

BANK OF GREECE

# ANNUAL REPORT

## 1999



ATHENS 2000

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## 1999

PRESENTED TO THE 67th GENERAL MEETING  
OF SHAREHOLDERS ON 25 APRIL 2000  
BY GOVERNOR LUCAS PAPADEMOS



ATHENS 2000

BANK OF GREECE  
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## I. FINANCIAL RESULTS FOR 1999

The Bank's Profit and Loss Account for 1999 shows total gross revenue of 188.0 billion drachmas and total operating expenses of 77.9 billion drachmas. Therefore, net profits reached 110.1 billion drachmas, compared with 101.2 billion drachmas in 1998.

Out of these net profits, an amount of 2.0 billion drachmas, corresponding to 12 per cent 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 4.3 billion drachmas be distributed under the same Article. A total of 6.3 billion drachmas would thus be distributed as dividend, compared with 4.6 billion drachmas last year, the total dividend per share amounting to 700 drachmas, compared with 517 drachmas last year. It should be noted that, for comparability purposes, the latter figure has been adjusted to the number of shares as it stands now, following the split effected in January 2000.

From the balance of net profits remaining after dividend distribution and income tax payment, 99.7 billion drachmas shall be paid to the government in accordance with Article 71 of the Statute, compared with 90.7 billion drachmas in 1998.

Total revenue from interest, commission fees and other receipts from domestic and foreign transactions – net of interest and commission payments – increased by 18.2 billion drachmas or 10.7 per cent compared with 1998 and amounted, as mentioned above, to 188.0 billion drachmas.

Net interest and commission fees from transactions in drachmas between the Bank and the government decreased by 2.3 billion drachmas or 1.0 per cent to 236.0 billion drachmas, compared with 238.3 billion drachmas in 1998. This decrease was primarily linked to interest on loans with a foreign currency clause and long-term loans, as well as to fees on government securities management. Specifically, interest on claims with a foreign currency clause dropped by 1.9 billion drachmas, reflecting a decline in interest rates; interest on long-term loans fell by 2.3 billion drachmas, as a result of the gradual decline in the outstanding loans of this category since the Bank of Greece has stopped extending new credit to the government. By contrast, interest on government paper holdings of the Bank increased by 9.5 billion drachmas. This increase was, however, partly offset by a 6.4 billion drachma increase in interest paid on government deposits with the Bank of Greece.

Commission fees on public entities' assets, which are managed by the Bank of Greece and invested in government paper, rose to 2.5 billion drachmas from 2.3 billion in 1998, while fees from the management of the book-entry securities system reached 9.7 billion drachmas, i.e. as much as in 1998.

The Bank's revenue from interest on credit facilities offered to credit institutions increased somewhat compared with 1998, mainly owing to a rise in the average debit balance on credit institutions' current accounts with the Bank of Greece. The amount of interest paid to banks was considerably larger, reflecting extensive Bank of Greece inter-

ventions in the interbank market for drachmas in order to absorb excess liquidity and, thereby, maintain interest rates at levels consistent with monetary policy goals. Specifically, intervention-related interest payments rose by 39.5 billion drachmas. It should be clarified that the extent and costs of these interventions for the Bank are related to capital inflows from abroad and the consequent rise in foreign exchange reserves, the management of which led to increased revenue. Interest paid by the Bank on other types of banks' deposits (not associated with interbank market interventions) grew by 28.9 billion drachmas, mainly owing to an increase in the reserve base.

For the third consecutive year, the Bank's foreign exchange operations led to a net credit position, which reached 235.6 billion drachmas in 1999, having increased by 87.0 billion drachmas or 58.8 per cent over 1998. As mentioned above, this development was due to increased revenue from the management of foreign exchange reserves, which on average were considerably higher than in 1998, but mainly to the increase in revenue from operations in the context of the Bank's interventions in the foreign exchange market, combined with the substantial appreciation of the US dollar and the pound sterling. The Bank's gold and foreign exchange reserves rose to \$19 billion at the end of 1999, having increased by \$0.8 billion in the course of the year, compared with a \$4.9 billion growth in 1998. It should be noted that the Bank's reserves have been calculated on the basis of the drachma/US dollar parity effective on 31 December 1999 (328.440 drachmas per US dollar, compared with 282.570 drachmas to one US dollar on 31 December 1998). Gold has been valued at 65 per cent of the average purchase price in US dollars in December 1999.

The Bank's total operating costs, excluding amortisation payments and provisions, amounted to 66.3 billion drachmas in 1999, having increased by 7.8 billion drachmas or 13.3 per cent over 1998. Specifically, outlays for personnel remuneration and pensions rose by 4.1 billion drachmas or 10.4 per cent, compared with an increase of 2.1 billion drachmas or 5.6 per cent in 1998. This larger increase in the wage bill in 1999 was the result of grade and pay advancement, the implementation of the wage agreement and the recruitment of new staff. Contributions to employees' insurance funds rose by 1.6 billion drachmas, compared with 0.5 billion in 1998. The one-off contribution which the Bank makes to the Pension Fund for each new recruit accounted for the bulk of this increase. Other operating costs rose by 1.9 billion drachmas (1997: 0.7 billion drachmas), mainly owing to emergency aid to the victims of the 7 September 1999 earthquake, but also to increased expenses for personnel training, book and printed matter purchases, and the maintenance of the equipment used by the Electronic Secondary Securities Market (HDAT).

In 1999, the Bank of Greece recruited 85 employees (of whom 66 for security personnel and 6 specialised in information technology and accounting). In addition to the 53 employees who retired in 1999, another 7 reached the age limit for retirement on 1 January 2000. Thus, the Bank's staff increased by 32, reaching 3,207 employees on 1 January 2000.

1999 was the third consecutive year of important institutional changes. Following a proposal of the General Council, the Ordinary General Meeting of Shareholders decided

on 29 April 1999 to dematerialise Bank of Greece shares and amend Article 8 of the Bank's Statute accordingly, in line with the provisions of Law 2396/96. Furthermore, in order to secure the decisive role of the government in the General Meeting of Shareholders and to improve the marketability of Bank of Greece shares, the Extraordinary General Meeting of Shareholders of 7 October 1999 approved the proposed amendments to Articles 8, 9 and 13 of the Statute. By virtue of these amendments: i) maximum government participation in the share capital of the Bank is increased to 35 per cent, so as to compensate for a possible decrease in insurance fund participation and ii) Bank of Greece shares may be split, following government approval. Moreover, the minimum number of shares needed by a shareholder to participate and vote at General Meetings may be modified. The Extraordinary General Meeting of Shareholders also authorised the General Council to resolve the matter concerning the fractional rights of the Bank's shareholders.

In the context of its efforts to modernise and improve the efficiency of its operation, the Bank pursued its organisational and technical adjustments in 1999, as well as its preparations for Greece's full-fledged participation in EMU. More specifically, the necessary adjustments were made in the organisational structure of the Departments of Monetary Policy and Banking, Government Financial Operations and Accounts, Information Systems and Organisation, and Administration. The Bank also decided to set up both an Information and Communications Office, which *inter alia* will be in charge of updating the Bank's website and organising a collection of archives, as testimony to the Bank's history and contribution to the country's economic development.

In addition to its Monthly Bulletin of Conjunctural Indicators, first published in 1997, the Bank of Greece launched a new bimonthly Bulletin of Regional Conjunctural Indicators for Macedonia-Thrace, edited by its Thessaloniki Branch.

In an effort to further the development of the Greek bond market, the Bank of Greece expanded the Electronic Secondary Securities Market (HDAT) and completed the development of the new application within the Securities Settlement System. More specifically, a new segment for repurchase agreements (repos) and a credit risk management system were set up within HDAT. These should both play a decisive role in reducing credit risk in the Greek market for securities and systemic risk in Greece's banking system.

In the field of information technology, the main applications needed to support both the Real-Time Gross Settlement System HERMES and the new method of compiling the balance of payments were completed and put into operation. Two other key applications, which will support the Bank's new Accounting Plan and foreign exchange operations, are also scheduled to become operative. In addition, the Y2K problem was handled successfully in all IT applications. Further improvements were made in the installations and mechanical equipment of the Bank's Printing Works in view of the euro banknote and coin production that the Bank will be undertaking.

The initial efforts made in 1998 to develop bilateral and multilateral relationships with other national central banks were pursued in 1999. Thus, in February 1999 in Skopje,

the Governors of the Bank of Greece and of the Central Bank of the Former Yugoslavian Republic of Macedonia (FYROM) signed a protocol for the cooperation of their respective institutions, especially on issues of effective banking supervision, monetary policy, capital market operation, statistical information and cross-border payment systems.

In the field of personnel training, the Bank of Greece continued to provide on-the-job training opportunities to its employees. Particular emphasis was placed on the comprehension and use of new operational systems and market instruments, and on familiarisation with market mechanisms for new financial products.

In the context of the “Zolotas Lectures”, the President of the European Central Bank (ECB), Willem Duisenberg, addressed the subject of “EU enlargement, some views from the ECB” in October 1999, while Laurence Klein, Professor of Economics and 1980 Nobel Prize Winner for Economics, also gave a lecture in November on the subject “Is the economic crisis over?”.

Maintenance and remodelling work at the Bank’s head and branch offices continued in 1999, in order to improve working conditions and achieve a higher degree of security for both premises and transactions. A suitable site was recently bought for the construction of a new building near the Head Office to fully accommodate the expansion of the Bank’s services.

As a contribution to the emergency aid to earthquake victims, the Bank approved the purchase of 400 container-homes for the victims of the 7 September 1999 earthquake in Athens and agreed to cover the reconstruction expenses of a school in a similarly devastated region of Turkey.

Finally, the Bank accepted an ECB proposal to co-organise a Greek contemporary art exhibition in Frankfurt in April 1999. It also inherited a collection of some 13,000 artefacts belonging to the late Pan. Tazedakis, including valuable gold and silver medals awarded to leading figures of Greece’s 1821 War of Independence.

The Bank pursued its tasks successfully in all its spheres of competence. More specifically, its contribution was decisive in establishing conditions of monetary stability, in enhancing the soundness and effectiveness of the financial sector and in speeding up preparations for the introduction of the euro and the conduct of the single monetary policy in 2001. With their commitment, loyalty and dedication, the Bank’s personnel were a key factor in this success.

On 26 February 2000 the two-year term of Monetary Policy Council member, Mr. Vassilis Droucopoulos came to an end. The Council of Ministers has already proposed his reappointment for a six-year term by Presidential Decree. With today’s 67th Ordinary General Meeting of Shareholders, in accordance with Article 21 of the Bank’s Statute, the terms of office of General Council members G. Kyriopoulos and Chr. Liakopoulos also expire. The General Meeting of Shareholders will thus be called upon to elect two new General Council members for a term of three years, namely until the Ordinary General Meeting of Shareholders for year 2003.

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

## II. THE GREEK ECONOMY IN THE LIGHT OF EURO AREA ENTRY

### 1. INTRODUCTION

1999 was a particularly important year for the Greek economy: for the first time in several decades, conditions of monetary stability were established. This achievement was the outcome of a long and arduous effort. Over the past few years, the deceleration of inflation, progress towards fiscal consolidation and the relative stability of the exchange rate of the drachma against key European currencies have all contributed to the creation of a new economic environment, which is compatible with the fulfilment of the convergence criteria for Greece's participation in the European Economic and Monetary Union (EMU) and is conducive to higher economic growth and a rise in living standards in Greece. With the completion of the phase of economic stabilisation, which lasted several years, it is useful, parallel to the assessment of economic developments and of the policies pursued in 1999, to examine the great progress made towards monetary stability during the past decade as well as the new possibilities and challenges now facing the Greek economy.

### 2. GLOBAL AND EUROPEAN ECONOMY

World economic growth accelerated to 3.3 per cent in 1999<sup>1</sup> from 2.5 per cent in 1998, as the international financial market turmoil of the years 1997-1998, focused mainly on Southeastern Asia, was overcome and confidence in financial markets was restored. Consumer price inflation in the industrial economies remained low and virtually unchanged (1999: 1.4 per cent, 1998: 1.5 per cent), while inflation in the developing economies decelerated (1999: 6.5 per cent, 1998: 10.1 per cent).

Economic growth in the industrial countries was generally satisfactory in 1999 and stronger than initially expected, particularly in the United States. However, economic conditions, particularly growth rates, differed considerably between the United States, Japan and the European Union. In the United States, economic growth remained high for the eighth consecutive year (1999: 4.2 per cent, 1998: 4.3 per cent) and the unemployment rate fell to a historical low (1999: 4.2 per cent, 1998: 4.5 per cent). The ensuing tightness in the labour market caused concern about a possible resurgence of inflation. Nevertheless, owing to the considerable improvement in productivity and strong competition in product markets, inflationary pressures remained subdued. Consumer price inflation accelerated slightly (1999: 2.2 per cent, 1998: 1.6 per cent). The creation of a fiscal surplus by the federal gov-

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<sup>1</sup> For the world economy the latest estimates of the International Monetary Fund were used (*World Economic Outlook*, April 2000), while for the EU there were employed the latest estimates of the European Commission (*Spring 2000 forecasts*, April 2000).



ernment for the second consecutive year (1 per cent of GDP in 1999 and 0.4 per cent in 1998) also contributed to the containment of domestic expenditure. Despite the rather limited rise in inflation, the Federal Reserve, to prevent the rekindling of inflationary pressures, raised three times (by 0.25 of a percentage point each time) its target interest rate in the interbank money market (federal funds rate), bringing it to 5.5 per cent at end-1999.

The Japanese economy recovered slightly (1999: 0.3 per cent, 1998: -2.5 per cent) and the unemployment rate rose (1999: 4.7 per cent, 1998: 4.1 per cent). These developments, combined with the ensuing large output gap, brought consumer prices down (1999: -0.3 per cent, 1998: 0.6 per cent). The Japanese government increased further its budget deficit to 7.1 per cent of GDP (1998: 4.3 per cent), to support private economic activity, which remained weak, while the central bank of Japan kept around zero its basic target interest rate in the interbank money market. Despite sluggish economic activity in Japan, most Southeastern Asian economies emerged from the crisis of previous years and achieved a stronger recovery than expected, thanks to appropriate adjustments in economic policy.

Fast economic growth in the United States and limited recovery in Japan sustained the imbalances which characterise current external transactions in both countries. The current account deficit rose to 3.7 per cent of GDP in the United States (1998: 2.5 per cent), while the current account surplus in Japan remained at the high level of 2.5 per cent of GDP (1998: 3.2 per cent). As a result, the yen appreciated by 11.4 per cent against the dollar, despite interventions by the central bank of Japan in the foreign exchange market.

In the European Union, annual GDP growth decelerated to 2.3 per cent in 1999, from 2.7 per cent in 1998, although economic activity accelerated gradually during 1999. The unemployment rate fell (1999: 9.2 per cent, 1998: 9.9 per cent), helped by the implementation of National Action Plans for Employment and of labour market reforms in a number of Member States. Economic recovery in the European Union was supported by the monetary policy pursued in the euro area in an environment of low inflation, reflecting moderate wage increases and the maintenance or even strengthening of fiscal discipline in Member States. The fiscal position improved on average in the European Union, where the budget deficit (1999: 0.6 per cent, 1998: 1.5 per cent) and public debt (1996: 67.6 per cent, 1998: 69 per cent) decreased as a percentage of GDP. In some cases, however, this decrease was due to GDP growth, which was more favourable than initially estimated, and to the drop in interest rates rather than to restrictive fiscal measures.

The sound design and implementation of an appropriate economic and monetary policy mix is conducive to sustainable economic growth combined with stability in the euro area. However, full attainment of European Union objectives, including lowering the still high unemployment rate, requires the assistance of structural policies as well, to ensure a more efficient functioning of markets and a faster rise in productivity. Economic policy efforts in the European Union are increasingly shifting towards structural reforms, as demonstrated by the special meeting of the European Council held in Lisbon in March 2000 to discuss employment, economic reform and social cohesion.

Average price increases in the European Union were very moderate. Inflation fell marginally to 1.2 per cent in 1999, from 1.3 per cent in 1998, while in the euro area it remained at the same low level (1.1 per cent) as in 1998.<sup>1</sup> However, the twelve-month rate of inflation accelerated during the year to 1.7 per cent in December 1999, mainly owing to conditions in the world oil market. Rising oil prices, increasing economic activity and faster money growth (M3), compared with the reference value, led the European Central Bank (ECB) to raise, in November 1999, its main refinancing rate by 0.5 percentage point to 3.0 per cent and both its marginal lending facility rate and its deposit facility rate by 0.5 percentage point to 4.0 per cent and 2.0 per cent, respectively, in order to prevent a resurgence of inflation. It is worth noting that the ECB had reduced its interest rates in April 1999.

During 1999, the euro depreciated almost continuously against the dollar (by 13.9 per cent), mainly reflecting market perceptions that the United States is superior to the European Union in terms of economic performance and structural flexibility. The effective exchange rate of the euro also depreciated, by about 6 per cent. The ECB has repeatedly stated that its strategy does not include a target for the exchange rate of the euro; its primary objective is to safeguard the internal value of the currency, i.e. price stability, taking into account changes in the external value of the euro to the extent that it affects inflationary prospects in the euro area. The drop in the external value of the euro since the beginning of 1999 does not reflect the real long-term potential of euro area economies, but mainly conjunctural factors. Although forecasts of swings in exchange rates are characterised by a high degree of uncertainty, it is estimated that the expected recovery of economic growth in Europe and its slowdown in the United States will contribute to the reversal of the course of the exchange rate of the euro against the US dollar. This view is corroborated by the fact that markets are becoming increasingly convinced that euro area countries will introduce significant reforms to resolve the structural problems which keep unemployment high in the European Union.

### 3. CONVERGENCE TOWARDS STABILITY

Economic developments in Europe and the rest of the world in 1999 had both positive and negative effects on the Greek economy. Faster world economic growth and improved conditions in international capital markets created a generally favourable global economic environment. Moreover, the progressive pick-up of economic growth in the European Union during 1999 and the maintenance of low inflation on average, despite its recent increase, had a propitious effect on the Greek economy. On the other hand, the steep rise in world oil prices and the substantial decline in the exchange rate of the euro and thus of the drachma against the US dollar and the Japanese yen in the course of 1999 caused a rise in inflation from October onwards, increased Greece's external debt (expressed in

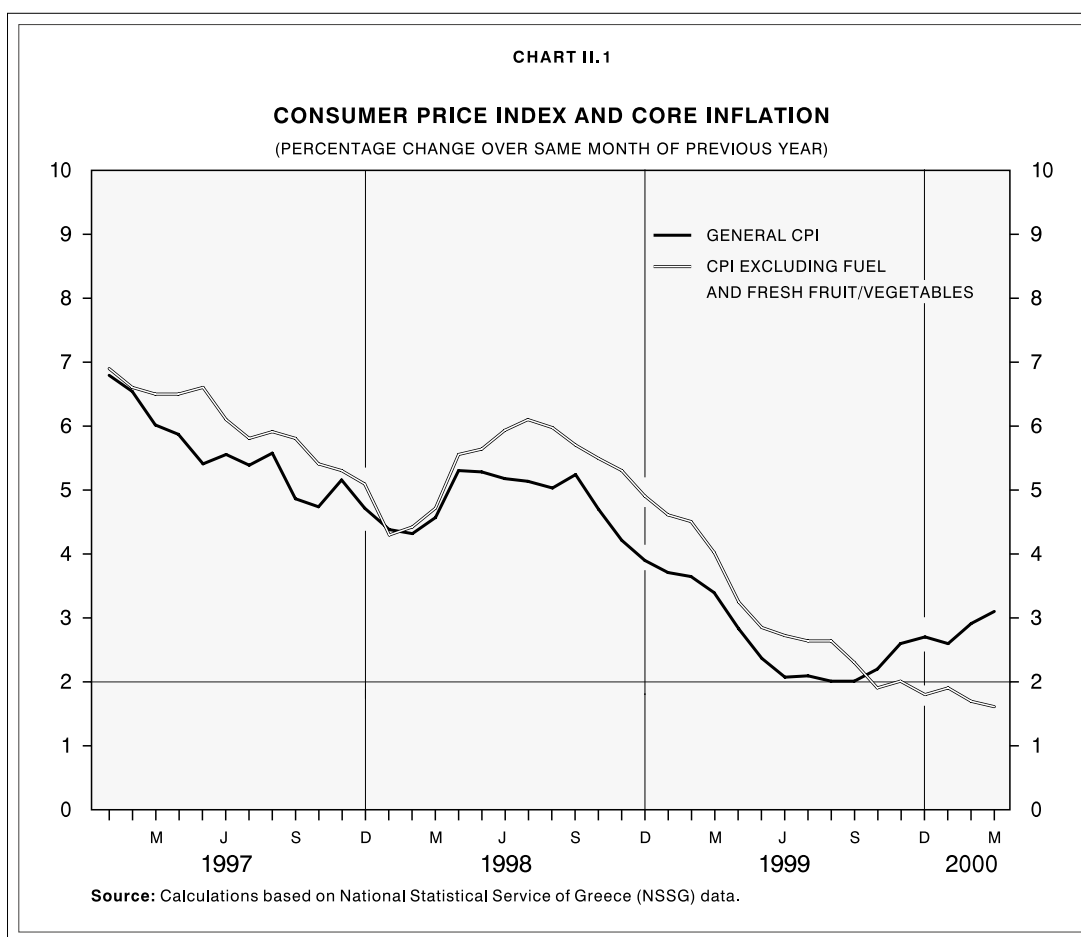
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<sup>1</sup> As measured on the basis of the harmonised index of consumer prices (HICP).

drachmas) and widened its current account deficit. In this global economic environment, the Greek economy continued to grow at a very satisfactory pace. At the same time, it succeeded in further curbing inflation and, in general, converging towards stability.

### 3.1 Inflation

Domestic inflationary pressures abated considerably and steadily in 1999. Inflation, measured by the Consumer Price Index (CPI), followed a downward trend in the first half of the year and fell at a fast pace from 3.9 per cent in December 1998 to 2.0-2.1 per cent in June-



September 1999 (see Chart II.1), a level considered to be consistent with price stability. From October 1999 onwards, inflation gradually rose, almost exclusively because of the more than doubling of world oil prices, and reached 2.7 per cent in December 1999. Core inflation,<sup>1</sup>

<sup>1</sup> As measured on the basis of the harmonised index of consumer prices (HICP).

however, which reflects endogenous inflationary pressures more accurately, dropped to 1.9 per cent in October 1999, i.e. to a level 3 percentage points lower than in December 1998. Since then it has not exceeded 2 per cent (see Chart II.1). This development clearly shows that a high degree of price stability was achieved in 1999. Lastly, on the basis of the Harmonised Index of Consumer Prices (HICP), average inflation reached 2.1 per cent in 1999 and fell further to 2 per cent in the twelve-month period that ended in March 2000 (see

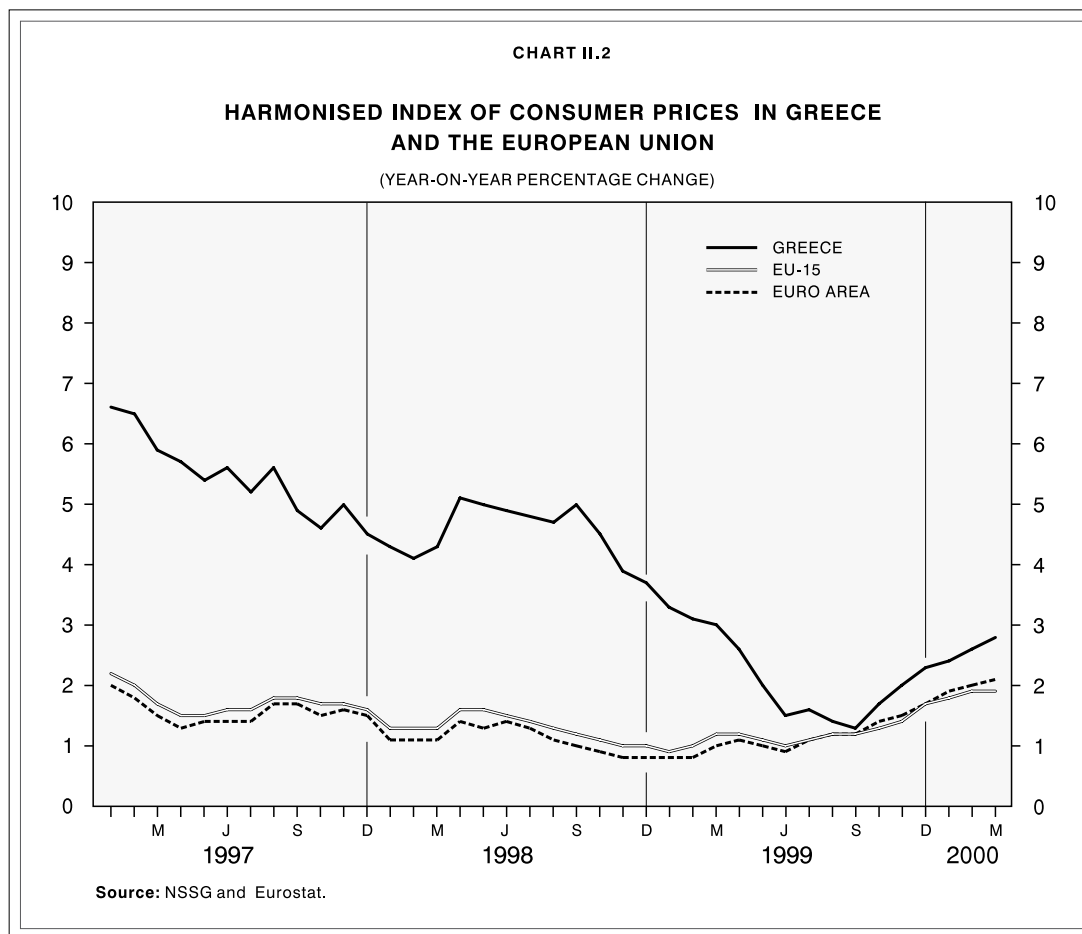


Chart II.2). Greece has therefore fulfilled the relevant convergence criterion of the Maastricht Treaty since December 1999.<sup>1</sup>

The deceleration of core inflation in 1999 was due to the monetary and economic policies pursued, favourable developments in the labour market and, to a lesser extent, special and exogenous factors. Monetary policy retained and indeed strengthened its anti-inflationary stance. In the course of 1999, the drachma was broadly stable against the euro (it appreciated slightly on average) and nominal interest rates remained unchanged from

<sup>1</sup> The reference value of the relevant convergence criterion was 2.1 per cent in December 1999 and 2.4 per cent in March 2000.

mid-February through mid-October. Actually, the drachma appreciated in real terms, while the stability of nominal interest rates, in conjunction with the drop in inflation, led to a considerable increase in real rates. These developments confirm that the anti-inflationary stance of monetary policy was enhanced. Moreover, liquidity (M4N) growth decelerated significantly to 5.6 per cent and total bank credit expansion remained roughly stable (10.9 per cent).<sup>1</sup> The slowdown in the growth of unit labour costs in the whole economy, by almost one and a half percentage point to 2.7 per cent in 1999, contributed considerably to the drop in inflation, while the reduction in the general government's deficit as a percentage of GDP (from 2.5 per cent in 1998 to 1.6 per cent in 1999) also had a favourable effect.

In 1999, inflation was also affected by reductions in certain indirect taxes and by other exogenous factors. Apart from the rise in fuel prices in the world market, the fall of the euro against the US dollar and the yen in the course of 1999 also had an upward effect on import prices and domestic inflation. By contrast, fresh fruit and vegetable prices had a small favourable effect, while the impact of the March 1998 devaluation of the drachma on inflation was eliminated by March-April 1999. The substantial exogenous effect of the rise in oil prices on inflation (about one and a half percentage point) was partly offset by a reduction in special consumption taxes on fuels and in other indirect taxes (which enabled cuts in electricity rates and car prices). Overall, indirect tax cuts in 1999 are estimated to have helped reduce inflation by one percentage point during the year. The "gentlemen's agreements" of November 1998 did not actually contribute to restraining inflationary pressures, as the prices of items covered by the agreements increased in 1999 on average more than the prices of all other items excluding fuel.<sup>2</sup>

The monetary stability achieved in 1999 crowned a disinflation process, which started in the early 1990s and gathered momentum in the last five years. Previously, from 1974 through 1990, inflation ranged between 12 and 25 per cent, and three phases of abating inflationary pressures were followed by corresponding phases of resurgent inflation. This phenomenon was partly related to the two energy crises and the conduct of a macroeconomic policy influenced both by the electoral cycle and the view that an expansion of aggregate demand could lead to a non-inflationary increase in real income. Experience has proved that this view is unfounded.

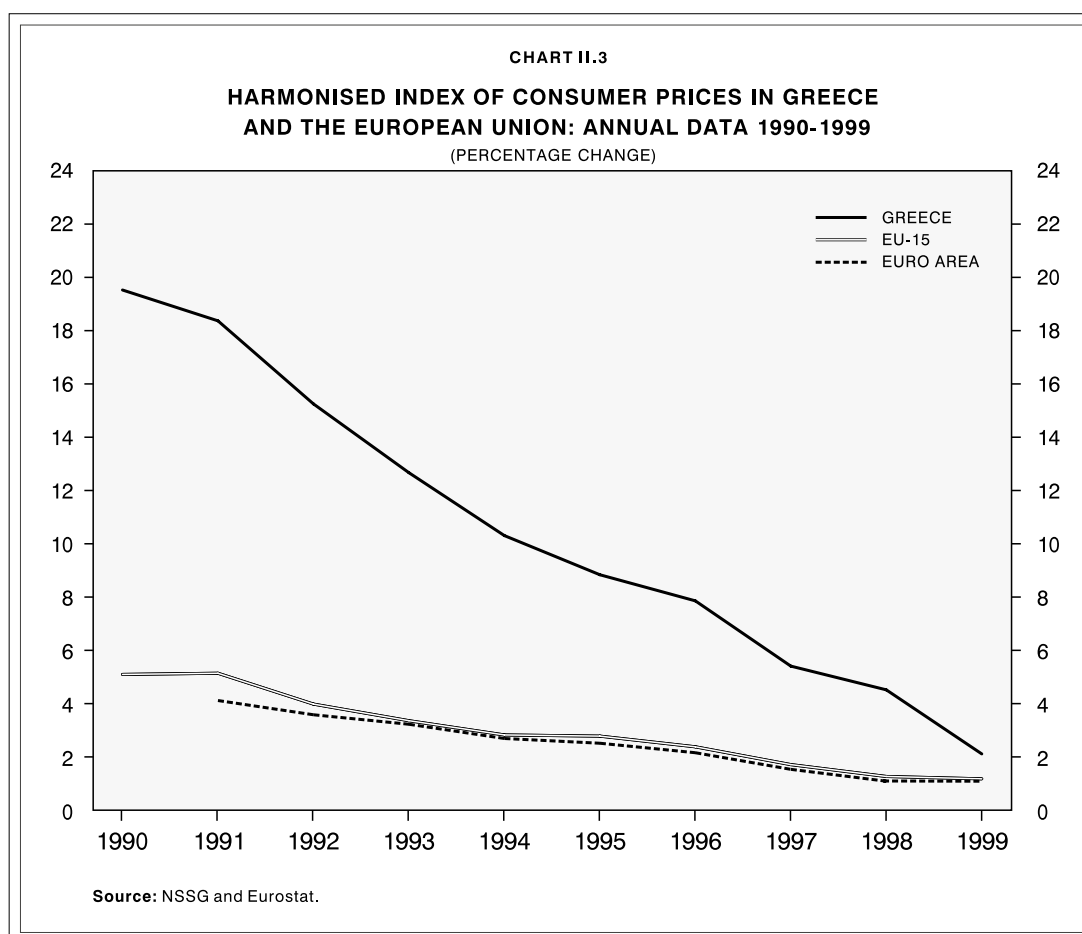
From 1990 to 1999, a period which can be characterised as the decade of convergence towards stability, the deceleration of inflation was continuous. The average annual rate of increase in the CPI, which had accelerated to 20.4 per cent in 1990, fell to 10.9 per cent in 1994 and 2.6 per cent (2.1 per cent on the basis of the HICP) in 1999 (see Chart II.3). This development reflects the drastic and systematic change in the stance and manner of conduct of macroeconomic policy, as well as the gradual adjustment of the social

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1 Credit expansion net of the effect of foreign exchange valuation differences.

2 The agreements provided for a 0.5 per cent average increase in the prices of items covered. Eventually, however, the increase came to 2.7 per cent, while core inflation reached 1.8 per cent.

partners' behaviour to the new environment of low inflation and to the requirements for Greece's full participation in EMU. The anti-inflationary stance of monetary policy was gradually strengthened and was based to a greater extent on the stabilisation of the exchange rate of the drachma (against the ECU and later against the euro) as an intermediate policy target and a means of reducing inflationary pressures and mitigating inflationary expectations (see Chart II.7 on page 35). Fiscal policy, particularly with the implementation of the revised Convergence Programme 1994-1999, contributed to slowing



down the increase in aggregate demand and prices by the almost steady reduction in the budget deficit (see Chart II.4 on page 29). Lastly, the progressive establishment of a climate of consensus among social partners and the appreciable growth of investment and productivity from 1995 onwards led to the substantial deceleration of the growth rate of unit labour costs, from about 20 per cent in 1990 to 2.7 per cent in 1999, broadly consistent with price stability.

The gradual deceleration of inflation in the 1990s was accompanied by a considerable and sustained acceleration of economic growth in recent years (see Chart II.9 on page 39).

Moreover, changes in the conduct of economic policy and the behaviour of the social partners were conducive to a noticeable weakening of the cyclical pattern of important economic variables. Actually, as some of these variables, such as real wages or the public deficit, affect inflation directly or indirectly, the dampening of their cyclical fluctuations is a stabilising factor for the future.

Although the economic policy mix improved during the 1990s, the improvement was not continuous and steady, with adverse effects on the pace of disinflation. At the beginning of the decade, there were years in which the government budget deficit increased as a percentage of GDP. Moreover, in the second half of the decade, the increase in real earnings at times overshot the rise in productivity appreciably and affected the country's international competitiveness unfavourably, thus playing a significant role in the devaluation of the drachma in 1998. The upsurge of inflationary pressures caused by the devaluation was temporary, owing to the moderate wage increases subsequently agreed between the social partners. Throughout the decade, however, owing to imperfect competition in some markets and the slow adjustment of inflationary expectations, the price mechanism either failed to respond adequately to the curtailment of demand, as in 1993, or overreacted to increases in cost components, as in 1998. In fact, after the devaluation of the drachma in March 1998, prices rose more than would have been expected in view of the rise in the drachma costs of imported inputs; as a result, the pace of disinflation was slower. Furthermore, during the 1990s, the fact that parts of the services sector remained rather sheltered from international competition contributed to the rise in the prices of services at an annual rate steadily higher than the rate for goods,<sup>1</sup> affecting accordingly the general price level.

Looking ahead, the prospects that average annual inflation will not noticeably exceed 2 per cent in 2000 are favourable. Consumer price inflation rose to 3.1 per cent in March<sup>2</sup> from 2.7 per cent in December 1999, exclusively owing to higher fuel prices. This is inferred from the fact that core inflation fell from 1.8 per cent to 1.6 per cent during the same period. Crude oil prices in the world market are exhibiting a downward trend. Although it is not possible to predict accurately supply and demand conditions in the world oil market until the end of 2000, it is expected that the rate of increase in the CPI will begin to decelerate from April onwards. For the year 2000 as a whole, it is estimated that average annual inflation will be around 1999 levels. According to the most recent forecasts of the European Commission and the International Monetary Fund, the average annual increase in the HICP this year will be 2.3 per cent and 2.4 per cent respectively.<sup>3</sup>

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1 The difference between the two rates was 3.5 percentage points on average.

2 On the basis of the HICP, it increased from 2.3 per cent to 2.8 per cent.

3 See European Commission, *Spring 2000 forecasts*, and IMF, *World Economic Outlook*, April 2000. The corresponding increase in the HICP in 1999 was 2.1 per cent, according to revised data of the NSSG and Eurostat. It should be noted, however, that the IMF has taken into account the data available before the revision, i.e. an increase of 2.3 per cent in the HICP for 1999.

The course of inflation in 2000 will also be influenced by other special factors, as well as by the changeover to the single currency. In particular, inflation will be unfavourably affected by the phasing out of the beneficial effect of the cut in indirect taxes in 1999. It will also be affected by the inevitable gradual convergence of domestic interest rates towards euro area rates and by the approach of the current exchange rate of the drachma to its central rate in ERM II in view of Greece's entry into EMU. The revaluation of the central rate of the drachma against the euro in January 2000 is estimated to contribute to lowering average annual inflation by at least half of a percentage point more than what it would have been had the central rate remained unchanged. The anti-inflationary stance of monetary policy, however, will be gradually weakened, owing to the progressive convergence of interest rates, though it is estimated that the latter's effect on total demand and inflation will be limited in 2000, because the boost in demand will be partly offset by the decrease in interest income. Moreover, some interest rates have begun to fall since 1999, while interest rates on foreign currency loans will not be affected. At the same time, the cut in bank lending rates and the raising of funds by firms from the stock market will contribute directly to restraining the rise in business costs and, hence, in prices.

In the year 2000, however, it is difficult to secure price stability exclusively by monetary policy; stability is feasible, provided that the planned economic and structural policies are implemented consistently and that wage developments and the pricing policy of business firms are conducive to price stability. More specifically, the general government deficit (on a national accounts basis) should not exceed 1.2 per cent of GDP, as envisaged in the Updated Convergence Programme, while fiscal policy should be implemented flexibly so as to counter inflationary pressures that may arise from other sources. It is possible to reduce to 2 per cent the growth rate of unit labour costs in the whole economy (from 2.7 per cent in 1999), provided that (i) the collective bargaining already under way takes into consideration the government measures introduced in recent months to increase disposable income as well as the need to improve international competitiveness and promote employment, and (ii) the wage increases to be agreed are compatible with the objective of price stability and the forecast rise in productivity. Finally, of particular importance is the faster implementation of structural policies. Market deregulation and a quicker rise in productivity and potential output can, first, contribute to restraining the growth of unit labour costs to a level compatible with the maintenance of price stability, second, strengthen competition, including the services sector and, third, enable aggregate supply to respond flexibly to a faster growth of demand.

### *3.2 Public finance*

Greece's budgetary position improved further in 1999, contributing to the establishment of economic stability. The general government deficit, on a national accounts basis, was reduced by about one percentage point to 1.6 per cent of GDP, i.e. to roughly



half of the reference value (3 per cent) of the relevant convergence criterion of the Treaty and, in addition, to a level only slightly higher than the corresponding euro area average (1.2 per cent). Moreover, the consolidated debt of general government decreased by one percentage point to 104.4 per cent of GDP, despite the considerable upward pressure exerted on the debt in foreign currency by the appreciation of the US dollar and the Japanese yen against the euro and thus against the drachma. The general government debt-to-GDP ratio is still much higher than both the reference value (60 per cent) of the relevant criterion of the Treaty and the corresponding euro area average (72.2 per cent). Nevertheless, the fact that this ratio fell by about 7 percentage points over the previous three years indicates that it is “sufficiently diminishing” and “at a satisfactory pace” and that, consequently, the relevant criterion of the Treaty is considered to have been met.

The decrease in the general government deficit resulted both from the 0.5 percentage point increase in the primary surplus (to 5.8 per cent of GDP in 1999) and from the further reduction of 0.4 per cent of GDP (to 7.4 per cent) in interest payments on a consolidated basis. The increase in the primary surplus was due to the large rise in revenue as a percentage of GDP, while primary expenditure grew slightly relative to GDP, partly owing to extraordinary events, such as the Kosovo crisis and the earthquake in Attica, which burdened government expenditure.

The increase in revenue overshot budget forecasts by 550 billion drachmas, mainly because of the higher yield of the personal and corporate income tax, the tax on stock market transactions, the special duty on car sales, and the real estate sales tax. The particularly favourable developments in tax revenue in 1999 are partly related to special factors, such as considerably increased car sales and larger volume of stock market trading, combined with a doubling of the corresponding tax rate. On a long-term basis, however, the effort to improve the efficiency of tax administration should intensify so as to keep up the satisfactory growth of tax revenue.

The factors which contributed to the reduction in public debt as a percentage of GDP were the increase in the primary surplus, a further decrease in interest rates (the average interest rate on public debt fell to 7.3 per cent, from 7.6 per cent in 1998) and the high (albeit slightly lower than in 1998) rate of economic growth. The reduction in public debt in 1999 was also due to the prepayment of debt amounting to 1,070 billion drachmas, or 2.8 per cent of GDP, employing privatisation revenues of the Public Portfolio Management Company. Conversely, the appreciation of 16 per cent and 30 per cent, respectively, of the US dollar and the Japanese yen against the drachma during 1999 resulted in an increase of 1,100 billion drachmas or 2.9 per cent of GDP in public debt, about 33 per cent of which is in foreign currency.<sup>1</sup> Furthermore, the government assumed debts of public enterprises (which do not belong to general government) thereby increasing public debt by 87 billion drachmas (0.2 per cent of GDP).

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<sup>1</sup> Including Bank of Greece loans with a foreign currency clause, which amount to 3,003 billion drachmas.

The evolution of fiscal aggregates over the last ten years leads to some general conclusions concerning the progress made so far towards fiscal consolidation, as well as the orientation of fiscal policy in the future. The general government deficit fell from about 16 per cent of GDP in 1990 to 10.2 per cent in 1995 and 1.6 per cent in 1999 (see

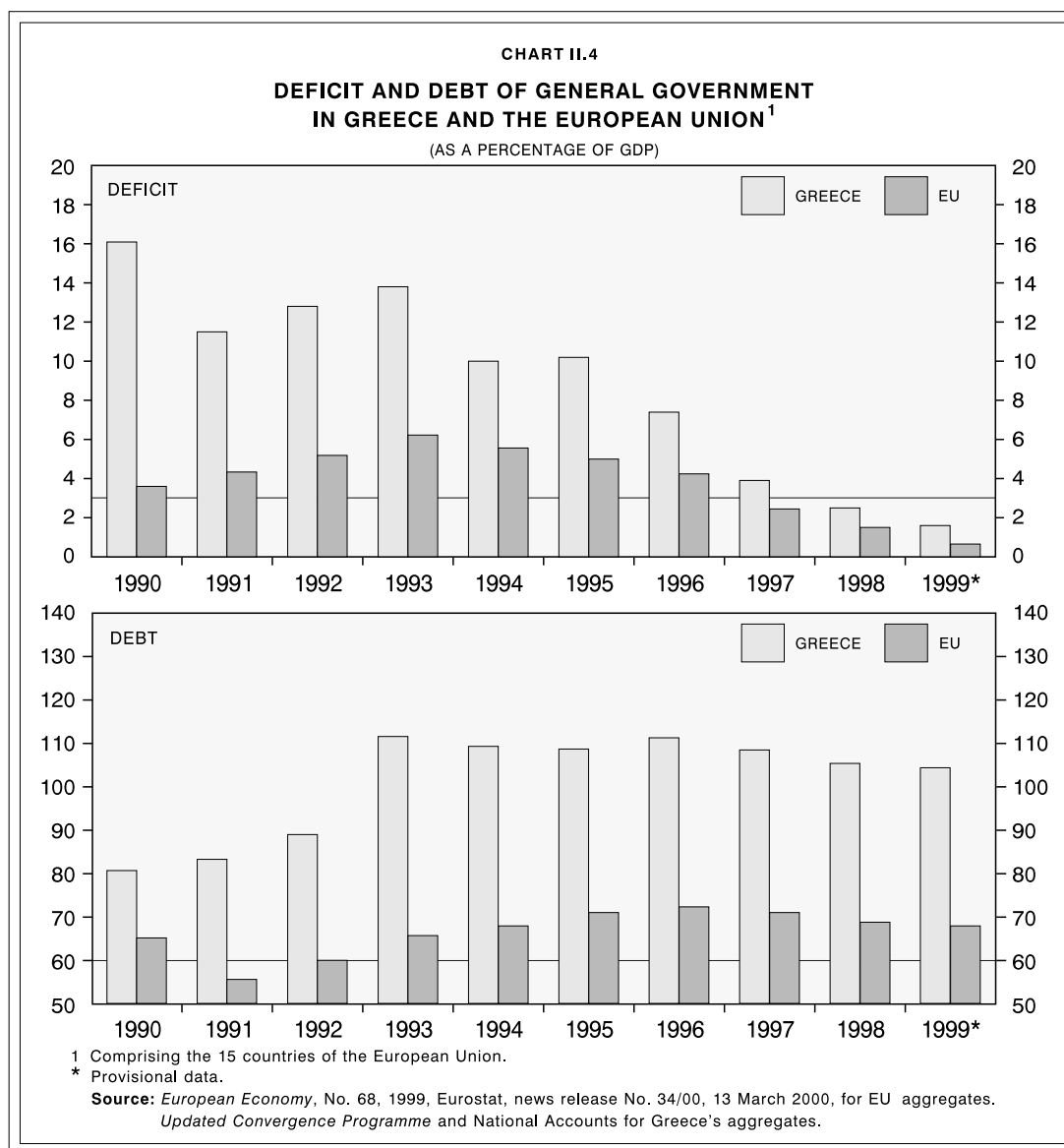
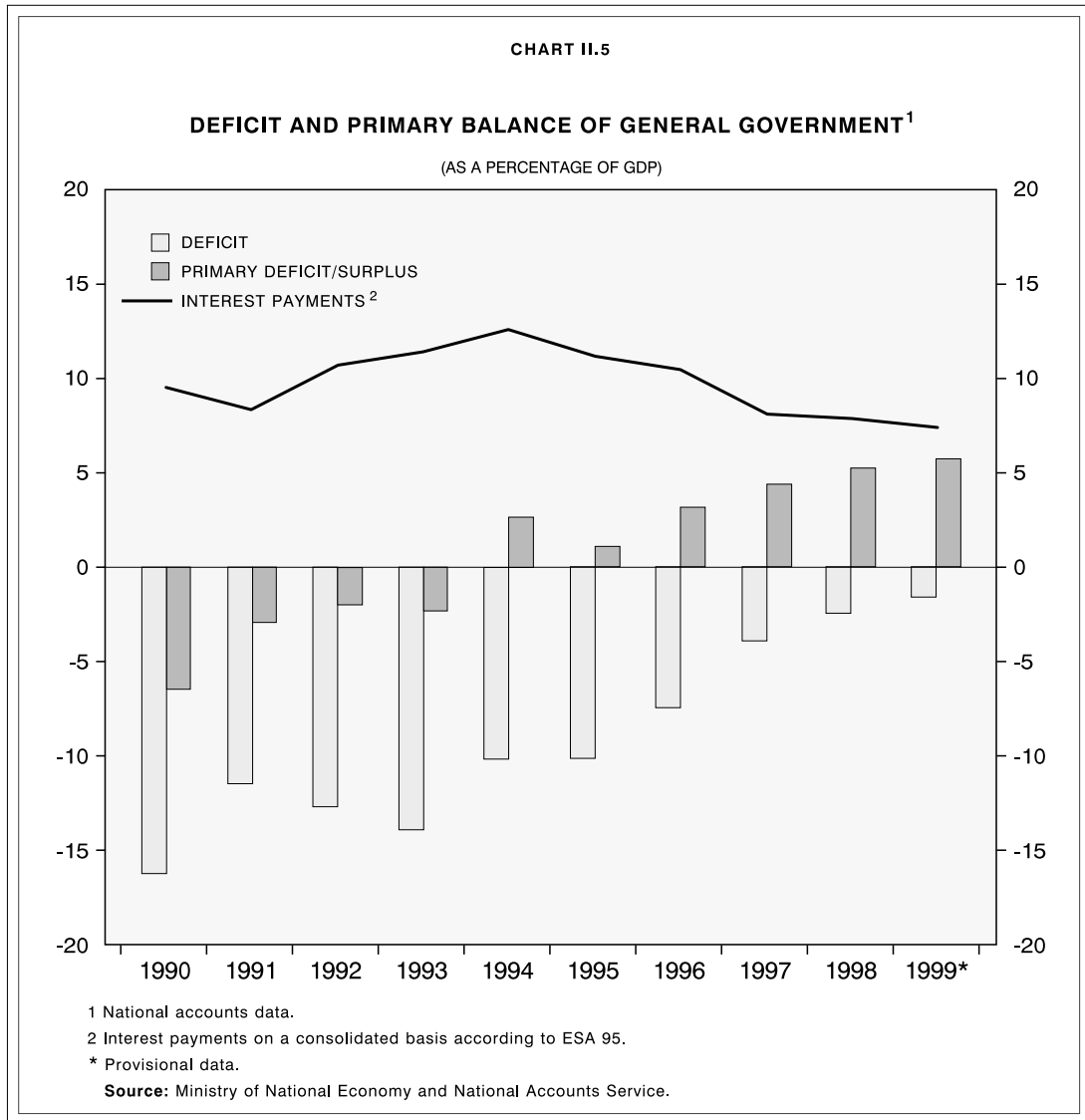


Chart II.4). This impressive development reflects, on the one hand, an improvement in the primary fiscal balance — large primary deficits (6.6 per cent of GDP in 1990) turned into primary surpluses of almost equal size (5.8 per cent of GDP in 1999)— and, on the other hand, the decrease, though not continuous, in interest payments on a consolidated

basis during the decade,<sup>1</sup> from 9.5 per cent of GDP in 1990 to 7.4 per cent in 1999 (see Chart II.5). The improvement in the primary balance of general government was due to the almost uninterrupted and substantial growth of revenue as a proportion of GDP during the 1990s, while the primary expenditure-to-GDP ratio remained broadly stable. The reduction in interest payments as a percentage of GDP was continuous throughout the



post-1994 period, mainly owing to the successful anti-inflationary monetary and economic policy, which led to a considerable drop in Greek interest rates.

<sup>1</sup> Interest payments on a consolidated basis do not include that part of interest which is paid by central government to insurance funds and other entities of general government (i.e. interest payments between general government entities).

Undoubtedly, the improvement in Greece's fiscal position in the last ten years, especially in the last five, was particularly noteworthy. Progress resulted from (i) more efficient fiscal management, as shown by the primary surpluses achieved despite the increase in investment expenditure, and (ii) economic stabilisation, specifically the reduction in inflation and inflationary expectations, which led to a fall in short- and long-term interest rates. The trends of major fiscal aggregates and their more comprehensive analysis also imply that in future the fiscal consolidation effort should be based on the containment of primary expenditure rather than an increase in revenue, especially since a tax reform is advisable to enhance the competitiveness of the economy and promote employment in the new environment of "tax competition" and "tax approximation" which is gradually taking shape in the European Union.

Despite the substantial improvement in the budgetary position of general government, the public debt/GDP ratio increased by almost 25 percentage points, from 1990 through 1999 (see Chart II.4). This was the outcome of the steep rise in public debt during the 1990-1996 period, which led the public debt/GDP ratio, with some fluctuations, to the high level of about 111 per cent in 1996, from which it fell in the next three years. The big increase in public debt at the beginning of the 1990s was, to a small degree, due to the public deficits in that period and, to a greater degree, to other factors, such as the inclusion in public debt of government liabilities to the Bank of Greece, the assumption by central government of debts of various entities outside general government, state participation in increases in the capital of some state-controlled banks, interest capitalisation, and differences due to the valuation in drachmas of foreign currency loans. The drop of 6.9 percentage points in the debt ratio during the last three years decelerated, owing to factors such as those mentioned above, particularly exchange rate movements and state participation in increases in the capital of public enterprises. This expansionary impact, however, was more than offset by the favourable effect of primary surpluses, faster economic growth, the reduction of interest rates, and revenue from privatisation. Therefore, a further reduction of the debt ratio over the coming years requires, apart from the forecast creation of high primary surpluses, strict adherence to the privatisation programme and faster financial consolidation of some public enterprises.

In the course of the 1990s, the composition of public debt improved significantly. Average debt maturity was lengthened to about 6.5 years in 1999 from around 4 years in 1995 and 2.5 years in 1990. Specifically, short-term liabilities maturing in up to one year, as well as floating rate notes, decreased to about 50 per cent of public debt at end-1999, compared with 79.5 per cent in 1995 and 77 per cent in 1990, a development which reduces the dependence of interest payments on short-term interest rate fluctuations. Moreover, the increase in the part of public debt consisting of negotiable instruments (82 per cent in 1999, compared with 61 per cent in 1990), combined with the expansion of the secondary market, considerably reduced the "liquidity premium", burdening the cost of government borrowing. Lastly, debt composition (drachmas and foreign currency) remained virtually unchanged, with a small decrease in the share of drachma loans, from 68.8 per cent in 1990

to 66.9 per cent of total debt in 1999, and a corresponding marginal increase (from 31.2 per cent to 33.1 per cent) in the share of foreign currency loans. It should be noted that, after the adoption of the single currency, the proportion of debt in foreign currency will decrease considerably, i.e. by the part of debt consisting of loans in euro (or in currencies of euro area countries).

To ensure gradual fiscal consolidation and a further reduction in public debt, the Updated Convergence Programme of the Greek Economy<sup>1</sup> provides for primary surpluses of the order of 6.5 per cent of GDP, in both 2001 and 2002, as well as for a further decrease in the debt-to-GDP ratio to 98.2 per cent in 2002. According to some estimates, lowering the debt/GDP ratio to 60 per cent by 2009 requires primary annual surpluses of 5.6 per cent of GDP.<sup>2</sup> If, however, the government continues to assume liabilities of entities outside general government, or, more generally, to proceed to arrangements not affecting the deficit but increasing public debt, larger primary surpluses will be needed to bring the debt/GDP ratio down to 60 per cent around the end of the decade. In contrast, by speeding up the privatisation programme, the government will be able to reduce faster both the debt and the deficits (owing to smaller interest payments).

### *3.3 Exchange rate and long-term interest rates*

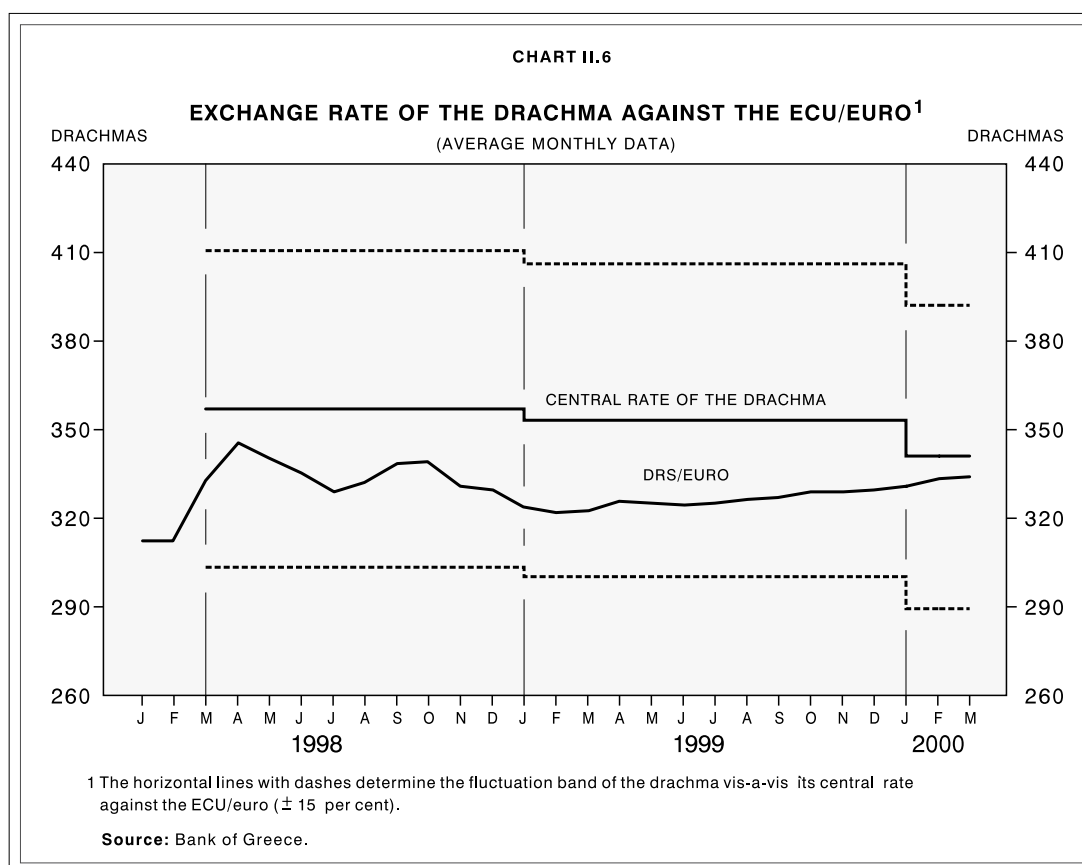
Although exchange rate stability can prove to be an effective means of curbing inflation, it cannot be ensured in the long run unless it is supported by monetary and, in general, macroeconomic policy aimed at establishing conditions of stability in the domestic economy. In the two years since the drachma joined the Exchange Rate Mechanism (ERM) of the European Monetary System (EMS) in March 1998, no pressures that could cause tension in the foreign exchange market were exerted on the drachma. During this period, the conduct of anti-inflationary monetary policy by maintaining fairly high interest rates, as well as favourable market expectations regarding the prospects of stabilisation and convergence of the Greek economy, resulted in the drachma being constantly appreciated against its central rate in the ERM. The positive deviation of the current from the central rate ranged between 2 per cent and 9 per cent (see Chart II.6). Since the drachma has participated in the ERM for more than two years without severe tension or depreciation against the currency of any other Member State, the convergence criterion relating to the exchange rate is deemed to be fulfilled.

The drachma joined the ERM in March 1998 at a central rate of 357 drachmas per ECU and the standard fluctuation band of  $\pm 15$  per cent. As from the creation of the euro area at the beginning of 1999, the drachma participates in the Exchange Rate Mechanism II (ERM II) (which has replaced the previous mechanism and is based on the determi-

<sup>1</sup> March 2000 revision.

<sup>2</sup> Estimates by services of the ECB and the Bank of Greece.

nation of central rates against the euro) at a central rate of 353.109 drachmas per euro and the same standard fluctuation band. The new central rate was, for technical reasons, slightly different from the previous central rate against the ECU<sup>1</sup>. On 17 January 2000, the central rate of the drachma against the euro appreciated by 3.5 per cent to 340.750 drachmas per euro. The appreciation facilitates the conduct of a monetary policy oriented towards price stability, as well as the creation of conditions conducive to sustainable economic growth.



Between the entry of the drachma into the ERM on 16 March 1998 and the end of 1998, the drachma's appreciation against its central rate ranged from 2.2 per cent to 8.5 per cent. During 1999 and up to the adjustment of the central rate of the drachma against the euro on 17 January 2000, the Greek currency deviated from the central rate within a much

<sup>1</sup> The drachma joined ERM II at a central rate of 353.109 drs per euro, compared with 357 drs per ECU under the ERM, although the ECU/euro conversion rate was 1.1, as provided for in the Maastricht Treaty. This difference reflects the fact that the central rates of ERM II currencies against the euro were calculated through the rate of conversion of the Deutsche mark to euro, so as to maintain unchanged the bilateral central rates between these currencies, which had been set on 16 March 1998. However, the ECU depreciated against the Deutsche mark from 16 March 1998 onwards, because of the weakening of the pound sterling, which participated in the ECU basket.

narrower band (6.5 per cent to 9 per cent). Between the date when the central rate was adjusted by 3.5 per cent and the end of March 2000, the gradual convergence of the drachma towards its central rate continued and by end-March the appreciation of the drachma had been reduced to less than 2 per cent. The gradual drop in the exchange rate and, accordingly, the decrease in the deviation of the current from the central rate from the beginning of February 1999 through March 2000 are related to the decrease in the interest rate differential between Greece and euro area countries. Also, more recently, they are related to favourable market expectations regarding Greece's entry into EMU and therefore the anticipated convergence of the current towards the central rate. The differential between the 3-month interbank Athibor rate and the corresponding EURIBOR rate narrowed gradually, from 8.3 per cent at the beginning of February 1999 to 5.1 per cent at end-March 2000.

The volatility of the exchange rate of the drachma against the euro was generally limited, on average, and followed a downward course during 1999. At the beginning of 2000, volatility was one third of what it was a year earlier. By intervening at times in the foreign exchange market, the Bank of Greece aimed to reduce excessive fluctuations of the exchange rate of the drachma against the euro, caused by exogenous disturbances, and did not seek to influence the level of the exchange rate, which was determined by the basic factors of demand and supply in the foreign exchange market, including the Bank's interest rate policy.

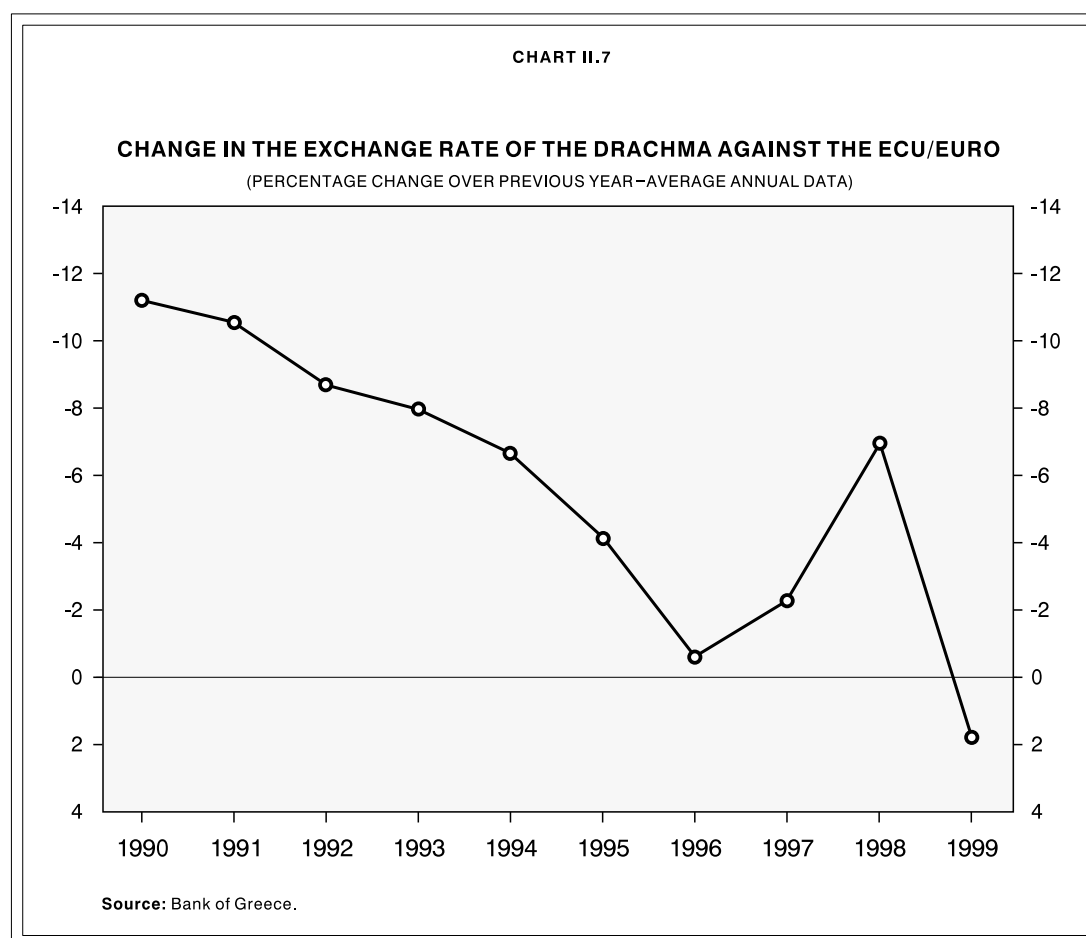
The exchange rate of the drachma against non-euro-area currencies generally followed the course of the exchange rate of the euro against these currencies, given that monetary policy had set as an intermediate target the relative stability of the drachma against the euro in this period. In particular, the exchange rate of the drachma against the US dollar dropped by 14 per cent in 1999, reaching 328.44 drachmas per dollar at the year-end. The dollar continued to strengthen in the first quarter of 2000, and by end-March the exchange rate had risen to 350.33 drachmas per dollar. This development was related to the high rate of growth of the US economy and the widening of the interest rate differential between the United States and the euro area. The exchange rate of the drachma against the Japanese yen fluctuated around 250 drachmas per 100 yen in the first five months of 1999. From end-May 1999 to end-March 2000, however, the yen rose almost continuously against the major currencies, partly reflecting the improvement of economic conditions in Japan. The rise of the yen worldwide caused the exchange rate of the drachma to increase gradually to 335.19 drachmas per 100 yen by end-March 2000.

The effective exchange rate of the drachma<sup>1</sup> remained broadly stable for most of 1999. From November 1999 through March 2000, it fell gradually by 2.8 per cent, owing to the substantial appreciation of the Japanese yen and the US dollar. At average levels, the effective exchange rate of the drachma fell by a mere 0.9 per cent in 1999, thus contributing to the reduction of domestic inflationary pressures.

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<sup>1</sup> The effective exchange rate is the value of a representative "basket" of foreign currencies, each of which is weighted on the basis of its importance to Greece's foreign trade.

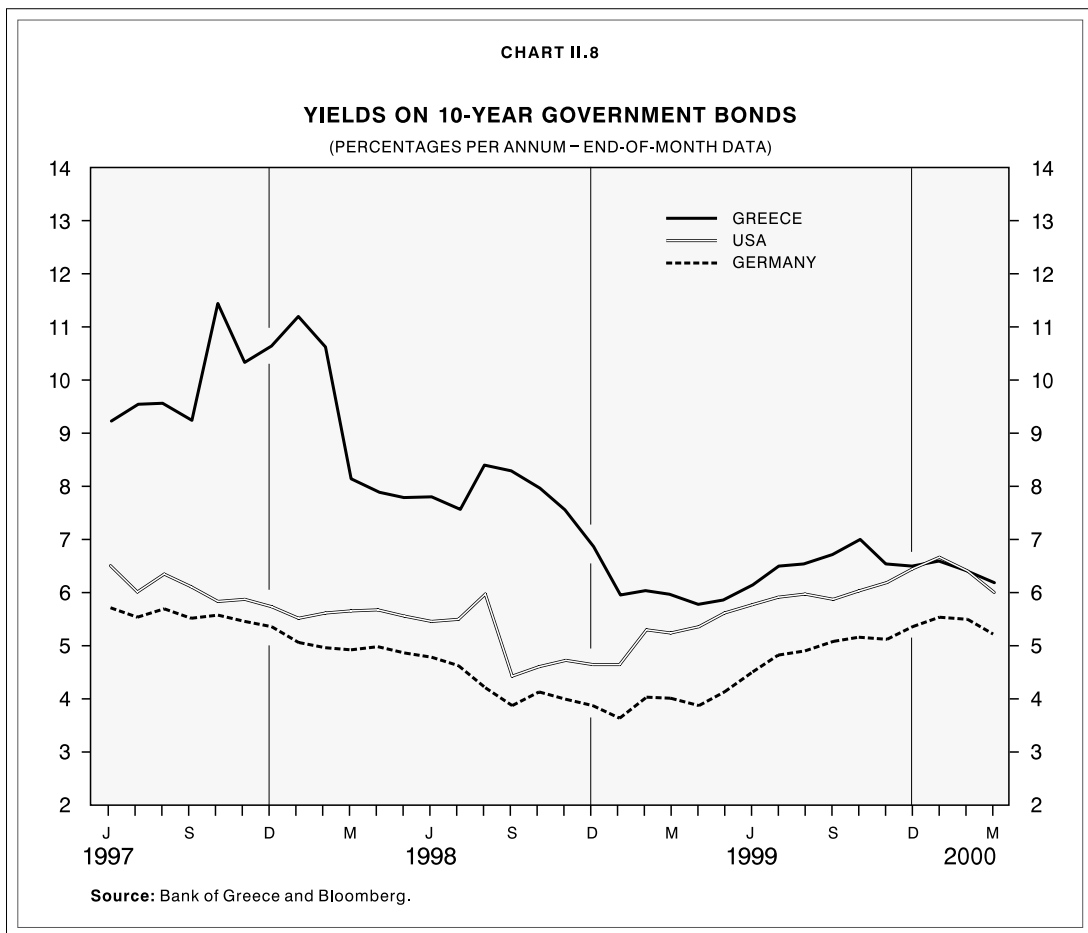
During the 1990s there was an important change in the role of the exchange rate in the conduct of monetary policy. At the beginning of the decade (1990-1993) the growth rate of money supply was a major intermediate target of monetary policy, while exchange rate policy played a limited role. The rate of depreciation of the drachma against European currencies was high at the time, about 8-12 per cent per annum (see Chart II.7). From 1995 onwards, monetary policy adopted the exchange rate of the drachma against the ECU as the main intermediate goal and set each year a specific target for the depreciation rate of



the drachma against the ECU, which was gradually limited to 3 per cent during 1995 and 0-2 per cent in the course of 1996 and 1997. When the drachma joined the ERM in March 1998, its exchange rate against the ECU/euro continued to be the main intermediate goal of monetary policy, while the central exchange rate of the drachma determined the reference value in the medium term. However, the current exchange rate of the drachma was allowed to appreciate against its central rate, in the context of anti-inflationary monetary policy. The Greek experience during the last five years underlines the role and the importance of relative stability of the exchange rate as an effective means of curbing inflation.



Convergence towards stability and favourable market expectations regarding the sustainability of nominal convergence in future are reflected in the evolution of yields on long-term Greek government bonds. Between January and mid-May 1999, the yield on 10-year bonds fell to 5.7 per cent, from 6.9 per cent at end-1998. In mid-May, however, this course was reversed and yields showed an upward trend up to mid-October, when they came to 7.3 per cent. This development was due to the rise in US bond market yields, which affected EU bond markets in the same direction. In mid-October 1999, the yield on



10-year bonds resumed a downward course and by end-March 2000 it fell to 6.2 per cent (see Chart II.8). The yields on 10-year bonds during this period were influenced by the cut in Bank of Greece interest rates and the Greek economy's better prospects of joining the euro area.

The assessment of convergence by the criterion of long-term interest rates is based on the evolution of Greek government 10-year bond yields, compared with corresponding yields in the EU countries with the lowest inflation. The yield differential between the 10-year Greek bond and the corresponding German one was gradually reduced from 3 per-

centage points at end-1998 to 0.9 of a percentage point at end-March 2000. The differential between the average long-term Greek interest rate and the reference value (average interest rate of the three best performing countries in terms of inflation, plus two percentage points) became negative after October 1999, implying that the relevant criterion has been fulfilled.<sup>1</sup> The differential between the yield on 10-year Greek government bonds and the average yield on the corresponding securities of other EU countries decreased drastically from 510 basis points at end-1997 to less than 100 basis points in mid-January 2000. This occurred parallel to significant progress in curbing inflation and improving Greece's public finances, but was also decisively affected by the entry of the drachma into the ERM in March 1998 and, in general, by the enhanced credibility of the economic and monetary policies pursued. As a result of these positive developments, international ranking firms have upgraded Greece's creditworthiness. The rise in inflation during recent months, owing to exogenous factors, has not affected inflationary expectations and, in general, economic convergence prospects. Government bond yields have been falling since January 2000.

#### 4. ECONOMIC GROWTH AND EMPLOYMENT

##### *4.1 Economic activity*

1999 was the fourth consecutive year in which the growth rate of the Greek economy (3.5 per cent) was clearly higher than the corresponding EU average (2.3 per cent). On the demand side, GDP growth was mainly due to the increase in gross fixed capital formation and private consumption. The rise in consumer demand, which reached 2.6 per cent, was supported by the higher real disposable income of households, greater recourse to borrowing, as well as capital gains due to the rise in the value of consumers' assets (particularly equity and real estate). The substantial increase in total investment demand (8.3 per cent) was accounted for by the large growth of investment in equipment and other construction projects, which offset the slow increase in housing investment. On the supply side, the highest growth rates were observed in construction, electricity – town gas – water supply, and services.

Developments in 1999 were a continuation of trends in the previous five years. In particular, during the six years of implementation of the 1994-1999 Convergence Programme,<sup>2</sup> economic activity followed a continuous upward course and average annual

1 The convergence criterion on long-term interest rates includes comparison between, on the one hand, the average yield of the 10-year Greek government bond in the last 12 months before the country is assessed for euro area entry and, on the other hand, the average yield of corresponding securities of the at most three best performing countries in terms of price stability in the same period.

2 The 1994-1999 Convergence Programme was drawn up in June 1994 and updated twice: In June 1998 (for the period 1998-2001) and in December 1999 (for the period 1999-2002).

GDP growth was 2.8 per cent, compared with 2.3 per cent in the EU. The most significant contributors to economic growth were investment, which grew at an average annual rate of 6.4 per cent during the above period, and, to a lesser degree, private consumption. In the previous four-year period (1990-1993), although inflows from EU Structural Funds corresponded on average to 2.3 per cent of GDP at market prices, the performance of the Greek economy, with an average annual growth of 0.5 per cent, fell short of the corresponding performance in other EU countries (1.4 per cent), a fact reflecting the decrease in investment in 1992-93 and in private consumption in 1993, as well as the negative contribution of the real external balance of goods and services in 1990, 1991 and 1993.

By contrast, in the 1994-1999 period, inflows from the Structural Funds and the Cohesion Fund of the EU, mainly under the 1st and the 2nd Community Support Framework (CSF), contributed to a considerable extent to a substantial increase in public and private investment and to the realisation of infrastructure projects. According to approximative calculations,<sup>1</sup> these inflows corresponded, on average, to 2.8 per cent of GDP at market prices and to 13.5 per cent of total gross fixed capital formation. In addition, the growth of private investment was accounted for by the gradual drop in inflation and interest rates, the enhanced credibility of economic policy and, in general, the improvement of the macroeconomic environment, while, during the more recent period 1997-1999, fund raising directly through the Athens Stock Exchange was continuously gaining importance.<sup>2</sup> Moreover, an incentive for investment by private and public enterprises was the required modernisation in view of stronger competition in the single European market. Total investment as a percentage of GDP increased from 18.6 per cent in 1994-1995 to 23.5 per cent in 1999. In fact, during the last three years this percentage was higher than the corresponding EU average. Also, the steady increase in private consumption was accounted for by the rise in average real wages, combined with the increase in employment.

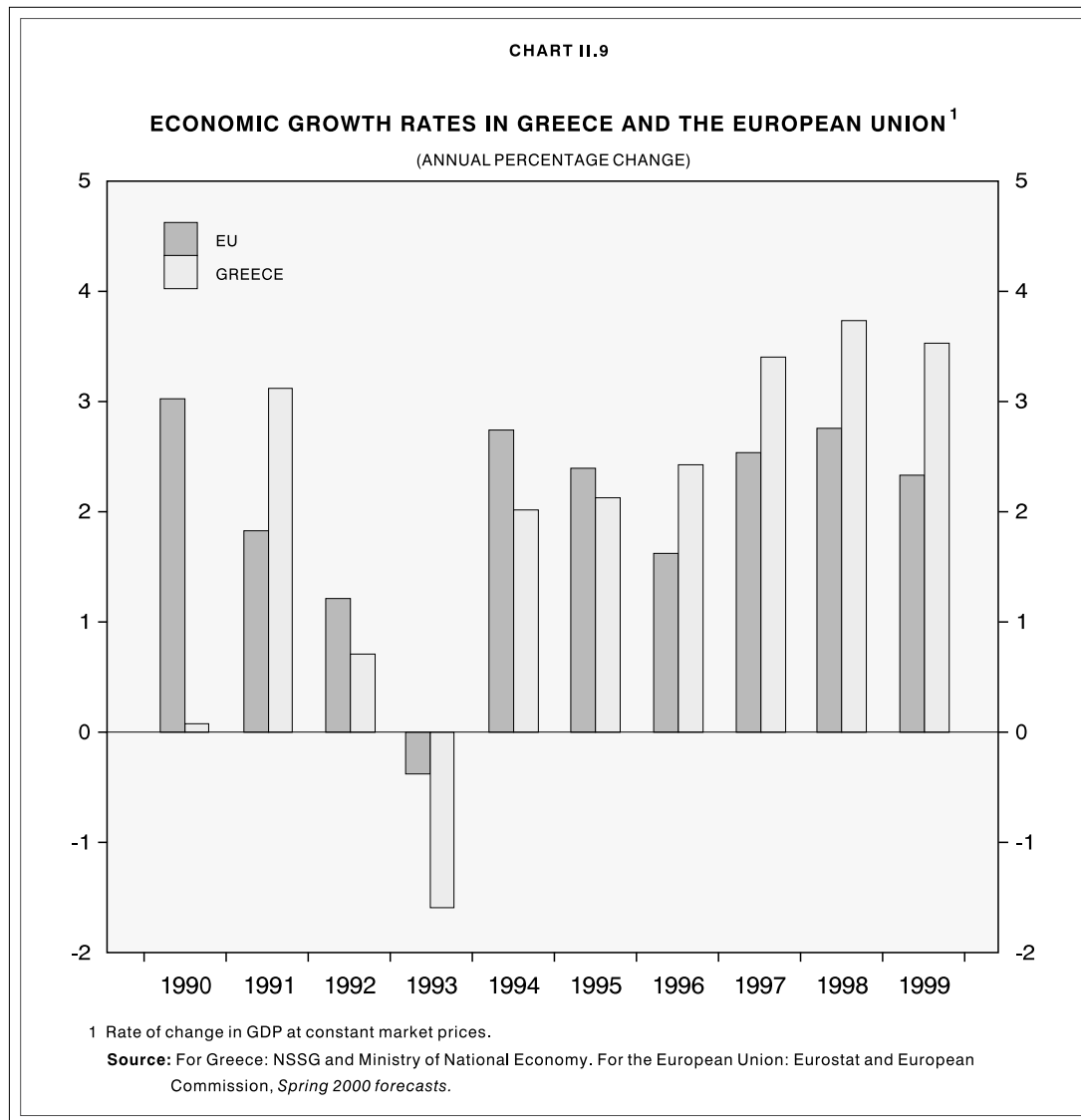
The implementation of the anti-inflationary macroeconomic policy provided for in the 1994-1999 Convergence Programme and the progress made towards nominal convergence, which both enhanced business confidence in the economy's prospects, as well as the utilisation of resources from the 1st and the 2nd CSF, were the main factors which accelerated the process of real convergence from 1996 onwards (see Chart II.9). These developments have a qualitative dimension worthy of mention, apart from the quantitative one. The fast growth of business investment from 1995 onwards was favourably affected by the gradual implementation of structural policy measures aimed at a more efficient operation of markets. Also it was part of the restructuring of the industrial and the services sectors, which had started before 1995 under the pressure of international competition. Clear evi-

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1 For each year, accrual data on inflows from EU Funds (receipts denominated in drachmas), as recorded in the annual Introductory Reports on the government budget were compared with national accounts data, at current prices.

2 Non-financial enterprises raised funds through the stock market (by increasing their share capital), which corresponded to 7.3 per cent (1997), 11.5 per cent (1998) and 28.8 per cent (1999) of non-housing investments of private and public enterprises. This proportion was only 3.1 per cent in 1996. See Bank of Greece, *Monetary Policy 1999-2000*, Table XIX.

dence of this restructuring is provided by the emergence of new, dynamic industries or the upgrading of existing industries in the fields of goods production (e.g. telecommunications equipment, chemicals, dairy products and juices) and services supply (e.g. information technology and telecommunications), as well as the large number of mergers of Greek firms or the extensive cooperation between Greek and foreign firms. At the same time



(despite initial delays), the realisation of major infrastructure projects, particularly in the fields of transportation, communications and energy, is the prerequisite for supplying better-quality and lower-cost basic services to consumers and producers, thereby contributing to the upgrading of Greece's geoeconomic position, i.e. enhancing the country's advantages as a location for business activity.

From the preceding analysis it is evident that prospects for the current and the next few years are clearly favourable. Moreover, the rate of economic growth is expected to remain higher than the corresponding EU rate. Hence the process of real convergence will continue. Specifically, according to the Updated Convergence Programme, GDP will increase by 3.8 per cent in 2000, 4.1 per cent in 2001 and 4.3 per cent in 2002. Similar figures are given in the European Commission's latest report on Greece (GDP to rise by 3.9 per cent in 2000 and 4.0 per cent in 2001), while GDP in the EU is forecast to grow by 3.4 per cent in 2000 and 3.1 per cent in 2001. If these forecasts are to come true, it will be necessary, as in the case of price stability, to pursue an appropriate economic policy mix and implement structural policy at a faster rate, so as to improve the operation of the markets for products, labour and capital as soon as possible.

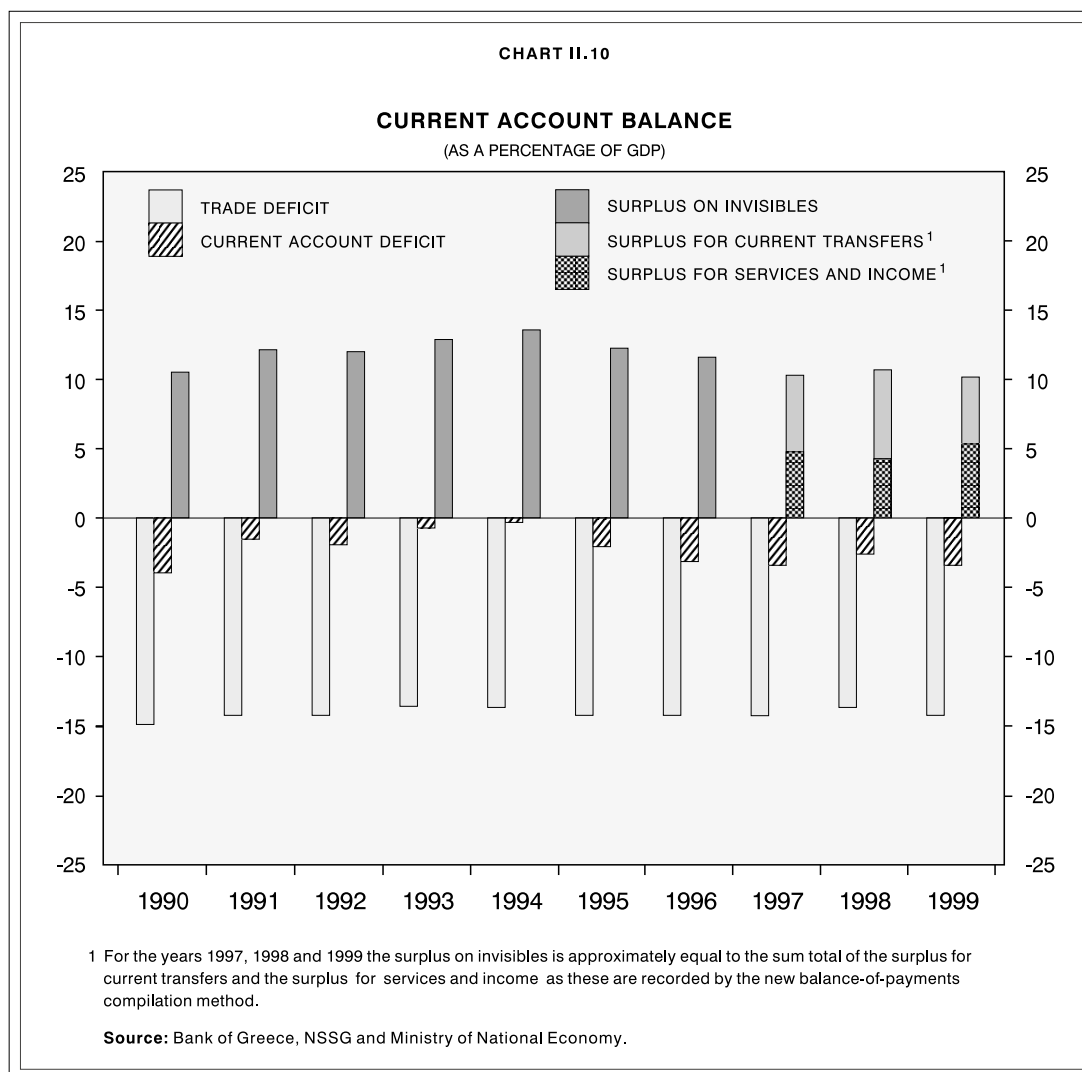
#### *4.2 External transactions*

The high rates of increase in the economy's expenditure, particularly investment outlays, together with improved competitiveness, were the main factors affecting the current account balance in the last three years. The current account deficit, on a settlements statistics basis, rose to 4.1 of GDP in 1999, compared with 3 per cent in 1998 and 4 per cent in 1997. On a national accounts basis, the deficit is estimated at 1.3 per cent of GDP for 1999 (1998: 1.9 per cent, 1997: 2.3 per cent). It should be made clear, however, that, on a settlements statistics basis, the level of the deficit in 1999 is not fully comparable with corresponding levels in previous years, owing to the new method for balance of payments compilation which is being applied since 1998 and according to which transactions are classified on the basis of the distinction between "residents" and "non-residents". Application of the new method was completed in 1999 and it is foreseen that, beginning with data for that year, it will be easier to make comparisons over time.

Current account items in 1999 were affected by the high growth rate of domestic economic activity, which was faster than that of Greece's main trading partners, and by the rise of about 40 per cent in the average annual level of oil prices in the world market. Moreover, the widening of the deficit in 1999 was significantly affected by special factors, such as the very large increase in passenger car imports and the fact that, for technical reasons, net inflows of EU transfers were transposed from the last months of 1999 to the first months of 2000.

For most of the 1990s, the current account deficit ranged between 1.7 per cent and 4.3 per cent of GDP (see Chart II.10). During periods of fast recovery in economic activity, the deficit — particularly the trade deficit — was increasing, mainly because it was inherently difficult for Greek firms to respond to the increase in demand for advanced technology products. Moreover, domestic products could not substitute for imported investment goods, hence domestic production could not meet increased investment activity in recent years. Nevertheless, even in years when the current account deficit

approached 4 per cent of GDP, its financing was rather easy, given that a considerable part of the deficit was financed by capital inflows, e.g. for the purchase of real estate or for direct investment, which did not lead to an increase in external debt. In addition, from 1995 onwards, when a policy of very limited depreciation of the drachma was pursued, inflows for portfolio investment (purchase of corporate shares and Greek government



bonds) by non-residents exceeded the financing requirements of the current account and therefore led to an increase in foreign exchange reserves.

The trade deficit came to 14.4 per cent of GDP in 1999, compared with 13.7 per cent in 1998. The increase was due to both the non-oil trade balance and the net oil import bill, which was burdened by the rise in oil prices. Compared with 1998, non-oil export receipts grew by 31.5 per cent in 1999, reflecting almost exclusively an increase in export volume, given that export prices remained broadly stable in 1999, as shown by the sub-

index compiled by the NSSG.<sup>1</sup> Moreover, the growth of investment and private consumption at a faster rate than in 1998 affected the non-oil import bill, which was 18.3 per cent higher than in 1998. A large part of the increase in the import bill in 1999 was due to passenger car imports. New passenger cars first brought into circulation in 1999 exceeded by 85,000 those circulated for the first time in 1998 (increase of 47 per cent) and the corresponding import bill grew by \$850 million. Large value imports in 1999 mainly concerned passenger ships and aircraft, as well as rolling stock imported by the Hellenic Railways Organisation – OSE – (total cost: about \$350 million). If to these estimates is added an amount of \$500 million, representing additional outlays for fuel imports, owing to the rise in the world prices of oil, it may be said that these three factors alone account for about 40 per cent of the overall increase in imports in 1999, compared with 1998.

During the last ten years, Greece's trade balance did not change noticeably and the trade deficit ranged between 13.5 per cent and 15 per cent of GDP (see Chart II.10). However, though the trade deficit as a percentage of GDP remained rather stable, its characteristics tend to differ from year to year. More specifically, as regards exports, a change in geographical distribution has been observed since the beginning of the 1990s, as the share of exports to the Balkans, Central Europe and the former Soviet Union is growing, because of the faster increase in demand for Greek products in these areas. The share of exports to Balkan countries in Greece's total export receipts has more than tripled, compared with the beginning of the 1990s, while the corresponding share for the countries of the former Soviet Union and Central Europe has almost doubled. By contrast, the share of export receipts from EU countries decreased over the same period. Apart from the change in geographical distribution, a considerable change has also been observed in the composition of Greek exports in the last ten years: the share of high-technology products, which incorporate new methods of production or are relatively new to the Greek manufacturing industry, has increased, while the share of traditional exportable goods has decreased. However, traditional industries, such as textiles, continue to have a high export performance, as measured by the ratio of exports to total output. As regards goods imports, the rather high growth rates of the economy, particularly of investment activity, over the last five years, together with the high income elasticity and the low price elasticity of imports, served to maintain non-oil imports between 17 per cent and 19 per cent of GDP.

Net transfers came to €4,250 million or 3.6 per cent of GDP in 1999, compared with €4,327 million or 4 per cent of GDP in 1998. They recorded a small drop, because the final allocation of resources under the 2nd CSF (which was approaching its end) deferred part of the inflows to the beginning of 2000. Indeed, in the first quarter of 2000, net transfers from the EU increased by €705 million, compared with the same period of 1999. Inflows under the 2nd CSF will continue until end-2001, while inflows under the 3rd

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<sup>1</sup> Provisional NSSG data on cross-border trading indicate that export volume remained unchanged in 1999, while import volume decreased, compared with 1998.

CSF, which covers the period 2000-2006, have begun this year and it is estimated that they will total €25 billion.

The level of the current account deficit per se, as a factor affecting foreign exchange market conditions and the parity of the drachma, will lose significance when Greece joins the euro area. However, the information provided by the level of the deficit will continue to be important as a competitiveness indicator in the new economic environment which will emerge following the adoption of the single currency. The rise in productivity and the long-term improvement in the competitiveness of Greek goods and services will depend in future mainly on the realisation of the structural changes necessary for the more effective operation of markets and firms, the modernisation of government machinery and the expansion and improvement of economic infrastructure.

#### *4.3 The problem of unemployment*

In 1999, according to estimates made by the European Commission and the Ministry of National Economy, the unemployment rate fell slightly to 10.4-10.5 per cent (in the EU to 9.2 per cent), while employment continued to increase. Detailed data are not yet available.<sup>1</sup>

In the period 1994-1998, i.e. the first five years of implementation of the 1994-1999 Convergence Programme, the unemployment rate rose from 8.9 per cent (1994) to 10.8 per cent (1998), while in the EU it decreased from 11.1 per cent to 9.9 per cent (see Chart II.11 on the next page). In Greece, during this period, employment grew at a lower rate<sup>2</sup> than the labour force. Between 1993 and 1998, only two thirds of the 380 thousand people who entered the labour force were absorbed by the creation of 250 thousand new jobs; hence, the number of jobless increased by 130 thousand.

The fast growth of the labour supply in recent years reflects the rise in the participation rate of women in the labour force, the increased — though only partly recorded — presence of immigrant workers, as well as the entry into or return to the labour market of people encouraged by favourable economic developments and employment promotion programmes. The inadequate increase in labour demand is the “net” result of contrasting developments: reduced employment in the agricultural sector, stagnation in the secondary sector and considerably increased employment in the services sector. In general, the restructuring taking place in all sectors of the Greek economy leads initially to a simultaneous rise in productivity and unemployment, particularly when restructuring is accompanied by “labour-saving” investment. However, the favourable multiplying effects of

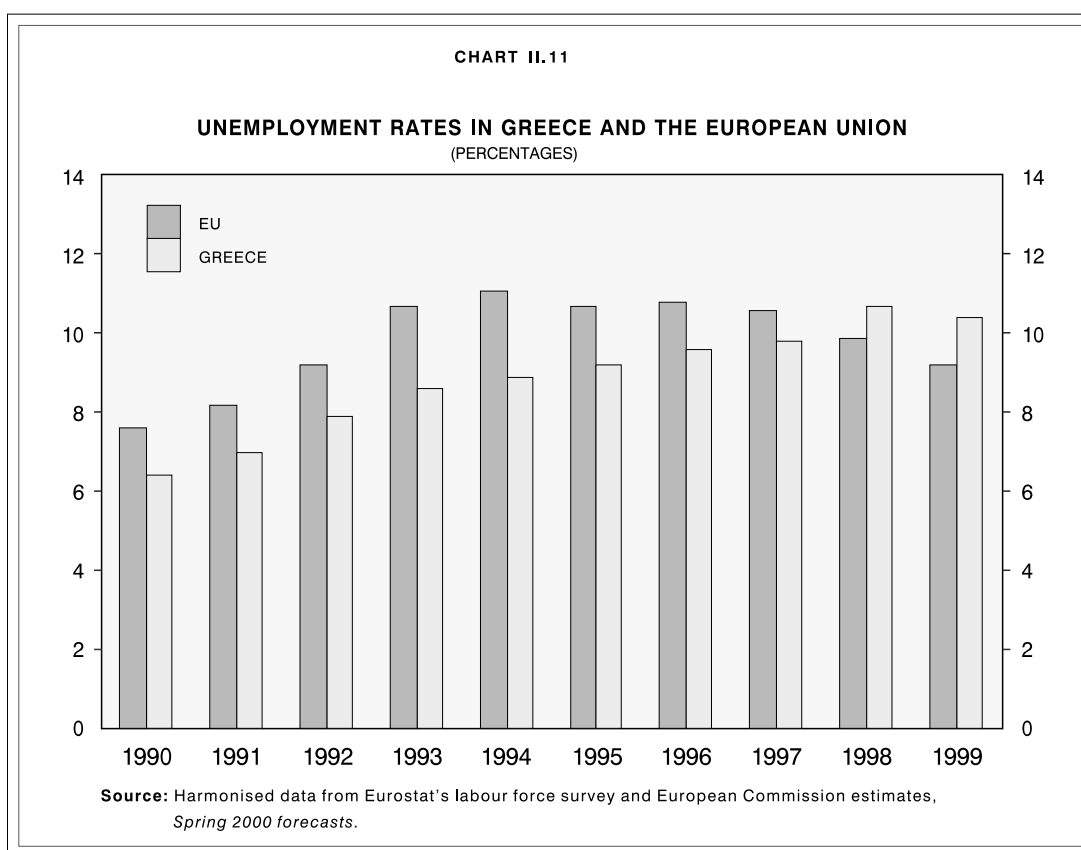
<sup>1</sup> In particular, data from the NSSG's labour force survey for 1999 are not yet available.

<sup>2</sup> Data on employment describe developments only approximately and they may underestimate its increase. It should be taken into account that throughout the 1990s the inflow of economic emigrants from non-EU countries was continuous, but it was inadequately recorded by official statistics (except for 1998). In 1998 the first stage for the legalisation of immigrant workers was completed.



restructuring and of improved productivity on overall economic activity can contribute, in the medium and the long term, to a faster increase in employment, albeit under certain conditions related to the efficiency of the educational system, labour market flexibility, the effectiveness of employment-promoting policies and the implementation of a macroeconomic policy conducive to both stability and growth.

The key indicators highlight the major problems in the labour market. First, the employment rate (i.e. the total number of workers as a percentage of the population 15-64 years old) increased from 55.9 per cent in 1994 to 57.2 per cent in 1998, but remains



lower than the corresponding EU rate (61 per cent), which in turn is much lower than in the United States or Japan (75 per cent). However, if account is taken of the full-time equivalent of the employment rate, then, according to European Commission estimates, Greece's deviation from the EU average is eliminated. This fact is related to the low rate of part-time employment in Greece (6.0 per cent) and the corresponding rather high rate in the EU (17.4 per cent). Second, unemployment is higher among young people and women, while its duration is also an important problem. Indeed, in 1998 the unemployment rate reached 29.8 per cent for people under 25 (EU: 19.4 per cent), 16.5 per cent for women (EU: 11.9 per cent) and 39.4 per cent for young women (EU: 20.7 per cent), while

long-term jobless were 56.5 per cent of the total number of unemployed (EU: 48 per cent).<sup>1</sup> By contrast, the unemployment rate for men over 25 was 5.1 per cent, i.e. lower than in the EU (7.3 per cent), partly reflecting the fact that people in Greece stay longer in the same job.

The above data imply, among other things, that general education and vocational training systems need to be improved, so that young people can acquire knowledge and skills that will enable them to respond to demand for various specialisations, which is constantly changing owing to technological advances. Moreover, labour supply by young people can be stimulated by reducing the tax burden on unskilled and low-salaried workers, and by strengthening, via tax arrangements or special grants, incentives for employment and training. Also the creation of jobs for young people can be encouraged by reducing labour costs of business firms.<sup>2</sup> Besides, the increase in the employment rate of women is conditional on the promotion, by measures improving social infrastructure, of the legally established equal treatment of men and women as regards employment. At the same time, to reduce the number of long-term unemployed, more emphasis should be put on "life-long learning", i.e. on the continuous renewal of skills. Lastly, the situation calls for greater elasticity in working hours and flexibility in total wages,<sup>3</sup> as well as a more effective matching of supply and demand in the labour market.<sup>4</sup> It should be noted, however, that an assessment of the degree to which the Greek labour market is flexible should be based not only on institutional arrangements (some of which remain restrictive), but also on actual conditions. For instance, first, the Greek economy succeeded, in the last decade, in absorbing hundreds of thousands of economic immigrants (despite the lack, until recently, of a satisfactory legal framework), second, actual working hours are very elastic (particularly in the numerous small enterprises) and, third, wage differentials are broadening slowly but steadily after the abolition of wage indexation and the modernisation of the collective bargaining system in 1990.

In general, rapid technological advances, particularly in the fields of information technology and telecommunications, call for the preparation and management of the transition to a knowledge-based economy, as stressed in March 2000 by the Lisbon European Council. The targets set are to turn the European Union into the most competitive and dynamic knowledge-based economy, maintain the economic growth rate at 3 per cent and raise the employment rate to 70 per cent by 2010 (from 61 per cent at present). According

1 All data for Greece refer to the second quarter of 1998. Data for the EU stem from the New Cronos database of Eurostat.

2 Indeed, the employment policy pursued is to a considerable degree in line with this target (programmes for the subsidisation of firms employing jobless young people and for self-employed young people, provisions for the taking over by the government budget of part of employers' and employees' social security contributions related to the employment of young people or those first getting a job).

3 The wider utilisation of the relatively recent legal provisions on the annualisation of working time, part-time employment and local accords on employment can contribute to this end.

4 The modernisation of the Manpower Employment Agency (OAED) via Employment Promotion Centres, the creation, by the social partners, of Information Offices for the Unemployed and for Business Firms, and the start-up of "private labour consultant offices" are already contributing towards the attainment of this goal.

to the guidelines set in Lisbon, policies on the “information society” and research should lead to the full utilisation of the possibilities offered by information technology, to very wide access (by schools as well) to the Internet, and to the dissemination of the required skills. At the same time, the promotion of the process of structural reforms for the sake of competitiveness and innovation, and the integration of the domestic market, the modernisation of the European social model, the improvement of education and, more generally, investment in human resources and the combating of social exclusion, as well as the implementation of an appropriate macroeconomic policy mix, will make possible the attainment of multi-faceted and interdependent targets, such as upgrading and full utilisation of human resources, ensuring the long-term viability of social security systems, and economic growth. Greece naturally participates in deliberations and decisions, and the relevant guidelines are of direct importance to the country: indeed, they are of greater importance to Greece, as the challenges the country will face after its forthcoming entry into the euro area require a concerted national effort to improve the competitiveness of the economy (which, as already stated, calls for, among other things, greater flexibility in the labour market), increase employment and, in the long-term, complete real convergence.

## 5. MONETARY POLICY<sup>1</sup>

### *5.1 Monetary developments and monetary policy in 1999*

The primary objective of monetary policy for 1999 was to achieve and secure price stability, i.e. an annual inflation rate not higher than 2 per cent. When announcing its policy, the Bank of Greece had underlined the importance of the timely attainment of this objective for meeting the relevant convergence criterion of the Maastricht Treaty. It had also stressed that price stability should be sustained over the coming years, so that the competitiveness of the Greek economy would not be affected negatively.

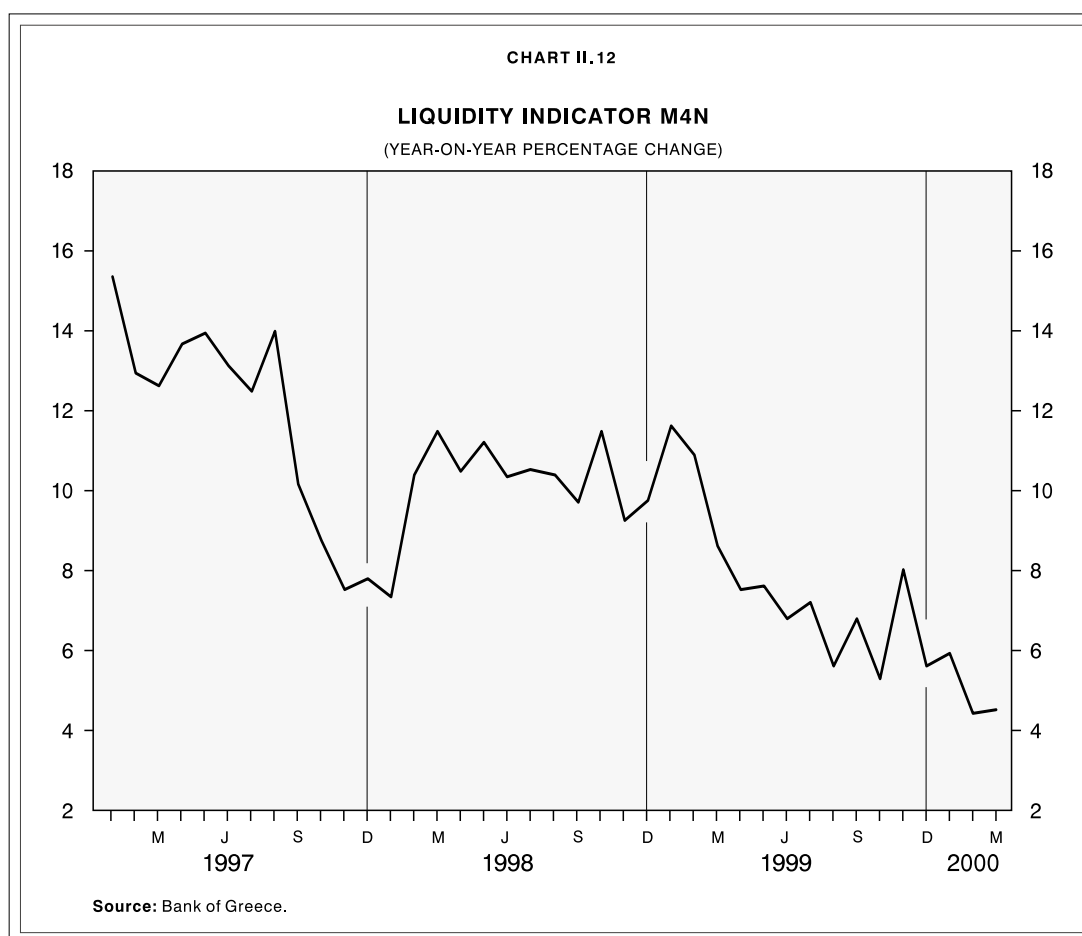
The framework in which monetary policy was conducted in 1999 was determined by the drachma's participation in ERM II, which, as mentioned above, replaced the Exchange Rate Mechanism of the European Monetary System at the beginning of 1999. In this context, the Bank's intermediate target was to maintain the exchange rate of the drachma against the euro relatively stable. Moreover, to assess monetary conditions, the Bank would use M4N<sup>2</sup> and total credit. Regarding the rate of change in these two aggregates during 1999, the Bank had announced the same forecast range (7-9 per cent). These forecasts were based on certain assumptions concerning the income velocity of currency in circulation and the financing of the public deficit and were deemed to be consistent with the inflation target. It had been pointed out, however, that the Bank would not adjust its

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<sup>1</sup> This section includes parts of Bank of Greece's report on *Monetary Policy 1999-2000* (February 2000), which has been submitted to the Greek Parliament and the Council of Ministers.

<sup>2</sup> M4N comprises currency in circulation, private deposits in drachmas and foreign currency, as well as private investments in repos, bank bonds, money market fund units and Greek government securities maturing in up to one year.

policy instruments automatically to any possible deviations of the above aggregates from relevant forecasts, but would carefully analyse the causes and nature of these deviations, evaluating their medium-term effect on inflation. At the same time, for a more comprehensive assessment of the path of inflation, the Bank would also use other indicators offering information on emerging conditions in goods and services markets as well as the labour market. As detailed above (Sections 3.1 and 3.3), the inflation target was attained



largely within 1999 and the exchange rate of the drachma against the euro remained virtually stable.

The monetary aggregate M4N increased by 5.6 per cent in 1999, compared with 9.8 per cent in 1998 (see Chart II.12). The twelve-month rate of increase in M4N declined since the beginning of 1999 and during the March-July period it moved within the forecast range (7-9 per cent), while from August through December it remained at a lower level than forecast, except in November (8 per cent). The course of M4N during 1999 was affected by the considerable decrease in private investment in Treasury bills, to the extent

that this investment was not replaced by investment in assets included in M4N, such as repos. M4N was also affected by investors' shift from money market funds to equity-type funds and by the increased amounts of capital the banks raised through the stock market.

Total credit expansion, adjusted for the effect of the substantially appreciated Japanese yen and, to a lesser extent, the US dollar, on the outstanding balance of foreign currency loans, came to 10.9 per cent, i.e. it was higher than both the forecast for 1999 (7.9 per cent) and the 1998 rate (9.1 per cent). The acceleration of total credit expansion was due to faster credit expansion to the public sector, while that to the private sector decelerated.

In particular, credit expansion to the public sector accelerated to 11.4 per cent in 1999, compared with 7.4 per cent in 1998. This speed-up, however, was due to a change in the way the public sector is financed and not to an increased PSBR, which was actually much smaller than in 1998 (1999: 1,502 billion drachmas, 1998: 1,962 billion). Specifically, investment by the domestic private non-bank sector in government securities decreased by a hefty 1,750 billion drachmas in 1999 (against a small increase of 61 billion drachmas in 1998), while there was a rise in corresponding investment by banks and other monetary financial institutions (1999: 522 billion drachmas, 1998: –557 billion) and non-residents (1999: 2,305 billion drachmas, 1998: 1,850 billion), thereby contributing to liquidity creation.

Credit expansion to the private sector, adjusted for foreign exchange valuation differences, was contained at 10 per cent in 1999 from 13 per cent in 1998 (or at 14 per cent in 1999 from 15 per cent in 1998, including foreign exchange valuation differences). Credit expansion was restrained largely due to the measures the Bank of Greece took in April and July 1999, which were dictated by the fast rise in some loan categories, mainly consumer loans and, to a lesser degree, credit to trade and housing. Specifically, following the relatively recent deregulation of the banking system and keener competition, since mid-1998 consumer loans had been growing faster than 30 per cent and loans to trade and to housing at rates close to 20 per cent. The measures were complementary to the monetary policy pursued and they provided for the imposition of reserve requirements in the form of non-remunerated six-month deposits with the Bank of Greece, in amounts equal to (or, in the case of consumer credit, twice as high as) the amounts by which individual banks' credit expansion to the private sector and public enterprises and entities exceeded given limits at the end of the second, third and fourth quarter of 1999.<sup>1</sup>

In the April-December period of 1999, total credit to domestic and import trade and to consumers increased by 9.5 per cent, i.e. by as much as was the upper limit, while total credit to the other branches of the private sector and to public enterprises and entities grew by 8.9 per cent (again the upper limit was 9.5 per cent). However, the outstanding balance of consumer loans increased by 9 per cent in the July-December 1999 period, compared with an upper limit of 6 per cent. Although credit expansion was restrained, consumer credit growth was still high. In December 1999, therefore, the Bank decided that the measures should remain in effect until the end of March 2000.

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1 For a fuller description of these measures, see Chapter V, section 3.

A breakdown of credit expansion to the private sector by branch shows that credit to trade recorded the largest deceleration. The slowdown was smaller for loans to consumers, shipping and tourist firms. By contrast, the rate of increase in loans to manufacturing, housing and agriculture accelerated. Total financing of households by the banking system (consumer and housing loans), despite fast growth in recent years, represented at end-1999 25.6 per cent of total bank loans to the private sector and public enterprises and entities, i.e. it remained at a much lower level than in the euro area (December 1999: 49.5 per cent).

In the context of anti-inflationary policy, the Bank of Greece kept its interest rates<sup>1</sup> at high levels during 1999. After a small drop in January 1999, these rates remained stable until about mid-October. Thereafter, the Bank proceeded to gradual interest rate cuts, taking into account the decrease in core inflation, the slowdown of average annual inflation on the basis of the HICP, the containment of the annual growth rate of M4N within or below the limits of forecasts for 1999 and 2000, as well as the favourable effect on inflation and inflationary pressures due to the rise, in mid-January 2000, of the central rate of the drachma against the euro in ERM II. The interest rate on the acceptance of 14-day deposits, a key intervention rate of the Bank of Greece, was reduced from 12.25 per cent at year-end 1998 to 10.75 per cent at year-end 1999 and 8.75 per cent in mid-April 2000.

The Bank's policy on interest rates and interventions in the interbank market maintained interbank rates at high levels. More specifically, the 3-month Athibor rate fell gradually, following Bank of Greece interest rate reductions, from 11.9 per cent at year-end 1998 to 9.6 per cent at year-end 1999 and 8.9 per cent at end-March 2000. The differential between Greek and euro area interbank rates remained broadly stable almost throughout 1999, while in December it began to decrease, because of the cut in Greek rates and the increase in European ones. In the case of 3-month interbank rates, the differential decreased from 8.7 percentage points at end-1998 to 5.1 percentage points at end-March 2000 (see Chart II.13).

After a small decrease at the beginning of 1999, bank deposit and lending rates remained virtually unchanged until almost the end of the year, but increased in real terms because of the fall in inflation. Since the end of December 1999, however, banks have reduced their interest rates, which are still high in real terms. At end-February 2000, deposit rates were 1-1.5 percentage points lower than at end-1999, the smallest decrease having been recorded by the savings deposit rate (December 1999: 7.9 per cent, February 2000: 6.9 per cent). Over the same period, lending rates fell by 0.6-1.3 percentage points. The smallest decrease occurred in the average rate on consumer loans and the largest in the rate on housing loans, while the interest rate on short-term loans to business firms fell by about one percentage point (December 1999: 14.6 per cent, February 2000: 13.7 per cent).

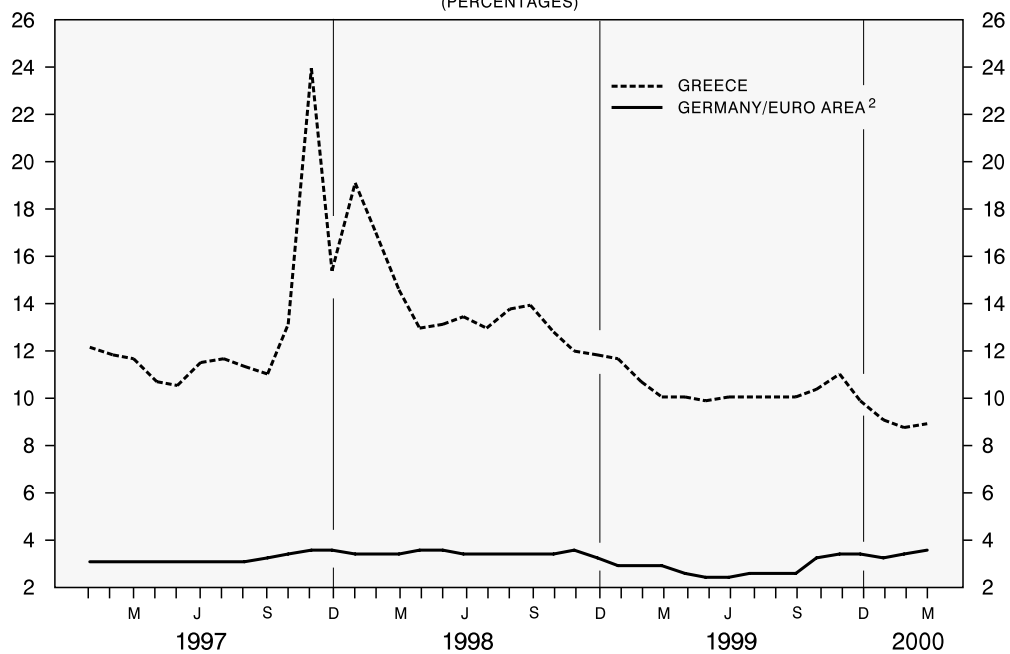
The above analysis implies that monetary policy maintained its anti-inflationary stance in 1999, thereby contributing decisively to the establishment of macroeconomic sta-

<sup>1</sup> Rate of intervention in the interbank money market, as well as interest rates on the two standing overnight facilities (lending and deposit facilities).

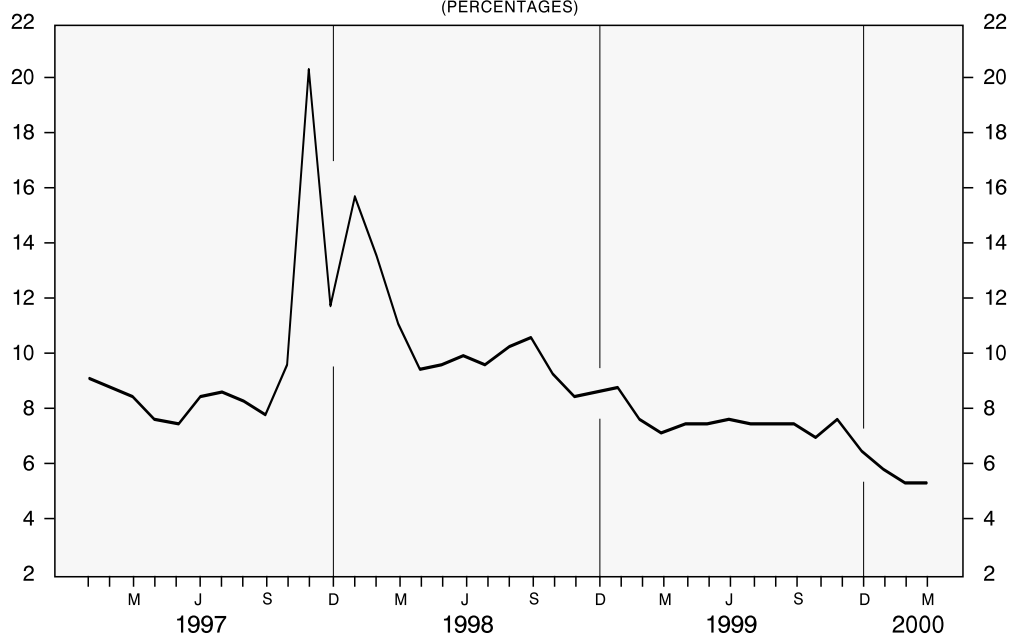
CHART II.13

**A. INTERBANK MONEY MARKET RATES<sup>1</sup>**

(PERCENTAGES)

**B. INTERBANK RATE<sup>1</sup> DIFFERENTIAL BETWEEN GREECE AND GERMANY/EURO AREA<sup>2</sup>**

(PERCENTAGES)

<sup>1</sup> Three-month rates; monthly averages.<sup>2</sup> For 1997-1998: the German rate, for 1999-2000: the corresponding euro area rate.**Source:** Bank of Greece and Bloomberg.

bility, the convergence of the Greek economy towards the euro-area economies and the fulfilment of relevant criteria for Greece's entry into the European monetary union.

## *5.2 Monetary policy stance and challenges in the year 2000*

Price stability remains the primary objective of monetary policy for the year 2000. A considerable degree of price stability was achieved in 1999, given that, as mentioned above, in the June-September period inflation fell to 2-2.1 per cent, if measured by the CPI, and below 2 per cent if measured by the HICP. However, the large increase in oil prices accelerated inflation from October 1999 onwards, as in all the other European countries, and let it rise to 3.1 per cent in March 2000. Nevertheless, core inflation, as a measured by the CPI excluding fuels and fresh fruit/vegetables, declined to 1.6 per cent in March 2000, from 2.3 per cent in September 1999. Lowering inflation below 2 per cent, however, is essential with a view to ensuring an environment of monetary stability as a precondition for sustainable economic growth, and to avoid a deterioration of the international competitiveness of the economy.

The exchange rate of the drachma against the euro continues to be the intermediate target of monetary policy, the reference point being the new central rate after its adjustment on 17 January 2000.

To assess monetary conditions and the course of inflation, the Bank of Greece will monitor, as in the past, a number of indicators providing information on the determinants and prospects of inflation. These indicators include monetary and credit aggregates, wages and, in general, the situation taking shape in the labour market, as well as the industrial capacity utilisation rate, the yield curve of government paper etc. It should be noted that the stability of the relationship between monetary aggregates, M4N inclusive, and GDP has been affected in recent years by financial innovations and the full liberalisation of capital movement, making it more difficult to use these aggregates as monetary policy indicators. Particularly as regards M4N, it is expected that in 2000 savers will shift to investment in assets not included in M4N, owing to their preference for investment in assets with longer maturities and higher yields, in view of the gradual convergence of Greek interest rates towards the lower level of European rates. However, it is estimated that M4N provides information on monetary conditions and the evolution of prices in the medium term. For this reason, the Bank continued its practice of giving a forecast on the increase in M4N for the year 2000 as well. The forecast range was estimated at 5-7 per cent and is consistent with the forecast increase of 3.8 per cent in real GDP and the further deceleration of the annual inflation rate, on the basis of the GDP deflator, to 2.5 per cent (1999: 2.9 per cent). The forecast on the growth rate of M4N took account also of the expected substitution, directly or indirectly, of bonds and equity for M4N components, owing to the gradual convergence of interest rates.

Unlike what happened in previous years, the Bank of Greece did not announce a forecast on credit expansion for 2000, because it is estimated that the development of



credit expansion to both the public and the private sector will be characterised by greater uncertainty, which makes it harder to give a reliable forecast, consistent with the desired evolution of the general price level. One of the various reasons for this difficulty is that the policy of public debt management pursued by the government affects credit expansion to the public sector. Specifically, the government's policy of prolonging average debt maturity has led to a restructuring of investors' portfolios, as the securities of longer maturity offered are more attractive to banks than to small individual savers, thus speeding up credit expansion. As already stated, faster credit expansion to the public sector in 1999 reflects the large change observed in the percentage of the PSBR financed by the private non-bank sector on the one hand and banks on the other. Another reason is the uncertainty characterising credit expansion to the private sector. In fact, the expected cut in lending rates, combined with the reduction in interest income tax, and growing competition will contribute to maintaining private sector demand for credit at high levels, while the abolition, at end-March 2000, of the restrictions imposed on credit by the Bank of Greece is expected to lead to a faster increase in credit, but at a rate which is difficult to predict.

Nevertheless, the Bank of Greece will monitor the development of credit expansion, in conjunction with fund-raising by business firms from non-bank sources, in order to assess monetary conditions more accurately. It should not be overlooked, however, that during 2000 the means available to the Bank for checking credit expansion will be reduced, owing to the inevitable gradual convergence of Greek interest rates towards euro area levels and the greater integration of Greek and euro area financial markets. It is therefore obvious that a change in the policy mix is required this year, with a larger share of other policy instruments in the anti-inflationary effort.

Faster credit expansion during periods of strong competition is often combined with the tendency of banks to undertake greater risks. Consequently, banks should be very careful in their lending operations, so as not to burden their portfolios with doubtful debts, which will ultimately reduce banks' long-term profitability and competitiveness. In the context of its supervisory tasks, the Bank of Greece will put special emphasis on the monitoring and effective management by banks of the credit risks they undertake.

## 6. FINANCIAL SECTOR

### *6.1 The banking system*

1999 was a year of major restructuring of the Greek banking system and the financial sector, in general. The trends that started to emerge in the last four years became stronger and more obvious. The key characteristics of developments regarding credit institutions in 1999 were: further increase in the degree of concentration owing to mergers and acquisitions, continuing expansion of operations into new sectors, considerable enhancement of their capital base and impressive improvement in their financial results, as well as increased activity abroad and forging of alliances and co-operation with foreign credit institutions.

The restructuring and expansion of the Greek banking system now underway reflects the influence of three main factors: deregulation of financial markets, free capital movement worldwide and major advances in information technology and telecommunications, which have led to globalisation of the financial services market and to internationalisation of competition in the field of banking. The introduction of the euro has further increased competition in the single European financial market, while the international environment of low inflation and low interest rates has also contributed towards reducing the traditional role of banks as intermediaries, since savers seeking higher yields have increased their investment in securities, either directly or indirectly, by investing in mutual fund units. Stronger competition and reduced bank intermediation have contributed to the emergence of two trends: first, operating costs have been squeezed through mergers and utilisation of the latest advances in information technology and in the provision of services and, second, banking operations have expanded into new fields, such as insurance, asset management and supply of new or derivative financial products. It is therefore evident that developments in the Greek banking system correspond to international trends.

In the year under review, mergers and acquisitions of credit institutions continued, as did the creation of large banking groups. Nevertheless, in the last five years the degree of bank concentration did not change considerably, as estimated on the basis of market shares of the two and the five largest banks. In terms of assets, in 1995 the two largest banks covered 38.1 per cent of the entire banking system and the relation between them was 2.2 to 1, while in 1999 the two largest groups controlled 42.8 per cent of the entire banking system and the relation between them was 1.6 to 1. By the same criterion, the five largest banks or groups had a 72.6 per cent share of the market in 1999, while in 1995 the same share was held by seven banks.<sup>1</sup> The degree of bank concentration in Greece is considered high, compared with the other EU countries. According to data for 1997, Greece ranked sixth in the EU in terms of bank concentration and the share of the five largest banks in EU countries averaged 52.6 per cent.

Despite the mergers and acquisitions actually realised in recent years or planned for 2000, the size of Greek banks remains small, compared with that of banks in the rest of the EU. Although size is an important determinant of a bank's capability to offer competitive services on a European scale, particularly after the introduction of the euro, it is not of course the only or the chief element of efficient and competitive bank operation.

Bank mergers and acquisitions in Greece during recent years were realised parallel to the process of privatising banks which were wholly or largely, directly or indirectly, state-controlled. After the privatisation of four banks (Ionian Bank, Cretabank, Macedonia-Thrace Bank, Bank of Central Greece), the share of state-controlled credit institu-

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<sup>1</sup> In 1995 the two largest banks were the National Bank and the Agricultural Bank and in 1999 the two largest groups were that of the National Bank and that of Alpha Credit Bank. In 1995 the five largest credit institutions were: the National Bank, the Agricultural Bank, the Commercial Bank, the Alpha Credit Bank and the Mortgage Bank, while in 1999 the five largest groups or banks were: the group of the National Bank, the Alpha Credit Bank, the Agricultural Bank, the Eurobank group and the Commercial Bank.

tions' assets fell considerably from 69.4 per cent in 1995 to 50.7 per cent of total assets in 1999, but is still the highest in the EU.

The further expansion of banking into relatively new fields of activity continued and increased in 1999. Particularly significant was the expansion of housing and consumer loans, where borrowers are offered a wide variety of options regarding maturity, interest rate and currency. The share of these two categories of loans in total bank lending to the private sector increased from 16.4 per cent in 1995 to 25.6 per cent in 1999, but remains much smaller than in euro area countries (December 1999: 49.5 per cent). It should be noted that in 1999 there was limited room for the development of new products in the specific categories of credit, because of the ad hoc measures taken by the Bank of Greece to contain credit expansion. However, apart from the supply of new financial products, banks are apparently striving to cover a broad range of relatively new financial services, such as asset management, underwriting or consultant services to firms raising funds through the Athens Stock Exchange and portfolio management services for banks' customers. Some of these services are provided directly by the banks, while others are offered through their subsidiaries. Banks dominate in the insurance industry, as almost all of them either operate their own subsidiaries or cooperate with insurance companies. Banks have recently been trying to gain access, through subsidiaries, to real estate management, while at the same time promoting cooperation with information technology and telecommunications companies, with a view to developing new products and securing new distribution networks.

Developments in capital adequacy, operating costs and the profitability of banks were highly positive in 1999. With respect to capital adequacy, the favourable stock market conditions that prevailed for most of the year enabled banks to raise substantial funds, thus increasing the capital adequacy ratio to 14.7 per cent (end-June 1999 data) from 11.3 per cent at the end of 1998. Given that banks managed to increase their capital (as calculated for supervision purposes) by 26 per cent in the ninth-month period from end-June 1999 to end-March 2000, it is estimated that this fact alone will lead to a further rise in the capital adequacy ratio, without considering the increase in reserves due to particularly high profits in financial year 1999. The increase in profits approached 100 per cent compared with 1998, but was partly due to high stock market gains in 1999. Nevertheless, high profitability was accompanied by a further drop in operating costs, as a percentage of year average assets, a development which is deemed very satisfactory, since these costs are considerably higher than in other EU countries.

The Greek banking system's prospects after Greece joins monetary union can be made more favourable through appropriate choices and coordinated efforts. Following the introduction of the euro, banks operating in local markets will continue to enjoy a competitive advantage in them because: i) they can assess more easily the risks involved in transactions with domestic firms, ii) they have forged long-standing relationships with their customers and iii) they are better informed on and familiar with the accounting procedures and the legal and fiscal requirements in force in the specific country. Nevertheless, in order to maintain their competitiveness, banks will have to make suitable

and timely choices as well as adopt an effective medium-term strategy. As mentioned previously, increased size can to some extent ensure economies of scale and enable banks to expand their operations in international markets. Moreover, bigger size can at least partly compensate for the negative results of growing competition in an environment of low inflation and low interest rates, which, as international and European experience shows, has narrowed the spread between deposit and lending rates and has therefore reduced income from traditional categories of bank business. Banks are consequently called upon to squeeze their operating costs further and to implement better methods of utilising human resources and assets in order to benefit from new opportunities. Supported by a strong capital base and efficient administration, Greek banks can face the new challenges successfully. The Bank of Greece will encourage banks' initiatives aimed at strengthening their competitive position, which is also enhanced by the measures it has already taken or is about to take so as to harmonise the legal framework for the conduct of monetary policy with the requirements of the Eurosystem. New measures will include reducing the reserve requirement ratio from 12 to 2 per cent, deregulating the management of foreign currency deposits and using standing facilities and intraday financing to meet obligations arising from the new real-time payment system HERMES.

## 6.2 *Capital markets*

The satisfactory evolution of domestic macroeconomic aggregates and gradually increasing market confidence in the successful outcome of the process leading to Greece's entry into the euro area, as well as favourable prospects for the development and profitability of many Greek enterprises, had a positive influence on the conditions that prevailed in domestic capital markets in 1999. Moreover, owing to the increased interlinking of markets and the full liberalisation of capital movement, domestic markets were also influenced considerably by developments in international capital markets, particularly in the United States.

In the primary market for government securities, the value of new issues amounted to 10.4 trillion drachmas in 1999 (roughly as much as in 1998), of which 8 trillion drachmas represented bonds. Of bond issues, 41 per cent were 10-year and 15-year bonds, while 20-year bonds started being issued in January 2000. The operation of the Electronic Secondary Securities Market (HDAT) since 1998 has contributed substantially to the creation of a government securities market characterised by increased liquidity and effectiveness, allowing the use, for Greek bonds, of the same risk weights applied by the Eurosystem for the provision of liquidity on collateral of securities issued in euro area countries.

Share prices and trading volume on the Athens Stock Exchange (ASE) started moving upwards in early-1999. The rise in prices was particularly steep between early August and mid-September 1999, but both prices and trading volume fell considerably in the last quarter. However, despite the shift observed in the last three months of the year, the composite share price index rose by 102.2 per cent between end-December 1998 and

end-December 1999. This increase compares with a 25.2 per cent rise in the Dow Jones index and increases of 17.8 per cent, 39.1 per cent and 51.1 per cent in the basic indices of the London, Frankfurt and Paris stock exchanges respectively. The composite ASE index rose in 1999 by an average of 108.1 per cent, with major price differences between individual categories. Specifically, the prices of bank shares rose by 83 per cent on average, those of industrial shares by 96.8 per cent and those of construction industry shares by 658 per cent, while share prices in the parallel market rose by a hefty 742 per cent.

It should be noted that a 102.9 per cent rise in the composite ASE index had also been recorded in 1990. Over the next six years, the index fluctuated sharply but at end-1996 it stabilised at about the same level as at the end of 1990. In 1997 and 1998 it rose by 58.5 per cent and 85.1 per cent, respectively. These changes point to the overall positive contribution of the improved macroeconomic environment and the high profitability of firms to stock market developments in the last three years. They also point to the existence of other factors affecting supply and demand in the stock market, which partly accounted for the stagnation of share prices during the period 1990-1996.

A pattern similar to that of prices was followed by the volume of ASE transactions, which at average daily levels gradually increased from 84 billion drachmas in December 1998 to 441 billion drachmas in September 1999, but then fell to 271 billion drachmas in December and to even lower levels in the early months of 2000.

Growing demand for shares enabled both banks and non-banks to raise substantial amounts of funds through the ASE. In particular, banks raised a total of 1,268 billion drachmas in 1999 (1998: 210 billion), thereby seeking to strengthen their position and increase possibilities for a competitive expansion of business at home and abroad. At the same time, non-financial firms raised 1,524 billion drachmas, compared with 544 billion in 1998. These amounts imply that, during periods of macroeconomic stability and favourable business prospects, the Greek capital market can support the investment and structural choices of business firms and facilitate the implementation of the privatisation programme.

Nevertheless, stock market developments in the course of 1999 brought to light weaknesses associated mainly with the growth rate of a market that was not sufficiently well known to most investors and is still in the phase of transition to maturity. During the summer, as indicated by the large number of new accounts opened in the Book-entry Securities System at the time, investments in the ASE were also made by people who were not familiar enough with the key characteristics of the market, particularly with the size of the risk inherent in such investment, as well as with the main factors having a medium-term effect on the price of a specific company's share. That period was marked by expectations of a general rise in prices, which did not take sufficiently into account the peculiarities and profitability prospects at the level of the business firm. It should be noted that, between end-July and 17th September 1999, the composite ASE index rose by 46.2 per cent and that of the parallel market by 125.8 per cent. When the first price adjustment occurred in mid-September, some further problems also arose, which were linked to investors' short positions in securities companies. The aforementioned weaknesses concerning investors' inad-

equate information and limited understanding of the nature of stock market transactions hindered the stabilisation of the market in the following months.

In order to mitigate pressures and prevent the spillover of these problems into the broader financial sector, the Bank of Greece took certain measures on 27 September 1999, aimed at raising (from 5 billion to 15 billion drachmas) the ceiling on lending to natural persons against collateral of securities and at deregulating bank credit to investment firms and securities companies. Later, on 17 March 2000, the Bank proceeded to the further deregulation of credit to natural persons for the purchase of a large number of shares, provided this will result in their acquiring a holding of at least 5 per cent of a firm's capital, while provisions applicable so far allowed financing only for gaining control of a company. Furthermore, natural persons were offered the option to borrow on collateral of securities already held in their portfolio and not only of shares purchased with the proceeds of the loan.

The prospects of the ASE are generally favourable in the long run, particularly owing to the progress made at a macroeconomic level in view of Greece's entry into the euro area. But a considerable improvement in productive capacity has also been observed at the level of the individual firm, owing to large investments in recent years, as well as in the ratio of own to borrowed funds, the breakdown of business loans by currency, the opening of new export markets, and in the extent to which firms cooperate with Greek and foreign enterprises or participate in them. These developments bode well for firms' profitability over the coming years. Moreover, the introduction of the euro in January 2001, which will entail a significant reduction in foreign exchange risk, as well as the fact that the Olympic Games of 2004 will be held in Athens and will offer opportunities to a wide range of firms, are additional factors justifying an optimistic assessment of the future of Greek enterprises.

The above analysis, however, does not imply that all firms listed on the ASE will automatically benefit, if they fail to take advantage of the opportunities offered. Nor should it be ignored that there are other factors which influence ASE prices, such as developments in international capital markets or in the exchange rates of major currencies (US dollar, yen, euro), as well as raw material and commodity prices. Some of these factors affect the various industries asymmetrically and this may lead to different effects on share prices. Consequently, it cannot be ruled out that the share prices of certain enterprises will fluctuate, although the long-term prospects of stock market values are favourable. Also, special attention should be paid to the criteria underlying decisions concerning capital increases and the timing of fund-raising through the stock exchange. In view of recent experience, the total amount of new fund-raising each month should be readily adaptable to changing market conditions.

In the years 2000 and 2001, markets will be adjusting to the new environment of low interest rates combined with the replacement of the drachma by the euro. The upgrading of Greek markets by international rating agencies should also be taken for granted. At the same time, the reduction in the PSBR will release funds previously used to finance public deficits. As far as the supply and demand for securities, mainly shares,

is concerned, all these factors are conducive to the creation of conditions which are expected to make a positive contribution to the further expansion of the Greek capital market. The measures recently announced by the government cover a wide range of institutional, organisational and operational issues, such as the improved institutional framework of the Capital Market Committee and the ASE, the enhanced transparency of stock market trading, the reduction in the number of companies to be listed on the ASE over the next few months, and the supervision of listed companies, particularly as regards the supply of information, the transactions of their major shareholders and the observance by the latter of ASE regulations. These measures are expected to accelerate and facilitate the transition of the Greek capital market to the stage of maturity of corresponding markets in the European Union.

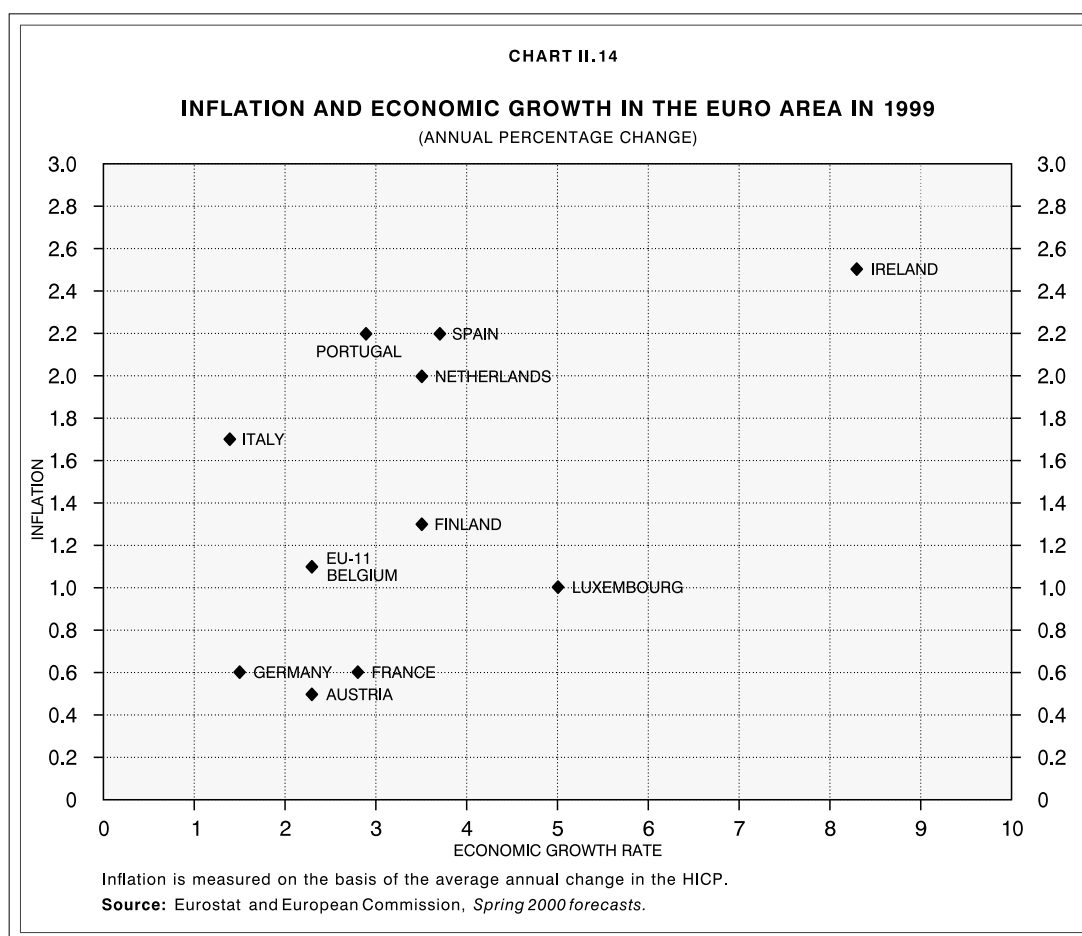
#### 7. THE GREEK ECONOMY AFTER ENTRY INTO THE EURO AREA

Greece's participation in the euro area will decisively influence the functioning and performance of the Greek economy in the future. The adoption of the euro will cause considerable changes in the economic environment: it will bring benefits and create opportunities, but, at the same time, it will imply constraints and pose challenges for economic policy. The economy's performance in the coming years will therefore hinge upon the ability of the private sector and the economic authorities to secure the potential benefits, take advantage of the opportunities, adjust successfully to the constraints and deal effectively with the new challenges. The crucial issues for the post-entry period are the consequences of the introduction of the single currency for monetary stability, on the one hand, and for the acceleration of economic growth and, hence, the prospects for real convergence of the Greek economy in the next ten years, on the other.

A major advantage to Greece from the adoption of the euro are the favourable prospects for price stability. Economic theory and international experience suggest that, in the long run, inflation is determined mainly by monetary factors. The average annual inflation rate in the euro area is projected to remain low, at a level not exceeding 2 per cent, on average. This is the primary objective of the independent European System of Central Banks, which is responsible for the formulation and conduct of the single monetary policy. However, while it can be reasonably expected that inflation in Greece will not deviate significantly from the euro area average in the long run, deviations may arise in the short and medium run, with possibly unfavourable consequences for economic activity and employment. This contingency should therefore be addressed by appropriate economic and structural policies at the national level.

A further potential benefit for Greece from full participation in EMU is the prospect of faster economic growth. The potential for faster growth of investment and economic activity is related to the elimination of foreign exchange risk in cross-border transactions within the euro area, to the lower financing costs stemming from the broader

and deeper single financial market and the envisaged price stability, as well as to lower transaction costs and greater price transparency. Nevertheless, faster and sustainable economic growth should not be taken for granted, nor should it be considered an automatic consequence of the adoption of the euro, because the effect of Greece's participation in EMU on domestic economic activity will be the net outcome of other factors as well. The potential for high growth will depend on the ability of the Greek economy to operate competitively, supplementing the benefits from entry into the euro area with comparative



advantages. For it should not be overlooked that such benefits also accrue to the other countries which have adopted the single currency.

These arguments imply that entry into the euro area cannot by itself ensure lasting price stability in the short and the medium run, nor can it automatically lead to higher growth rates required for the convergence of Greek living standards towards the respective average in EU member states. On the contrary, economic theory, as well as international experience, clearly suggest that deviations in inflation and economic growth between the member states of a monetary union should be expected.



In particular, the initial performance of the eleven countries which have adopted the euro confirms the existence of such deviations, even though they are limited (see Chart II.14). It is worth noting that these deviations cannot be attributed to major differences in the economic and monetary policies pursued. Such differences have been reduced by the implementation of the single European monetary policy since January 1999, by the convergence in recent years of national monetary policies within the euro area and by continuing fiscal consolidation in these countries in the context of the Stability and Growth Pact.

Various factors and structural characteristics of the economies in the euro area may cause deviations in their economic performance. First, differences in the structure of the financial sector and in the functioning of markets, especially the labour market, entail differences in the transmission mechanism of the single monetary policy and hence in its effects on inflation and economic activity in individual member states. Second, differences may exist in the cyclical positions of euro area member states. Third, exogenous factors may influence individual countries asymmetrically, i.e. to different degrees. Fourth, the completion of the single market and increased cross-border competition between enterprises, which should promote the convergence of tradeable goods prices, can lead to inflation differentials in the initial stage of monetary union. Consequently, national economic policy will have to take these factors into account in order to secure price stability at the national level, given that the single monetary policy is formulated and implemented on the basis of overall monetary and economic conditions in the euro area.

In the new environment resulting from the stabilisation of the Greek economy and its entry into the euro area, the main goals of economic policy will be the acceleration of economic growth, the convergence of Greek living standards towards the EU average and the combatting of unemployment. These goals should, of course, be attained parallel to securing price stability, both because price stability entails certain direct benefits and because it is a precondition for sustainable growth. Furthermore, economic policy must be able to mitigate any future fluctuations in economic activity due to exogenous shocks, cyclical effects or the ongoing restructuring of the EU economy.

It is self-evident that the above goals cannot be pursued through the conduct of national monetary and exchange rate policies, since, after the adoption of the euro, the monetary policy implemented by the Bank of Greece will be the single European monetary policy and it will certainly not be possible to change the drachma's exchange rate against the euro. Therefore, the growth and employment objectives will have to be pursued via structural reforms and fiscal measures. However, it should be pointed out that the loss caused by the inability to implement a national monetary and exchange rate policy to strengthen economic activity is, in practice, rather limited for various reasons. National monetary and exchange rate policies were formerly focused on achieving stability and were therefore not employed to support other goals. Furthermore, their ability to do so in a permanent and effective way is highly questionable. Both international and Greek experience suggest that, for a small, open economy operating in an environment of high capital mobility, the conduct of an autonomous monetary policy is in any case subject to con-

straints. Moreover, the ability to improve international competitiveness through an exchange rate adjustment is temporary and, in the long run, ineffectual, as inflationary pressures caused by the exchange rate adjustment often largely offset the initial benefits.

Sustainable growth, lower unemployment and lasting price stability can and should be attained mainly through structural reforms aimed at improving the international competitiveness of the Greek economy, enhancing competition in the domestic markets for goods and services, and achieving a more efficient and flexible functioning of the labour market. Enhancing competitiveness is an essential prerequisite and the primary means of increasing net exports of goods and services, which is the only way in which a small, open economy can achieve faster and steady growth of real national income. Strengthening competition in goods markets and increasing flexibility in the labour market are necessary not only to secure price stability, but also to minimise the impact on employment of exogenous and unexpected changes in total domestic demand or other external disturbances. When competition in goods and services markets is imperfect and/or labour market flexibility is insufficient, exogenous shocks, adversely affecting domestic economic conditions, tend to require a larger decrease in employment and real incomes in order to restore equilibrium.

Structural reforms which can contribute to the enhancement of competitiveness and the strengthening of competition, and hence to job creation, may be grouped into four categories: First, those aimed at deregulating markets and reducing state interventions. The faster deregulation of markets for energy, telecommunications and certain services, as well as the completion of the privatisation programme, will improve the quality and international competitiveness of Greek goods and services and, at the same time, help secure price stability. Second, reforms which involve changing and enhancing the role of the state in certain areas and entail its more efficient operation. Government has an important part to play, not only in further improving infrastructure, but also in substantially upgrading education and vocational training and in promoting technological research and the adoption of new technologies. In particular, the improved training of young people and of the long-term unemployed, so that they can acquire new skills, will contribute to a more efficient matching of labour demand and supply, and thus to the reduction of unemployment. Third, reforms of the institutional framework within which firms operate can foster investment and expand business activity. In this context, the simplification of procedures for the establishment of new firms and for the approval and hosting of foreign direct investment<sup>1</sup> will encourage business activity and create new jobs. Fourth, institutional reforms (along with the introduction of new technologies) aimed at improving the functioning of the financial sector and, more specifically, the financing of new small and medium-sized enterprises, which constitute a driving force of economic growth. In fact, more efficient functioning of the capital market will support the acceleration of economic growth.

Fiscal policy has an important role to play in the implementation of structural reforms. Nevertheless, this policy must strike a balance between the objectives of stability

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1 It should be noted that the amount of foreign direct investment in Greece is among the lowest in the European Union.

and fiscal consolidation, on the one hand, and the promotion of faster economic growth, on the other. The Stability and Growth Pact, which constitutes the framework for the conduct of fiscal policy in European Union countries, requires, as a medium-term objective, a budgetary position that is close to balance or in surplus. The maintenance of high primary surpluses in the coming years is indispensable, not only to ensure long-term fiscal balance (given that the debt/GDP ratio, although reduced, remains very high and continues to put a strain on the economy), but also to deal with potential additional strains associated with the future obligations of major social security funds and public enterprises. The implementation of measures aimed at creating a viable and competitive social security system must be a policy priority, as it will contribute both to restoring full fiscal balance in the long run and to improving the competitiveness of the economy. Furthermore, fiscal consolidation efforts should be kept up so that fiscal policy can be given sufficient room for manoeuvre to deal with exogenous shocks that may affect the Greek economy once it joins the euro area. Finally, in the short run, fiscal policy will have to play a part in easing any inflationary pressures that may be caused by the relaxation of monetary conditions in the final phase of the changeover to the single currency.

On the other hand, fiscal policy is called upon to strengthen the growth process by restructuring government expenditure and reforming the tax system. In particular, the restructuring of government expenditure should enable additional resources to be channelled to education, research and development, and active labour market policies, as well as to an improvement in the overall infrastructure of the economy. The planned tax reform must aim to provide incentives to establish new enterprises, to step up investment activity and enhance research and development, as well as create new jobs and increase employment. Ensuring fiscal balance and, at the same time, taking measures to promote growth is undoubtedly a hard but necessary task for the economic authorities in the years to come. That is precisely why it is essential to proceed to the speedy introduction of reforms, including the deregulation of markets, privatisation of state-controlled enterprises and an overhaul of the social security system, which can promote growth and improve, directly and indirectly, the country's budgetary position.

The past decade was a period of stabilisation of the Greek economy. The policies pursued by the economic and monetary authorities and the efforts made by the Greek people have borne fruit. Low inflation and a faster pace of economic activity have been the major achievements. The current decade must be a period of rapid growth, which, to be sustainable, requires stability. In this way, Greek standards of living will converge towards the EU average, while, at the same time, the problem of unemployment will also be dealt with through the implementation of appropriate policies.

The prospects for high and sustainable growth and an increase in employment are favourable. This conclusion rests on three observations. First, the domestic stability already achieved and Greece's forthcoming entry into the euro area are creating an environment which will be generally conducive to growth. Second, the government has adopted this dual goal (growth and employment) and is committed to achieving it. Moreover, its

attainment is supported by all Greek political forces and by Greek society at large, while the European Union, at the Lisbon Summit, highlighted economic growth, on the one hand, and the reduction in unemployment, on the other, as key policy priorities. Third, the required human resources are available and, if properly utilised and mobilised, they will constitute the chief factor underlying the growth process. These observations should not, however, lead to the conclusion that the achievement of these objectives is an easy task. Sustainable and strong growth requires structural adjustments in several areas, as well as continued efforts for full fiscal consolidation over the coming years. Moreover, the growth objective will have to be achieved in the highly competitive environment of the European Economic and Monetary Union and in the environment created by the new technology- and knowledge-based economy. We can, however, be optimistic, not only for the aforementioned reasons but also because we are aware of the constraints being faced and have a good understanding of the policies required for achieving the said objectives. The adoption of the euro by Greece in 2001 requires that these policies should be implemented promptly and effectively. At the same time, it can be expected that full EMU membership will foster the implementation of appropriate economic policies and the reorganisation of the public and the private sector, so that the economy can function competitively and thus secure a sustained convergence to higher living standards.

### III. ECONOMIC ACTIVITY AND EMPLOYMENT

#### 1. EXPENDITURE AND NATIONAL INCOME

##### *1.1 General developments*

In 1999 the growth rate of economic activity remained at high levels, though it decelerated somewhat relative to 1998. According to the most recent estimates (based on the European System of Accounts ESA 95 – see Box III.1) by the National Statistical Service of Greece (NSSG) for the year 1998 and by the Ministry of National Economy for the year 1999, GDP grew by 3.5 per cent, compared with 3.7 per cent in 1998. On the demand side (see Table III.1), private consumption and gross fixed capital formation contributed equally to GDP growth, whereas the real external balance on goods and services, on a national accounts basis, made a negative, albeit small contribution. The slow growth of housing investment was offset by the surge in investment in equipment and other construction (except dwellings), which contributed to a slight pick-up in the growth of total investment demand (1999: 8.3 per cent, 1998: 8.1 per cent). It should be also pointed out that a particularly significant acceleration was observed in the growth of general government's investment (1999: 14.5 per cent, 1998: 6.7 per cent). On the supply side, it is estimated that the highest rates of increase were recorded in construction, electricity-town gas-water supply and services (see Table III.2).

##### *1.2 Developments by category of expenditure*

According to estimates by the NSSG and the Ministry of National Economy, in 1999 private consumption, at constant 1995 prices, grew faster than in 1998 (1999: 2.6 per cent, 1998: 2.1 per cent). As, according to the same estimates, the “private sector's”<sup>1</sup> real disposable income increased by 1.7 per cent in 1999 (1998: 1.4 per cent), average propensity to save fell to 10.6 per cent in 1999, from 11.4 per cent in 1998. In greater detail, the increase in consumption expenditure was financed by consumer credit expansion (in 1999 the outstanding balance of consumer loans granted by commercial banks rose by 31 per cent) and by the appreciation of households' assets (see Chapter IV.1.2 below).

The acceleration in consumption growth is also confirmed by available short-term indicators (see Chart III.1). More specifically, the volume of retail sales (of goods) grew by

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1 Owing to the lack of detailed data, national accounts estimates by the NSSG and the Ministry of National Economy for recent years concern the gross disposable income of the entire private sector, which, in this particular case, is meant to comprise households, private and public enterprises and the self-employed. Therefore, this aggregate covers the income of wage-earners and the self-employed (in urban and rural activities), pensions, households' income from assets (rents, dividends, etc.) and business firms' undistributed profits.

**BOX III.1****The changeover to the European System of Accounts-ESA 95**

The national accounts data released by the NSSG Directorate of National Accounts in the October-December 1999 period were compiled according to the European System of Accounts 1995 (ESA 95). This is a consistent and integrated system of tables and accounts relying on a block of internationally agreed on concepts, definitions, economic relations, classifications and accounting principles. It is also fully compatible with the System of National Accounts (SNA 93) set up by the United Nations in co-operation with the International Monetary Fund, the European Commission, OECD and the World Bank. Moreover, it has adapted to conditions

PERCENTAGE DEVIATION OF ESL 95 ESTIMATES OF MAIN MACROECONOMIC  
AGGREGATES (CURRENT PRICES) FROM CORRESPONDING ESTIMATES  
OF THE "MIXED" SYSTEM

	1995	1996	1997*	1998*
Gross domestic product (GDP) at market prices	1.27	0.86	0.92	0.91
Final national consumption (private and public)	-1.02	-0.88	-0.90	-0.84
Gross fixed capital formation (and change in stocks)	2.48	0.53	1.91	1.83
Imports of goods and services	1.15	0.72	2.20	1.75
Exports of goods and services	12.73	10.86	11.68	10.49
Final consumption of non-residents, in Greece <sup>1</sup>	23.96	14.57	17.62	7.34
Final consumption of residents, abroad <sup>2</sup>	0.00	-4.97	8.82	5.69

1 Included in exports.

2 Included in imports.

\* Provisional estimates.

Source: National Accounts Directorate of NSSG.

prevailing in the EU and to the increased requirements of EU institutions for statistical data and economic information. Consequently, ESA 95 may be used as a central framework of reference for the compilation of social and economic statistics of the EU and its individual Member States, thus ensuring, to the extent possible, a coherent, reliable and comparable description of different economic structures, their development over time and their mutual relationships. Overall, ESA provides a comparable and reliable conceptual and accounting framework, particularly important and useful for the monitoring and conduct of social and economic policy at national and European level.

The changeover of Greece's National Accounts from the traditional system, which followed the principles of the OECD standardised system of National Accounts, to the →

→ European System of Accounts 1995 was gradual. Efforts to revise the traditional system started in mid-90s, in line with Community Directive 89/130/EEC, which, to enhance the comparability, reliability and fullness of GDP data at market prices, required Member-States to harmonise their methods of assessing GDP. The effort led initially to the establishment of a “mixed” system, which, however, though being very close to the methodology and spirit of ESA 95, was not fully harmonised with it. This “mixed” system was the basis for compiling national accounts for the period from 1988 to 1998, which were used until recently.

The changeover from the “mixed” system to ESA 95 was completed in December 1999 and the fully harmonised available data, which constitute final estimates for 1995-1996 and provisional estimates for 1997-1998, were used to draw up the Updated Convergence Programme. The table of the Box outlines the differences between the two systems with respect to some macroeconomic aggregates. Three main reasons account for these differences:

- First, the harmonisation of balance of payments statistics with the 5th edition of the relevant IMF Manual and with the requirements of the European Central Bank. Revised (by the Bank of Greece) balance of payments statistics have recorded in a more comprehensive manner commodity exports and, in addition, have shown that foreign tourists’ consumption expenditure in Greece (which, on the basis of national accounts, is included in goods and services exports) is significantly higher than under the previous system; consequently, they have recorded a lower level than before for national private consumption and a higher level for exports and GDP. According to the revised data, final consumption of foreigners (non-residents) increased by 17.6 per cent in 1997 and 7.3 per cent in 1998, relative to the corresponding figures of the “mixed” system.

- Second, the fact that the new system includes statistical data from supplementary and improved sources.

- Third, the existence of methodological and conceptual differences between the two systems (computer software expenditure is considered to be investment expenditure under the new system, differences exist in the classification of stamp duties, etc.). Nevertheless, only a small part of the differences observed in the macroeconomic fundamentals can be attributed to this factor.

As evidenced by data in the table of the Box, there are some differences between new estimates on economic fundamentals for 1998 and the old ones, owing to the changeover from the “mixed” system to ESA 95. More specifically, compared with the old estimates, GDP appears to be slightly higher (0.9 per cent) at both market and current prices, while gross fixed capital formation and imports are 1.8 per cent higher. As already stressed out, a significant increase is observed in exports (+10.5 per cent), because of the revision of balance of payments statistics. Moreover, owing to the rise in foreigners’ (non-residents) consumption, national final consumption appears 0.8 per cent lower.

3.8 per cent in 1999, compared with 2.4 per cent in 1998. The growth of all components of this index accelerated. At the same time, the number of new passenger car registrations rose by 46.8 per cent in 1999 (1998: 10.8 per cent), reflecting a considerable drop in prices in November 1998 and September 1999, due to cuts in indirect taxes, and the growth of

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

	Billion drachmas <sup>1</sup>	Annual percentage changes			
	1995	1996	1997	1998	1999
1. Consumption	24,075.7	2.1	2.5	2.1	2.2
1.1 Private	19,901.6	2.4	2.7	2.1	2.6
1.2 Public	4,174.1	0.9	1.7	2.0	0.5
1.2.a Individual consumption expenditure	1,600.7	3.8	-0.5	3.6	-0.8
1.2.b Collective consumption expenditure	2,573.4	-0.9	3.2	1.0	1.3
2. Gross fixed capital formation	5,066.0	8.4	13.1	8.1	8.3
2.1.a By investor: General government	883.4	2.0	11.7	6.7	14.5
2.1.b Other sectors	4,182.6	9.7	13.4	8.3	7.1
2.2.a By type: Construction	3,210.5	1.8	17.3	9.0	7.7
2.2.b Equipment	1,594.5	23.1	8.2	7.2	10.0
2.2.c Other investment	261.0	-0.9	-1.9	1.4	3.0
3. Change in stocks and statistical discrepancy (percentage of GDP)	85.7	0.4	0.0	-0.1	-0.1
4. Domestic final demand	29,227.4	3.3	4.1	3.2	3.5
5. Exports of goods and services	4,800.2	3.5	7.9	4.2	5.4
5.1 Exports of goods	2,843.2	0.6	6.9	1.7	3.8
5.2 Exports of services	1,957.0	7.7	9.2	7.5	7.5
6. Final demand	34,027.6	3.3	4.6	3.3	3.8
7. Imports of goods and services	6,792.4	7.0	9.5	1.9	5.1
7.1 Imports of goods	6,162.4	7.8	8.8	1.2	5.0
7.2 Imports of services	630.2	-1.1	16.3	8.9	6.0
8. Balance of goods and services	-1,992.2	...	...	...	...
9. GDP at market prices	27,235.2	2.4	3.4	3.7	3.5

	Contributions to GDP growth			
1. Consumption	1.9	2.2	1.8	1.9
1.1 Private	1.7	2.0	1.5	1.9
1.2 Public	0.1	0.3	0.3	0.1
1.2.a Individual consumption expenditure	0.2	0.0	0.2	0.0
1.2.b Collective consumption expenditure	-0.1	0.3	0.1	0.1
2. Gross fixed capital formation	1.6	2.6	1.7	1.9
2.1.a By investor: General government	0.1	0.4	0.2	0.5
2.1.b Other sectors	1.5	2.2	1.5	1.3
2.2.a By type: Construction	0.2	2.0	1.2	1.1
2.2.b Equipment	1.4	0.6	0.5	0.8
2.2.c Other investment	0.0	0.0	0.0	0.0
3. Change in stocks and statistical discrepancy (percentage of GDP)	0.0	-0.4	-0.1	0.0
4. Domestic final demand	3.5	4.4	3.4	3.8
5. Exports of goods and services	0.6	1.4	0.8	1.0
5.1 Exports of goods	0.1	0.7	0.2	0.4
5.2 Exports of services	0.6	0.7	0.6	0.6
6. Final demand	4.1	5.8	4.2	4.8
7. Imports of goods and services	-1.7	-2.5	-0.5	-1.4
7.1 Imports of goods	-1.8	-2.1	-0.3	-1.2
7.2 Imports of services	0.0	-0.4	-0.2	-0.2
8. Balance of goods and services	-1.1	-1.1	0.3	-0.4
9. GDP at market prices	2.4	3.4	3.7	3.5

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

1995-96: NSSG/National Accounts.

1997-98: NSSG/National Accounts. Provisional estimates.

1999: Ministry of National Economy/Directorate of Macroeconomic Analysis (March 2000). Provisional estimates.



households' disposable resources (owing to the aforementioned rise in equity prices and the faster expansion of consumer credit). Nevertheless, the index of business expectations in retail trade<sup>1</sup> remained virtually unchanged (0.1 per cent), relative to the previous year. Lastly, an increase was also observed in demand for services (see Section 3 of this Chapter).

In 1999, total gross fixed capital formation, at 1995 constant prices, continued to increase for the fifth year in a row. Of total investment growth (+ 8.3 per cent), about two thirds were accounted for by investment of "other sectors" (i.e. public and private enterprises, as well as households), which rose by 7.1 per cent, while the remaining one third came from a clear pick-up in general government's investment (+ 14.4 per cent) relative to that in the previous three years. A breakdown of investment by type reveals a further acceleration in other construction investment (except dwellings), which rose by 10.6 per cent, and in investment in equipment (+ 10 per cent); thus, these items contributed roughly to the same extent to the rise in total investment demand.

The considerable growth of public investment reflects the faster absorption of Community resources from the 2nd Community Support Framework (CSF) during 1999.<sup>2</sup> Disbursements under the Public Investment Budget (PIB)<sup>3</sup> grew by 18.8 per cent in 1999 (provisional data — see Chart III.2), while total PIB payments are forecast to increase by 8.2 per cent in 2000. One of the primary objectives of PIB for 2000 is to promote the completion of projects funded by the 2nd CSF and the execution of the projects which will be covered by the 3rd CSF. Besides, according to data from the Introductory Report on the Budget, public enterprises' investment grew by 9.1 per cent in 1999 at current prices, compared with 19.6 per cent in 1998, and, as in previous years, continued to focus on telecommunications, energy and transportation.

The continuation of the upward course of construction industry in 1999 was mainly due to the faster growth of other construction (except dwellings) and was related to a shift of construction firms'<sup>4</sup> interest to infrastructure projects of the public sector. By contrast, the growth rate of residential investment decelerated noticeably. On the basis of available indicators, a marginal upswing was observed in the output of manufacturing branches associated with the construction industry.<sup>5</sup> Moreover, according to the relevant survey of the Foundation for Economic and Industrial Research (IOBE), the index of

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1 The index includes car trade companies.

2 On the basis of payments, the rate of absorption of community resources from the 2nd CSF overshot 80 per cent at end-1999, compared with 57.3 per cent at end-1998, while, on the basis of credit commitments, it is estimated to have reached 100 per cent.

3 Bank of Greece data.

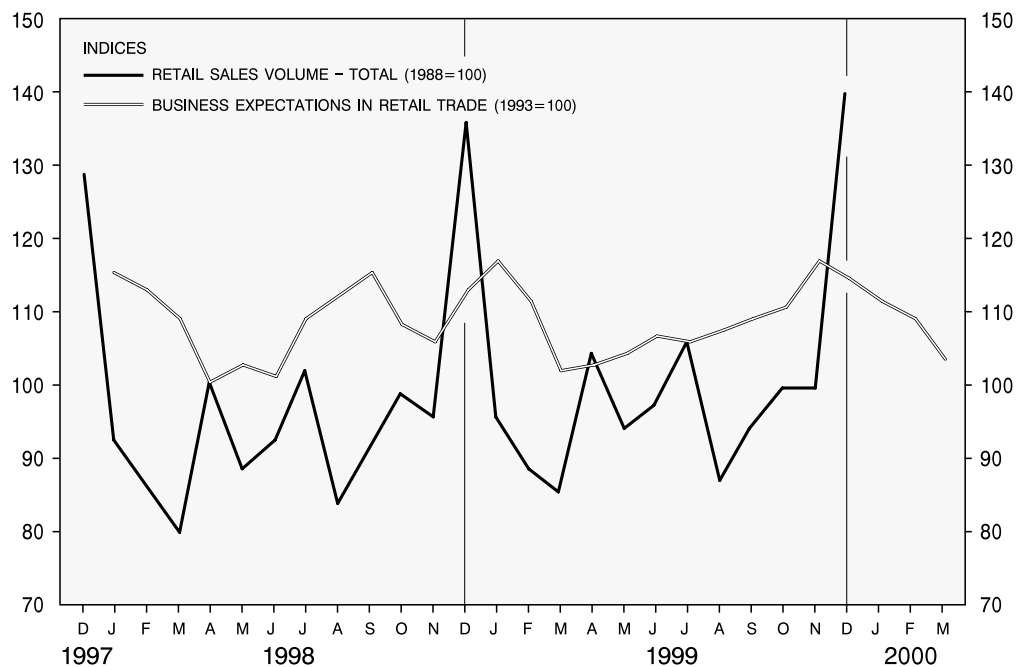
4 According to information published in the financial press, in the period from 1994 to 1999 tender procedures were initiated for 56,611 public works (a record number for Greece) with a total budget of 11 trillion drachmas. Among them, road construction works accounted for the largest part (42.5 per cent of the total budget), followed by building works (29.1 per cent), hydraulic works (17.6 per cent), electrical and mechanical engineering works (7.1 per cent) and harbour works (3.1 per cent).

5 NSSG provisional data show that the output of non-metallic minerals increased by 0.3 per cent in 1999. In particular, ready-made concrete output rose by 3.6 per cent and the production of all types of cement by 0.6 per cent. If the clinker type, which is intended for export, is not taken into account, cement output declined by 1.9 per cent in 1999.

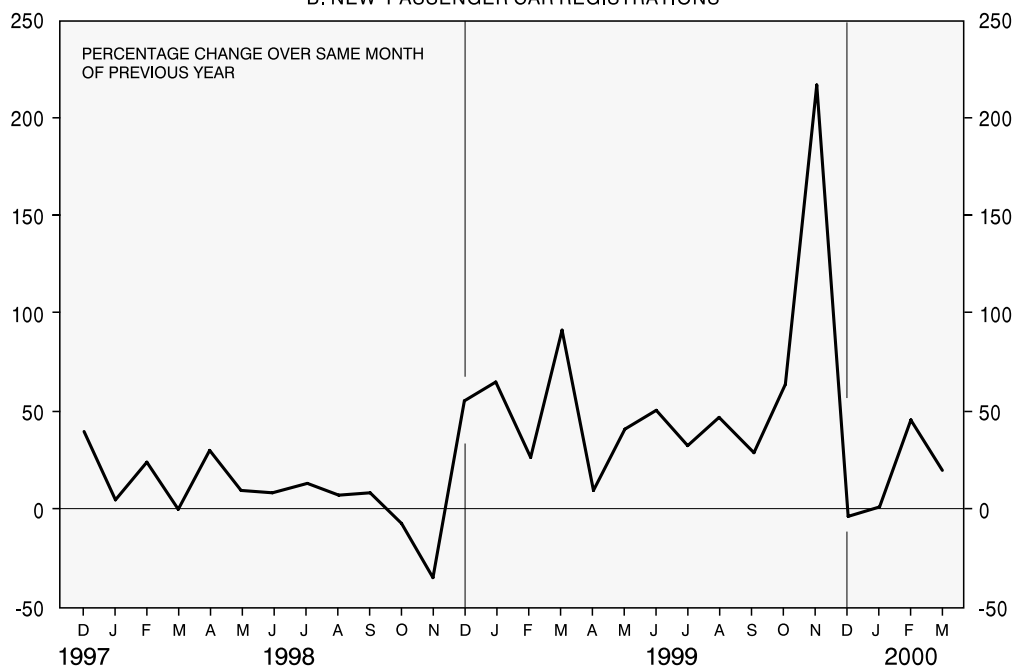
CHART III.1

## CONSUMPTION DEMAND

## A. RETAIL SALES VOLUME AND BUSINESS EXPECTATIONS

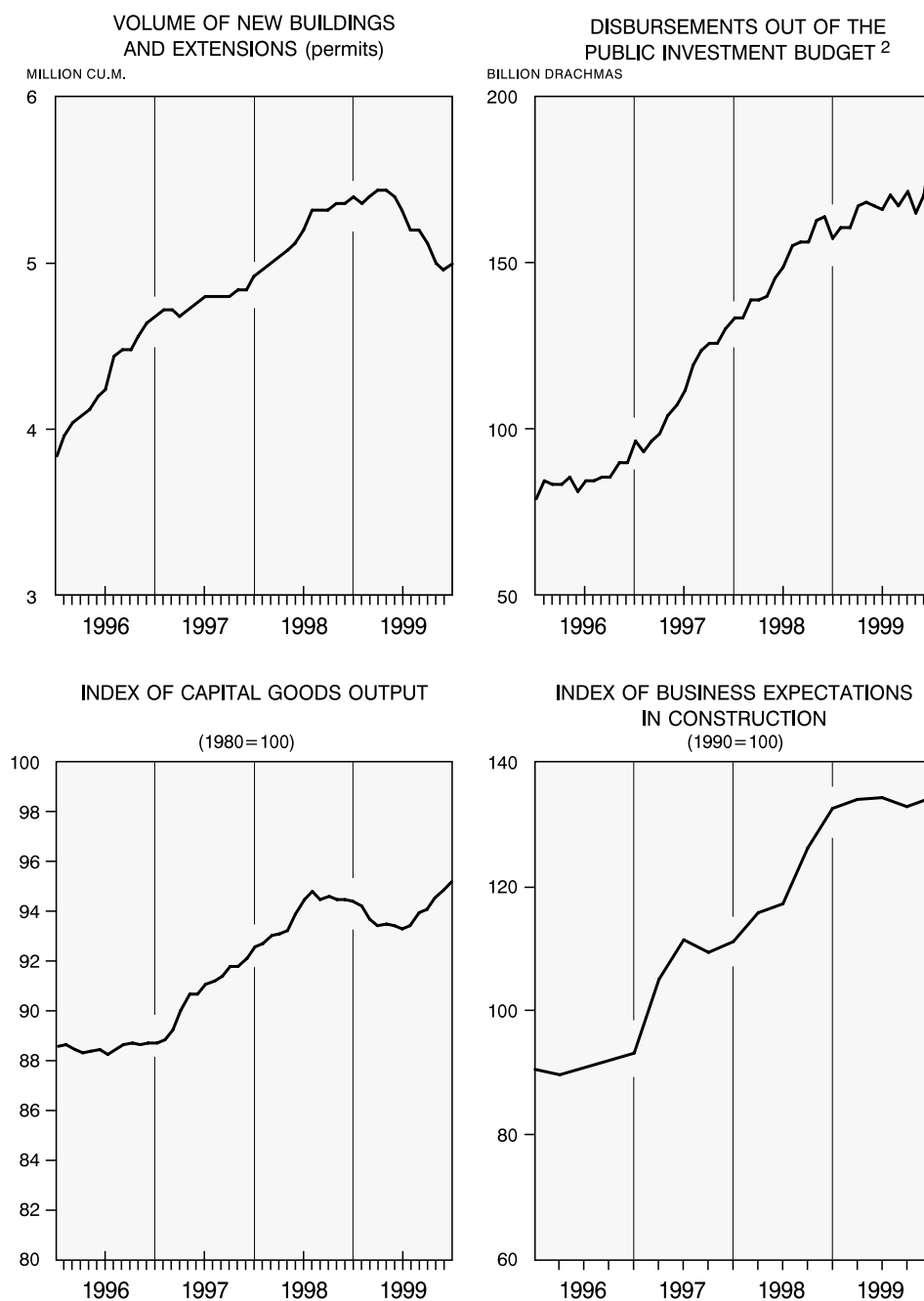


## B. NEW PASSENGER CAR REGISTRATIONS



**Source:** 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, and of forecasts on business activity over the next 6 months.

CHART III.2

MAIN INDICATORS OF INVESTMENT ACTIVITY<sup>1</sup>

<sup>1</sup> Twelve-month average centred on the last month of the period.

<sup>2</sup> Disbursements to finance the public investment programme (cash basis, current prices).

**Source:** NSSG, IOBE and Bank of Greece.

business expectations in construction<sup>1</sup> continued to rise in 1999, albeit at a clearly slower pace (1.4 per cent) than in the previous two years. The same survey suggests that the business climate regarding the construction of “other buildings” (except dwellings) and the execution of public works improved, while business forecasts of firms involved in the construction of dwellings were negative. Nevertheless, the index of secured production

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

		Billion drachmas	Annual percentage changes (constant prices)			
		1995	1996	1997	1998	1999
1	Primary sector (agriculture)	2,479.7	-3.3	0.1	2.2	1.0
2	Secondary sector	5,639.2	2.2	5.0	6.5	4.4
2.a	Mining and quarrying	162.1	-3.0	-0.1	-0.4	-5.0
2.b	Manufacturing	3,261.5	3.9	0.4	4.7	1.5
2.c	Electricity - town gas - water supply	596.6	-2.4	0.1	3.2	6.0
2.d	Construction	1,619.0	1.0	16.8	11.3	9.5
3	Tertiary sector	17,048.1	2.4	3.2	3.1	3.5
3.a	Trade	3,413.7	5.9	5.8	6.4	6.0
3.b	Hotels - Restaurants	1,642.7	4.0	2.6	3.8	4.0
3.c	Transportation - Communications	1,696.3	-5.6	4.1	2.6	3.0
3.d	Financial intermediaries	1,060.4	8.2	7.0	3.7	8.0
3.e	Real estate management and other activities	4,285.6	1.7	1.1	2.2	2.0
3.f	Public administration - Security	1,808.8	7.0	0.2	-1.7	-1.5
3.g	Health	1,123.8	-1.9	0.9	3.8	4.0
3.h	Education	1,313.7	-3.8	8.0	2.0	3.0
3.i	Other activities	703.1	3.2	-0.1	2.6	3.1
4	Gross value added	25,167.0	1.8	3.3	3.8	3.5
5	Imputed banking services	-741.3	3.3	5.2	4.9	3.0
6	Gross value added at basic prices	24,425.7	1.8	3.3	3.7	3.5

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

1995-96: NSSG/National Accounts.

1997-98: NSSG/National Accounts. Provisional estimates.

1999: Ministry of National Economy/Directorate of Macroeconomic Analysis (March 2000). Provisional estimates.

months increased, from 17 in 1997 and 20 in 1998 to 21.4 in 1999. As already mentioned, Ministry of National Economy estimates show that private residential investment continued to grow in 1999 but at slower pace than in the previous two years (1999: 3 per cent,

<sup>1</sup> According to data from the published income statements of the 34 construction firms whose shares are listed on the Athens Stock Exchange, their turnover increased sharply (by 114.3 per cent) to 688.2 billion drachmas in 1999, compared with 321.1 billion drachmas in 1998, while their profits recorded an equally impressive rise (82.7 per cent). It should be noted that in 1998 the share capital of construction firms increased substantially, while a strong acquisition and merger activity was observed between firms of the construction industry. Data from the Athens Stock Exchange show that funds raised by construction firms amounted to 282 billion drachmas, accounting for 7.9 per cent of investment in other construction (except dwellings).

1998: 7.6 per cent, 1997: 9.8 per cent). It is characteristic that, according to NSSG data, the volume of new buildings (on the basis of permits issued) decreased by 8.3 per cent in 1999, following a significant rise in the three-year period from 1996 to 1998. This development possibly reflects the fact that part of the demand for dwellings was satisfied in the two previous years. However, new housing loans increased at an accelerating rate in 1999.<sup>1</sup>

## 2. PRIMARY AND SECONDARY PRODUCTION

### 2.1 Overview

According to provisional estimates by the NSSG and the Ministry of National Economy (see Table III.2), in 1999 the production of both the primary and the secondary

TABLE III.3  
INDUSTRIAL PRODUCTION (1980=100)

	Weights (1980)		Average annual percentage change					1999 level* (1980=100)
			1995	1996	1997	1998	1999*	
<b>TOTAL</b>		<b>100.0</b>	1.8	1.2	1.1	7.7	3.7	123.4
<b>1. Mining and quarrying</b>	5.8	<b>100.0</b>	-3.2	3.3	3.6	-4.4	-13.3	127.6
Lignite		26.9	0.1	3.5	-1.8	2.3	-2.6	223.9
Bauxite		10.3	-6.0	9.0	-17.5	-4.3	4.9	61.2
Iron and nickel ores		2.5	8.3	4.4	4.2	-11.8	-10.3	124.7
Chrome and manganese ores		1.0	14.6	15.9	2.3	-29.3	-48.1	3.3
Oil wells and extraction of natural gas		13.0	-15.3	13.3	-8.7	-31.3	-94.3	9.0
Marble/stone and other building materials		22.4	7.8	3.2	18.8	2.4	8.0	206.2
Sulphur compounds, barytes		10.9	-27.7	-45.3	125.3	14.3	-11.9	61.6
Magnesite		13.0	5.2	-12.9	4.8	3.1	-18.3	28.4
<b>2. Manufacturing</b>	87.8	<b>100.0</b>	2.1	0.6	1.0	3.4	0.5	105.9
<i>Category of product</i>								
Consumer non-durables <sup>1</sup>		60.5	0.5	0.7	-0.6	2.8	-0.5	109.6
Consumer durables		5.5	-1.5	2.4	6.7	24.2	10.1	130.3
Capital goods		34.0	6.5	0.1	4.3	2.0	0.9	95.2
<b>3. Electricity and natural gas</b>	6.4	<b>100.0</b>	3.5	3.8	0.4	48.0	28.6	360.7
Electricity		99.2	3.3	3.8	0.4	6.8	7.0	212.5
Natural gas		0.8	10.2	1.8	-0.5	1,587.1	79.8	19,706.1

<sup>1</sup> Comprising consumer non-durables and intermediate products.

\* Provisional data.

Source: NSSG.

sector of the economy increased for the third consecutive year, though at a slower pace than in 1998 (1999: 1.0 per cent and 4.4 per cent, respectively, 1998: 2.2 per cent and 6.5

<sup>1</sup> The outstanding balance of housing loans granted by commercial banks rose by 26.8 in 1999, compared with 18.5 per cent in 1998 and 22.5 per cent in 1997.

per cent). The deceleration in the secondary sector stemmed from the slower rate of increase in manufacturing (1999: 1.5 per cent, 1998: 4.7 per cent), as well as from the drop, in absolute terms, in mining-quarrying output (–5 per cent in 1999, against 0.4 per cent in 1998). The growth pattern of manufacturing output seems to have been affected by economic growth fluctuations in European countries – whose markets absorb the largest part of Greece's industrial exports – and by the drop in domestic building activity, after a period of pronounced growth. By contrast, total construction output continued to increase at a very fast pace (9.5 per cent in 1999, compared with 11.3 per cent in 1998 and 16.8 per cent in 1997). These national accounts estimates are broadly confirmed by the evolution of the NSSG's monthly index of industrial output, which comprises manufacturing, mining-quarrying and electricity-natural gas (see Table III.3).

## 2.2 Agricultural production

According to estimates by the Ministry of National Economy, primary sector output rose by a mere 1 per cent in 1999, compared with 2.2 per cent in 1998. The increase,

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

Products	1994	1995	1996	1997	1998	1999*
Soft wheat	838	758	630	654	612	621
Durum wheat	1,581	1,384	1,132	1,398	1,300	1,400
Maize	1,814	1,520	1,800	2,000	2,000	1,850
Alfalfa	1,428	1,396	1,266	1,237	1,232	1,232
Tobacco	129	120	126	123	123	123
Cotton (natural)	1,180	1,250	962	1,059	1,170	1,320
Tomatoes		1,130	1,162	1,167	1,226	1,226
for processing	1,100	2,600	2,352	3,095	1,970	2,160
Sugar beet	2,420	330	337	400	473	350
Olive oil	330	140	161	162	143	135
Lemons	141	820	979	965	801	1,040
Oranges	875	323	335	292	332	336
Apples	321	745	897	268	500	1,002
Peaches	1,173					
		510	525	522	493	490
Meat, total	522					
		1,834	1,786	1,821	1,821	1,838
Milk, total	1,853					

\* Provisional data.

Source: Ministry of Agriculture.

which was also corroborated by provisional data on agricultural output from the Ministry of Agriculture, stemmed from the growth of plant production, in particular fruit and cotton (see Table III.4). By contrast, livestock production recorded a small

decrease for the second year in a row, mostly because of the drop in meat production. The index of producer prices remained at roughly the same levels as in 1998 (see Table III.5), as the drop in the prices of plant products was offset by the rise in livestock product prices. However, input prices were characterised by a relative stability for the second consecutive year (their level remained unchanged in 1998 and rose slightly in 1999), since the prices of the most important inputs (energy and animal feed) that burden agricultural concerns did not change significantly (+0.8 per cent and +0.2 per cent, respectively).

TABLE III.5  
PRODUCER PRICES AND INPUT PRICES (1990=100)

		1991	1992	1993	1994	1995	1996	1997	1998	1999
	Weights	Percentage changes in producer prices								
Plant production	71.02	24.9	0.9	5.2	16.0	11.9	9.4	3.4	-0.3	-1.8
Livestock production	28.98	10.8	11.6	9.4	13.2	4.0	0.2	3.3	3.4	3.5
General producer price index	100.00	20.8	3.7	6.4	15.2	9.6	6.9	3.4	0.5	-0.2
	Weights	Percentage changes in agricultural input prices								
General input price index	100.00	24.6	14.4	12.3	6.9	5.7	9.0	2.6	0.0	0.6

Source: NSSG.

International developments in the production and marketing of primary sector products make more imperative the need for Greek agricultural production to specialise in quality products, in order to ensure that farming and livestock concerns of the country will become viable and achieve high levels of income. It is expected that the following factors will contribute in this direction: the increase in agricultural productivity,<sup>1</sup> the further expansion of investment in marketing and standardisation of agricultural products,<sup>2</sup> as well as the utilisation of resources from EU Structural Funds to support some categories of cultivation — e.g. organic farming<sup>3</sup> — for which strong demand is expected in the years to come.

1 According to Ministry of Agriculture calculations, productivity growth in the agricultural sector reached almost 10 per cent.

2 According to the Ministry of Agriculture, 795 investment projects of a total cost of 234.1 billion drachmas were approved during the implementation of the Programme on Improving Processing and Marketing for Agricultural Products under the 2nd CSF.

3 Though organic farming now takes up 11,500 hectares or 0.3 per cent of total cultivated land (against 600 hectares in 1993), there is considerable room for its expansion, as is the case in most other European countries.

## 2.3 Manufacturing

### 2.3.1 General developments

The deceleration of manufacturing output growth to 0.5 per cent in 1999 from 3.4 per cent in 1998 (provisional data) was mainly due to the small decrease in the production of consumer non-durables, following a rise in 1998. By contrast, consumer durables continued to grow at a strong pace and capital goods recorded a further increase, in line with the growth of investment demand in recent years.<sup>1</sup>

The overall acceleration of manufacturing output growth between 1995 and 1999, at least as recorded by the NSSG's index of manufacturing output (1980=100),<sup>2</sup> does not exceed 5.6 per cent, while it is calculated that the growth of total Greek GDP over the same period amounted to 13.6 per cent. It is estimated that this growth differential mainly reflects the fact that the Greek industry is in a stage of restructuring and adjustment<sup>3</sup> over the last years. The performance of some traditional industries, such as clothing-footwear, leather and textiles,<sup>4</sup> is negative, affecting the overall picture of manufacturing. On the other hand, heavy investment for the modernisation of Greek industries, as well as various mergers and co-operations — often with the participation of foreign firms — have not yet reached a maturity stage and hence they have not been recorded in manufacturing growth as yet. However, according to other surveys or indices that depict developments in the Greek industry, the performance and prospects of Greek firms look much better. The ICAP's annual sample survey (carried out at the end of 1999 and regarding estimates for 1999 and expectations for 2000 of 250 industrial firms) shows that profits per industrial firm rose by 25.7 per cent in 1999, while the value of sales per industrial firm increased by 10.9 per cent (the growth of sales volume overshoot 9 per cent). According to the same survey, 47.2 per cent of industrial firms forecast that in 2000 they will increase their fixed capital formation in real terms, relative to 1999, a most significant finding, given that investment activity was considered to be rather high in 1999. In the first quarter of 2000, the IOBE's index of business expectations recorded a noticeable recovery, rising from 103.9 in December 1999 to 105.3 in January, 112.3 in February and 115.1 in March 2000, while the rate of capacity utilisation for indus-

1 According to the *final* data (recently released), manufacturing output eventually increased by 0.7 per cent in 1999 (consumer goods: -0.4 per cent, consumer durables: 10.1 per cent, capital goods: 1.4 per cent).

2 It is generally accepted that the index of industrial output does not follow accurately current developments, as it uses an old base-year (1980), and therefore fails to depict the important structural changes that have taken place in industry over the last twenty years.

3 Several modern investment plans have been implemented under the Business Plan for Industry 1994-1999 and it is estimated that they have enhanced the flexibility of Greek industrial firms and their ability to manufacture diversified and high-quality products. According to the IOBE's investment survey, investment carried out to expand productive capacity for the manufacturing of new products rose from 20 per cent of total investment expenditure in 1997 to 21 per cent in 1998 and 28 per cent in 1999.

4 All these branches of Greek manufacturing are steadily following a downward trend. As a result, their respective output indices stand well below their levels in the base-year (1980: clothing-footwear: 39.6, leather: 29.3, textiles: 62.2).



TABLE III.6  
MANUFACTURING PRODUCTION (1980=100)

	Weights (1980)	Average annual percentage changes					1999 level* (1980=100)
		1995	1996	1997	1998	1999*	
<b>Manufacturing</b>	100.0	2.1	0.6	1.0	3.4	0.5	105.9
Food	11.9	2.0	-0.1	-3.3	3.9	2.6	136.7
Beverages	3.7	3.9	-6.0	-2.1	4.9	0.0	168.7
Tobacco	2.3	10.9	-1.2	-0.8	-5.1	0.6	128.5
Textiles	16.1	-5.5	-4.6	1.4	-0.8	-7.2	62.2
Footwear and clothing	6.1	-9.8	-12.0	-3.1	-13.1	-3.4	39.6
Wood and cork	2.2	17.0	-1.9	-11.6	-8.3	-10.8	50.9
Furniture	1.2	-4.7	-0.2	-0.1	-3.4	16.0	85.0
Paper	1.9	3.7	-5.0	-4.8	-3.3	-7.6	136.9
Printing and publishing	2.6	-0.7	8.4	-7.5	-4.4	-6.0	72.4
Leather	0.8	-8.4	-7.1	-11.8	-14.9	-16.2	29.3
Rubber and plastics	3.9	-12.6	1.1	-0.4	9.7	8.8	145.1
Chemicals	7.8	10.8	7.9	2.0	10.3	1.8	177.8
Petroleum and coal products	2.8	4.3	7.0	-0.6	2.0	-4.2	145.2
Non-metallic minerals	8.6	1.8	7.1	2.2	2.5	0.3	99.9
Basic metals	6.5	4.8	-3.7	10.2	2.4	-2.0	114.2
Metallurgical products	6.4	4.6	-1.5	8.2	-1.9	-0.9	72.8
Machinery and appliances, excluding electrical	1.9	20.4	2.9	11.1	2.2	9.8	128.4
Electrical machinery and appliances	4.7	3.0	6.7	12.7	22.9	5.4	166.6
Vehicles	8.0	4.6	-1.1	-3.0	5.1	4.9	76.1
Miscellaneous	0.6	14.2	79.8	-2.4	-44.2	8.6	57.0

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

	1.05	2.14	0.62	0.98	0.48
<b>Manufacturing</b>					
Food	-0.18	0.32	-0.01	-0.52	0.39
Beverages	0.46	0.24	-0.38	-0.13	0.00
Tobacco	0.40	0.32	-0.04	-0.02	0.02
Textiles	-0.06	-0.66	-0.52	0.15	-0.74
Footwear and clothing	-0.51	-0.37	-0.40	-0.09	-0.08
Wood and cork	-0.14	0.23	-0.03	-0.18	-0.13
Furniture	0.02	-0.05	0.00	0.00	0.13
Paper	0.21	0.12	-0.16	-0.15	-0.20
Printing and publishing	-0.05	-0.01	0.17	-0.17	-0.11
Leather	-0.02	-0.04	-0.03	-0.04	-0.04
Rubber and plastics	0.48	-0.69	0.05	-0.02	0.44
Chemicals	0.20	1.12	0.89	0.24	0.23
Petroleum and coal products	0.42	0.16	0.27	-0.02	-0.17
Non-metallic minerals	0.22	0.14	0.54	0.18	0.03
Basic metals	0.32	0.33	-0.26	0.68	-0.15
Metallurgical products	-0.10	0.20	-0.06	0.36	-0.04
Machinery and appliances, excluding electrical	0.02	0.33	0.06	0.22	0.21
Electrical machinery and appliances	-0.07	0.15	0.34	0.68	0.39
Vehicles	-0.54	0.26	-0.06	-0.17	0.27
Miscellaneous	-0.04	0.04	0.26	-0.01	0.03

\* Provisional data.

Source: Calculations based on NSSG data.

CHART III.3

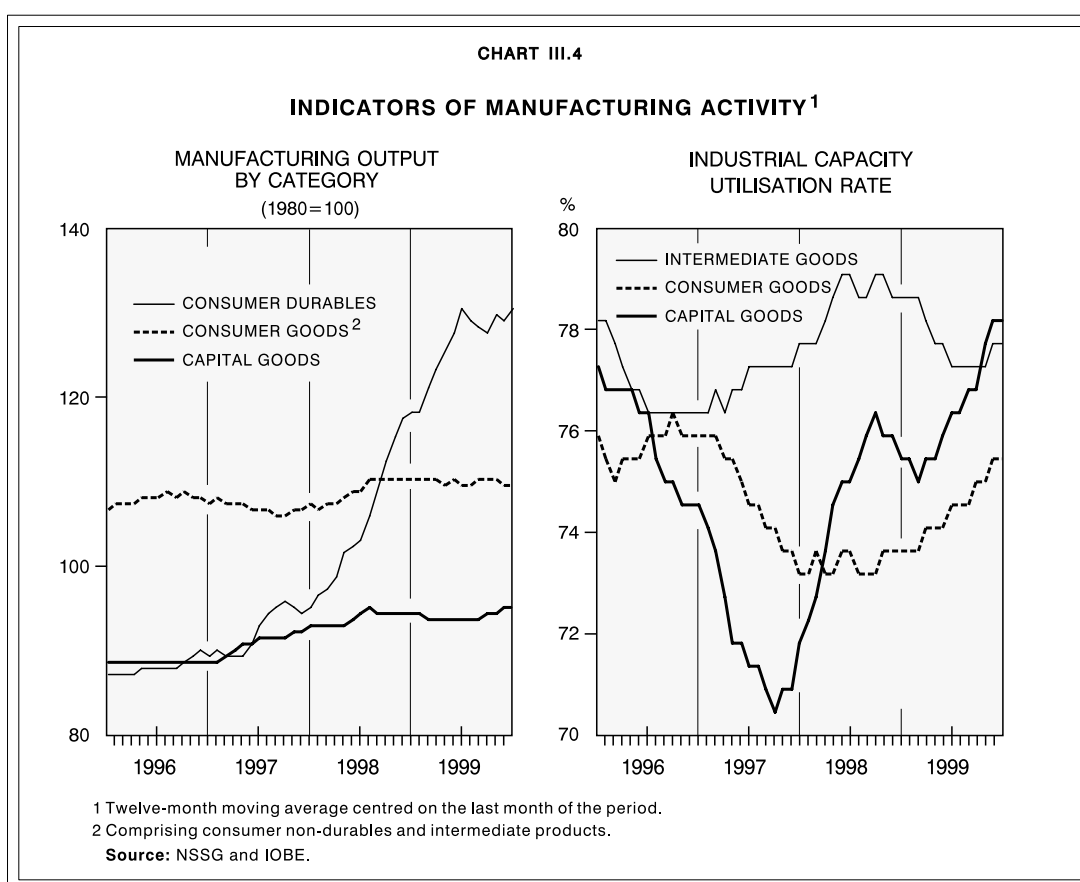
## OUTPUT AND BUSINESS EXPECTATIONS IN MANUFACTURING



**Source:** 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.

try as a whole remained high, given that it exceeded by more than three percentage points its level in the corresponding quarter of 1999 (see Charts III.3 and III.4). The IOBE's survey also points to a rise in the index of industrial firms' months of secured production (from 5.1 months in November 1999 to 5.8 months in March 2000). Lastly, provisional data recently released by the NSSG suggest that the annual growth rate of manufacturing output stood, according to a new index (1993=100), at 1.9 per cent in January 2000.

Regarding the competitiveness of Greek industrial products, the dynamism of exports declined slightly in 1999, not entailing, however, dramatic changes in the perfor-



mance of industry as a whole or its individual branches. According to NSSG foreign trade statistics, the value of non-oil exports dropped by 2.9 per cent and thus the export performance of manufacturing, i.e. the share of production which is sold in foreign markets, decreased to 26.5 per cent in 1999, from 27.9 per cent in 1998. At the same time, import penetration<sup>1</sup> decreased by 1 percentage point, although stronger consumer and investment

<sup>1</sup> The index of import penetration records the proportion of imports to apparent consumption and constitutes a means of measuring the share of imported goods in domestic markets.

demand led to a 0.6 per cent rise in the value of imports. However, according to the IOBE's survey on industry, the proportion of business firms estimating that their competitive position improved during 1999 is much larger than that of those believing the opposite (17 per cent for the domestic market, 8 per cent for the EU market and 11 per cent for third countries' markets, compared with 1 per cent, 2 per cent and 2 per cent, respectively).

### *2.3.2 Developments by branch of manufacturing*

Out of a total of 20 manufacturing branches, 10 recorded an increase, one displayed no change and the remaining 9 showed a decrease. Among those with a rise in production in 1999, furniture showed the greatest dynamism (increase of 16 per cent, against -0.1 per cent in 1998), followed by machinery and appliances (9.8 per cent, compared with 11.1 per cent in 1998), rubber and plastics (8.8 per cent, against -0.4 per cent in 1998), "miscellaneous" manufacturing products (8.6 per cent, 1998: -2.4 per cent), electrical machinery-appliances (5.4 per cent, 1998: 12.7 per cent) and transportation equipment (4.9 per cent, 1998: -3 per cent). By contrast, a significant decrease was observed in leather (-16.2 per cent, 1998: -11.8 per cent), wood and cork (-10.8 per cent, 1998: -11.6 per cent), paper (-7.6 per cent, 1998: -4.8 per cent) and textiles (-7.2 per cent, 1998: 1.4 per cent). It is worth noting that, though only 10 out of the 20 manufacturing branches achieved an increase in production, compared with the base year (1980), the general level of production was almost 6 per cent higher than in 1980. This reflects the fact that in most manufacturing branches with a higher production level than in 1980 the cumulative growth rate of production exceeds 30 per cent.

Turning to developments in manufacturing branches and their performance in domestic and foreign markets, the following should be noted:

Available data from NSSG foreign trade statistics are provisional and do not offer a complete picture of developments in individual manufacturing branches. Moreover, their cross-checking with Bank of Greece settlements statistics on export trade is impossible, particularly for the period under review, as 1999 was the first year of implementation of the new balance of payments statistics and thus comparability with data of previous years is limited.

A first examination, however, of NSSG data reveals that the export value of tobacco products, printing-publishing and paper, petroleum and coal products, as well as rubber-plastics and chemicals, increased, along with a slight improvement in their export performance, i.e. the share of exports in total branch output, over the same period. Yet, only in the case of rubber-plastics and chemicals (see Table III.7) the improvement of export performance was accompanied by the growth of the respective share in the domestic market. The high export performance of these branches is associated with the strong growth of their exports, mostly to the European Union, which growth is estimated to have reached almost 70 per cent in the three-year period from 1997 to 1999.

TABLE III.7  
IMPORT PENETRATION AND EXPORT PERFORMANCE  
IN MAIN BRANCHES OF MANUFACTURING

Branches <sup>1</sup>	Percentage changes				Import penetration <sup>3</sup>	Export performance <sup>4</sup>
	Current prices		Gross production value	1980 prices		
	Imports <sup>2</sup>	Exports <sup>2</sup>		Gross production value		
Food-beverages (20,21)						
1995	9.5	23.5	8.5	2.3	24.1	17.0
1996	-1.6	6.5	4.4	-1.2	23.1	17.4
1997	13.6	-8.7	1.0	-3.1	24.9	15.7
1998	12.1	8.7	9.0	4.0	25.4	15.6
1999*	-7.7	-1.9	3.7	2.1	23.1	14.8
Textiles, clothing-footwear, leather (23, 24, 29)						
1995	11.2	10.9	2.3	-7.0	61.9	65.9
1996	11.1	2.6	-2.8	-7.0	67.5	69.5
1997	18.8	15.2	3.4	-0.6	76.4	77.5
1998	11.7	1.4	0.4	-4.9	78.8	78.2
1999*	-5.5	-5.9	-6.1	-6.6	79.0	78.4
Rubber and plastics, chemicals (30, 31)						
1995	34.6	25.8	11.2	3.0	54.2	14.1
1996	-4.1	12.4	10.8	6.0	50.7	14.3
1997	10.3	21.7	6.3	1.3	52.2	16.4
1998	15.2	19.1	15.3	10.1	52.3	17.0
1999*	-0.8	12.6	5.4	3.6	51.2	18.1
Non-metallic minerals (33)						
1995	15.6	-8.4	8.7	1.8	23.2	21.1
1996	10.5	19.5	13.3	7.1	23.0	22.3
1997	9.5	11.7	7.7	2.2	23.5	23.1
1998	12.1	-7.9	7.1	2.5	23.6	19.9
1999*	-8.6	-16.6	3.4	0.3	20.6	16.0
Basic metals and metallurgical products (34, 35)						
1995	32.7	25.9	15.9	4.8	50.0	35.0
1996	-3.0	-5.3	2.2	-2.9	47.7	32.4
1997	20.5	13.3	17.8	9.4	47.8	31.2
1998	8.8	11.5	5.8	0.8	49.1	32.9
1999*	-7.7	-5.2	-0.9	-1.6	46.8	31.5
Machinery and appliances (36, 37)						
1995	12.7	41.1	19.0	7.4	78.5	37.7
1996	7.4	1.2	8.3	5.6	77.7	35.2
1997	27.4	31.8	20.2	12.3	79.5	38.6
1998	27.0	22.9	21.7	17.3	80.3	39.0
1999*	3.0	-4.3	7.0	6.5	78.6	34.9
Transportation equipment (38)						
1995	24.9	34.5	14.9	4.6	70.3	6.2
1996	9.5	5.7	7.1	-1.1	70.7	6.1
1997	17.5	64.4	-0.4	-3.0	74.8	10.1
1998	25.1	3.8	14.6	5.1	76.3	9.1
1999*	23.2	-17.8	11.6	4.9	77.6	6.7
<b>Manufacturing (total, excluding oil)</b>						
1995	19.9	18.7	11.3	2.1	49.0	27.5
1996	2.6	5.4	6.1	0.4	48.2	27.4
1997	18.2	11.3	6.5	1.1	51.2	28.6
1998	17.3	6.6	9.1	3.4	52.8	27.9
1999*	0.6	-2.6	2.6	0.7	51.8	26.5

<sup>1</sup> The two-digit branch-code (according to the Greek Standard Industrial Classification) is listed in parentheses.

<sup>2</sup> Customs statistics data.

<sup>3</sup> Ratio of value of imports over the value of apparent consumption.

<sup>4</sup> Ratio of value of exports over the gross value of production at current prices.

\* Provisional data.

**Source:** Calculations based on NSSG data.

By contrast, a decrease was observed in the value of exports of the other manufacturing branches, particularly non-metallic minerals, wood and furniture, transportation equipment, metallurgical products and basic metals, textiles and ready-made clothes, as well as leather. In most cases, the decrease in the value of exports was followed by a drop or a slower growth in the value of imports; hence, the share of domestic products in the domestic market did not decline considerably. In fact, in the branches of food and beverages, whose imports dropped by 7.7 per cent (compared with an increase of 12.1 per cent in 1998), it seems that the increase in demand was satisfied chiefly by domestic production, reducing import penetration by more than 2 percentage points. Regarding textiles-clothing and leather, the index of export performance remained at high levels (1999: 78.4, 1998: 78.2), but this does not necessarily imply that Greek products hold a significant share in foreign markets, as it reflects a simultaneous decline in exports and a decrease in production.

Owing to the ongoing restructuring of the Greek manufacturing sector, export orientation and trade penetration in foreign markets are not differentiated mainly by manufacturing branch, but concern healthy and dynamic business firms from all branches.<sup>1</sup> More specifically, it is estimated that several medium-sized and large domestic industrial firms have created better conditions for the expansion of their business in recent years,<sup>2</sup> as they have benefited (and are still benefiting) from the drop in borrowing costs,<sup>3</sup> the slower growth of labour costs, investment grants under the law on development incentives,<sup>4</sup> as well as from the possibility of raising funds through the stock market. The environment of monetary and exchange rate stability, which is being established by Greece's entry into EMU, is expected to further enhance the dynamism exhibited by these firms.

## 2.4 Mining and quarrying

In 1999 mining and quarrying output continued to follow a downward path, indeed at a faster pace than in 1998 (–13.3 per cent, compared with –4.4 per cent in 1998). The declining trend in the past two years is a signal that Greek mining is in a transitional phase,

1 As indicated by e.g. the aforementioned ICAP survey, estimates on the profitability of industrial firms do not vary significantly depending on the branch each of these firms belongs to. By contrast, estimates vary notably on the basis of firms' size, given that the estimated profitability of large and medium-sized firms of the sample was clearly higher than that of the small ones.

2 The examination of the income statements of 115 commercial and industrial firms listed on the Athens Stock Exchange shows that their net fixed assets increased by 19.5 per cent (excluding holdings), while total reserve assets (including securities) rose by 75 per cent relative to 1998. Irrespective of origin, these financial improvements constitute an additional tool of firms willing to take new investment initiatives or proceed to strategic actions either in domestic or in foreign markets.

3 According to moderate calculations, for a loan of 1 million drachmas, a firm would incur interest payments amounting to 320,000 drachmas in 1993 and half this amount in 1999. It is expected that interest payments will decline further to a quarter of this amount by 2001.

4 The Business Plan for Industry 1994-1999 incorporated, *inter alia*, 181 business plans aimed at improving international competitiveness and 652 investment plans designed to ensure production flexibility, the observance of high-quality standards, the introduction of innovations and the use of new technologies.

as the production of some types of minerals has either been reduced or stopped, while at the same time new products and fields of activity are emerging.

As indicated by NSSG data (see Table III.3), the decline in extraction activity was almost entirely due to the fact that oil well output fell to zero and much less to the drop in lignite extraction. Iron and nickel ore output decreased further relative to 1998, while the production of sulphur compounds, barytes and magnesite was also reduced. By contrast, the production of marble, stone and other building materials increased at an accelerating pace, while bauxite production recovered.

In greater detail, according to NSSG data, lignite extraction declined<sup>1</sup> in 1999, after a recovery in the previous year. Nevertheless, the output index remained fairly high (at around 1997 levels), given that lignite constitutes the basic raw material for electric power production in our country. Bauxite production recovered, owing to rising demand from countries such as the United States and Russia.<sup>2</sup> The continuing decline in nickel output,<sup>3</sup> as reflected in the corresponding NSSG index, was related with the drop in foreign demand and nickel ore prices worldwide in 1998. However, in 1999 a significant rebound was observed in nickel prices<sup>4</sup> (which more than doubled relative to December 1998). As a result, nickel production has shown some signs of recovery since August 1999 (with the exception of October and November). Thus, the twelve-month rate of increase in the index of nickel output stood at 18.3 per cent, while the rise in nickel prices is expected to affect favourably output growth in 2000. Further, provisional NSSG customs statistics suggest that, unlike the volume of total nickel exports, which was reduced, nickel export volume to third (non-EU) countries increased steeply (+210.8 per cent) in 1999.

As already mentioned, oil well output amounted to zero throughout 1999 (with the exception of December), because the exploitation of the Prinos' deposit was halted in the period from December 1998 to November 1999.<sup>5</sup>

The production of marble, stone and other building materials increased – indeed at a faster pace than in 1998 – reflecting intense construction activity. The largest rise was observed in marble output (+22.1 per cent), followed by stone (+13.3 per cent). By contrast, following a substantial rise in 1998, the production of gypsum declined by 2.4 per cent, as did kaoline and bentonite output (–7.6 per cent). It should be noted that the marble industry, despite the problems it is still facing as regards the issuance of operating

1 According to DEH data, however, lignite extraction from its mines grew by 3.9 per cent in 1999 relative to 1998.

2 According to NSSG provisional data, aluminium and alumina exports to third (non-EU) countries declined slightly in 1999 (–1.4 per cent), whereas exports to the United States and Russia rose by 199.8 per cent and 44.9 per cent, respectively.

3 It should be reminded that the LARKO firm had reduced nickel output to 15,000 tonnes in 1998 and decided to reduce it further (by one third) in 1999.

4 The drop in Russian nickel exports and the growth of world demand for stainless steel (whose output absorbs 70 per cent of nickel production) are considered as the possible reasons for the rise in nickel prices.

5 It should be recalled that as from 1 December 1998 the Northern Aegean Petroleum Company has shut down the Prinos oil-drilling platform. About a year after, on 17 December 1999, the deposit exploitation rights were conceded to the “Kavala Oil” consortium. According to the contract concluded between the Greek government and the consortium, the oil well output will be exclusively absorbed by the company “Hellenic Petroleum S.A.”.

licences, exhibited a strong dynamism in 1999, which manifested itself by the creation of business nets and consortiums<sup>1</sup> aimed at enabling Greek marble to penetrate the world market, be promoted in the domestic market and be used in major construction projects. According to NSSG provisional data, the volume of marble exports increased by 8.6 per cent in 1999, while the growth of export volume to third countries was even larger (+20.4 per cent).

Lastly, the production of sulphur compounds and barytes recorded a significant decline, given that the Chalkidiki mines face operational problems with the local authorities on environmental issues.<sup>2</sup>

## 2.5 *Electricity-natural gas*

In 1999 the production of electricity and natural gas (see Table III.3) continued to increase at a very fast pace (28.6 per cent), according to the relevant NSSG index. This mainly reflected the continuing strong rise in the index of natural gas distribution, in response to steadily increasing demand for this new fuel.<sup>3</sup> Over the same period, electricity production grew at a slightly accelerating rate (the highest over the past six years) and, thus, total production of electricity and natural gas contributed decisively (4.3 percentage points) to the rise in total industrial output.

Moreover, Public Power Corporation (DEH) provisional data show that net electric power production increased by 7.2 per cent in 1999 to 44,867.9 GWH. The increase was mostly (5 percentage points) accounted for by the steep rise (133 per cent) in power output from natural-gas-operated plants, owing to the start-up of operation of a plant at Megalo Lavrio. The strong increase (of 25 per cent) in power output from hydroelectric plants made also a positive contribution (of 2.3 percentage points), while power output from lignite-operated plants remained roughly unchanged. By contrast, continuing the

1 Indeed, the firm "Cosmo Marbles S.A.", constituting of seven vertically concentrated marble industries, was set up at the beginning of 1999, while the new consortium under the name "Cosmos Building Materials Shanghai Co Ltd" is now building a marble processing factory in China.

2 Besides, it should be noted that the realisation of gold extraction investment by the firm TVX Hellas, concerning two extraction projects in the regions of Olympiada and Skouria in Chalkidiki, has been suspended (although in 1999 the Ministry for the Environment, Physical Planning and Public Works made a preliminary approval of operating licences for the mines), because the approval of the study on the environmental impact of the project is being delayed.

3 Indeed, in the course of 1999, 1.41 billion cubic metres of natural gas were distributed to various consumption sectors, while it is forecast that the volume of natural gas to be distributed will overshoot 1.8 billion cubic metres in 2000 and will reach 6.5 billion cubic metres by 2010. In February 2000 the terminal station of liquified natural gas (from Algeria) in Revithousa became operational, offering a second source of gas supply to the natural gas transfer system, and hence the Public Gas Corporation (DEPA) will proceed to the activation of the new, low-pressure networks in Piraeus, so as to provide gas to industrial and commercial consumers. As regards the construction of new urban (low-pressure) networks, it is expected that DEPA will have completed in April 2000 the procedure of selecting investors, who will then proceed to the construction of networks in Attica, Thessaloniki and Thessalia. Lastly, in 1999 the advisability study on building a submarine pipe which will connect the Greek with the Italian system of natural gas was approved, on the basis of the agreement concluded between DEPA and the Italian National Organisation of Hydrocarbons (ENI).



downward trend of the past three years, power output from diesel plants declined by 2.3 per cent, owing to the shift of use from diesel to natural gas. Electricity production from renewable energy sources rose further (reaching 56 GWH in 1999 from 34 GWH in 1994), while energy produced for “own” use (self-production) amounted to 90.4 GWH. As a result, private producers contributed for the first time, even by a modest 0.2 percentage point, to the growth of total electricity production. It should be noted, however, that the expansion of renewable sources of energy, despite being a primary objective of Greece’s energy policy since 1994 through the establishment of the appropriate legal framework, was smaller than expected, owing to problems in the implementation of Law 2244/99. For this reason, the government is proceeding for the amendment of this law in the course of 2000.<sup>1</sup>

On the demand side, total electricity consumption rose in the January-November 1999 period, albeit at a decelerating rate (4.2 per cent), compared with 1998. The rise was mainly accounted for by the growth of demand for commercial and household use, while demand for agricultural use remained broadly unchanged and that for industrial use decreased. In particular, demand for agricultural use increased marginally (by 0.2 per cent), following a surge of 18.2 per cent in 1998. Commercial use continued to grow considerably in 1999 (1999: 11.3 per cent, 1998: 15.3 per cent), broadening further its share in total consumption, while the increase (of 3.7 per cent) in demand for household use reflected the large cuts (15.3 per cent in total during 1999) in electricity rates for household use. By contrast, electric power demand for industrial use decreased slightly by 0.2 per cent, reflecting the containment of manufacturing output growth. This development was entirely due to the drop of 2.5 per cent in demand of factories consuming high voltage electricity, whereas demand of factories consuming medium and low voltage electricity rose by 1.8 per cent. Lastly, electricity consumption for other uses, mainly for lighting streets and squares, increased substantially (8.5 per cent).

With regard to the country’s energy potential, installed capacity recorded a large increase (of 702 MW) in 1999 (thus, total installed capacity reached 10,997 MW), as the combined cycle plant at Megalo Lavrio (570 MW), the two hydroelectric plants of Platanovrisi (101 MW) which belong to the Nestos complex, as well as some smaller diesel plants (30 MW), were incorporated into the interlinked system. Besides, a series of other projects, expected to be put into operation over coming years, are in progress,<sup>2</sup> while investment activity by DEH is forecast to continue to grow at a strong pace in 2000.<sup>3</sup>

As a result of the increase in Greece’s electric power potential, the economy’s self-sufficiency in energy improved notably and its energy dependence fell almost to zero.

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1 Pursuant to Law 2244/94, in the five years from 1995 to 1999, the Ministry of Development granted 107 installation licences to power stations using renewable energy sources (capacity of 372.9 MW), while operation licences were granted to only 22 enterprises (with a total capacity of 72.2 MW).

2 These works include mainly the construction of a combined-cycle, natural-gas-operated plant in Komotini (492 MW) and a lignite-operated plant in Florina (330 MW).

3 According to the Introductory Report on the Budget, in 2000 DEH will carry out investment amounting to 360 billion drachmas.

Consequently, in 1999 the net imports/sales ratio dropped to 0.4 per cent, the lowest level over the last twenty years.

In 2000 the primary goal of Greece's energy policy is to promote the implementation of Law 2773/99,<sup>1</sup> so as, according to the relevant EU Directive, to enable the gradual deregulation of the electric power market as of the beginning of 2001. Investors are strongly interested therein, as implied by the conclusion, in early 2000, of the first agreement for the construction of a big private factory for electricity production.<sup>2</sup> At the same time, the creation of a single Balkan market<sup>3</sup> is expected to ensure meeting increased demand for electricity (throughout the Balkans) and to help reap the benefits from the resulting economies of scale.

### 3. SERVICES

Income from services increased in 1999 at a faster rate than in 1998 (3.5 per cent compared with 3.1 per cent), as a result of intense activity, particularly in telecommunications, the financial sector and tourism.

In greater detail, income from transport-communications rose by 3 per cent in 1999, compared with 2.6 per cent in 1998. This development reflected the increase in road, rail and sea cargo transport (due to the growth of foreign trade), steadily growing demand for telecommunications services and the recovery of tourism (see Chart III.5). More specifically, freight carried by the Hellenic Railways Organisation (OSE) increased by 7.8 per cent, while the modernisation and the upgrading of the railway network through resources from the 3rd CSF open up new prospects for rail transport. Furthermore, the deregulation of air transport and the increase in the number of private airlines<sup>4</sup> contributed to the enhancement of competition, the upgrading of services supplied and the drop in transport costs. Nevertheless, the occupancy rate dropped by 15.1 per cent in private airlines and 11.5 per cent in Olympic Airways. According to Olympic Airways data, passenger transport declined by 3 per cent.<sup>5</sup>

More extensive reference should be made to telecommunications. The volume of services offered by the Hellenic Telecommunications Organisation (OTE) (on the basis

1 Enacted on 22 December 1999.

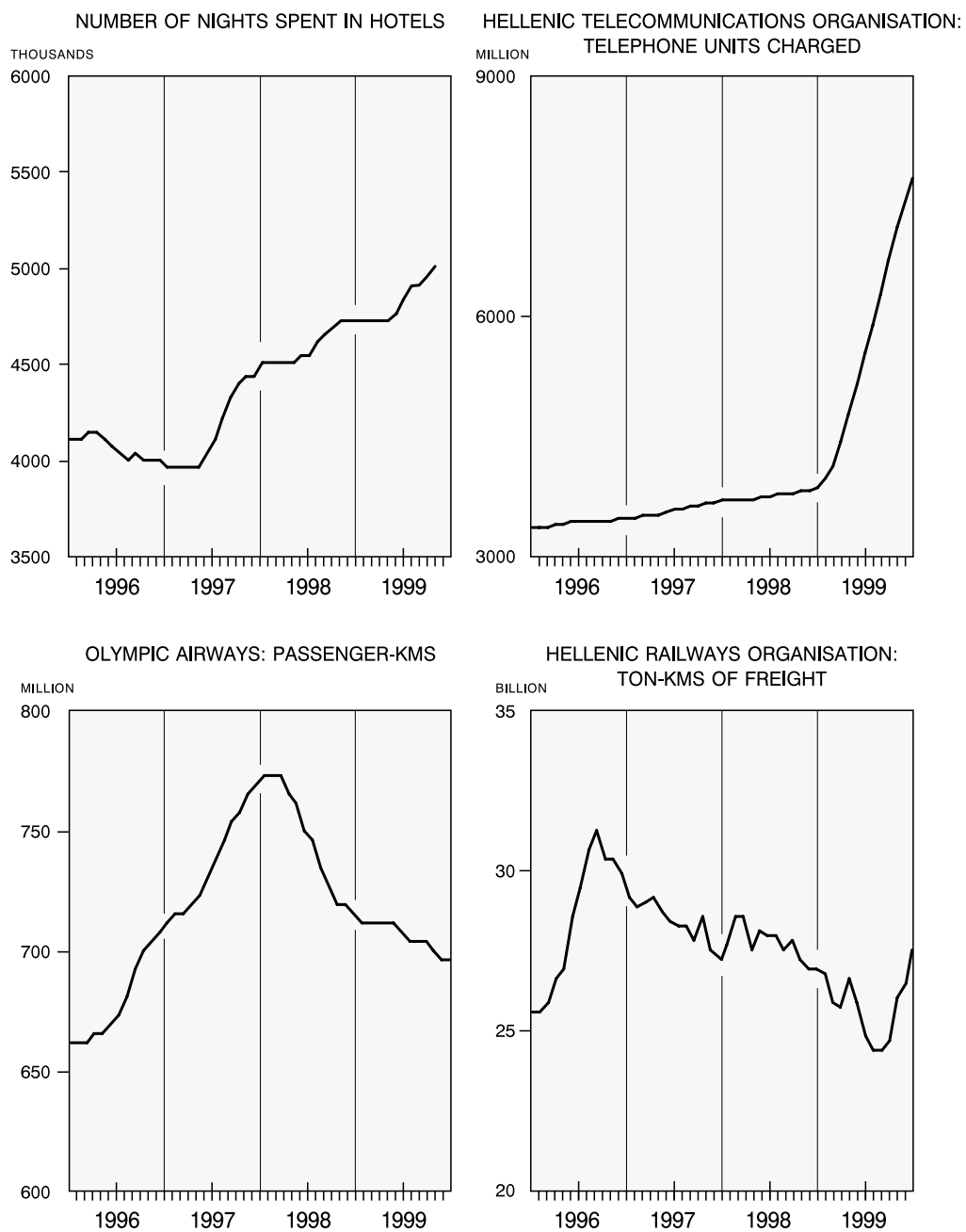
2 The agreement concerned the construction of an export-oriented, natural-gas-operated plant (400-600MW) in Thrace. It was signed between a Greek-Italian, a Turkish, a Russian and an American company.

3 The declaration for the creation of a competitive regional market of electric power in Southeastern Europe was signed in the Conference of Thessaloniki on 10 September 1999.

4 The Civil Aviation Administration has granted 21 flight permits to Greek airlines, the largest of which have obtained a considerable share of Olympic Airways sales. It is calculated that: a) in 1999, seats offered by private companies increased by 225 per cent and b) Olympic Airways' competitors obtained 36 per cent of the Greek air transport market.

5 The share of Olympic Airways in international flights was reduced to 14.9 per cent in 1999, compared with 18.3 per cent in 1998.

CHART III.5

ACTIVITY INDICATORS FOR SERVICES<sup>1</sup>

<sup>1</sup> Twelve-month moving average centred on the last month of the period.

**Source:** National Tourism Organisation (EOT), Hellenic Telecommunications Organisation (OTE), Olympic Airways (OA) and Hellenic Railways Organisation (OSE).

of telephone units charged) rose by 100.7 per cent in 1999.<sup>1</sup> Moreover, the digitalisation of OTE's network, which has reached 92 per cent, enables the provision of new services and the growth of OTE's revenue.<sup>2</sup> The large volume of the services offered is indicated by the fact that government revenue from mobile telephone rates grew by 66 per cent in 1999 as a whole and 140.1 per cent in the January-February 2000 period, and by the turnover of the three mobile telephony companies, which reached about 500 billion drachmas in 1999. It should be pointed out that after 1993, when the mobile telephone market "opened" in Greece, and particularly in the last four years, telecommunications have recorded a spectacular increase. Furthermore, the convergence between telecommunications and information technologies, as well as the forthcoming deregulation (on 1 January 2001) of fixed telephony services, open up new growth prospects. Competition will intensify, thus encouraging the development of new businesses and leading to the creation of new jobs and the improvement, in quality terms, of the services offered, while it will have a dampening effect on prices.<sup>3</sup> According to some estimates, the turnover of telecommunications companies approaches 2 trillion drachmas, or 5 per cent of GDP. The growth of mobile telephony is very rapid. At the end of 1999, the number of mobile telephone users came to 3.9 million. Of them, Panafon subscribers numbered 1,663,000, Stet Hellas subscribers 1,183,000 and Cosmote subscribers 1,048,000. The rate of mobile telephony penetration in the Greek market was almost 37 per cent at end-1999 and it is expected to reach 50 per cent at the end of 2000 and 70 per cent at the end of 2003. In the first quarter of 2000, the number of mobile telephone connections rose by 10 per cent, while the penetration of mobile telephony came to 41 per cent of Greek population. (Over the same period, the customer base of Cosmote increased by 16.4 per cent, which corresponds to 171,820 new connections). Company accounts may be the new field of development of mobile telephony. According to a survey carried out by ICAP, the penetration of mobile telephony in this field is particularly low, implying that there is large room for expansion. Lastly, the use of Internet is steadily growing. A survey carried out by OTEnet (the largest Internet services provider in Greece on the basis of the turnover) shows that 3.6 per cent of Greek population are Internet users. The average Internet penetration rate in the 15 EU countries is 12 per cent, while in the United States it is three times as much. The European Commission, however, estimates<sup>4</sup> that the above EU rate will almost double between 1998 and 2000, while it will reach 6 per cent in Greece, which has the lowest ranking among the 15 EU countries. According to the same estimates, Portugal (with 9 per cent) will stand just before Greece at the bottom of the list, while Finland and Sweden (with 49 per cent and 48 per cent, respectively) will continue to be in the lead.

1 The rise reflects in part the new method of time-charging, effective as of 1 March 1999.

2 According to OTE estimates, in 2000 its turnover is forecast to increase by 13 per cent and pre-tax profits by 7 per cent.

3 For the price reduction in the course of 1999, see Chapter IV.1.2. Box IV.2.

4 See *Strategies for jobs in the information society*, and *e-Europe: an information society for all* (European Commission documents submitted to the Lisbon European Council in March 2000).

Income from trade increased by 6 per cent in 1999 compared with 6.4 per cent in the previous year. The volume of retail trade rose by 3.8 per cent, as shown by the retail sales volume index compiled by the NSSG. However, according to the IOBE's monthly survey on retail trade for 1999, the index of business expectations remained virtually unchanged (+0.1 per cent), as forecasts regarding business activity were moderate and estimates on sales and the level of inventories declined. By contrast, prospects for new orders were positive.

It should be noted that almost all branches of retail trade witness rapid changes, owing to acquisitions and mergers. The most commonly used method for the creation of chain stores is the system of "franchising". Moreover, new prospects are being opened up for retail trade, owing to the development of e-trade,<sup>1</sup> which is projected to receive financing of 80 billion drachmas from the 3rd CSF. A determinant of the expansion of e-trade is the growth of Internet use.<sup>2</sup>

Income from the financial sector (earned by the "financial intermediaries") continued to grow substantially (by 8 per cent). In 1999 the banking sector was dominated by acquisitions and mergers, while bank profits recorded a sharp increase. At the same time, the development of e-banking, the emergence of new bankassurance and financial products, as well as keener competition, open up new prospects of further expansion of the financial sector in the competitive environment of the euro area. Insurance companies' profits and premium production<sup>3</sup> also rose steeply, while the compulsory insurance of the major technical projects related to the Olympic Games of 2004 creates new prospects.

Income from hotels-restaurants and "other services"<sup>4</sup> rose by 4 per cent and 3.1 per cent, respectively, owing to the recovery of tourism. According to provisional data from the National Tourism Organisation (EOT), the number of tourist overnight stays in hotels increased by 7.6 per cent between January and October 1999, while tourist arrivals grew by 10.6 per cent in the January-September period. Moreover, tourist arrivals by charter rose by 14.4 per cent between April and October, while overnight stays in AA through C class hotels of tourist areas grew by 4.6 per cent over the same period. Domestic tourism also rose by 3.1 per cent in the period from January to October 1999. The growth of tourism led to a rise in the average occupancy of hotels. Between April and October 1999, the aver-

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1 A presidential decree governing the implementation by Greece of Community Directive 99/93/EC, regarding electronic signatures, has been drawn up and will soon be promulgated. According to estimates, by June 2000 (i.e. one year before the relevant deadline) Greece will have completed the establishment of the national network through which digital signatures will be legally identified..

2 According to a survey carried out by the Greek consulting company "Strategic International", in 1999 the number of Internet connections overshot 400,000, while it is estimated that they will increase at a monthly rate of 5 per cent in the course of 2000.

3 According to estimates by the Chairman of the Association of Greek Insurance Companies, in 1999 insurance premium production rose by 25 per cent and profits by 150 per cent relative to 1998. Moreover, according to the income statements accompanying the consolidated balance sheets of insurance companies listed on the Stock Exchange, in 1999 pre-tax profits grew by 409.2 per cent and income by 80.5 per cent.

4 According to World Tourism and Travel Council estimates (WTTC), in 1999 Greece's GDP in tourism stood at 8.2 trillion drachmas or about 21 per cent of total GDP.

age occupancy rate of hotels was equal to 80.6 per cent, compared with 77 per cent in the corresponding 1998 period. Moreover, travel receipts (at constant drachmas) grew by 40.5 per cent in the period from January to September 1999.<sup>1</sup> The upgrading, in quality terms, of infrastructure,<sup>2</sup> thanks to the substantial funds for tourism expected from the 3rd CSF, and the lengthening of the tourist period,<sup>3</sup> along with the promotion of alternative forms of tourism, create a climate of optimism for the further development of tourism.

The 2 per cent rise in income (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 1.5 per cent decrease in income from public administration-national security and the increase in income from health and education (4 per cent and 3 per cent, respectively) are mostly related to government activity, budget execution and employment in central government.

#### 4. EMPLOYMENT-UNEMPLOYMENT

According to estimates by the Ministry of National Economy and the European Commission, employment grew by 1-1.5 per cent in 1999, while the unemployment rate may have fallen by about 0.5 percentage point.<sup>4</sup> Nevertheless, it is not possible to give a full account of developments, owing to the lack of sufficient data.<sup>5</sup> (However, according to the most reliable data available — i.e. those of the NSSG — the average annual rate of total unemployment had reached 11.1 per cent in 1998, while in the second quarter of that year it stood at 10.8 per cent, compared with 9.6 per cent in the corresponding 1997 quarter).<sup>6</sup> Available evidence for 1999 is presented in the paragraphs below.

IOBE’s monthly business surveys are a useful source of information. According to them, business forecasts in the course of 1999 suggest that employment remained unchanged

1 These data are not fully comparable with those of previous years, owing to the gradual introduction of the new balance of payments compilation method.

2 According to data from the Hellenic Chamber of Hotel Business, high-class (AA and A) hotel beds account for 30.4 per cent of all hotel beds, while lower class (C, D and E) hotel beds for 45.7 per cent.

3 According to data from the Association of Hoteliers of Rhodes, in the winter season tourist arrivals increase by 62 per cent and overnight stays in hotels by 75.4 per cent. It should be noted that, according to Hellenic Chamber of Hotel Business data, 35.9 per cent of Greek hotels operate all year round, while the remaining 64.1 per cent operate on a seasonal basis.

4 See Ministry of National Economy, *Updated Convergence Programme, 1999-2002*, European Commission, *Report on the implementation of the 1999 broad economic policy guidelines* (March 2000) and *Spring 2000 forecasts*, April 2000.

5 The most recent data releases from the NSSG’s labour force survey concern the four quarters of 1998. Similarly, the NSSG’s index of wage earners’ employment in manufacturing is available until December 1998. Data for 1999 are not yet available.

6 These rates have been calculated on the basis of Eurostat definitions, already adopted by the NSSG. It should be recalled that, on the basis of the old definition used by the NSSG, the total unemployment rate came to 10.3 per cent in the second quarter of 1997. For a more detailed examination of developments in 1998, see Bank of Greece, *Monetary Policy, Interim Report 1999*, November 1999, Box on p. 53.

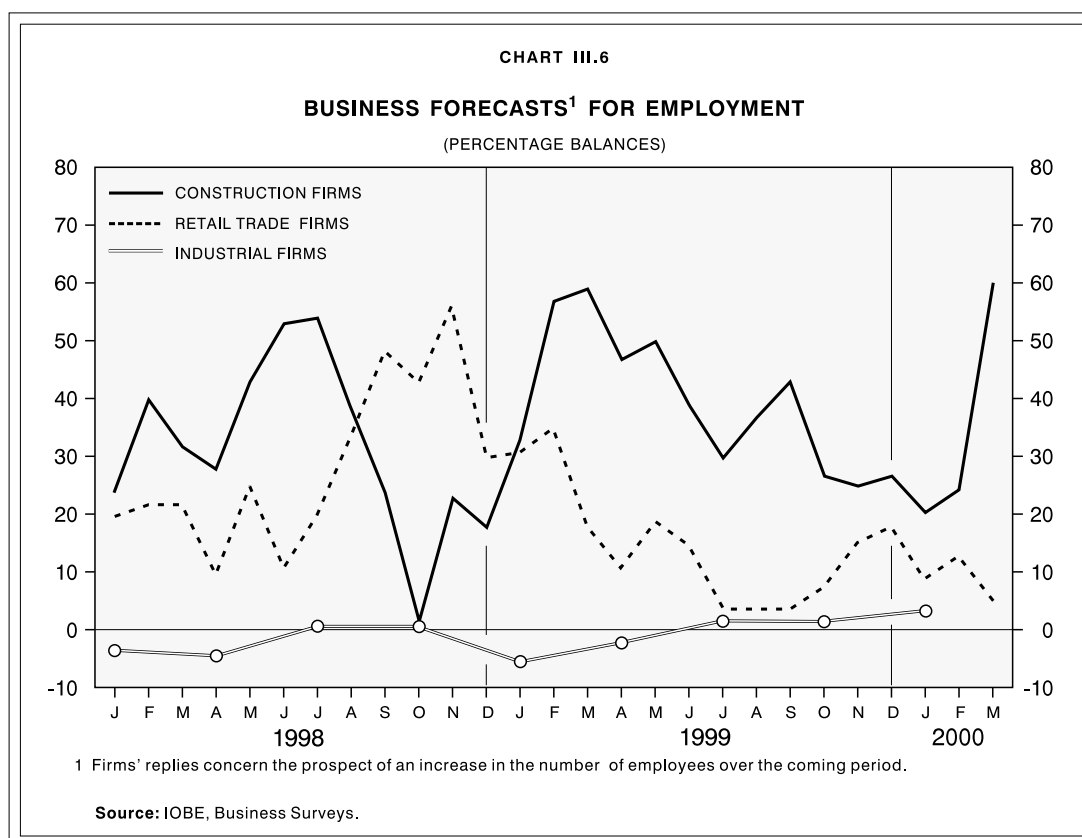
TABLE III.8  
POPULATION, LABOUR FORCE, EMPLOYMENT AND UNEMPLOYMENT  
(Thousand persons – unemployment in percentage points)

	Population		Labour force		Employed		Unemployed		Unemployment rate	
	1997	1998	1997	1998	1997	1998	1997	1998	1997	1998
<b>Men and women</b>										
– total (aged 15 or more)	8,723	8,719	4,261	4,445	3,853	3,967	408	478	9.6	10.8
– 15-64 years old	6,792	6,933	4,132	4,331	3,725	3,854	407	477	9.8	11.0
– 15-24 years old	1,380	1,419	490	567	338	399	152	169	31.0	29.8
– 25 years or more	7,343	7,300	3,771	3,878	3,515	3,568	256	309	6.8	8.0
<b>Men</b>										
– total (aged 15 or more)	4,135	4,208	2,600	2,693	2,439	2,504	162	188	6.2	7.0
– 15-64 years old	3,261	3,387	2,507	2,613	2,346	2,425	161	187	6.4	7.2
– 15-24 years old	657	698	254	304	198	239	56	65	22.0	21.4
– 25 years or more	3,478	3,510	2,346	2,389	2,241	2,265	106	123	4.5	5.1
<b>Women</b>										
– total (aged 15 or more)	4,588	4,511	1,661	1,753	1,415	1,463	246	290	14.8	16.5
– 15-64 years old	3,531	3,546	1,625	1,719	1,379	1,429	246	289	15.1	16.8
– 15-24 years old	723	720	235	264	140	160	96	104	40.9	39.4
– 25 years or more	3,865	3,791	1,426	1,489	1,275	1,303	150	186	10.5	12.5

**Source:** NSSG, Labour force survey, second quarter of 1997 and 1998. Revised data based on Eurostat definitions, New Cronos database.

in industry and recorded a clear increase in construction, while the positive forecasts made by retail trade firms continued to decline until September, to recover in the last quarter of 1999 (see Chart III.6). Yet, according to an annual<sup>1</sup> survey carried out by ICAP, the number of industrial firms estimating that employment increased was clearly larger.<sup>2</sup>

Besides, data from the Ministry of Finance and the Ministry of National Economy (see Chart III.7 and Table III.9) point to an increase in average annual employment in cen-



tral government (+2.1 per cent<sup>3</sup>), while in public enterprises average annual employment dropped by 1.9 per cent (as in the three previous years). Employment in the banking sector rose by 1.1 per cent between December 1998 and December 1999 (see Table III.9).

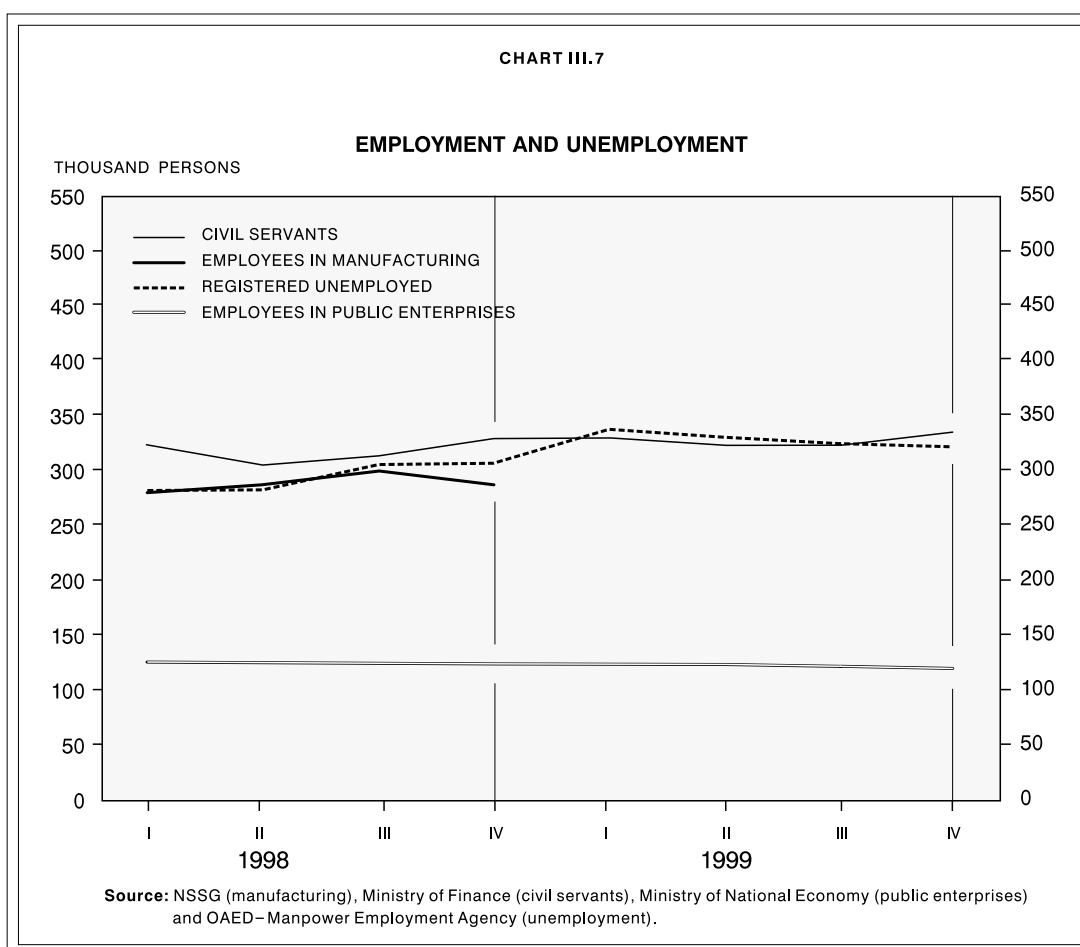
1 ICAP survey, *The Greek industry: estimates for 1999 and expectations for 2000*, December 1999. The survey covered a sample of 250 industrial firms.

2 42.2 per cent of firms estimated that employment increased, 47.5 per cent that it remained unchanged and 10.3 per cent that it dropped, while forecasts for 2000 were even more positive.

3 This rate is calculated by making some adjustments to initial data, so as to include employees in public hospitals (whose wages are paid or subsidised by the government's ordinary budget) and to take into account the fact that raw data indicate a misleadingly high annual growth rate of the number of employees in the second quarter of 1999, given that in the second quarter of 1998 fixed duration contracts of substitute teachers in secondary schools were terminated earlier than usual.



The average annual number of registered unemployed persons (Manpower Employment Agency – OAED – data) grew by 36,000 in 1999 (after increasing by 76,000 in 1998 – see Chart III.7 and Table III.10). This development largely reflects the fact that the unemployed have to register with OAED in order to participate in the subsidised employment and training programmes which concern an ever-growing number of persons. Besides, the *existence*, in itself, of programmes for the promotion of employment, along with positive economic developments, may encourage persons who previ-



ously remained outside the labour force (either because they had never sought a job or because they had stopped doing so) to start seeking a job, as they consider that employment opportunities have increased. These are the factors which usually contribute to the *simultaneous* growth of both the number of the unemployed and the employed, as well as of the labour force participation rate, as it happened in 1995, 1996 and 1998.<sup>1</sup>

<sup>1</sup> See Bank of Greece, *Annual Report 1996*, Athens 1997, p. 96, and *Monetary Policy, Interim Report 1999*, November 1999, Box on p. 53.

At first sight this seems a paradoxical outcome: As these programmes take some time to produce results, an increase in unemployment (owing to the interest expressed by persons outside the labour force) is observed *initially*, while employment growth *follows*.

TABLE III.9  
POPULATION, LABOUR FORCE AND EMPLOYMENT

	1998 (thous. persons)	Annual percentage changes						
		1993	1994	1995	1996	1997	1998	1999
Population aged 15 or more <sup>1</sup>	8,719	1.7	1.4	0.9	1.0	1.2	0.0	...
Population aged 15-64 <sup>1</sup>	6,933	1.4	0.5	0.1	0.3	-0.1	2.1	0.5 <sup>7</sup>
Labour force <sup>1</sup>	4,445	1.8	2.2	1.1	1.9	-0.5	4.3	0.8 <sup>7</sup>
Employment: <sup>1</sup>	3,967	1.0	1.9	0.9	1.2	-0.4	3.0	1.2 <sup>7</sup>
– Primary sector <sup>1</sup>	704	-1.6	-0.4	-1.0	0.5	-2.4	-8.0	...
– Secondary sector <sup>1</sup>	914	-3.6	-0.6	-0.9	-0.1	-2.1	5.5	...
– Tertiary sector <sup>1</sup>	2,349	4.3	3.8	2.4	2.1	1.1	5.7	...
Rate of participation in the labour force <sup>1,2</sup>		(48.7)	(49.1)	(49.2)	(49.7)	(48.8)	(51.0)	(...)
Employment rate <sup>1,3</sup>		(55.2)	(55.9)	(56.4)	(56.9)	(56.7)	(57.2)	(...)
Unemployment (as a percentage of the labour force) <sup>1</sup>	478	(8.6)	(8.9)	(9.1)	(9.6)	(9.6)	(10.8)	(10.5) <sup>7</sup>
Employment in:								
– Manufacturing <sup>1</sup>	578	...	-0.3	0.0	-0.3	-2.8	3.4	...
– Construction <sup>1</sup>	282	...	0.0	-3.4	0.0	-1.2	13.3	...
– Banks <sup>4</sup>	62	0.0	5.3	4.0	2.8	1.0	1.8	1.1
– Civil service <sup>5</sup>	326	4.3	-2.0	2.2	2.3	1.0	0.9	2.4
– Public enterprises and entities <sup>6</sup>	152	3.4	4.4	0.2	-0.3	-1.5	-2.6	-1.9

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.

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

3 Total employment 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 per cent in 1994, 1.4 per cent in 1995, 2.5 per cent in 1996 and 1.1 per cent in 1997 and to have decreased by 1.1 per cent in 1998. In 1999 average annual employment increased by 2.1 per cent (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).

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

7 Ministry of National Economy estimates.

A significant development in 1999 was the continuation of the process for the legalisation of immigrant workers. According to Ministry of Labour data, 115,000 “green

cards”<sup>1</sup> were issued until the beginning of April 2000. This figure accounts for 51 per cent of the 225,691 persons who had submitted the required supporting documents to OAED by the relevant deadline (end-April 1999). For the submission of supporting documents, immigrant workers were required by relevant legislation to register with the system of social security. According to estimates by the Athens Labour Centre, 90,000 immigrant workers have already been insured by the Social Insurance Fund (IKA), while another 90,000 have been insured by the Farmers’ Insurance Fund (OGA) and 20,000 by the Self-Employed Workers’ Fund (TEBE).<sup>2</sup> The issuance of green cards is aimed to be completed by June 2000,<sup>3</sup> while a draft law with permanent provisions for economic immigrants has been drawn up.<sup>4</sup>

It should be noted that immigrant workers who have applied for a green card accounted for only 60 per cent of the 373,196 persons recorded by OAED *at the first stage* (1 January 1998 to 1 June 1998) of the relevant procedure. In the same period, NSSG’s labour force survey (covering the second quarter of 1998) had recorded only 154,000 immigrant workers from non-EU countries (138,000 employed and 16,000 jobless). Yet this figure was much larger than that recorded by the surveys for 1990-1997.<sup>5</sup> Besides, according to some estimates, the total number of economic immigrants is even larger, possibly reaching 650,000. This means that immigrant workers, who are mostly employed in services (restaurants, hotels, housework), construction, manufacturing (mainly textiles) and agriculture, actually account for more than 10 per cent of the labour force. Their economic activity contributes to GDP growth, enhances labour market flexibility, helps contain labour costs and inflation, and increases the revenue of the social security system.<sup>6</sup> Moreover, the average age level of immigrant workers is clearly lower than that of total population. Therefore, to the extent that the presence of immigrant workers tends to become of a more permanent character, available demographic projections for the next thirty years should be revised in a more favourable direction. According to current projections, population ageing — i.e. the steady increase of persons aged 65 or more as a percentage of the population of working age (those aged 15-64

1 This 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 2736/1999).

2 Data from a speech given by the Chairman of the Athens Labour Centre at the conference on “Immigrants in Greece of 2000”, Athens, 4 February 2000.

3 Article 20 of Law 2736/99 included regulations to speed up the work of the committees which are responsible for the issuance of cards.

4 It should be reminded that the “green card” procedure was implemented as a one-off measure, concerning only immigrants who were residing illegally in Greece in late November 1997 (when Presidential Decree 358/97 was promulgated).

5 According to the NSSG surveys, the participation of immigrant workers from non-EU countries in the Greek labour force increased gradually from 20,000 in 1990 to 83,000 in 1997, while it almost doubled in 1998, reaching 154,000.

6 For a more detailed examination of the economic dimension of the subject, see several related studies of R. Fakiolas, of which the most recent (“Demographic and economic developments — the advantages and disadvantages of the current situation in Greece”) was published in the Athens weekly magazine “*Oikonomikos Tachydromos*”, 16 March 2000.

years)<sup>1</sup> — is expected to continue, with particularly adverse effects on the economic sustainability of the social security system (especially the pension system).

The employment policy implemented in 1999 was based on the second annual National Employment Action Plan, which was drawn up in accordance with guidelines on employment which had been adopted by the Vienna European Council in December 1998. More specifically, the Ministry of Labour estimates that, in 1999, 51,700 persons participated in the programmes for the subsidisation of employment and self-employment, while it forecasts that participants will reach 67,000 in 2000. At the same time, OAED continued to establish “Employment Promotion Centres” (of which 23 are already operational); these centres are aimed at improving the quality of services provided to job seekers and enterprises in need of staff. Moreover, the social partners continued to establish Information Offices for the Unemployed and Business Firms with objectives similar to

TABLE III.10  
RECENT DEVELOPMENTS IN UNEMPLOYMENT

Quarter	OAED data	NSSG data	
	Number of unemployed (thousand persons)	Number of unemployed (thousand persons)	Unemployment rate (percentage points)
1998 I .....	277.5	518.1	11.7
II .....	278.2	478.5	10.8
III .....	301.7	478.7	10.7
IV .....	301.8	501.7	11.3
1999 I .....	334.5	...	...
II .....	326.7	...	...
III .....	321.4	...	...
IV .....	320.4	...	...

Source: OAED and NSSG.

those of the above centres. Besides, in the course of 1999, further progress was made in the implementation of the provisions of Law 2639/98 which aim to increase labour market flexibility.<sup>2</sup> In more detail, the following Presidential Decrees were issued: 88/99 (transposition into national law of Directive 93/104/EEC concerning the organisation of working time),

1 According to World Bank projections (based on data for 1990-1991) — see E. Bos *et al.*, *World population projections 1994-95: estimates and projections with related demographic statistics*, 1994) this percentage (“the dependency ratio of the elderly”) will increase from 21.2 per cent in 1990 to 25.5 per cent in 2000, 28.8 per cent in 2010, 33.3 per cent in 2020 and 40.3 per cent in 2030 (see also: Committee for the examination of long-term economic policy, *Economy and pensions*, National Bank of Greece, Athens 1997, p. 1-17). The corresponding projections by NSSG (based on data for 1995) suggest that this percentage will grow from 25.5 per cent in 2000 to 29.1 per cent in 2010, 32.7 per cent in 2020 and 35.4 per cent in 2025. It is obvious that, if the most recent data on the inflow of immigrants and their integration in the Greek economy and society are taken into account, the projected growth of the dependency ratio of the elderly over time may be notably smaller.

2 See Bank of Greece, *Annual Report 1998*, p. 89.

136/99 (creation of a Body of Labour Inspectors) and 160/99 (private offices of employment consultants). Also, Territorial Employment Pacts were implemented, on a pilot basis, in seven high-unemployment areas of Greece. In addition, Law 2753/99, Article 4, par. 13, established tax incentives for the recruitment of personnel by enterprises. More specifically, regarding persons recruited between 17 November 1999 and 31 December 2001, 50 per cent of a business firm's outlays for contributions to employees' *main* pension insurance *will be deducted for a two-year period from the firm's "net revenue"* (and hence from its taxable profits), provided that the firm does not proceed to any dismissals over the same period.<sup>1</sup> Lastly, Law 2738/99 established collective bargaining in central government (for issues other than salaries and pensions), which may contribute to a more flexible organisation of work.

The preparation of the third National Employment Action Plan (for 2000), which will be submitted to the competent Community bodies in May 2000, has already started, in line with the "Guidelines on employment policy for the year 2000", adopted by the Helsinki European Council in December 1999.

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<sup>1</sup> About the recently announced measure of financing through the government budget part of the social security contributions paid by the lowest-salaried *employees*, see below, Chapter IV.2.

## IV. PRICES, WAGES AND BUSINESS PROFITS

### 1. PRICE DEVELOPMENTS

#### *1.1 Summary*

In the course of 1999, although crude oil prices more than doubled and the US dollar appreciated against the drachma and the other European currencies, inflation decelerated in Greece because other factors exerted stronger downward pressure. Indeed, the drachma remained stable against the euro in 1999 (in fact, it appreciated slightly at average levels) and monetary policy retained its restrictive stance. Furthermore, the impact of the March 1998 devaluation on the twelve-month rate of increase in consumer prices was eliminated in March-April 1999. Fiscal policy and wage developments, as well as the measures taken by the government to reduce indirect taxation, also had an anti-inflationary effect. Finally, developments in fresh fruit and vegetable prices were on the whole favourable.

Consequently, the twelve-month rate of increase in the Consumer Price Index (CPI) decelerated to 2 per cent in August and September 1999, from 3.9 per cent in December 1998. In October 1999, it started accelerating gradually and reached 2.7 per cent in December 1999 and 3.1 per cent in March 2000, almost exclusively owing to rising fuel prices (see Chart II.1 and Table IV.1). The average annual rate of increase in the CPI decelerated sharply: from 4.8 per cent in 1998 to 2.6 per cent in 1999.

Besides, on the basis of the Harmonised Index of Consumer Prices (HICP), the inflation differential between Greece and the euro area was impressively reduced in the course of 1999 (from 2.9 percentage points to 0.6 of a percentage point), since the twelve-month rate of inflation in Greece fell to 2.3 per cent<sup>1</sup> in December 1999 from 3.7 per cent in December 1998, while in the euro area (where it had dropped to 0.8 per cent in December 1998) it accelerated after February 1999, reaching 1.7 per cent in December (see Chart II.2 and Box IV.1). In the early months of 2000, HICP inflation accelerated – in Greece and the euro area – owing to the continuing rise in oil prices.

The abatement of inflationary pressures in Greece in 1999 is corroborated by the fact that core inflation (based on the twelve-month rate of change in the CPI excluding fuel, fresh fruit and vegetables) dropped to 1.8 per cent in December 1999 from 4.9 per cent in December 1998. Although core inflation remained higher than CPI inflation until September,<sup>2</sup> the deviation between these two aggregates gradually decreased and turned negative in October (see Chart II.1). From then on and up to March 2000 (1.6 per cent),

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1 Revised data published by Eurostat and the National Statistical Service of Greece (NSSG) on 20 March 2000.

2 This phenomenon was due to the fact that the twelve-month rate of change in fuel prices (as well as in fresh fruit and vegetable prices) included in the CPI (but not in core inflation) remained negative until September, despite the considerable increases after February. From October, however, this rate turned positive.

TABLE IV.1  
INFLATION INDICATORS  
(Annual percentage changes)

Year or quarter	Consumer Price Index					Wholesale Price Index <sup>1</sup>								
	GENERAL INDEX	Sub-indices				GENERAL INDEX	Sub-indices							
		Goods	Services	CPI excluding fruit, vege- tables & fuel	CPI excluding food & fuel		Food and non-alcoholic beverages	Fresh fruit and vegetables	Fuel	Final domestic products for home consumption				
										Primary	Industrial	Industrial excluding fuel		
1991	19.5	17.8	22.7	18.6	18.8	19.3	22.6	28.2	16.7	23.0	17.7	...	10.7	14.6
1992	15.9	14.1	19.2	16.3	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	14.8	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	11.0	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	9.4	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	8.1	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	6.0	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	5.3	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	4.1	2.9	3.0	2.4	1.8	-1.7	2.1	3.4	3.7	2.6	-0.1	0.5
1996 a'	8.6	7.4	10.4	8.7	9.0	6.6	2.9	10.1	6.6	3.1	7.5	7.1	8.1	5.0
b'	8.6	7.8	10.0	8.4	8.6	8.3	11.7	9.9	6.7	13.5	6.8	6.3	6.6	1.5
c'	8.0	7.3	9.3	7.7	8.0	7.7	13.6	9.8	6.3	14.3	6.7	5.6	5.2	0.9
d'	7.6	6.3	9.7	7.4	7.9	5.5	6.2	10.9	5.0	5.0	7.3	5.6	2.7	-0.7
1997 a'	6.4	5.0	8.6	6.7	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	6.4	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	5.8	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	5.3	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	4.5	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	5.7	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	5.9	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	5.2	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	4.4	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	2.9	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	3.9	2.5	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	3.3	1.9	1.8	2.4	2.9	14.9	4.2	0.7	6.2	2.4	4.4	1.5

1 From 1997 onwards, new, revised wholesale price index (1990=100).

Source: Calculations based on NSSG data.

**BOX IV.1****HICP inflation in Greece and the euro area**

The euro area HICP rose by 2.0 per cent, on an annual basis, in February 2000, and by 2.6 per cent in Greece (see the first table of the Box).<sup>1</sup> This deviation (0.6 of a percentage point) is largely explained by the different cost and productivity conditions prevailing in each case. In the euro area, the rate of change in unit labour costs in the whole economy remained at low levels in 1999 (1.3 per cent, according to the April 2000 estimates of the European Commission), while it reached 2.7 per cent in Greece. The impact of the rise in fuel prices is evident in all euro area countries, as depicted in the “Housing” and “Transportation” items included in the HICP (see the first table). However, general inflation seems to have

COMPARISON OF TWELVE-MONTH RATES OF CPI CHANGE BETWEEN GREECE  
AND THE EURO AREA (FEBRUARY 2000 – PERCENTAGE POINTS)

Category	Greece (1)	Euro area (2)	Deviation in percentage points (1)–(2)
General	2.6	2.0	0.6
Food and non-alcoholic beverages	2.3	0.1	2.2
Alcoholic beverages and tobacco	2.7	2.5	0.2
Clothing and footwear	1.0	0.5	0.5
Housing, water supply, electricity and fuel	6.9	3.7	3.2
Durables, household commodities and services	1.2	0.7	0.5
Health	0.9	1.7	–0.8
Transportation	4.4	5.7	–1.3
Communications	–15.6	–3.0	–12.6
Entertainment, cultural activities	0.8	0.1	0.7
Education	3.6	2.5	1.1
Hotels, cafeterias and restaurants	5.5	2.4	3.1
Miscellaneous goods and services	1.9	2.2	–0.3

**Source:** NSSG and Eurostat.

been contained in euro area countries, as increases in food prices remained at very low levels, close to zero, electricity rates dropped owing to the deregulation of this market, and gas prices were contained. →

<sup>1</sup> In March 2000, HICP growth rate reached 2.1 per cent in the euro area and 2.8 per cent in Greece. Detailed data are not yet available.



→ *Comparison of HICP inflation between Greece and the three best performing countries*

The largest price increases in the “Services” and “Food-beverages-tobacco” items led to a faster increase in inflation in Greece than in Germany, France and Austria, i.e. the three best performing euro area countries<sup>1</sup> in terms of inflation (see the second table of the Box). By contrast, the upward effect of fuel (which is related to the fact that international crude oil prices more than doubled in comparison with December 1998) was largely offset, especially in Greece, by the drop in electricity rates and the prices of industrial goods, excluding energy.

COMPARISON OF THE TWELVE-MONTH RATES OF HICP CHANGE  
BETWEEN GREECE AND THE THREE BEST PERFORMING  
COUNTRIES IN TERMS OF INFLATION (FEBRUARY 2000 - PERCENTAGE POINTS)

Special categories	Greece	Euro area	Germany	France	Austria*
<i>General HICP</i>	2.6	2.0	2.1	1.5	1.9
Goods	2.6	2.4	2.4	1.9	2.0
Food, beverages, tobacco	2.4	0.6	-0.5	1.5	1.0
Processed food	2.9	1.0	-0.2	2.1	0.4
Unprocessed food	1.6	-0.1	-1.2	0.6	2.0
Industrial goods	2.7	3.3	3.8	2.1	2.4
Industrial goods excluding energy	-0.5	0.5	0.2	-0.5	0.6
Energy	17.9	13.5	16.1	12.2	9.8
Electricity	-7.5	-0.3	-1.4	-2.1	-4.9
Heating oil	55.0	54.9	78.0	53.3	52.8
Gasoline and lubricants	21.9	20.3	25.6	19.6	18.6
Services	2.7	1.7	1.2	0.7	1.5

\* Provisional data.

Source: NSSG and Eurostat.

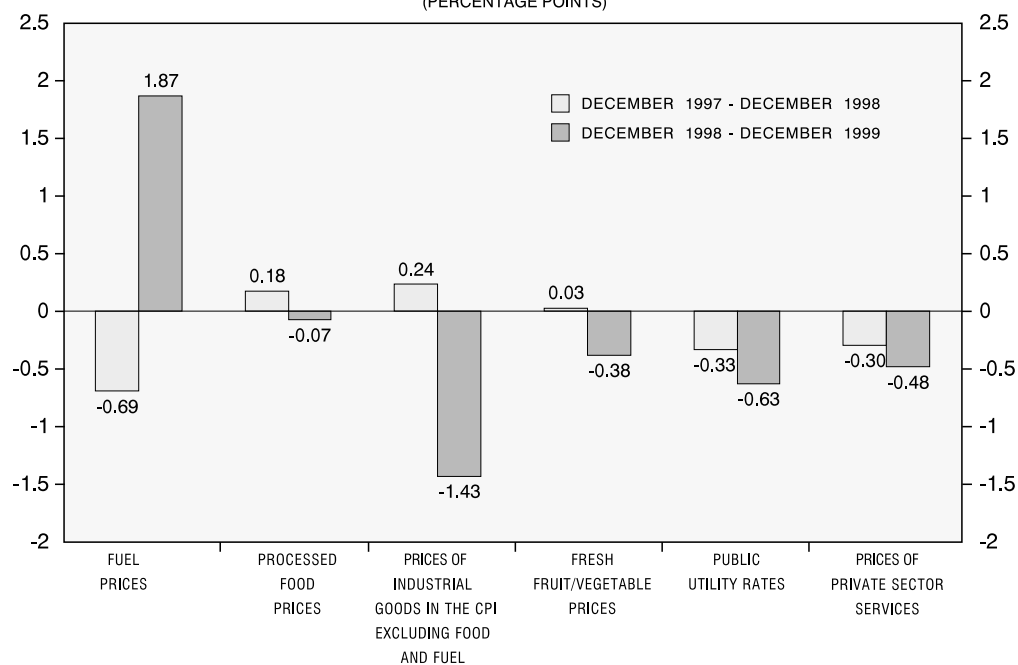
Processed food prices in Greece rose higher than in the three best performing euro area countries, owing to larger increases in the prices of edible oil and fat (Greece: 13.6 per cent, Germany -4.8 per cent, France: 2.1 per cent, Austria: -0.9 per cent), dairy products (Greece 2.1 per cent, Germany: -2.0 per cent, France: 2.0 per cent, Austria: -0.1 per cent), mineral water (Greece: 3.4 per cent, Germany: -0.3 per cent, France: 0.3 per cent, Austria: -0.5 per cent) and meat (Greece: 1.8 per cent, Germany: -1.3 per cent, France: 1.9 per cent, Austria: 0.2 per cent). Increases in the prices of fresh vegetables contributed to the acceleration of inflation in Greece as regards unprocessed food, reflecting peculiarities of the Greek market and the different impact of the seasonal cycle, compared with the other countries (Greece: 4.0 per cent, Germany: -1.1 per cent, France: -2.5 per cent and Austria: 0.7 per cent).

1 “Best performance” concerns average inflation during the twelve months from March 1999 to February 2000.

CHART IV.1

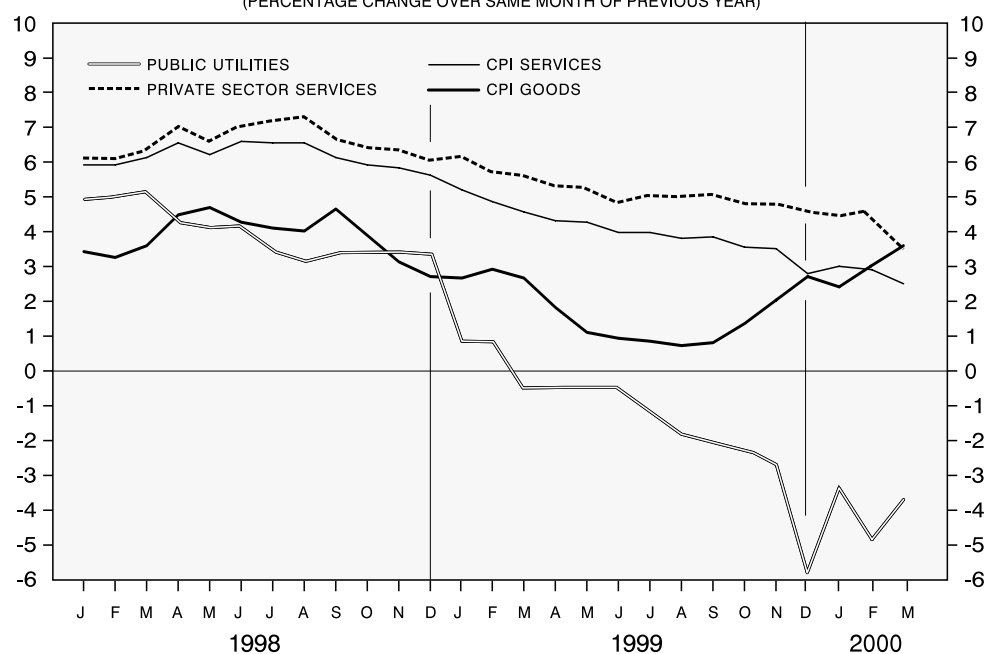
**A. MAIN CONTRIBUTIONS TO THE CHANGE IN THE ANNUAL INFLATION RATE**

(PERCENTAGE POINTS)



**B. GOODS AND SERVICES IN THE CONSUMER PRICE INDEX**

(PERCENTAGE CHANGE OVER SAME MONTH OF PREVIOUS YEAR)



Source: Calculations based on NSSG data.

core inflation showed a downward trend, stayed lower than CPI inflation and, in addition, did not exceed 2 per cent. The fact that, until September 1999, core inflation remained higher than 2 per cent is mainly attributable to the high twelve-month rate of increase in the prices of private sector services (5.4 per cent on average in the January-September period) and in those of certain commodities (see Chart IV.1B). The decrease in passenger car prices and in Hellenic Telecommunications Organisation –OTE– and Public Power Corporation –DEH– rates contributed to the deceleration of core inflation in the last quarter of the year. Moreover, although the twelve-month rate of change in the NSSG's Wholesale Price Index (WPI) rose significantly during 1999 (from 3.0 per cent in December 1998 to 5.5 per cent in December 1999) and the first few months of 2000 (February 2000: 7.2 per cent), mainly owing to the large increase in fuel prices,<sup>1</sup> the growth rate of the WPI excluding fuel decelerated considerably in the course of 1999 (from 4.5 per cent in December 1998 to 2.1 per cent in December 1999). In the early months of 2000, it accelerated somewhat (February 2000: 3.2 per cent), a development associated with the faster drop in the effective exchange rate of the drachma (see Chart IV.2 and Table IV.1).

### *1.2 Factors affecting inflation in 1999*

The monetary and economic policies pursued in Greece maintained their clear anti-inflationary stance in 1999. In particular, real interest rates remained high in 1999 and, as a result, the growth rate of the liquidity indicator M4N reached 5.6 per cent, i.e. a level lower than the 7-9 per cent reference range, while total credit expansion –although it did not decelerate– was contained to 11.1 per cent (excluding foreign exchange valuation differences). At the same time, the evolution of the exchange rate of the drachma, combined with the decrease in export prices of Greece's trading partners and the favourable developments of raw material prices (excluding crude oil) in the world market, minimised imported inflation<sup>2</sup> (excluding that related to fuel prices). In fact, although the effective exchange rate of the drachma in December 1999 was 4.3 per cent lower than in December 1998, its average 1999 level was only 0.9 per cent lower, while in 1998 it had dropped by 5.9 per cent. The average annual rate of change in the wholesale prices of imported final products<sup>3</sup> was close

1 The twelve-month rate of change in fuel prices included in the WPI remained negative only until May. It then turned positive and reached 123.2 per cent in December. Wholesale fuel prices (in contrast to consumer prices) were not affected by the cuts in special consumption taxes.

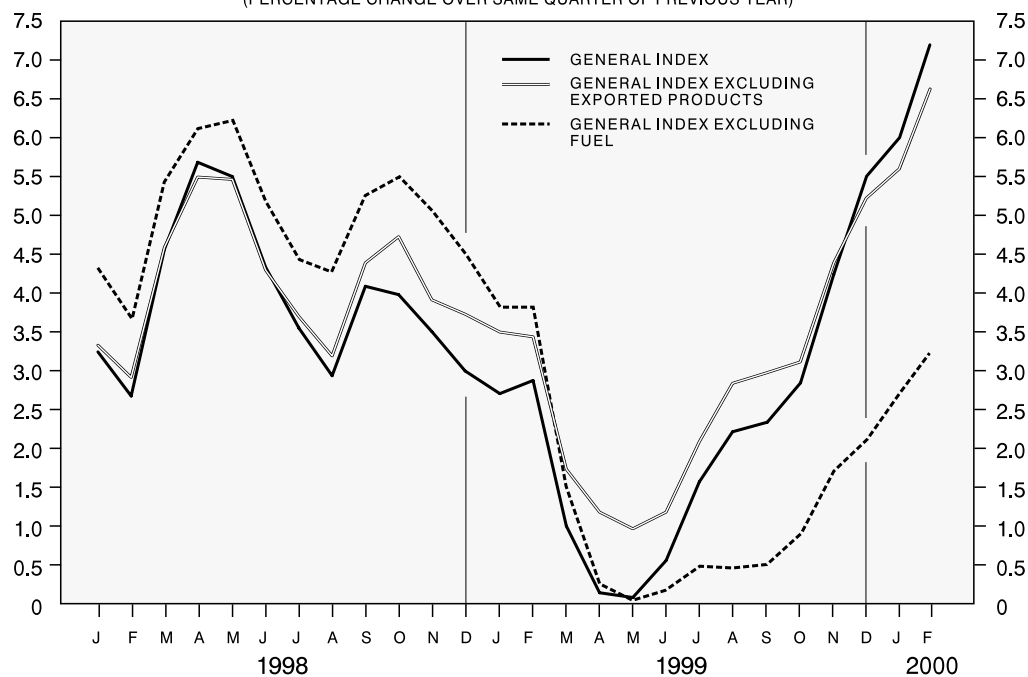
2 Export prices in OECD countries fell by 1.7 per cent in 1999 (in EU countries was 1.1 per cent). Additionally, the average annual level of raw material prices (excluding energy) in the world market dropped by 3.1 per cent (in euro terms). See OECD, *Economic Outlook*, December 1999, p. 234 and ECB, *Monthly Bulletin*, March 2000, Table 4.2 p. 31\*.

3 Precisely because it concerns final products, this index has not been considerably affected by the increase in the price of imported crude oil (which is a raw material). Indeed, the rate of change in the WPI for imports, excluding fuel, was 0.3 per cent.

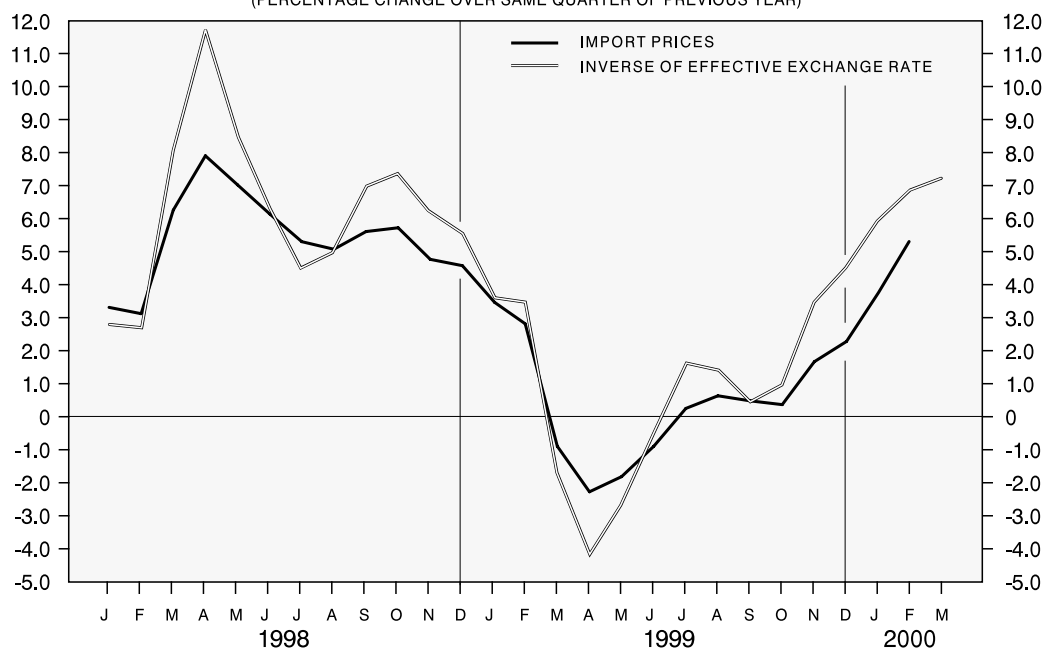
CHART IV.2

**A. WHOLESALE PRICE INDICES**

(PERCENTAGE CHANGE OVER SAME QUARTER OF PREVIOUS YEAR)

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

(PERCENTAGE CHANGE OVER SAME QUARTER OF PREVIOUS YEAR)

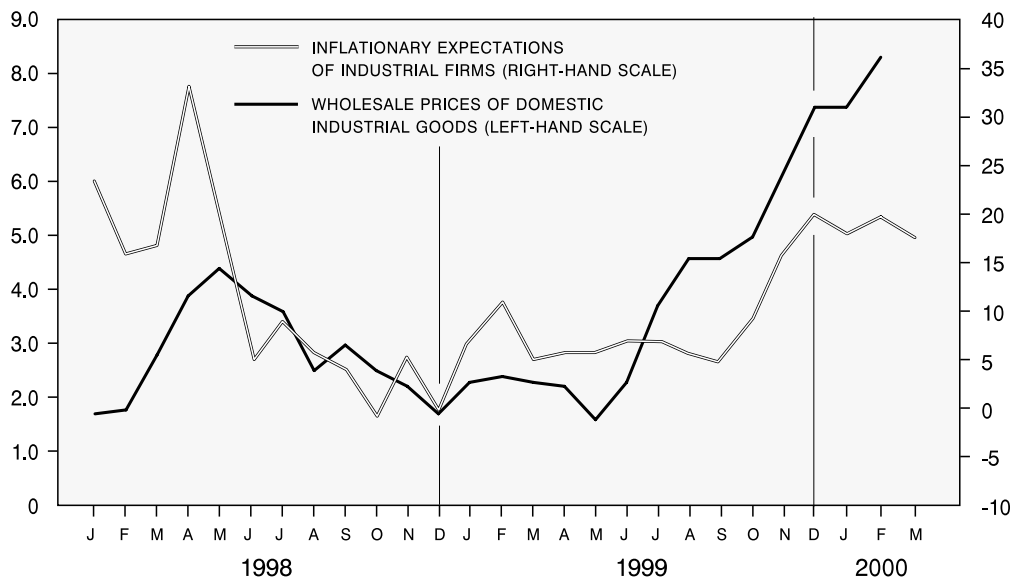


Source: Calculations based on NSSG and Bank of Greece data.

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 and IOBE data.

to zero (+0.5 per cent) in 1999 (see Chart IV.2B). Furthermore, the elimination of the impact of the March 1998 devaluation on the twelve-month rate of change in the CPI resulted in a deceleration of inflation by one percentage point, in March and April 1999. The stability of the exchange rate and, generally, the consistent conduct of monetary policy also contributed towards mitigating inflationary expectations (see Chart IV.3A).

Unit labour cost developments contributed significantly to the deceleration of inflation in 1999 as in previous years. In fact, the rate of increase in unit labour costs in the whole economy –on the basis of the latest available data and evidence– dropped to 2.7 per cent (compared with 4.1 per cent in 1998). Additionally, the slower growth of earnings in 1999 influenced inflation favourably on the demand side, since it helped contain the increase in wage earners' disposable income, which is an important component of households' disposable income (see Section 2 of the present chapter and Table IV.3).

The general government deficit fell to 1.6 per cent of GDP, on a national accounts basis, from 2.5 per cent in 1998 (according to the latest estimates by the Ministry of National Economy), thus containing the growth rate of total demand and exerting a positive impact on inflation.

The deceleration of inflation would have been considerably faster if the large increase in crude oil prices in the world market after February 1999 had not had an upward effect on domestic fuel prices (see Chart IV.4). In particular, the price of UK Brent (in US dollars) rose by 142.1 per cent between end-December 1998 and end-December 1999,<sup>1</sup> while fuel prices in the domestic market increased by 24.0 per cent<sup>2</sup> December-on-December (thus contributing 1.06 percentage point to the twelve-month inflation rate in December).<sup>3</sup> It is estimated that if the government had not reduced the special consumption taxes on fuel, inflation would have been 0.36 of a percentage point higher at end-1999.

The exogenous inflationary impact of the rise in fuel prices was offset, only to a small extent (0.2 of a percentage point), by the generally favourable developments in fresh fruit and vegetable prices.<sup>4</sup> Additionally, the favourable influence exerted on the twelve-month rate of change in the CPI by the measures taken by the government in autumn 1998 to reduce indirect taxation faded away (from end-September 1999 to January 2000). Taking into account

1 Based on data published by *The Economist*. Owing to the 16.2 per cent appreciation of the dollar against the drachma over the same period, the price of crude oil in the world market rose by 181 per cent in drachma terms. The same conclusion is drawn on the basis of crude oil prices in euro terms, as published in the ECB's *Monthly Bulletin*, March 2000, Table 4.2, p. 31\*.

2 Fuel prices in the WPI rose by 123.2 per cent between December 1998 and December 1999. The smaller increase in fuel prices for the consumer reflects three factors: i) the smaller share of refinery prices in retail prices, ii) the cuts in taxes on gasoline and heating oil and iii) the fact that heating oil is treated as a seasonal commodity in the compilation of the CPI during the summer months.

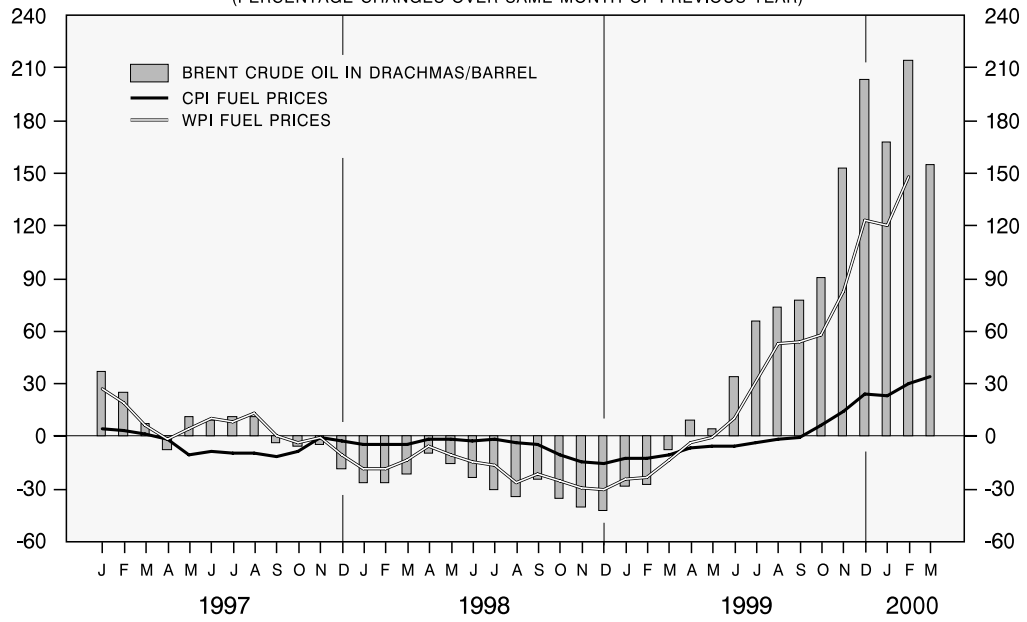
3 It has been calculated that a 10 per cent rise in the price of crude oil in the world market leads to a 0.08-0.1 per cent increase in the Greek CPI (as well as in the euro area HICP), assuming that exchange rates remain stable.

4 Between December 1998 and December 1999, fresh fruit and vegetable prices remained almost unchanged (+0.2 per cent), while they had increased by 6 per cent in the course of 1998 (see Table IV.1).

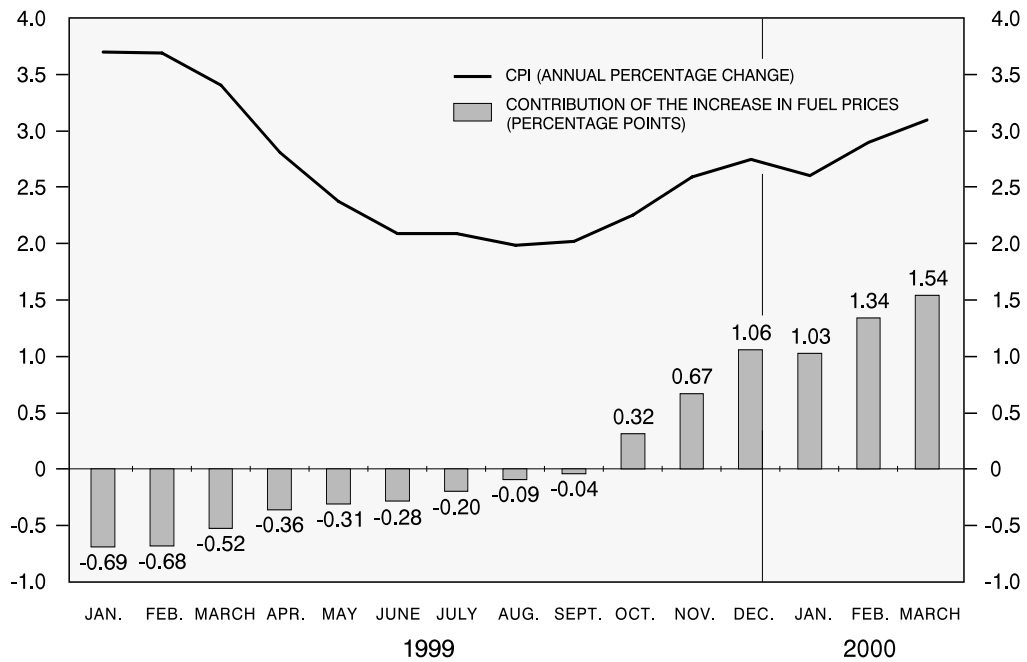
CHART IV.4

**A. EVOLUTION OF CPI AND WPI FUEL PRICES AND OF THE 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 and data on futures contracts for Brent crude oil in the London market.

this development and in order to offset the steep rise in fuel prices, the economic policy mix was enhanced with the adoption of measures to reduce indirect taxation. It should be pointed out that the decrease in OTE rates, twice in the course of the year, was not related to these measures, but to the competitive conditions and the forthcoming complete deregulation of the telecommunications market. The “gentlemen’s agreements” signed in November 1998, which provided for stability or limited increases in the prices of a wide range of goods and services during 1999, do not seem to have contributed directly to the containment of inflation, as is evident from ex-post estimates (for cuts in indirect taxation and “gentlemen’s agreements” see Box IV.2). By contrast, the twelve-month rate of CPI increase in December 1999 would have been one percentage point higher without the government measures to reduce indirect taxation, which came into effect at the beginning of 1999. It should be recalled that these measures also have medium-term consequences, since they contribute –to a degree which is not possible to determine– to the mitigation of inflationary expectations of enterprises and households, leading to more moderate wage claims by employees and to more conservative pricing policies by business firms. Furthermore, labour cost developments in 2000 have already been favourably influenced through the mechanism of corrective wage rises provided for by most of the collective labour agreements in the private sector.

## **BOX IV.2**

### **Measures to reduce indirect taxation, “gentlemen’s agreements”, and inflation**

#### *1. Measures to reduce indirect taxation*

Consumption taxes on gasoline, heating oil and private passenger cars were reduced twice between September 1998 and end-1999: on 24 September 1998 and 5 August 1999 (gasoline), on 15 October 1998 and 15 October 1999 (heating oil) and on 15 November 1998 and 6 September 1999 (cars). Electricity rates were also reduced twice, without affecting DEH’s revenue: on 1 January 1999 owing to the decrease in the VAT scale and on 1 December 1999 because of the cut in VAT on diesel oil used in the production of electricity.

(The three cuts in OTE rates –on 1 March 1999, 22 November 1999 and 1 February 2000– are not associated with the decrease in indirect taxation, but reflect the restructuring of OTE rates under the pressure of intensifying competition and in view of the complete deregulation of the market. This restructuring led to a reduction in the average cost of telephone services for users, but at the same time it contributed to an increase in OTE’s total revenue and in the volume of services rendered. This development reflected a decrease in international and long-distance telephone and Internet rates, as well as the increase in local call rates. It is quite possible that the restructuring will continue during 2000 and that further weighted average reductions in OTE rates will take place).

The cuts in indirect taxation contributed to a decrease of 0.9 of a percentage point in *average annual* inflation in 1999 and a reduction of 0.6-0.7 of a percentage point in the →



→ *twelve-month rate* of inflation in December 1998 and of one percentage point in December 1999. As a result, the corrective rises in contractual earnings in the private sector, which were granted as from 1 January 1999 and 1 January 2000 on the basis of the two-year collective labour agreements signed in 1998, were smaller to the same extent. Consequently, average earnings and unit labour costs in the *private non-bank sector* grew less (by 0.6-0.7 of a percentage point in 1999 and by one percentage point in 2000) than what they would have increased had tax cuts not been effected. The impact on average earnings and unit labour costs in *the whole economy* is estimated at 0.35 of a percentage point in 1999 and 0.55 of a percentage point in 2000.

The fading away, by the end of 2000, of the downward effect of indirect taxation cuts on the twelve-month inflation rate (both directly and through the mechanism of corrective wage rises) will result (*ceteris paribus*) in an average annual inflation rate which will be higher by 0.3 of a percentage point in 2000 and 0.8 of a percentage point in 2001 than what it would be otherwise. However, the negative impact on average inflation in 2001 (which is more important) is fully offset by the fact that “imported” inflation in that year will be much lower than in 2000, given that the convergence of the drachma to its central rate within ERM II will have been completed by the end of 2000. Specifically, it is estimated that, for this reason, the contribution of the change in import prices to average annual inflation will drop by 0.9 of a percentage point in 2001 compared with 2000.

## 2. “Gentlemen’s agreements” on prices

“Gentlemen’s agreements” concerned price developments in 1998 and 1999 and were concluded between the government and the private sector. There are considerable differences in terms of quality between the agreements for each of the two years. Specifically:

(a) *Agreements for 1998*. These were concluded in August 1998 (for a very limited number of consumer goods) and September 1998 (for a considerably bigger number of goods, corresponding to about 1/10 of the “consumer’s basket”). They provided for *price cuts* over a period of three to six months, but they were not strictly observed in practice. In fact, the prices of commodities covered by the agreements rose by 3.5 per cent on average in the course of 1998 (December 1998/December 1997), while the prices of other goods (excluding fresh fruit, vegetables, fuel and passenger cars, which were all affected by exogenous factors) rose by 5.2 per cent. This comparison suggests that the twelve-month inflation rate in December 1998 would have been 0.2 (0.17) of a percentage point higher if the agreements had not been concluded. (The calculation takes into consideration that commodities covered by the gentlemen’s agreements have a 10 per cent share in the CPI “basket”.) These agreements, which were promoted by the government when it became obvious that many enterprises had raised the prices of their products more than would have been reasonable on the basis of the increase in the drachma cost of imported inputs, were aimed at restricting the inflationary impact of the drachma devaluation (March 1998). The implementation of the agreements was based on economic fundamentals: on the one hand, the preceding increase in profit margins and, on the other, the positive →

→ developments in key cost components (labour, financing, public utility services, world oil prices). As in the case of cuts in indirect taxation, a consequence of these agreements was that corrective increases in contractual earnings granted as from 1 January 1999 to the wage-earners in the *private non-bank sector* were 0.2 of a percentage point lower. Similarly, average earnings and unit labour costs in the *whole economy* rose by 0.1 of a percentage point less than they would have risen if the agreements had not been signed.

“GENTLEMEN’S AGREEMENTS” REGARDING PRICES DURING 1999

CPI items covered by the agreements	Current weights Dec. 98 (thousandths)	Agreed increase in the course of the year (percentage points)	Final increase in the course of the year (percentage points)
Bread	12.69	0.0	0.7
Biscuits-cookies	5.22	0.0	1.1
Fresh beef, veal, pork, lamb, poultry	39.51	0.0	1.7
Confectionery	6.65	0.0	4.3
Garments and articles of clothing <sup>1</sup>	90.15	1.0	1.3
Footwear	26.46	0.0	3.0
Materials for maintenance and repair of dwellings	7.11	0.0	0.4
Services for maintenance and repair of dwellings	11.80	0.0	4.5
Furniture <sup>2</sup>	12.76	2.5	2.1
Lighting fixtures	1.34	0.0	1.7
Household appliances	9.78	0.0	-1.6
Glassware and tableware <sup>3</sup>	4.93	1.5	1.1
Dental services	21.97	0.0	2.8
Parking	0.93	0.0	16.7
Non-electronic toys and games	3.77	0.0	-1.1
Gyms and dance schools	2.17	0.0	4.6
Restaurants	44.37	0.0	4.8
Cafes <sup>4</sup>	33.56	1.0	6.8
Hairdressing salons and barber shops	5.32	0.0	3.3
Dwelling and car insurance	13.38	0.0	3.1
All items covered by the agreements	353.87	0.46	2.73
CPI (all items)	1,000.00	...	2.7
CPI excluding fuel and fresh fruit-vegetables	916.40	...	1.8

1 Agreed increase 0-2 per cent.

2 Agreed increase 0-5 per cent.

3 Agreed increase 0-3 per cent.

4 Agreed increase 0-2 per cent.

**Source:** Bank of Greece calculations based on the November 1998 “gentlemen’s agreements” and the detailed NSSG data on the evolution of the CPI.

(b) *Agreements for 1999.* Agreements signed in November 1998 concerned a wide range of goods and services, corresponding to about 1/3 of the “consumer’s basket”. They did not envisage price cuts, but *stability or a limited rise in prices* (2-3 per cent or –in one case– 5 per cent) throughout 1999. It is estimated that strict observance of these agreements would lead →

→ to a mere 0.5 per cent rise in the prices of covered items between December 1998 and December 1999. In practice, however, the implementation of the agreements (especially those concerning the prices of services) was very loose. As shown by an approximate calculation (see the table of the Box) based on detailed data on the CPI, the prices of items covered by the agreements finally rose by 2.7 per cent in the course of 1999. This rate was exactly the same as the rate of increase in the general CPI and much *higher* than core inflation (1.8 per cent). This suggests that the *net direct* impact on inflation at end-1999 was nil. It is quite possible that these price rises reflect (albeit to a very limited extent) the restoration of certain prices that had been reduced under the 1998 agreements. Furthermore, one may not exclude the possibility that the implementation was less loose in the first months of 1999. In any case, the 1999 agreements, as well as those of 1998, were based on economic fundamentals (favourable cost developments, previous expansion of profit margins), while it is possible that, despite their unsatisfactory implementation, they contributed (e.g. thanks to the publicity initially surrounding them) to a mitigation of inflationary expectations. Since the agreements did not lead to an artificial squeezing of inflation in 1999, their expiry cannot adversely affect inflation in 2000.

If one took into account the adverse effects on inflation of the increase in crude oil prices in the world market (+1.4 percentage point) and the elimination of the effect of cuts in indirect taxes in 1998 (between +0.6 and +0.7 of a percentage point), as well as the favourable impact of corresponding cuts in 1999 (−0.1 of a percentage point) and of developments in fresh fruit and vegetable prices (−0.2 of a percentage point), then –all other factors being equal– the twelve-month inflation rate would have risen by 0.8-0.9 of a percentage point in 1999. Given that inflation actually decelerated by 1.2 percentage points between December 1998 and December 1999, the anti-inflationary result of monetary, fiscal and incomes policies –excluding measures to reduce indirect taxation– was of the order of two percentage points.

A complete examination of the factors that affected inflation in 1999 requires certain additional observations, which concern the development of consumer demand (and its relation to income and other household resources) and business profits.

According to available data (see Chapter III.1.2), the rate of increase in consumer demand accelerated in 1999, after falling in 1998 owing to the devaluation of the drachma.<sup>1</sup> However, the productive capacity utilisation rate did not change appreciably, on the basis of available indices, which, at least at first sight, do not indicate excess demand. In fact, the average annual industrial capacity utilisation rate rose only slightly in 1999 (although the rise was quite steep in the second half of the year), while the number of unemployed registered with OAED grew in 1999, after the increase in labour supply recorded by the NSSG in 1998.

Household resources were affected not only by real disposable income from wages (which has already been mentioned), but also by increased –compared with 1998– recourse

<sup>1</sup> However, the business expectations index in retail trade remained almost stable in 1999 (+0.1 per cent).

to borrowing. Indeed, at the beginning of 1999, consumer credit increased at a very fast twelve-month rate, which started falling after April (see Chapter V.3).

At the same time, household assets (real estate,<sup>1</sup> shares<sup>2</sup> and shares in mutual funds investing in equity<sup>3</sup>) continued to appreciate in value and –depending on whether capital gains were realised or not– expanded directly available resources or created expectations that these resources would increase, which may have led to a decrease in savings or to borrowing for consumption purposes.

TABLE IV.2  
EVOLUTION OF REAL ESTATE (DWELLINGS) PRICES: 1994-1999

Year	Athens area		15 provincial cities <sup>3</sup>	
	Percentage change	Deflated change <sup>4</sup>	Percentage change	Deflated change <sup>4</sup>
1994	...	...	8.7	-1.6
1995	...	...	9.4	1.5
1996	...	...	6.8	-0.7
1997	12.6 <sup>1</sup>	7.5	11.2	6.0
1998	14.5 <sup>1</sup>	10.2	10.6	6.0
1999	11.3 <sup>2</sup>	8.8	5.4	2.8

1 December-on-December changes.

2 September-November 1999 over September-November 1998 changes.

3 Fourth quarter-on-fourth quarter changes.

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

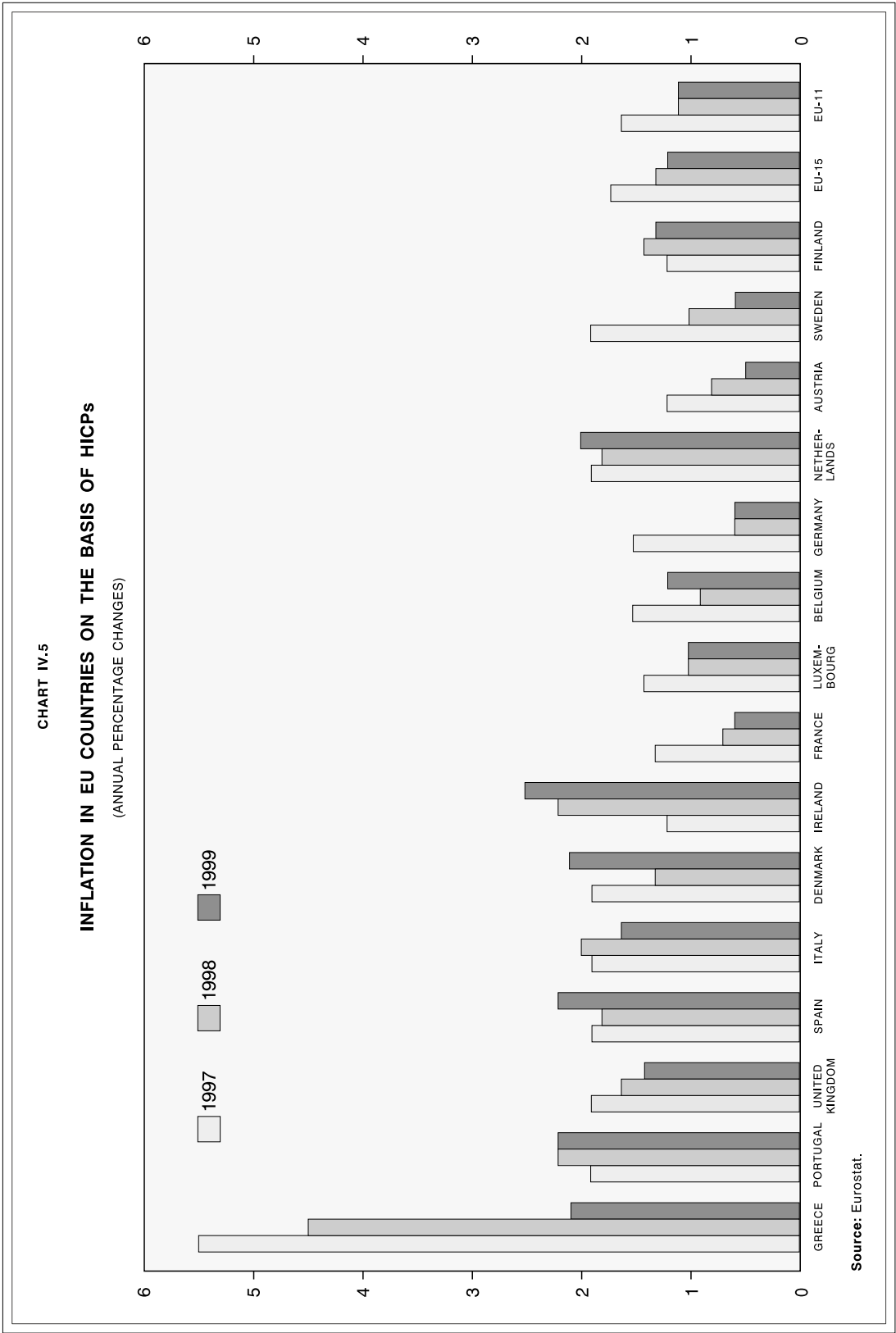
**Source:** For *the province*, weighted change on the basis of quarterly data on the cities of Agrinion, Alexandroupoli (since 1996), Volos, Heraklion, Thessaloniki, Ioannina, Kavala, Kalamata, Xanthi, Patras, Pyrgos, Rethymnon, Rhodes (since 1997), Sparta and Chania, collected by Bank of Greece branches. 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 and 1999, they were collected by Property Ltd.

The appreciation of household assets usually affects consumer prices with a time lag. In addition, in the specific case, the effects were limited, mainly for two reasons. First, part of the income from the realisation of capital gains was used to purchase consumer durables of relatively large value (usually imported goods, the supply of which is elastic, and mainly cars, whose prices had fallen after the cut in indirect taxes). Moreover, part of these resources was used to purchase real estate, the demand for which was already strong because of the gradual cuts in interest rates. Increased demand contributed to a rise in real estate prices, which led to an increase in rents, so that returns on

1 See Table IV.2.

2 The general share price index of the Athens Stock Exchange rose by 102.2 per cent in 1999, while in the 1997-99 period its cumulative rise reached 493 per cent.

3 Compared with December 1998, the monthly value of stock market transactions in September 1999 was almost five times higher, while in December 1999 it was more than three times higher. At the same time, the share of equity-type mutual funds in total mutual fund assets rose steeply.



invested capital would be satisfactory. However, since the rise in property prices led to an increased supply of dwellings (corroborated by the high growth rate of building activity, on the basis of building permits issued up to 1998), the increase in rents was restrained. The twelve-month rate of increase in rents (included in the CPI) therefore remained almost twice as high as inflation, but fell from 6.1 per cent in December 1998 to 4.0 per cent in December 1999. Second, the drop or fluctuation in the ASE share price index after 17 September 1999 undermined the public's expectations of a continuous and steep rise in share prices, which may have led earlier to a higher propensity to consume and increased recourse to consumer credit.

Finally, developments in profits do not appear to have contributed to the deceleration of inflation, since, as shown by the analysis in Section 3 of the present chapter, operational profit margins were widened, at least those of manufacturing firms producing for the domestic market. This conclusion is indirectly corroborated by the assessment of the results of "gentlemen's agreements". By contrast, the pressure of demand and competitive conditions in foreign markets seems to have induced export firms to exercise restraint in setting profit margins.

## 2. WAGES AND SALARIES IN 1999

The growth rate of unit labour costs in the whole economy kept decelerating in 1999 and reached the lowest level for the past 25 years. More specifically, it is estimated that –on the basis of the most recent data<sup>1</sup> and evidence– it fell to 2.7 per cent (from 4.1 per cent in 1998),<sup>2</sup> thus contributing to the slowdown of average annual inflation. This development reflects the slower growth (from 6.5 per cent in 1998 to 4.6 per cent in 1999) of average earnings in the whole economy (see Table IV.3), as a result of the wage policy adopted in the public sector, as well as of collective labour agreements in private and public enterprises. In the business sector (developments in which affect inflation on the cost side in a more direct way), unit labour costs rose by 2.9 per cent, i.e. slightly more than in the whole economy (2.7 per cent), but less than in 1998 (3.3 per cent).

The slowdown of the growth rate of earnings in 1999 helped contain the increase in wage earners' disposable income, which is a significant component of households' total dis-

1 Since the expansion of the sample surveys carried out by the NSSG on earnings is still under way, quarterly data from these surveys on the increase in wages and salaries in 1999 are not yet available.

2 Unit labour cost is 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 the Macroeconomic Analysis Directorate of the Ministry of National Economy. According to the latter, unit labour cost rose by 5.5 per cent in 1998 and 2.5 per cent in 1999, on a national accounts basis. It should be recalled that the NSSG and the Ministry of National Economy define unit labour cost as the *ratio of total compensation of employees per employed wage earner to GDP (at constant prices of the previous year) per employed person*. For the problems involved –owing to new data on developments in employment– in the calculation of the growth rate of unit labour cost in total economy in 1998, see Bank of Greece, *Monetary Policy, Interim Report 1999*, Box on page 53.

posable income. Table IV.3 presents rough estimates of the rate of increase in real disposable income of *an employee with average earnings* (1.1 per cent in 1999, compared with 1 per cent in 1998).<sup>1</sup> Considering, however, the estimated increase in the number of wage earners, it is estimated that *total* (not *per capita*) real disposable income of wage earners rose by about 2.7 per cent and thus contributed, in as much as it was not offset by other factors, towards containing the growth rate of consumer demand at about the same level (2.6 per cent).

As shown by data on ways to resolve labour disputes and on strike action, free bargaining and a climate of moderation were the main features of industrial relations in 1999. Specifically, according to the Ministry of Labour, 226 collective labour agreements were signed in 1999 (compared with 292<sup>2</sup> in 1998), while the Mediation and Arbitration Organisation – OMED – issued 51 arbitration decisions (58 in 1998<sup>3</sup>). The number of working hours lost because of strikes was very low in the first five months of the year, for which data are available (45.6 thousand hours, compared with 1.5 million hours in 1998).

Developments in wages and salaries in 1999 by category of workers were as follows:

Under Law 2702/99, civil servants' salaries were raised by 2 per cent as from 1 January 1999. According to the most recent *ex post* estimates of the Ministry of Finance (March 2000), total central government outlays for salaries, pensions and health care rose by 6.9 per cent in 1999. Excluding health care outlays,<sup>4</sup> the rate of increase falls to 6 per cent, while outlays for salaries rose by 5.8 per cent (compared with 8 per cent in 1998). Since the average annual level of employment in the public sector (central government) is estimated to have risen by 2.1 per cent (see Chapter III.4), per capita outlays for salaries rose by 3.6 per cent, i.e. considerably less than in 1998 (9.2 per cent). In public enterprises, one-year (OSE, ELTA) or two-year (OTE, DEH) collective agreements were signed, which envisaged salary increases of 1.6-2.5 per cent as from 1 January 1999 and 1.5-2 per cent as from 1 July 1999 (for 2000, DEH's agreement envisages a 2 per cent salary increase as from 1 January 2000 and a rise in an allowance as from 1 July 2000). According to provisional estimates, these adjustments led to an increase of about 6.5 per cent in average

1 The calculation of disposable income in Table IV.3 takes account of developments in income tax and workers' social security contributions, for an employee with average earnings and a typical family. Income tax is the tax withheld from wages and salaries in the course of the year, including the tax refund from the previous year (paid during the current year). The fact that during most of 1999 the income tax scale remained unchanged, increased the burden on wage earners due to direct taxation. However, the considerable tax relief granted for 1999 incomes by Law 2753/99, which was enacted in early November 1999, had a positive impact on wage earners' real disposable income as from December 1999. This law provided for the refunding to civil servants (in December, together with the Christmas bonus) of the difference from tax withheld, while to all other wage earners it was refunded by 15 January 2000. It should also be noted that the substantial cuts in indirect taxation in 1998 and 1999 contributed directly towards increasing real disposable income, since they led equally directly to a decrease in inflation.

2 The number of collective labour agreements signed in 1999 decreased because of the large number of two-year agreements signed in 1998.

3 According to OMED records, 65 arbitration decisions were issued in 1999 and 64 in 1998. The difference was due to the fact that some decisions are submitted to the Ministry of Labour with a delay (or may not be submitted at all).

4 As mentioned in the Introductory Report on the Budget, the significant increase (25 per cent) in health care outlays is attributed to the settlement of previous years' debts and the rise in state hospital daily charges in 1998.

TABLE IV.3  
EARNINGS, UNIT LABOUR COSTS AND PRODUCTIVITY: 1994 - 1999  
(Annual percentage changes)

	1994	1995	1996	1997	1998	1999
<b>WHOLE ECONOMY</b>						
– Average gross earnings <sup>1</sup> (nominal)	13.0	11.9	11.5	10.5	6.5	4.6
– Average gross earnings <sup>1</sup> (real)	1.9	2.8	3.0	4.7	1.6	1.9
– Employees' average disposable income <sup>1</sup> (nominal)	11.5	10.3	9.7	10.7	5.9	3.7
– Employees' average disposable income <sup>1</sup> (real)	0.5	1.3	1.4	4.9	1.0	1.1
– Total compensation of employees <sup>1,2</sup>	13.7	12.6	12.5	10.7	7.9	6.3
– Unit labour costs <sup>1,3</sup>	11.4	10.3	9.9	7.0	4.1	2.7
– Consumer price index <sup>4</sup>	10.9	8.9	8.2	5.5	4.8	2.6
– Gross domestic product <sup>5</sup>	2.0	2.1	2.4	3.4	3.7	3.5
<b>BUSINESS SECTOR<sup>6</sup></b>						
– Total compensation of employees <sup>1</sup>	14.7	12.4	10.9	9.4	7.1	6.5
– Unit labour costs <sup>1</sup>	12.4	10.1	8.3	5.8	3.3	2.9
<b>CIVIL SERVICE<sup>7</sup></b>						
– Average gross earnings of employees	9.4	12.3	14.9	13.5	9.2	3.6
– Total outlays for salaries and pensions	11.3	13.1	16.4	13.3	9.9	6.0
– Total outlays for salaries (excluding pensions)	11.8	13.9	17.8	14.7	8.0	5.8
<b>PUBLIC ENTERPRISES</b>						
– Average gross earnings of employees <sup>8</sup>	18.8	10.9	14.1	11.0	8.0	6.5
– Total personnel outlays <sup>8</sup>	25.3	11.6	12.6	9.7	4.3	4.5
– Monthly earnings of white-collar workers in electricity-water supply <sup>4</sup>	11.0	11.2	14.0	9.9	8.9	...
– Hourly earnings of blue-collar workers in electricity-water supply <sup>4</sup>	16.1	15.8	8.7	10.4	11.4	...
<b>BANKS</b>						
– Average gross earnings of employees <sup>1</sup>	14.4	15.4	13.4	9.7	4.0	9.8
– Total outlays for salaries <sup>9</sup>	20.5	20.0	16.6	10.8	5.9	...
– Total compensation of employees <sup>9</sup>	18.2	17.3	16.0	9.8	6.6	11.0
– Monthly earnings of employees <sup>4,10</sup>	17.5	13.1	12.7	9.4	8.6	...
<b>NON-BANK PRIVATE SECTOR</b>						
– Minimum earnings <sup>11</sup> (nominal)	12.6	9.4	8.2	8.0	5.4	3.5
– Minimum earnings <sup>11</sup> (real)	1.5	0.5	0.0	2.4	0.6	0.9
– Average contractual earnings <sup>12</sup>	12.5	10.1	8.6	8.2	5.7	3.9
– Average gross earnings <sup>1</sup>	12.9	11.2	8.8	8.8	5.8	4.4
– Total compensation of employees <sup>1</sup>	12.6	12.2	10.2	9.3	7.6	6.5
– Hourly earnings of blue-collar workers in manufacturing <sup>4</sup>	13.1	13.2	8.6	8.9	4.7	4.4*
– Monthly earnings of white-collar workers in manufacturing <sup>4</sup>	13.0	13.2	9.4	9.8	5.9	...
– Output per hour worked (manufacturing) <sup>4</sup>	3.9	2.0	1.1	4.4	4.4	1.9*
– Unit labour costs (manufacturing) <sup>4</sup>	8.7	11.0	7.5	4.4	0.2	2.5*
– Weekly earnings of blue-collar workers in mining <sup>4</sup>	15.3	14.0	12.7	12.2	5.2	...
– Monthly earnings of white-collar workers in mining <sup>4</sup>	12.9	11.3	11.7	14.3	13.7	...
– Monthly earnings of employees in retail trade <sup>4</sup>	13.3	12.8	9.7	12.0	9.6	...
– Monthly earnings of employees in wholesale trade <sup>4</sup>	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 (September 1999-March 2000): 1994: 12.9 per cent, 1995: 15.3 per cent, 1996: 8.8 per cent, 1997: 12.5 per cent, 1998: 10.1 per cent, 1999: 7.9 per cent.

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 per cent, 1995: 11.6 per cent, 1996: 5.9 per cent, 1997: 8.4 per cent, 1998: 5.5 per cent, 1999: 2.5 per cent.

4 Calculations based on NSSG survey data.

5 NSSG and Ministry of National Economy estimates (September 1999-March 2000).

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 and 1999, health care outlays were not counted in.

8 Estimates for 1994-1998, based on Ministry of National Economy data. 1999: Provisional estimates.

9 Data from annual profit and loss accounts (1994-1999). 1999: Provisional estimates.

10 October-on-October rates of change.

11 National General Collective Labour Agreement.

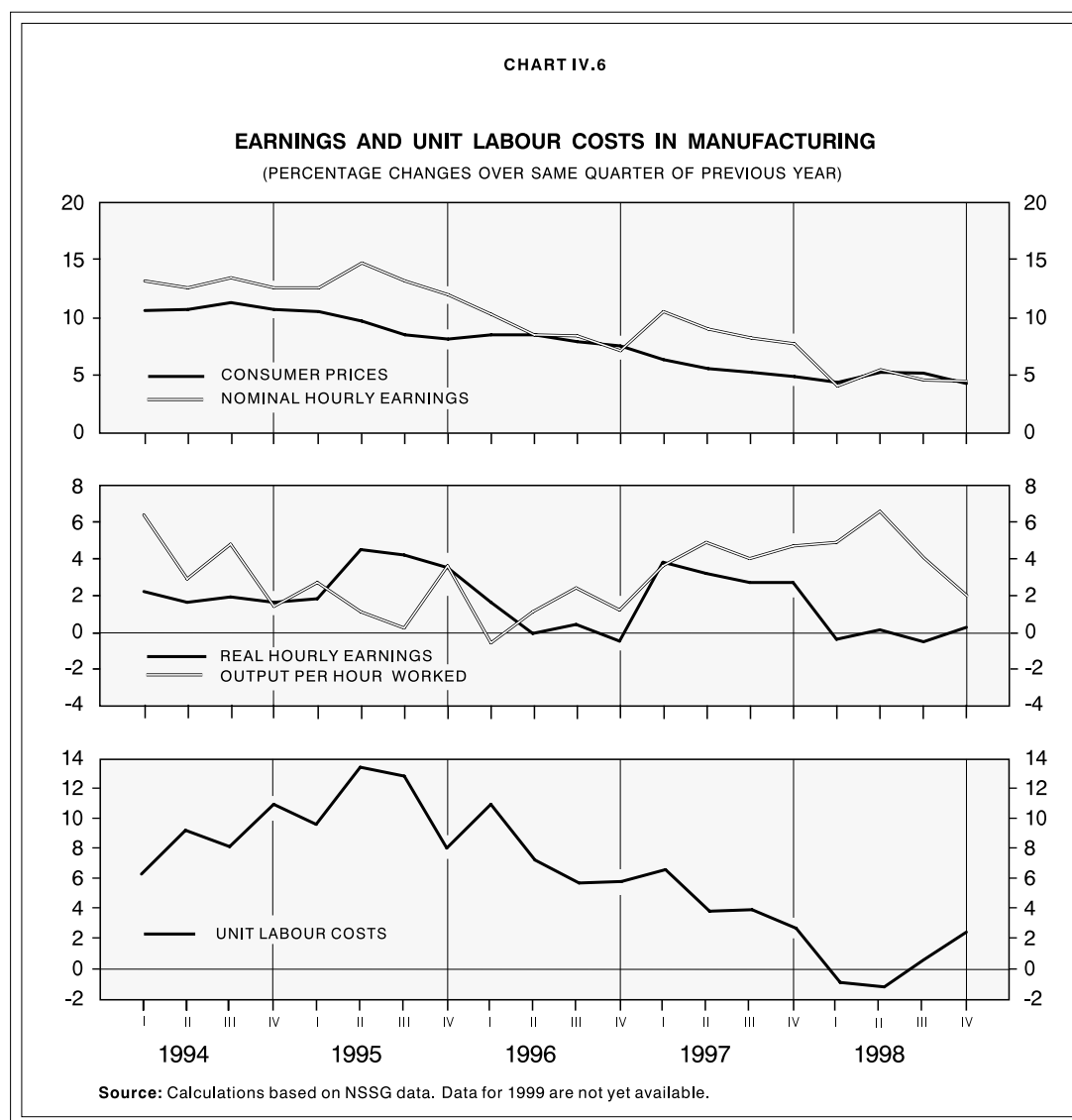
12 Calculations based on data from collective labour agreements at branch or occupational level.

\* Provisional estimates.



gross earnings in public enterprises, while the increase in total personnel outlays must have been appreciably smaller, as average annual employment dropped by 1.9 per cent.

Banks signed a sectoral collective two-year labour agreement, providing for a salary rise of 3.4 per cent as from 1 January 1999 and 2.4 per cent as from 1 January 2000. However, according to the annual statements published by banks so far, personnel outlays



rose by 11 per cent, which suggests a 9.8 per cent per capita increase in earnings (since the number of bank employees rose by 1.1 per cent). This development, which was not anticipated, may reflect the large increase in bank profits in recent years and is certainly related to the restructuring of the banking sector. Take-overs and mergers, the rapid expansion of small banks and the large-scale introduction of new technology by all banks normally lead,

initially, to special wage arrangements (e.g. for the personnel of the merged or purchased bank), as well as to the recruitment of highly specialised staff (with correspondingly high salaries). It would be reasonable to assume, however, that such restructuring will lead, in the medium term, to the containment of total or *per employee* labour costs.

Finally, in the non-bank private sector, the two-year collective agreements signed in 1998<sup>1</sup> applied to most branches, as to well as to the minimum wages of unskilled workers, while one-year agreements were signed in some branches in 1999. In particular, minimum earnings rose by 1.8 per cent as from 1 January 1999 (including a corrective increase of 0.4 per cent) and by 1.4 per cent as from 1 July 1999. At sectoral level, pay rises are estimated to have reached –on average, based on a sample of 61 collective agreements and arbitration decisions– 2.1 per cent as from 1 January 1999 (including the corrective increase) and 1.5 per cent as from 1 July 1999. The average annual increase in contractual earnings fell to 3.9 per cent (from 5.7 per cent in 1998), while the average annual rate of increase in earnings actually paid in the non-bank private sector is estimated to have followed a similar course. In manufacturing, average earnings rose almost as much as in 1998 and the rate of increase in unit labour costs (a mere 0.2 per cent in 1998) accelerated to about 2.5 per cent (since the growth of manufacturing output slowed down to 0.7 per cent in 1999, from 3.4 per cent in 1998). The rise in labour costs, combined with an average annual decrease of 0.9 per cent in the drachma's nominal effective exchange rate, compared with 5.9 per cent in 1998, led to a virtually stable (–0.3 per cent) real exchange rate of the drachma (based on unit labour costs in manufacturing), after a 5.3 per cent drop in 1998.

With regard to 2000, the rate of increase in unit labour costs in the whole economy is expected to decelerate somewhat to about 2 per cent (from 2.7 per cent in 1999). In particular, by virtue of Articles 30-31 of Law 2768/1999, total monthly earnings of civil servants were raised by 2.1-2.9 per cent as from 1 January 2000. Armed forces and security forces officers received higher increases (in two instalments), while certain allowances of various categories of central government personnel also rose. Thus, public outlays for salaries and pensions will rise by 5.9 per cent in 2000 (according to the Introductory Report on the Budget), compared with 6.0 per cent in 1999, while *per capita* outlays for salaries and pensions are estimated to increase by about 5 per cent (1999: 3.6 per cent). In the private sector, contractual earnings will rise almost as much as in 1999, while in banks and public enterprises pay rises are expected to be smaller.<sup>2</sup> As a result, average earnings in *the whole economy* will rise by about 4.5 per cent, i.e. roughly as much as in 1999. Given this, new income tax legislation<sup>3</sup>

1 These agreements were signed after the March 1998 devaluation of the drachma and envisaged small increases. This reflected workers' moderate wage demands, owing to their greater confidence in the prospect of lower inflation, as well as the effect of anti-inflationary monetary policy on the social partners' behaviour.

2 As mentioned above, the two-year collective agreement (1999-2000) for the bank sector envisages a 2.4 per cent pay rise as from 1 January 2000 (some banks pay additional increases under agreements at the level of the firm), while the agreement for DEH personnel envisages a 2 per cent pay rise as from 1 January 2000 and an increased allowance as from 1 July 2000.

3 The provisions of Law 2753/99 were previously mentioned. As regards wage earners, these provisions have already led to a refunding of the extra tax withheld in 1999, as well as to a considerable decrease in income tax withheld as from 1 January 2000, while they will lead to a slightly larger tax refund in mid-2000.

will lead to an increase in the average disposable income of wage earners, at a rate 1.5 percentage points higher than that of average pre-tax earnings (see first table in Box IV.3).

It is obvious that the coming true of these forecasts will depend on the course and the outcome of collective bargaining in the private sector and certain public enterprises. It should be noted that the prospect of sustainable low inflation, as well as the reduction in wage earners' tax burden, could contribute to the acceptance of limited pay rises. In the private sector, the positions assumed up to now by both sides during the negotiations for the National General Collective Labour Agreement seem to indicate that they may agree on an average annual rise in earnings which will not exceed the inflation target and the

### **BOX IV.3**

#### **Developments in wages 1975-1999 and wage differentials 1990-1999**

The tables of the Box present long-term series of certain basic wage aggregates. In particular, nominal and real average earnings in the whole economy together with the disposable income of an average wage earner are presented for the 1975-1999 period, according to Bank of Greece estimates. At the same time, the tables show the minimum earnings of unskilled workers (on the basis of national general labour agreements) and the average earnings actually paid to workers in manufacturing (based on NSSG data). Differentials between average earnings in various economic branches and minimum wages during the 1990-1998 period are also presented.

The following conclusions can be drawn:

- As shown in the first table, the tight incomes policy pursued in 1979-1981, 1983, 1986-87 and 1991-1993 clearly affected real earnings. By contrast, the considerable increase in real earnings in 1975-1978 was related to the effort to restore the purchasing power which had been lost during the dictatorship (1967-1974). Furthermore, the incomes policy pursued in 1982 provided for particularly large increases in low earnings, while real increases in 1988-1989 followed the large reductions due to the implementation of the 1986-1987 stabilisation programme. Finally, in the 1994-1999 period, the continuous increase in real earnings, which is expected to continue in 2000, is primarily related to the orientation of the Convergence Programme towards a rise in real wages that would not exceed the increase in productivity, although an overrun was observed in the 1995-1997 period (at least as regards average earnings in the whole economy).

- The 1982-1990 period was characterised by large increases in low wages (January 1982) and the application of the wage indexation system, according to which pay increments were inversely related to the level of earnings. Those two elements led to a decrease in wage differentials in the same period. Consequently, the cumulative percentage increase in real *minimum* wages was almost double the corresponding rise in real *average* earnings. By contrast, as shown in the second table, wage differentials widened after the abolition of the wage indexation system, i.e. in the 1991-1999 period. More specifically, in the 1995-1999 period, the cumulative percentage increase in real *average* wages was more than three times higher than the respective increase in real *minimum* earnings. This development suggests increased flexibility in the labour market. →

WAGES, EMPLOYEES' AVERAGE DISPOSABLE INCOME AND CONSUMER PRICES: 1975-2000  
(Annual percentage changes)

Year	Consumer prices (1)			Average pre-tax earnings in the whole economy (2)			Employees' average disposable income (3)			Employees' minimum earnings (4)			Minimum daily earnings of a single worker without working experience (5)			Weekly earnings of blue-collar workers in manufacturing (6)		
	Nom.	Real	Index	Nom.	Real	Index	Nom.	Real	Index	Nom.	Real	Index	Nom.	Real	Index	Nom.	Real	Index
1975 ...	13.6	7.9	83.2	22.6	7.9	83.2	22.1	7.5	82.9	21.5	7.0	83.7	20.9	6.4	92.4	21.4	6.9	75.6
1976 ...	13.0	8.6	90.3	22.7	8.6	90.3	21.8	7.8	89.4	22.0	8.0	90.4	19.1	5.4	97.4	26.0	11.5	84.2
1977 ...	12.4	19.2	6.0	21.8	6.0	95.8	20.7	7.4	96.0	17.3	4.4	94.4	15.8	3.0	100.3	18.7	5.6	89.0
1978 ...	12.6	21.8	8.2	21.8	8.2	103.6	21.1	7.5	103.2	23.0	9.2	103.1	21.6	8.0	108.4	24.2	10.3	98.1
1979 ...	18.9	18.8	-0.1	103.5	-0.1	103.5	16.9	-1.7	101.4	17.9	-0.8	102.2	17.5	-1.2	107.1	20.4	1.3	99.4
1980 ...	24.8	20.6	-3.4	100.0	-3.4	100.0	23.0	-1.4	100.0	22.0	-2.2	100.0	16.6	-6.6	100.0	25.5	0.6	100.0
1981 ...	24.5	24.0	-0.4	99.6	-0.4	99.6	22.3	-1.8	98.2	24.1	-0.3	99.7	23.7	-0.6	99.4	23.8	-0.6	99.4
1982 ...	21.0	26.1	4.2	103.8	4.2	103.8	24.4	2.8	100.9	46.4	21.0	120.6	48.2	22.5	121.8	30.3	7.7	107.1
1983 ...	20.2	17.2	-2.5	101.2	-2.5	101.2	15.8	-3.7	97.2	15.4	-4.0	115.8	15.4	-4.0	116.9	19.2	-0.8	106.2
1984 ...	18.5	23.1	3.9	105.1	3.9	105.1	22.2	3.1	100.2	25.8	6.2	123.0	26.0	6.3	124.3	25.3	5.7	112.3
1985 ...	19.3	21.1	1.5	106.7	22.0	2.3	102.5	17.9	-1.2	121.5	-1.2	121.5	18.0	-1.1	122.9	23.1	3.2	115.8
1986 ...	23.0	12.3	-8.7	97.4	11.3	92.8	10.8	-9.9	109.5	10.9	-9.8	110.8	10.9	-9.8	110.8	12.5	-8.5	106.0
1987 ...	16.4	10.9	-4.7	92.8	11.6	89.0	10.1	-5.4	103.6	10.2	-5.3	105.0	10.2	-5.3	105.0	9.8	-5.7	100.0
1988 ...	13.5	20.5	6.2	98.6	19.5	93.7	17.0	3.1	106.8	17.1	3.2	108.3	17.1	3.2	108.3	24.0	9.3	109.2
1989 ...	13.7	19.6	5.2	103.7	22.0	7.3	100.5	20.1	5.6	112.8	5.6	112.8	18.9	4.6	113.3	20.7	6.2	116.0
1990 ...	20.4	22.1	1.4	105.2	21.2	0.7	101.2	17.3	-2.6	109.8	-2.7	110.3	17.1	-2.7	110.3	19.3	-0.9	115.0
1991 ...	19.5	14.7	-4.0	101.0	15.2	-3.6	97.6	15.1	-3.7	105.8	-4.3	105.5	14.4	-4.3	105.5	16.7	-2.3	112.3
1992 ...	15.9	11.8	-3.5	97.4	15.8	-0.1	97.5	11.9	-3.5	102.1	-4.0	101.3	11.3	-4.0	101.3	13.7	-1.9	110.2
1993 ...	14.4	12.5	-1.7	95.8	6.3	-7.1	90.6	12.4	-1.7	100.3	-2.1	99.2	12.0	-2.1	99.2	10.5	-3.4	106.5
1994 ...	10.9	13.0	1.9	97.6	11.5	0.5	91.0	12.6	1.5	101.8	1.5	101.8	12.6	1.5	100.7	13.2	2.1	108.7
1995 ...	8.9	11.9	2.8	100.3	10.3	1.3	92.2	9.4	0.5	102.3	9.4	102.3	9.4	0.5	101.2	13.3	4.0	113.0
1996 ...	8.2	11.5	3.0	103.4	9.7	1.4	93.5	8.2	0.0	102.3	7.8	102.3	7.8	-0.4	100.8	8.8	0.6	113.7
1997 ...	5.5	10.5	4.7	108.2	10.7	4.9	98.1	8.0	2.4	104.8	8.0	104.8	8.0	2.4	103.2	8.8	3.1	117.2
1998 ...	4.8	6.5	1.6	109.9	5.9	1.0	99.1	5.4	0.6	105.4	5.4	105.4	5.4	0.6	103.8	4.6	-0.2	117.0
1999 ...	2.6	4.6	1.9	112.0	3.7	1.1	100.2	3.5	0.9	106.3	3.5	106.3	3.5	0.9	104.7	...	...	...
2000 (forecast)	...	4.4	...	...	6.5	...	...	...	...	...	...	...	...	...	...	...	...	...

**Note:** For alternative estimates on average earnings, based on national accounts data, see Ministry of National Economy publications: *The Greek economy 1960-1997: Long-term macroeconomic statistical series, 1998, and Current developments and prospects of the Greek and the world economy, December 1999.*

**Source:** (1) NSSG – national index.

(2) Bank of Greece estimates.

(3) Bank of Greece indicative estimates concerning an employee with average earnings, a 3- or 4-member family and a self-owned or rented dwelling. For 2000, account was taken of: (a) the reduction in income tax for all wage earners and (b) the cut in social security contributions for low-salaried employees.

(4) Average of employees receiving minimum wages (blue- or white-collar workers, single or married, with or without working experience).

(5) National general collective labour agreements.

(6) NSSG. Data for 1999 are not yet available.

## GREECE: LEVEL OF EARNINGS AND WAGE DIFFERENTIALS (1990-1999)

Year (December)	Minimum earnings		Actually paid earnings									
	Daily earnings of blue-collar workers	Monthly earnings of white-collar workers	Average daily earnings of blue-collar workers			Average monthly earnings of white-collar workers						
			Manufac-turing	Mining-quarrying	Electricity-Water supply	Manufac-turing	Mining-quarrying	Electricity-Water supply	Retail trade	Wholesale trade	Banks	Insurance
1990	3,118	69,728	4,807	7,903	6,204	183,014	191,424	211,124	99,508	127,685	194,263	152,644
1991	3,501	78,272	5,617	9,451	6,869	214,537	220,182	259,691	115,951	147,352	226,353	175,435
1992	3,870	86,487	6,246	9,236	7,455	239,229	232,803	250,373	131,907	173,148	229,619	199,721
1993	4,411	98,568	7,037	11,453	8,638	276,300	269,148	301,017	147,327	198,033	273,434	232,028
1994	4,934	110,225	7,942	12,937	10,028	311,566	296,085	320,876	167,005	230,209	321,331	271,782
1995	5,338	119,220	8,915	14,368	11,299	345,641	330,866	348,759	187,390	257,510	363,399	313,548
1996	5,753	128,460	9,538	16,240	12,438	375,813	375,741	400,567	205,548	286,095	409,426	348,158
1997	6,195	138,316	10,315	18,141	13,300	409,078	419,719	438,283	230,685	313,461	447,772	373,244
1998	6,492	144,900	10,705	18,718	14,558	428,799	458,439	474,974	250,324	333,675	486,333	406,548
1999	6,703	149,583	...	...	...	...	...	...	...	...	...	...

Wage differentials: Actually paid earnings/minimum earnings

Year (December)	Blue-collar workers			White-collar workers									
	Manufac-turing	Mining-quarrying	Electricity-Water supply	Manufac-turing	Mining-quarrying	Electricity-Water supply	Retail trade	Wholesale trade	Banks	Insurance			
1990	1.54	2.53	1.99	2.62	2.75	3.03	1.43	1.83	2.79	2.19			
1991	1.60	2.70	1.96	2.74	2.81	3.32	1.48	1.88	2.89	2.24			
1992	1.61	2.39	1.93	2.77	2.69	2.89	1.53	2.00	2.65	2.31			
1993	1.60	2.60	1.96	2.80	2.73	3.05	1.49	2.01	2.77	2.35			
1994	1.61	2.62	2.03	2.83	2.69	2.91	1.52	2.09	2.92	2.47			
1995	1.67	2.69	2.12	2.90	2.78	2.93	1.57	2.16	3.05	2.63			
1996	1.66	2.82	2.16	2.93	2.92	3.12	1.60	2.23	3.19	2.71			
1997	1.67	2.93	2.15	2.96	3.03	3.17	1.67	2.27	3.24	2.70			
1998	1.65	2.88	2.24	2.96	3.16	3.28	1.73	2.30	3.36	2.81			

Source: Calculations based on NSSG data on actually paid earnings and data from national general collective labour agreements on minimum wages and salaries. NSSG data on actually paid earnings for 1999 are not yet available.

anticipated increase in productivity. It should be recalled that employees in private enterprises have already received (as from 1 January 2000) a corrective pay rise of 0.7 per cent. In the negotiations that started in mid-January 2000, the main claims of the Greek General Confederation of Labour (GSEE) regarding pay rises concerned “making up” for anticipated inflation, a share in GDP growth, and a corrective pay rise clause. The GSEE is also seeking a “minimum wage allowance”, on the grounds that in recent years minimum wages have risen less than average earnings (see also Box IV.3). Relevant to the latter claim is the recent decision of the government that the contribution which has to be paid to the Social Insurance Fund (IKA) *for old age insurance (main pension) by those receiving minimum wages* will be covered by the government budget. This contribution equals 6.67 per cent of earnings and the measure is equivalent to an 8 per cent increase in the disposable income of *wage earners receiving minimum wages*, without raising the labour costs of enterprises. On the basis of the official estimate that 270,000 workers will benefit from this measure, the budget will be burdened with 38 billion drachmas per annum. This amount is equal to 0.3 per cent of total compensation of employees (12,775 billion drachmas in 1999 on a national accounts basis) and entails a further 0.4 per cent increase in wage earners’ *total* disposable income per annum. It is estimated that this move favours agreements for non-inflationary wage increases, while also stimulating labour supply. This is in line with the guidelines issued by the European Council in Lisbon (March 2000), which asked for “adequate concrete measures” in order to “alleviate the tax pressure on labour and especially on the relatively unskilled and low-paid” and to “improve the employment and training incentive effects of tax and benefit systems”.<sup>1</sup>

### 3. BUSINESS PROFITS

The course of profitability in 1999, at least in manufacturing, may be examined on the basis of available price and cost indices. In particular, wholesale prices of domestic final industrial products for home consumption rose at an average annual rate of 3.7 per cent in 1999.<sup>2</sup> As regards costs, the following should be noted: First, raw material prices in the world market, in drachma terms, showed an average annual rise of 15.8 per cent. This reflected the large increase in crude oil prices, which more than offset the drop in the prices of non-energy raw materials.<sup>3</sup> The average annual level of the effective exchange rate of the drachma (which affects the drachma cost of imported inflows) fell only slightly (–0.9 per cent) in 1999. Second, unit labour costs in manufacturing are estimated to have risen by

1 See “Presidency conclusions”, European Council, Lisbon, 23-24 March 2000, as well as the study by T. Boeri, R. Layard and S. Nickell “Welfare-to-work and the fight against long-term unemployment” submitted to the British and the Italian Prime Minister ahead of the Lisbon Council.

2 The corresponding rate excluding fuel was 2.6 per cent.

3 Calculation of average annual changes in drachma terms, on the basis of data for prices in euro published in the *Monthly Bulletin* of the ECB, March 2000, Table 4.2, p. 31\*.

about 2.5 per cent. Third, telecommunication services prices and electricity rates decreased. Fourth, average annual interest rates charged for loans to business also fell.

At the same time, according to IOBE surveys, manufacturing and retail trade firms' assessments of actual demand conditions were negative on average during the year and did not therefore encourage a substantial increase in profit margins. By contrast, forecasts made by industrial firms concerning sales in the next 3-4 months and by retail trade firms concerning orders in the next quarter were clearly positive.

TABLE IV.4  
EXPORT PRICE INDEX AND  
EFFECTIVE EXCHANGE RATE OF THE DRACHMA  
(Annual percentage change)

	Effective exchange rate of the drachma	Wholesale export prices	
		In drachmas	In foreign currency
<b>1999</b> Jan. ....	-3.5	-0.7	-4.2
Feb. ....	-3.4	0.4	-3.0
March ....	1.7	-2.3	-0.7
Apr. ....	4.3	-4.4	-0.3
May ....	2.7	-3.7	-1.1
June ....	0.5	-2.3	-1.8
July ....	-1.6	-0.6	-2.2
Aug. ....	-1.4	-0.4	-1.8
Sept. ....	-0.5	0.0	-0.5
Oct. ....	-1.0	1.9	0.9
Nov. ....	-3.4	4.0	0.5
Dec. ....	-4.3	7.2	2.6
<b>2000</b> Jan. ....	-5.6	8.1	2.0
Feb. ....	-6.4	10.3	3.2
March ....	-6.6	...	...

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

On the basis of cost developments (all cost components, excluding crude oil prices,<sup>1</sup> rose at a lower rate than output prices or decreased), as well as of the assessment of demand conditions by the firms themselves, it is estimated that profit margins of manufacturing firms producing for the domestic market widened. On the other hand, the pres-

1 The impact of the rise in crude oil prices is evident not only from the sharp acceleration –from 1.6 per cent in May to 7.4 per cent in December 1999 and 8.3 per cent in February 2000– of the rate of increase in wholesale prices of domestic industrial products for home consumption (including the prices of fuels which are *final* products), but also from the acceleration –from 1.6 per cent in May to 2.4 per cent in October, 2.5 per cent in November, 2.3 per cent in December 1999 and 2.5 per cent in February 2000– of the rate of increase in the respective index excluding fuel (which was affected by the rise in the prices of fuels used as *raw material* in the production of final products).

sure exerted by demand and competition in foreign markets seems to have led exporters to restraining their profit margins. Indeed, the average annual rate of change in the wholesale prices of exported final products was negative in 1999: –0.1 per cent (excluding fuel: –1.3 per cent). At the same time, wholesale price developments suggest that in 1999 and the early months of 2000, export firms used pricing policy to exploit every drop in the exchange rate of the drachma and took care to offset every rise in it as shown in Table IV.4.

The above analysis mainly concerns operating profit margins. The overall profit margins of firms whose shares are listed on the ASE widened significantly, since net profits grew much faster than turnover, as is evident from the income statements already published. However, since fund-raising from the ASE led to a considerable increase in

TABLE IV.5  
FIRMS' ESTIMATES ON THEIR PROFITS, SALES AND PRODUCT PRICES: 1999  
(Annual percentage change)

Size of firm	Profits per firm	Value of sales per firm	Industrial goods prices
Small	3.2	9.5	1.0
Medium-sized	26.4	10.1	0.8
Large	32.7	12.9	1.7
<b>Total industry<sup>1</sup></b>	<b>25.7</b>	<b>10.9</b>	<b>1.0</b>

1 Weighted estimate.

Source: ICAP sample survey, *Greek industry: estimates for 1999 and expectations for 2000*, December 1999.

own funds, the return on own funds (as is usually calculated, i.e. the ratio of net profits to own funds on the basis of the balance sheet and the profit and loss account of the *same year*) is estimated to have increased moderately. The large increase in total profits mainly reflects the rise in “non-organic” revenue from stock market transactions and asset management, as well as the decrease in financial costs, which resulted from the decrease in lending rates and in fund-raising directly from the stock exchange. Moreover, according to estimates based on a sample survey conducted by the ICAP, profits per industrial firm rose by 25.7 per cent in 1999, while the value of sales per firm rose by 10.9 per cent. Another conclusion drawn indirectly from the same survey is that profit margins widened in large and medium-sized industrial enterprises, but narrowed in small firms (see Table IV.5).<sup>1</sup>

1 ICAP, *Greek industry: estimates for 1999 and expectations for 2000*, December 1999. The survey was conducted on a sample of 250 industrial firms.





## V. MONETARY POLICY AND MONETARY AND CREDIT DEVELOPMENTS IN 1999

### 1. MONETARY POLICY OBJECTIVES FOR 1999

The primary objective of the monetary policy pursued in 1999 was to achieve price stability, i.e. annual price increases not exceeding 2 per cent, according to the definition of price stability adopted by the European Central Bank. The timely attainment of this goal would also mean that Greece has satisfied the convergence criterion regarding inflation, thus fulfilling the prerequisites for participating in the European Economic and Monetary Union in January 2001.

In conducting monetary policy, the Bank of Greece had set as an intermediate target the relative stability of the exchange rate of the drachma within the Exchange Rate Mechanism II (ERM II), which the drachma joined on 1 January 1999 at a central rate of 353.109 drachmas per euro and the standard fluctuation band of  $\pm 15$  per cent. Furthermore, the Bank had calculated and announced a 7-9 per cent reference range for the growth rate of M4N and for credit expansion. This range was deemed to be consistent with the inflation target and was based on certain assumptions regarding the macroeconomic environment in which monetary policy is pursued.

The inflation target was attained to a significant extent in 1999. CPI inflation fell gradually from 3.9 per cent in December 1998 to 2 per cent in August and September 1999, but then started accelerating, owing to the steep worldwide rise in oil prices, and reached 2.7 per cent in December. Core inflation, which is not affected by the increase in fuel and fresh fruit and vegetable prices, continued its downward course after September and has not exceeded 2 per cent since October 1999.

The relatively high domestic interest rates in 1999, together with expectations that Greece would join the euro area, resulted in maintaining the drachma strong within ERM II. Thus, the drachma remained appreciated by 7.7 per cent on average compared with its central rate in the mechanism. The appreciation of the drachma was combined with limited variability of the exchange rate in the course of the year. This variability followed a downward trend and by the end of 1999 it fell to about 1/3 of the level reached at the beginning of the year.

In the first two months of 1999, the drachma showed a tendency to appreciate, reflecting considerable inflows of capital to be invested mainly in government bonds. From mid-January to end-March, the appreciation of the drachma against its central rate fluctuated between 8.5 and 9 per cent, while the Bank of Greece was intervening in the market to absorb the quantity of foreign exchange offered. The capital outflows recorded since end-March, partly owing to the uncertainty caused by the Kosovo crisis, limited the appreciation of the drachma to 7.5-8 per cent, a level where it stayed until end-May. In the June-July period, the drachma strengthened once again, owing to capital inflows and the

seasonality of certain current account components, and, as a result, the appreciation against its central rate rose to 8-8.5 per cent. In the August-December period, the deviation of the drachma from its central rate gradually decreased, with some intervals of relative stability, and stood at 6.5 per cent at the end of 1999. The evolution of the exchange rate of the drachma reflects its successful participation in ERM II, since the Greek currency was not subjected to pressure that could cause tension in the foreign exchange market or wide fluctuations in its exchange rate. Following the 3.5 per cent revaluation of the central rate to 340.750 drachmas per euro on 17 January 2000 and the gradual adjustment of the current exchange rate thereafter, the deviation of the drachma from its new central rate was limited to 1.8 per cent at end-March 2000.

## 2. MONETARY DEVELOPMENTS

### 2.1 Monetary aggregates

As mentioned in the *Annual Report 1998*, the Bank of Greece started in 1999 to use a new monetary aggregate, M4N, which is considered to be a more reliable indicator of the stance of monetary policy. M4N, which has a wider coverage than M3 and M4, includes currency in circulation, private deposits in drachmas and foreign currency, as well as private investment in repos, bank bonds and money market fund units<sup>1</sup> and government paper with a maturity of up to one year, i.e. all private assets which are of a monetary nature. These assets are liabilities of Monetary Financial Institutions (MFIs), which include banks and money market funds. M4N has a more stable relationship with GDP than the previous indicators, because shifts of funds between some categories of liquid assets are internalised in this aggregate and, therefore, do not affect its evolution.

M4N grew by 1,908 billion drachmas or 5.6 per cent in 1999, compared with its 7-9 per cent reference range. In 1998, M4N had risen by 3,038 billion drachmas or 9.8 per cent (see Table V.1). The twelve-month rate of M4N growth decelerated in 1999 (see Chart V.1) and in the March-July period it generally stood within its reference range, while, during the rest of the year (except November), it was below the lower limit. In November 1999, the twelve-month rate of M4N growth accelerated to 8 per cent, partly owing to increased public expenditure, as some government payments were made earlier to avoid problems that would be possibly caused by the transition to year 2000.

The slower increase of M4N in 1999 was associated with the shift of savings, over most of the year, from money market mutual funds to equity mutual funds, whose liabilities are not included in M4N, but was also related to fund-raising by banks through the stock exchange. It should be noted that total money market fund assets fell by 1,406 bil-

<sup>1</sup> According to a decision of the Capital Market Committee (No. 129/14 April 1998), money market funds are those investing at least 65 per cent of their capital in money market instruments.

lion drachmas in 1999 and the corresponding total for equity funds grew by 4,537 billion drachmas. At the same time, banks raised 1,286 billion drachmas to increase their capital (1998: 210 billion drachmas). Another factor that contributed to the containment of M4N growth was the considerable decrease (of 1,978 billion drachmas, compared with a 1,059 billion drop in 1998) in private investment in Treasury bills, to the extent that it was substituted by investment in assets not included in M4N, such as two-year savings bonds.

As regards M4N components, currency in circulation increased by 466 billion drachmas or 21.1 per cent in 1999, compared with 23 billion drachmas or 1.1 per cent in

TABLE V.1  
MONETARY AGGREGATES AND LIQUIDITY<sup>1</sup>

	Outstanding balances on 31 Dec. 1999* (billion drachmas)	Annual changes					
		Billion drachmas			Percentages		
		1997	1998	1999*	1997	1998	1999*
1. Currency in circulation, M0	2,671.9	241.4	23.1	466.0	12.4	1.1	21.1
2. Private deposits	24,167.5	2,039.1	1,672.6	2,788.5	11.5	8.5	13.0
2.1 In drachmas	21,233.2	1,697.3	385.3	2,525.2	10.2	2.1	13.5
2.1.1 Sight	3,395.3	213.7	489.3	1,088.6	13.3	26.9	47.2
2.1.2 Savings	14,994.2	1,133.7	446.1	1,212.7	9.3	3.3	8.8
2.1.3 Time	2,843.7	349.9	-550.1	223.9	12.4	-17.4	8.6
2.2 In foreign currency	2,934.3	341.8	1,287.3	263.3	32.8	93.0	9.9
3. Repurchase agreements with the private sector (repos)	3,035.4	-23.8	855.8	2,143.0	...	...	...
4. Bank bonds	10.6	56.5	9.5	-105.3	...	...	...
5. Money market fund units	4,580.4	2,151.6	1,535.8	-1,406.1	93.6	34.5	-23.5
6. Private investment in Greek government securities with an initial maturity of up to one year	1,363.1	-2,230.9	-1,058.8	-1,978.3	-33.6	-24.1	-59.2
<b>7. Liquidity indicator M4N   (=1+2+3+4+5+6)</b>	<b>35,828.9</b>	<b>2,233.9</b>	<b>3,038.0</b>	<b>1,907.8</b>	<b>7.8</b>	<b>9.8</b>	<b>5.6</b>

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

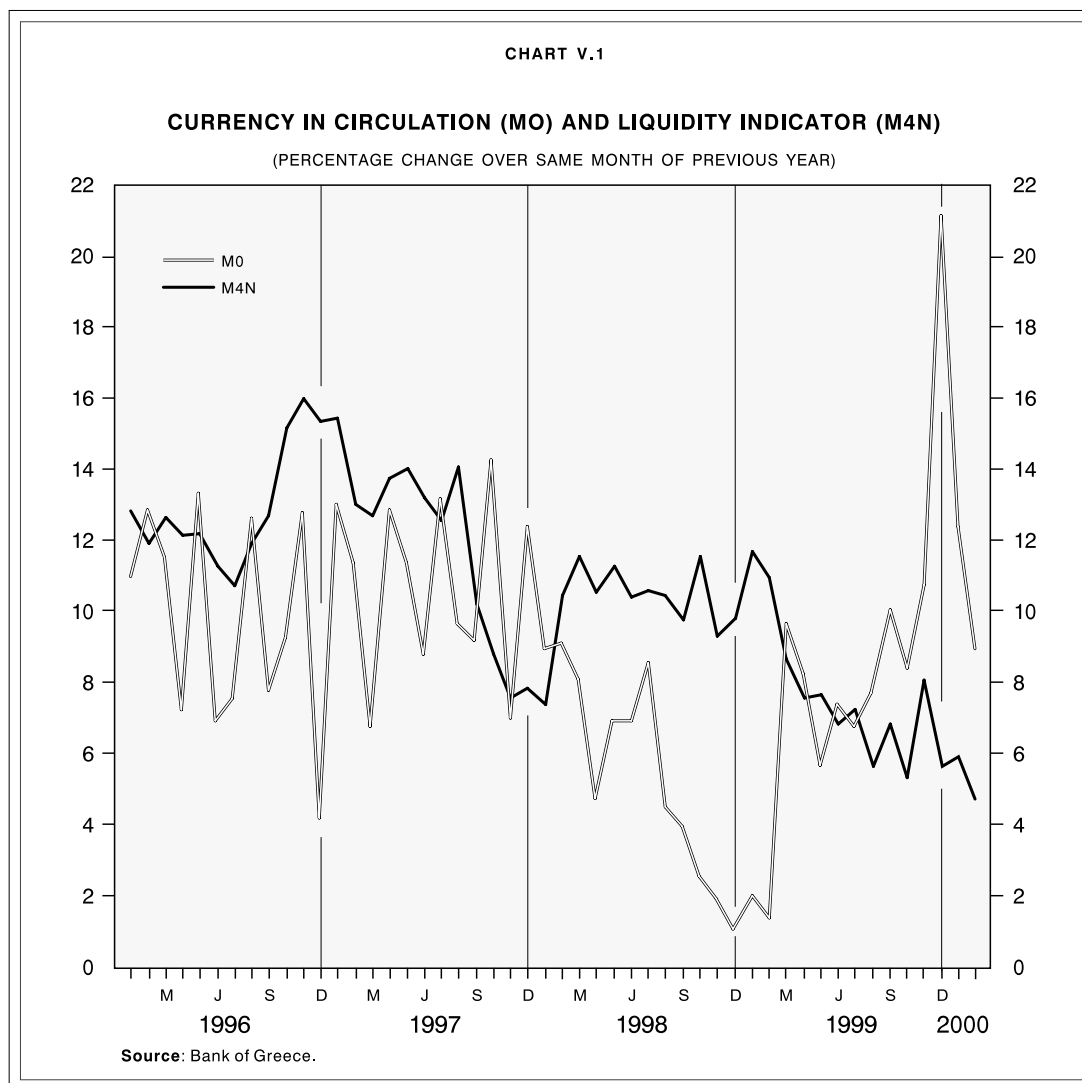
\* Provisional data.

Source: Bank of Greece.

1998. Currency in circulation grew at a high rate only at the end of the year, while in the January-November period the twelve-month rate was around 7 per cent. The increase in currency in circulation at the end of the year, apart from the usual seasonality, reflects increased holdings of banknotes by the public in order to deal with possible problems in the operation of information systems in the transition to the year 2000. However, the proper and timely preparation of the banking system, the coordination of which was undertaken by the Bank of Greece, ensured a smooth transition. Thus, the quantity of currency held outside the banking system returned to normal in a relatively short period of

time and its twelve-month growth rate dropped to 12.4 per cent at end-January 2000 and to 8.9 per cent at end-February 2000 (see Chart V.1).

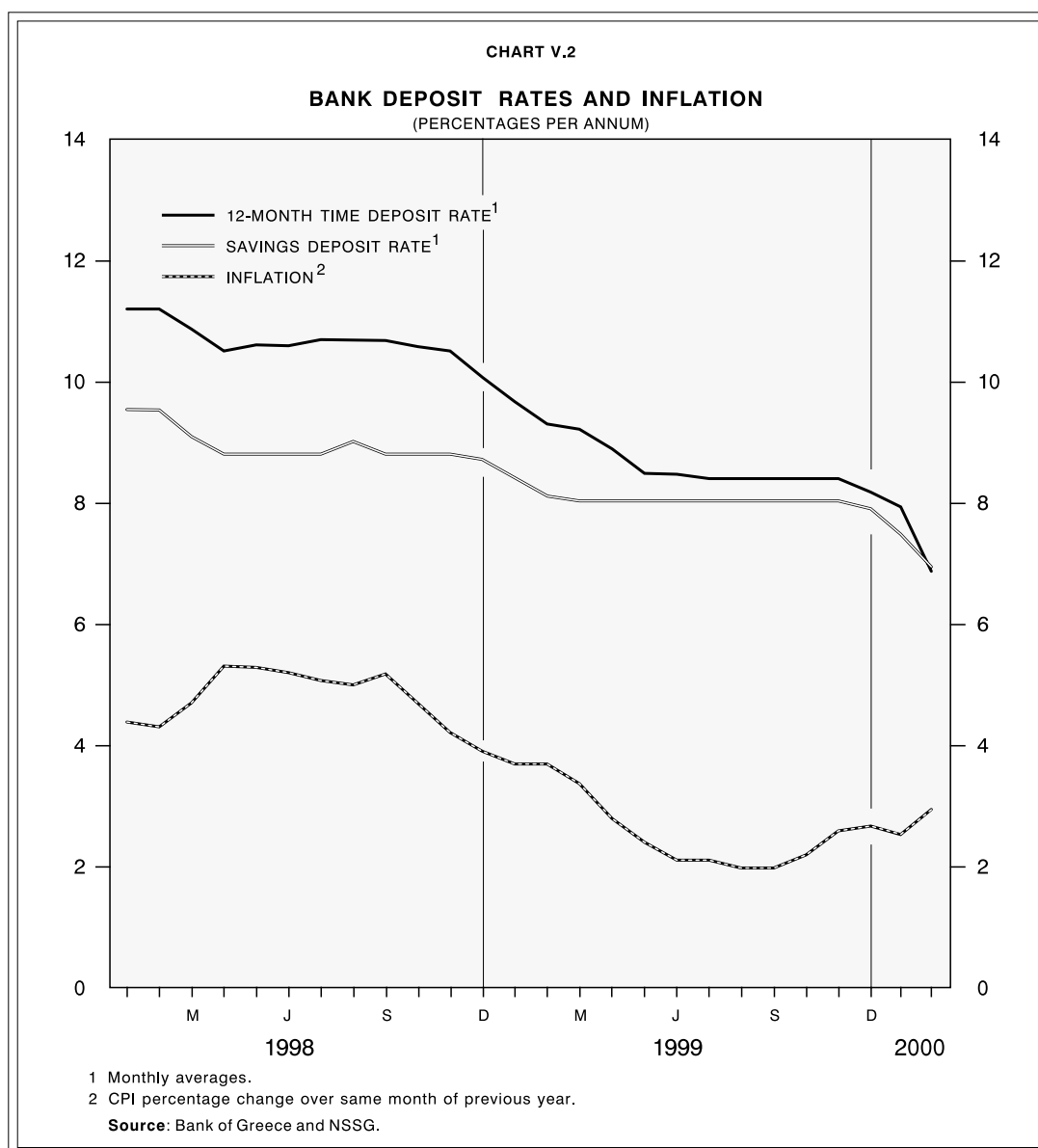
Private deposits in drachmas and foreign currency increased by 2,788 billion drachmas or 13 per cent in 1999, compared with 1,673 billion drachmas or 8.5 per cent in 1998 (see Table V.1). The acceleration of the growth rate of deposits was due to increased



drachma deposits (1999: 2,525 billion drachmas or 13.5 per cent, 1998: 385 billion drachmas or 2.1 per cent), while the growth of private deposits in foreign currency decelerated considerably, after a very strong speed-up in 1998 (1999: 263 billion drachmas or 9.9 per cent, 1998: 1,287 billion drachmas or 93 per cent).

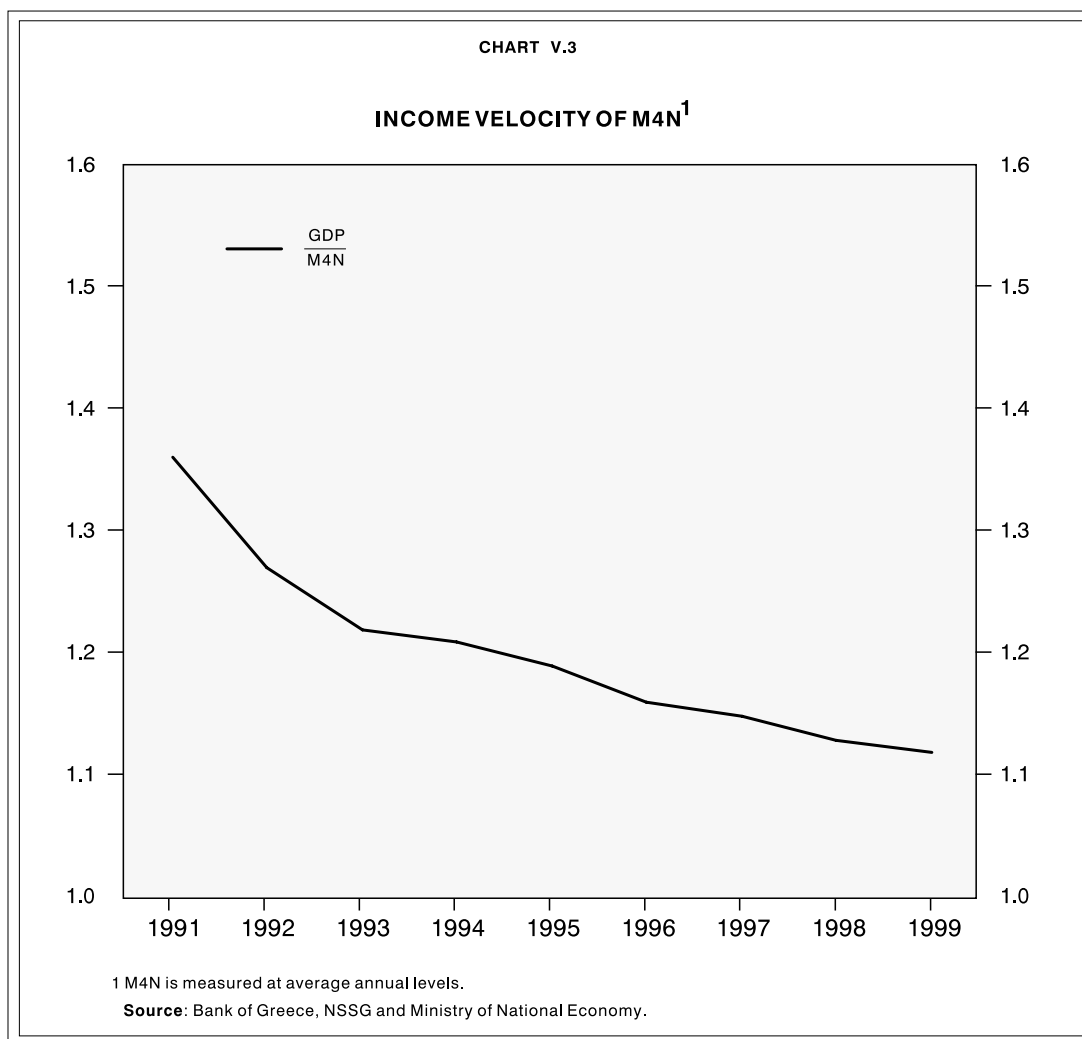
As regards the individual categories of drachma deposits, sight deposits grew by 47.2 per cent in 1999, compared with 26.9 per cent in 1998, a development which is asso-

ciated mainly with the large increase in the volume of trading on the Athens Stock Exchange. In this respect, it should be noted that the average daily value of ASE transactions in 1999 was 236 billion drachmas, compared with 56 billion in 1998. The growth rate of savings deposits also accelerated from 3.3 per cent in 1998 to 8.8 per cent in 1999. The



average rate of increase in these deposits remained at high levels (11 per cent), as it seems that savings deposits were used — although to a lesser extent than sight deposits — to support the increased volume of stock market transactions in 1999. Besides, the decrease in the interest rate on savings deposits was limited, in contrast to the cut in the interest rate on time deposits (see Chart V.2). Specifically, the interest rate on savings deposits, after

falling by half a percentage point in the first two months of 1999, stabilised around 8 per cent until the end of the year. As a result, the real interest rate on savings deposits (measured on the basis of ex post inflation) at the year-end was half a percentage point higher than at the beginning of the year. After the cut in Bank of Greece interest rates in December 1999 and January 2000, banks adjusted deposit rates. Thus, in the first two



months of 2000, the interest rate on savings deposits was cut by one percentage point, to 6.9 per cent.

Time deposits increased by 8.6 per cent in 1999, after falling by 17.4 per cent in 1998. Their twelve-month rate of change was negative throughout the January-November 1999 period and their average rate of change in 1999 dropped to -9 per cent. This development was due to the reduction in the interest rate on time deposits in 1999 and the consequent shift of savings towards other investments with higher yields, such as repos, whose

yields are not subject to taxation as from September 1998, and shares, whose prices showed a large increase in 1999. In particular, the interest rate on twelve-month deposits was cut by about 2 percentage points in 1999 and by another 1.5 percentage point (to 6.8 per cent) in the first two months of 2000, for the reasons mentioned above.

As regards residents' foreign currency deposits, the adjustment of savers' portfolios was completed in 1999. The adjustment included considerable investments in this category of deposits, especially after their liberalisation in August 1997. Thus, the twelve-month growth rate of residents' foreign currency deposits was limited to 9.9 per cent at end-1999, from 93 per cent at end-1998. This development was also related to the policy pursued in 1999 aiming to maintain the exchange rate of the drachma stable against the euro. The large increase in private investment in repos continued in 1999, having started after the abolition of taxation on repo yields in September 1998. In particular, these investments grew by 2,143 billion drachmas in 1999, compared with an increase of 856 billion in 1998. Lastly, money market fund units held by the private sector dropped by 1,406 billion drachmas in 1999, compared with an increase of 1,536 billion in 1998. As mentioned above, this outcome was related to the shift of investors towards equity funds, whose assets amounted to 5,031 billion drachmas at end-1999, from 494 billion at end-1998.

The evolution of M4N components reflected intra-M4N shifts, which did not affect it to the same extent. At average annual levels, however, M4N grew faster than nominal GDP. Hence, the slightly downward trend of the income velocity of M4N continued in 1999 (see Chart V.3 on the previous page).

## *2.2 Interest rates and interventions in the money market*

The Bank of Greece kept its interest rates at high levels in 1999. After a small drop in January 1999, these rates remained stable for a long time (between January and October), while the Bank made further reductions in October and December 1999 and, more recently, in January, March and April 2000.

In particular, the Bank reduced its interest rate on the acceptance of 14-day deposits by 0.25 percentage point to 12 per cent, the interest rate on the first tier of the deposit facility by 0.10 percentage point to 11.5 per cent and the Lombard rate by 2 percentage points to 13.5 per cent (see Table V.2). Furthermore, the Bank cut by 2 percentage points, to 20 per cent, the interest rate on credit institutions' debit balances on their current account with it (penalty rate). The larger adjustments of the Lombard rate and the penalty rate were of a more technical nature and were associated with the aim of reducing fluctuations of short-term interest rates, but did not directly affect the general level of interbank rates, owing to excess liquidity conditions in the market.

The next decrease in Bank of Greece interest rates occurred in October 1999 (see Chart V.4 on page 132), despite the considerable deceleration of inflation in the January-September period (by 1.7 percentage points). The Bank's interest rates remained unchanged



because core inflation, although dropping during that period, was still at relatively high levels, while bank loans to the private sector — especially consumer loans — kept increasing at a high rate, and because oil prices rose sharply in the world market. In October 1999, the Bank reduced its interest rates by 0.50 percentage point. Furthermore, in early October, the Bank raised from 450 to 900 billion drachmas the ceiling on credit institutions' financing against collateral of government securities, in the context of gradual harmonisation with the corresponding marginal lending facility in the euro area.

The Bank of Greece further reduced its interest rates in December 1999 and in January, March and April 2000. Thus, the interest rate on the acceptance of 14-day deposits dropped by 2.75 percentage points (from 11.50 to 8.75 per cent), the interest rate on the first tier of the deposit facility by 3 percentage points (from 11.0 to 8 per cent), the interest rate on the second tier of the deposit facility by 1.75 percentage points (from 9.2 to 7.5 per cent) and the Lombard rate by 3.5 percentage points (from 13.0 to 9.5 per cent).

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

Date of interest rate change	Overnight deposit facility rate		14-day deposit rate <sup>1</sup>	Lombard rate
	First tier	Second tier		
10 Dec. 1998 .....	11.60	9.75	12.25	15.50
14 Jan. 1999 .....	11.50	9.75	12.00	13.50
21 Oct. 1999 .....	11.00	9.25	11.50	13.00
16 Dec. 1999 .....	10.25	9.00	10.75	12.25
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

1 The change in the 14-day deposit rate is effective as of the previous day to that referred to in the table.

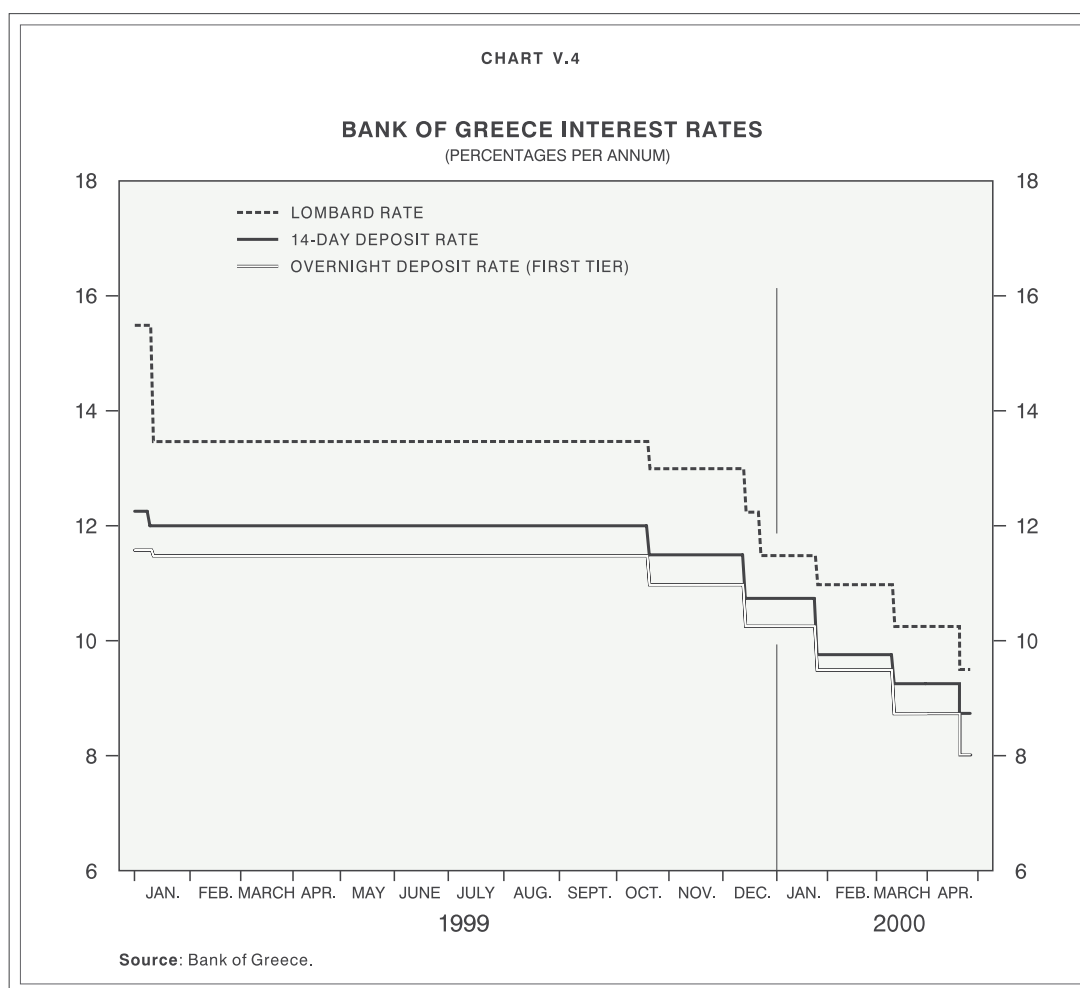
Source: Bank of Greece.

In deciding on these changes, account was taken of: (i) the initial stabilisation and then the decrease in core inflation, which stood at 1.6 per cent in March 2000, (ii) the deceleration of annual average inflation on the basis of the harmonised consumer price index, and the estimated fulfilment of the inflation criterion, (iii) the containment of the annual rate of M4N increase within or below the reference range for 1999 and 2000 (7-9 per cent and 5-7 per cent, respectively) and (iv) the estimated favourable effect on inflation of the appreciation of the central rate of the drachma in ERM II. Furthermore, in its latest interest rate cut, the Bank took into consideration the estimated positive impact on inflation of the recent drop in the international oil price and the estimated effects on prices and economic activity of conditions prevailing in capital markets.

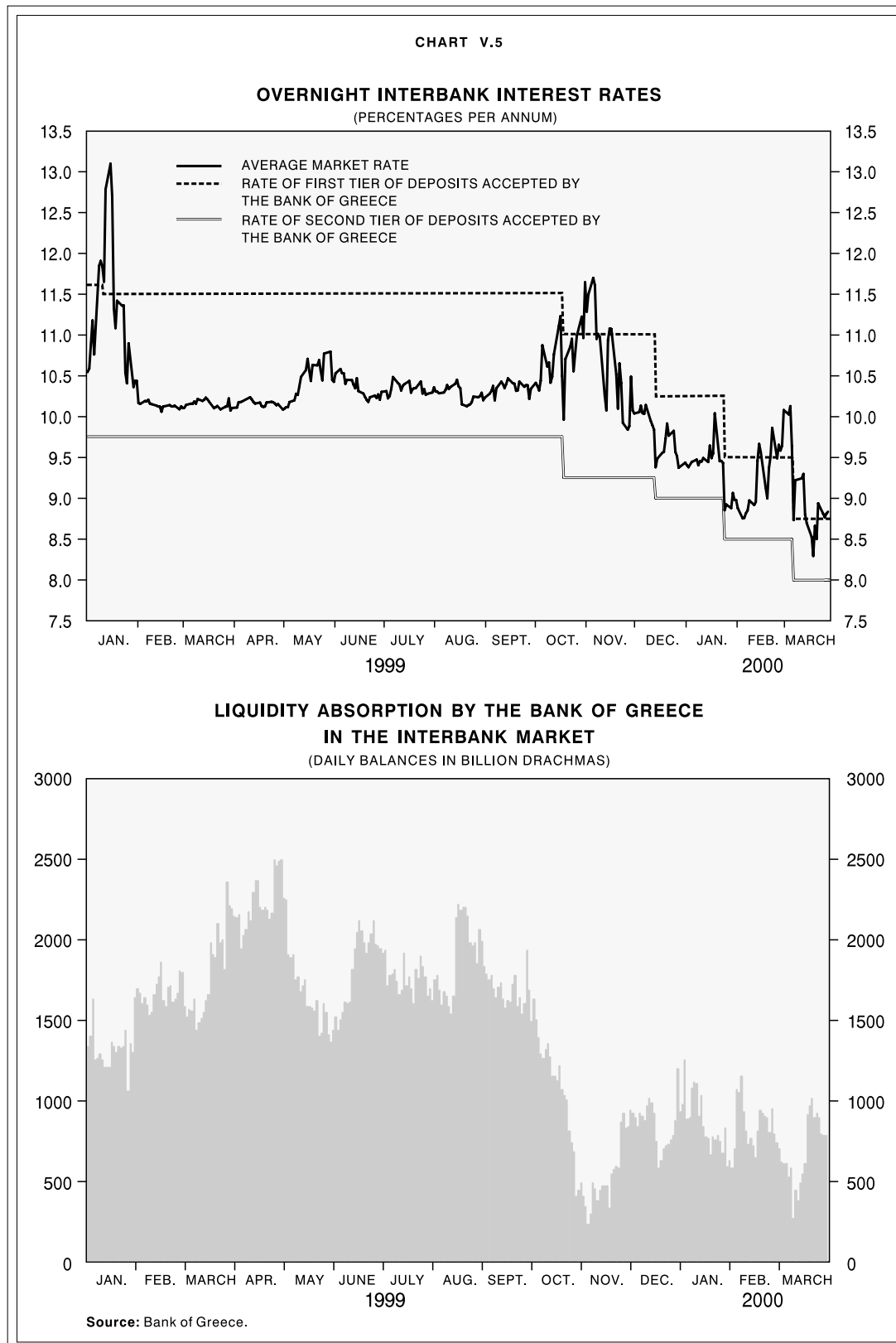
As regards the Lombard rate, it was reduced twice in December 1999, by 0.75 percentage point each time. The second cut was made in the context of facilities offered by the Bank of Greece to credit institutions, to enable them to face unforeseen changes in

liquidity in the transition to year 2000. These facilities also included a special provision allowing credit institutions to be financed without limits against collateral of government paper between 15 November 1999 and 14 January 2000. At the same time, the ceiling on the amount credit institutions could draw from their required reserve accounts with the Bank of Greece was raised from 10 to 15 per cent.

In 1999, to maintain interest rates at levels compatible with the anti-inflationary policy pursued, the Bank of Greece absorbed considerable amounts of liquidity from the

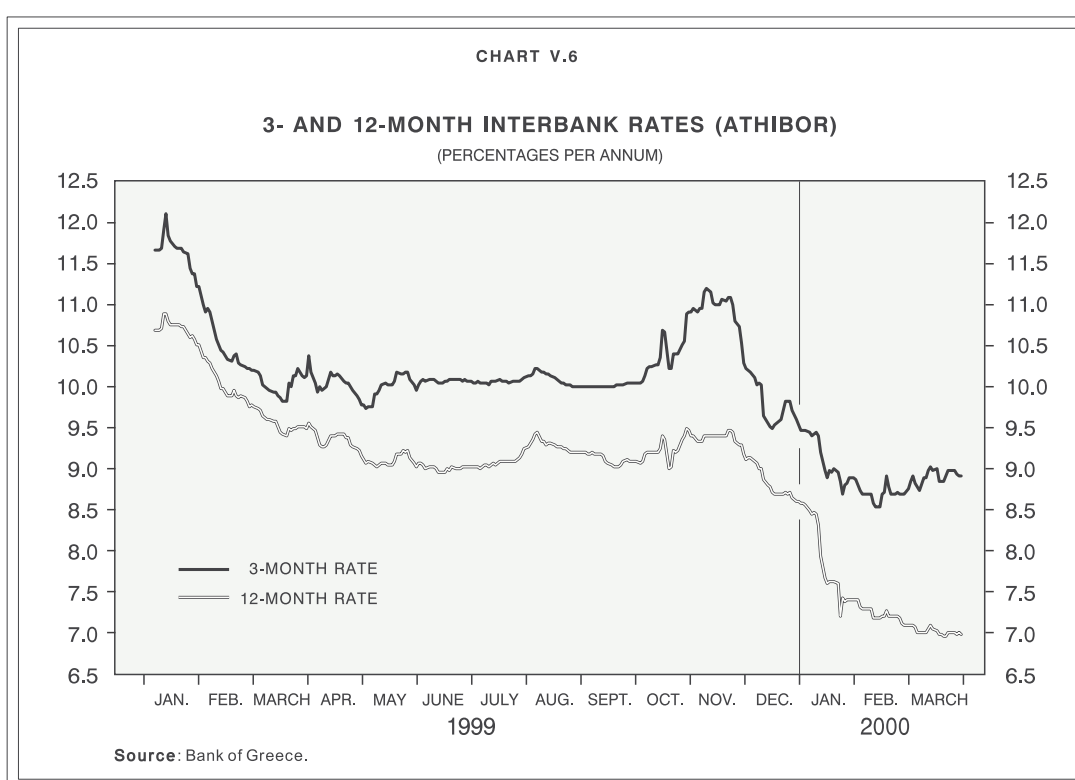


interbank market (see Chart V.5 on the next page). The average daily balance of absorbed funds was about 1,500 billion drachmas in 1999, compared with 750 billion in 1998. Liquidity absorption was high in the January-September 1999 period, largely reflecting capital inflows mainly during the first two months of the year. From early October 1999, however, it was gradually reduced and the average daily balance of absorbed funds at the year-end fell to 800 billion drachmas, from about 1,750 billion in the first nine months of the year. The relatively limited absorption of liquidity in the last quarter of 1999 was asso-



ciated with capital outflows in that period and with increased fund-raising and accumulation of funds by the government in October 1999 to finance its expenditure, which is higher in the last two months of the year for seasonal reasons.

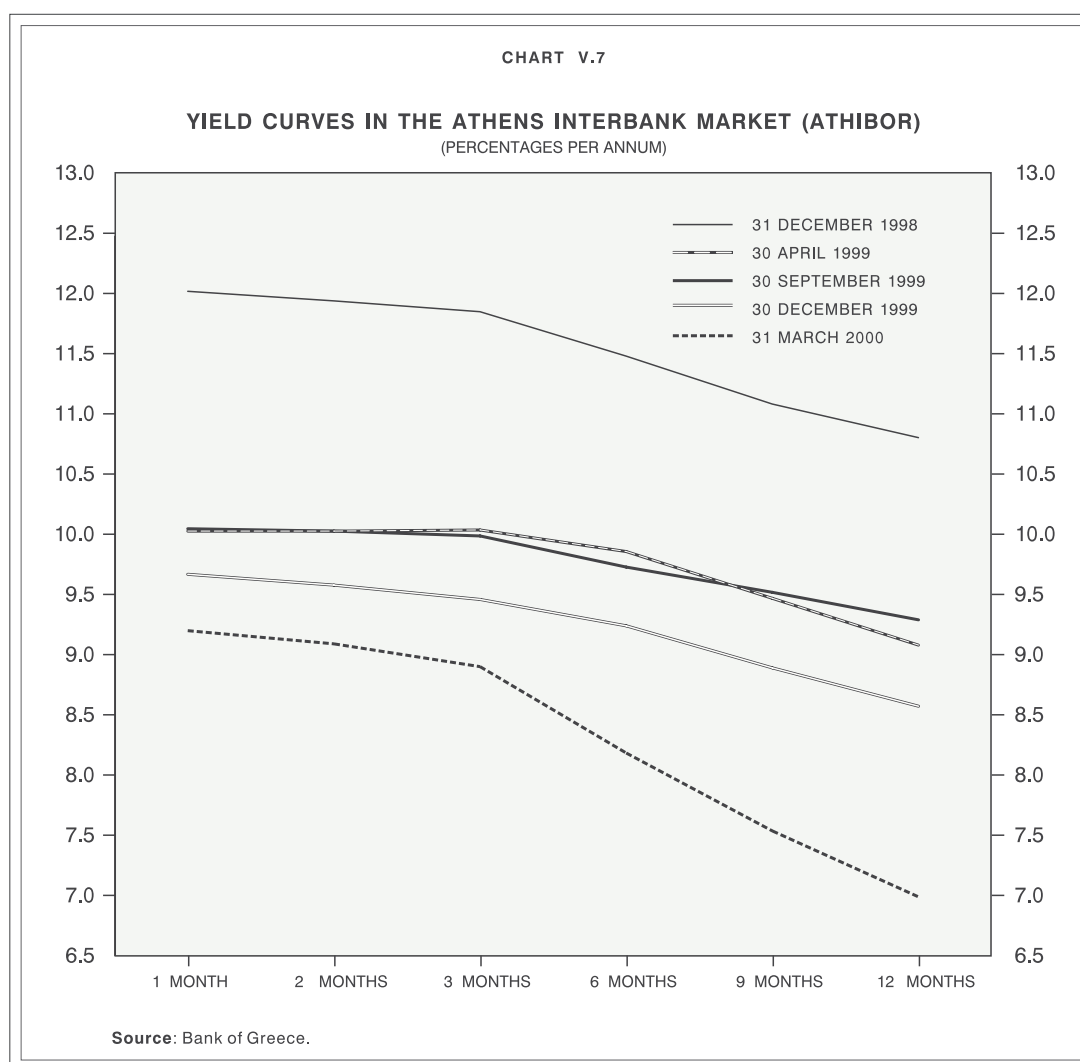
Liquidity absorption in the first quarter of 2000 remained on average almost at the same level as in the last quarter of 1999 (around 800 billion drachmas), despite cuts in Bank of Greece interest rates in the December 1999-March 2000 period and the conditions prevailing in the Athens Stock Exchange during the same period, as the government, in order to meet its increased borrowing requirements, considerably reduced its deposits with the central bank.



In April 1999, to implement its intervention policy more effectively, the Bank of Greece began to hold three-month tenders for the acceptance of deposits so as to absorb for a longer time part of the excess liquidity in the interbank market, which is of a structural nature. It should be noted that, in the second half of 1999, the amount of liquidity absorbed through three-month interventions was about 1/3, on average, of total liquidity absorption.

Both nominal and real interbank money market rates, despite falling by 2.2-2.3 percentage points, remained at relatively high levels in 1999. Specifically, Athibor rates fell by 1-2 percentage points in the first two months of 1999, with the largest falls recorded in short-term rates. During the following months and until mid-October 1999, they remained

almost unchanged, with the exception of the 12-month interest rate, which fell slightly. The gradual decrease in liquidity that characterised the interbank market from mid-October to mid-November 1999 had an upward effect on interest rates (mainly those for shorter maturities). From mid-November 1999, however, interest rates started declining, as the market was anticipating a decrease in Bank of Greece interest rates, while liquidity in the banking system also increased. In particular, the three-month Athibor rate dropped to 9.5 per cent



at end-1999 (from 11 per cent in mid-November 1999), while the 12-month Athibor rate decreased from 9.4 per cent to 8.6 per cent in the same period (see Chart V.6).

After the appreciation of the central rate of the drachma against the euro in January 2000 and the adjustment of Bank of Greece interest rates in the first quarter of 2000, interbank rates further decreased by 0.6 to 1.6 percentage points, with the largest

decreases observed in the longest maturities. More specifically, at end-March 2000, the 3-month Athibor reached 8.9 per cent, while the 12-month Athibor rate came to 7 per cent.

The yield curve in the interbank market moved downwards in an almost parallel way in the course of 1999 (see Chart V.7). The main characteristics of the curve were its slightly downward slope for the longer maturities and the fact that it remained almost horizontal for the shorter maturities (one to three months). The shape of the curve suggests that the market was not expecting a rapid adjustment of domestic interest rates to those of the euro area. The parallel downward shift of the curve (for shorter maturities) continued in the first quarter of 2000 – while the curve assumed a steeper downward slope for longer maturities compared with 1999 – as it is anticipated that Greek interest rates will gradually converge to those of the euro area in 2000.

### 3. CREDIT DEVELOPMENTS

#### *3.1 Total credit expansion*

Total credit to the public and the private sector increased by 12.2 per cent in 1999, i.e. its growth rate accelerated in comparison with 1998 (9.7 per cent). However, as detailed below, credit expansion in 1999 was affected by large foreign exchange valuation differences, owing to the considerable appreciation of the Japanese yen and the US dollar. Net of valuation differences, total credit expansion was limited to 10.9 per cent in 1999, compared with a 7-9 per cent reference range. In comparison with 1998, credit expansion to the public sector accelerated, while credit expansion to the private sector decelerated.

In greater detail, credit expansion to the public sector reached 11.4 per cent in 1999, compared with 7.4 per cent in 1998. This acceleration reflected the increased financing of central government, as the financial surplus of public enterprises and entities rose to 524 billion drachmas, from 388 billion in 1998. It should be noted that the increased financing of central government was not related to its borrowing requirements in 1999, which were considerably less than in 1998. Specifically, the borrowing requirements of central government, on a cash basis, dropped to 2,026 billion drachmas in 1999, from 2,350 billion in 1998 (see Table V.3). The containment of central government borrowing requirements resulted as the combined effect of an increase in the primary surplus (1999: 810 billion drachmas, 1998: 642 billion) and a rise in interest payments (1999: 3,403 billion drachmas, 1998: 3,248 billion), while the Agricultural Markets Management Service (DIDAGEP) deficit remained at 1998 levels (1999: 71 billion drachmas, 1998: 79 billion). Finally, an increase was recorded in the balance on the government's credit accounts with the Bank of Greece, including public debt management accounts.

The above developments had the same result as in 1998: credit expansion to the public sector accelerated, although the borrowing requirement of the latter decreased. This is attributable to a significant change in the way the private non-bank sector and credit institutions financed the PSBR. More specifically, government paper holdings by the domestic non-bank sector decreased by 1,750 billion drachmas in 1999, compared with a 61 billion drachma increase in 1998. The shift of the private non-bank sector towards financial instruments other than government securities is associated, to some extent, with the limited familiarisation of the public with long-term bonds – which were

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

	1997	1998	1999*
1. Net public sector borrowing requirement (1.1+1.2) (as a percentage of GDP)	2,142 (6.5%)	1,962 (5.5%)	1,502 (3.9%)
1.1 Central government <sup>1</sup>	2,620	2,350	2,026
1.2 Public enterprises and entities <sup>2</sup>	-478	-388	-524
2. Financing of public sector's deficit by the private non-bank sector	119	61	-1,750
3. Credit expansion to the public sector (1-2)	2,023 (9.2%)	1,901 (7.4%)	3,252 (11.4%)
4. Credit expansion to the private sector	1,477 (15.3%)	1,672 (15.0%)	1,797 (14.0%) <sup>3</sup>
5. Total credit expansion (3+4)	3,500 (11.0%)	3,573 (9.7%)	5,049 (12.2%) <sup>3</sup>

1 Including capitalised interest.

2 (-) suggests a surplus.

3 Credit expansion includes foreign exchange valuation differences owing to the considerable appreciation of the Japanese yen and the US dollar, mainly in the second half of 1999. Excluding those differences, credit expansion to the private sector and to the whole economy reaches 10.0 per cent and 10.9 per cent respectively.

\* Provisional data.

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

the main focus of government issues over the last two years (1998-99) – but is mostly linked to stock market developments and the high yields of equities in 1999. By contrast, government paper held by MFIs grew by 522 billion drachmas in 1999, compared with a 557 billion drachma decrease in 1998. However, government paper held by non-residents increased by 2,305 billion drachmas, (1998: 1,850 billion), thereby contributing to the creation of liquidity in the economy. The increased demand for government paper by banks and non-residents is related to the anticipated convergence of Greek interest rates towards the lower rates in European markets and thus to expectations of considerable capital gains.

### 3.2 *Financing of the private sector*

Developments in the financing of the private sector in 1998 and early 1999 caused considerable concern to the Bank of Greece, because of their potential impact on inflation. Specifically, the relatively recent deregulation of the banking system and keener competition between banks led to a large and accelerating increase in certain categories of loans. In fact, as from mid-1998 the twelve-month rate of increase in consumer loans was steadily above 30 per cent, while loans to trade and housing grew at rates close to 20 per cent. The relatively high correlation of these categories of loans with final demand and the level of prices led the Bank of Greece to take special measures in April 1999, which were further strengthened in July. These measures were complementary to the monetary policy pursued and were aimed at containing to 12 per cent the annual rate of increase in loans to the private sector and to public enterprises and entities at the end of 1999. This rate was compatible with the containment of total credit expansion within the 7-9 per cent reference range for 1999.

The measures concerned two categories of loans.<sup>1</sup> The first category comprised loans to domestic and foreign trade and to consumers; the second category included all other types of loans to the private sector and to public enterprises and entities. This distinction was aimed at strengthening the effectiveness of the measures and avoiding the possibility of a large increase in consumer loans with a corresponding reduction of lending to other sectors of the economy. In both categories, if the twelve-month rate of increase exceeded 12 per cent, an amount equal to the overrun would have to be deposited in a six-month non-interest-bearing account with the Bank of Greece. More specifically, as bank credit is characterised by seasonality, these measures would take effect if credit expansion overshoot 3.5 per cent in the April-June 1999 period, 5.5 per cent in the April-September 1999 period and 9.5 per cent in the April-December 1999 period.

Developments in credit aggregates in the first half of 1999, i.e. about three months after the imposition of the above measures, were not particularly satisfactory, as credit expansion decelerated slightly, but stayed at high levels. Consumer loans, in particular, were increasing at a twelve-month rate of over 40 per cent, owing to a large growth of personal loans, for the granting of which no supporting documents are required. In July 1999, the Bank of Greece took additional measures, specifically for consumer loans: if such loans increased over 2 per cent in the July-September 1999 period and over 6 per cent in the July-December 1999 period, an amount twice as much as the overrun would have to be deposited in a six-month non-interest-bearing account with the Bank of Greece.

Total credit to the private sector grew by 1,797 billion drachmas or 14 per cent in 1999, compared with a 1,672 billion or 15 per cent increase in 1998. It is worth noting that credit expansion fluctuated sharply in the course of the year: in the first half, the twelve-month growth rate of lending followed a generally downward course, falling to 11 per cent

<sup>1</sup> See Monetary Policy Council Act 13/16 April 1999.



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

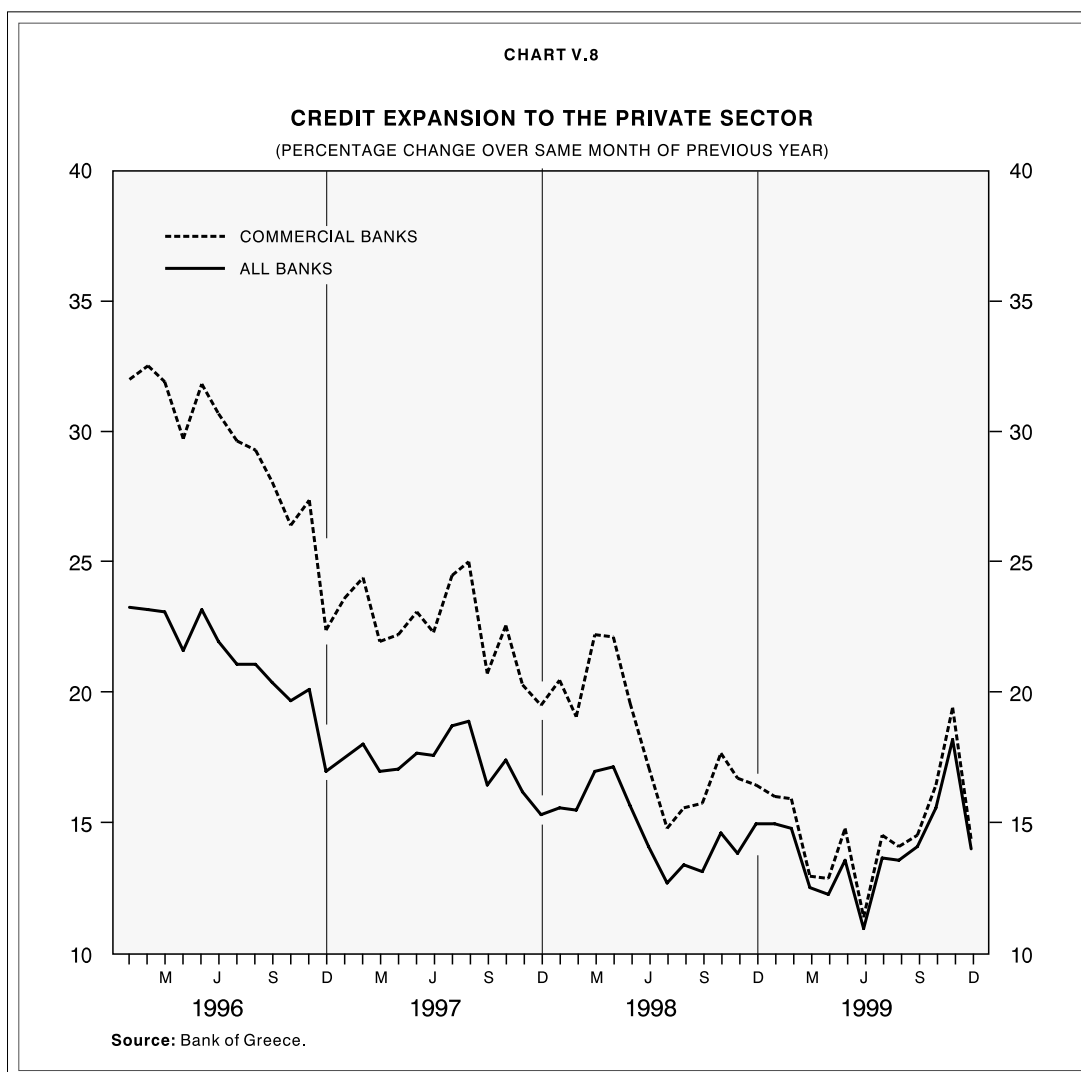
Year	Total credit			Breakdown by maturity						Breakdown by currency					
				Long-term			Short-term			Drachmas			Foreign currency		
	Billion drachmas	Percentage points	Percentage of GDP	Billion drachmas	Percentage points	Billion drachmas	Billion drachmas	Percentage points	Percentage points	Billion drachmas	Percentage points	Billion drachmas	Billion drachmas	Percentage points	Percentage points
1990 <sup>1</sup>	647.5	16.5	4.9	295.9	16.7	351.6	588.7	16.4	15.6	588.7	15.6	58.8	58.8	40.1	40.1
1991 <sup>1</sup>	732.0	16.4	4.5	237.0	11.6	495.0	593.2	20.6	13.9	593.2	13.9	138.8	138.8	72.6	72.6
1992 <sup>1</sup>	878.4	17.1	4.7	198.6	8.8	679.8	718.1	23.7	14.9	718.1	14.9	160.3	160.3	48.6	48.6
1993 <sup>1</sup>	672.9	11.5	3.2	188.9	7.7	484.0	526.4	14.3	9.9	526.4	9.9	146.5	146.5	29.9	29.9
1994 <sup>1</sup>	827.2	13.8	3.5	240.8	9.3	586.4	547.8	17.2	10.2	547.8	10.2	279.4	279.4	43.9	43.9
1995	1,503.3	22.0	5.7	513.2	18.2	990.1	949.0	24.7	16.1	949.0	16.1	554.3	554.3	60.5	60.5
1996 <sup>1</sup>	1,414.0	17.0	4.8	443.5	13.3	970.5	570.0	19.4	8.3	570.0	8.3	844.0	844.0	57.4	57.4
1997 <sup>1</sup>	1,476.7	15.3	4.8	636.3	16.9	840.4	1,052.3	14.2	14.3	1,052.3	14.3	424.4	424.4	18.3	18.3
1998	1,671.9	15.0	4.8	657.9	14.9	1,014.0	1,295.7	15.1	15.4	1,295.7	15.4	376.2	376.2	13.7	13.7
1999*	1,797.4	14.0	4.7	751.3	14.8	1,046.1	1,069.4	13.5	11.0	1,069.4	11.0	728.0	728.0	23.4	23.4

<sup>1</sup> Excluding the effect of the conversion of state-guaranteed loans into government bonds due to the calling-in of relevant guarantees.

\* Provisional data.

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

at the end of June. It then accelerated steeply until the end of November 1999, and finally dropped to 14 per cent in December (see Chart V.8). The deceleration of credit expansion in 1999 was due to a limited increase especially in short-term drachma-denominated loans, in contrast to a considerably faster growth of foreign currency loans. In particular, drachma-denominated loans increased by 1,069 billion drachmas or 11 per cent in 1999 (1998: 1,269 billion drachmas or 15.4 per cent), while loans in foreign currency grew by



728 billion drachmas or 23.4 per cent in 1999 (1998: 376 billion drachmas or 13.7 per cent, see Table V.4). As mentioned above, however, the significantly larger change in the outstanding balance of foreign currency loans in 1999 was due to the appreciation of the Japanese yen (30 per cent) and the US dollar (16.2 per cent). Since roughly two-thirds of all foreign currency loans have been contracted in those two currencies, their appreciation against the drachma led to an increase in the outstanding balance of loans, in drachma

terms, without involving an actual increase in bank loans. Net of valuation differences, estimated at 520 billion drachmas for 1999 (1998: 220 billion), foreign currency loans increased by 6.7 per cent (1998: 5.7 per cent) and total credit expansion to the private sector by 10 per cent (1998: 13 per cent). This decline is associated with the measures taken by the Bank of Greece to contain credit expansion, as well as with money market developments. In fact, funds raised by enterprises (excluding banks and portfolio investment companies) through the stock market amounted to 1,628 billion drachmas in 1999, almost triple the amount raised in 1998 (556 billion drachmas).

The large foreign exchange valuation differences reflected mainly increased borrowing by Greek companies in Japanese yen. In greater detail, loans in yen rose by 48.9 per cent in 1999, or 14.5 per cent net of valuation differences. As a result, at end-1999 they represented 47.8 per cent of total foreign currency loans, compared with 39.6 per cent at end-1998 and 19.8 per cent at end-1997. The preference for yen-denominated loans stemmed from their very low interest rates, which fell further during 1999 (January 1999: 3.9 per cent, December 1999: 3.3 per cent). The share of other currencies in business firms' borrowing was as follows: Deutschemark and euro 20.8 per cent (1998: 21.6 per cent), US dollar 14.9 per cent (1998: 17.7 per cent), Swiss franc 13.6 per cent (1998: 15.2 per cent) and other currencies 2.9 per cent (1998: 5.9 per cent). This shows that euro-denominated borrowing dropped somewhat in 1999, although these loans increased by 19 per cent. This development is attributed to the fact that the outstanding balances of loans in Japanese yen and US dollars increased considerably owing to foreign exchange valuation differences. Increased demand for euro was related to the stability of the exchange rate of the drachma against the euro and with the relatively low interest rates on euro-denominated loans. Specifically, the interest rate charged by Greek banks on short-term business loans in euro declined in 1999 and was 8.7 percentage points lower, on average, than that on corresponding drachma loans.

### *3.3 Sectoral breakdown of credit to the private sector*

A sectoral analysis of credit expansion (see Table V.5) reveals a considerable deceleration of credit to trade, while the growth rate of credit to consumers, shipping and tourist enterprises showed a smaller deceleration and the outstanding balance of loans to leasing companies decreased. By contrast, the growth rate of credit to manufacturing, housing and agriculture accelerated.

In particular, credit to manufacturing, which includes large and small-scale industry and mining, grew by 371 billion drachmas or 11.6 per cent in 1999 (1998: 195 billion drachmas or 6.1 per cent). Thus, credit expansion to manufacturing contributed 2.9 percentage points to total credit expansion to the private sector in 1999, compared with 1.7 points in 1998 (see Chart V.9). Nevertheless, the actual increase in loans to manufacturing firms was lower, since the change in outstanding balances includes substantial foreign

exchange valuation differences. Net of such differences, credit expansion is limited to about 7 per cent. It should be noted that manufacturing firms raised large amounts of funds through the stock market (1999: 396 billion drachmas, 1998: 175 billion).

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

	Outstanding balances on 31 Dec. 1999* (billion drachmas)	Changes in outstanding balances					
		Billion drachmas			Percentage points		
		1997 <sup>1</sup>	1998	1999*	1997 <sup>1</sup>	1998	1999*
1. <u>Agriculture</u>	1,226.7	30.8	9.7	98.7	2.8	0.9	8.7
Long-term loans	730.4	53.7	21.5	25.2	8.5	3.1	3.6
Short-term loans	496.3	-22.9	-11.8	73.5	-5.0	-2.7	17.4
2. <u>Manufacturing and mining</u>	3,571.2	163.5	194.6	371.2	5.4	6.1	11.6
Long-term loans	775.9	10.1	32.5	66.1	1.5	4.8	9.3
Short-term loans	2,795.3	153.4	162.1	305.1	6.5	6.5	12.3
3. <u>Trade</u>	3,141.1	426.5	474.6	169.6	22.6	20.5	5.7
Domestic	2,404.8	366.3	410.9	156.4	24.9	22.4	7.0
Import	580.4	45.9	37.1	22.5	15.6	10.9	4.0
Export	65.7	4.8	2.7	-15.7	6.5	3.5	-19.3
Tobacco	90.2	9.5	23.9	6.4	18.8	39.9	7.6
4. <u>Housing</u>	2,915.9	370.0	407.9	583.6	23.8	21.2	25.0
5. <u>Consumer credit</u>	1,319.5	157.1	269.0	318.9	27.3	36.8	31.9
6. <u>Other</u>	2,440.7	328.8	316.1	255.5	21.3	16.9	11.7
– Tourism	547.4	25.6	48.4	34.3	5.8	10.4	6.7
– Shipping	588.5	103.5	57.6	40.5	26.7	11.7	7.4
– Leasing companies	77.4	57.2	15.3	-72.6	73.9	11.4	-48.4
– Other	1,227.4	142.5	194.8	253.3	22.4	25.0	26.0
<u>Total</u>	14,615.1	1,476.7	1,671.9	1,797.4	15.3	15.0	14.0
Long-term loans	5,817.9	636.3	657.9	751.3	16.9	14.9	14.8
Short-term loans	8,797.2	840.4	1,014.0	1,046.1	14.2	15.1	13.5

1 Excluding the effect of the conversion of state-guaranteed loans into government bonds due to the calling-in of relevant guarantees.

\* Provisional data.

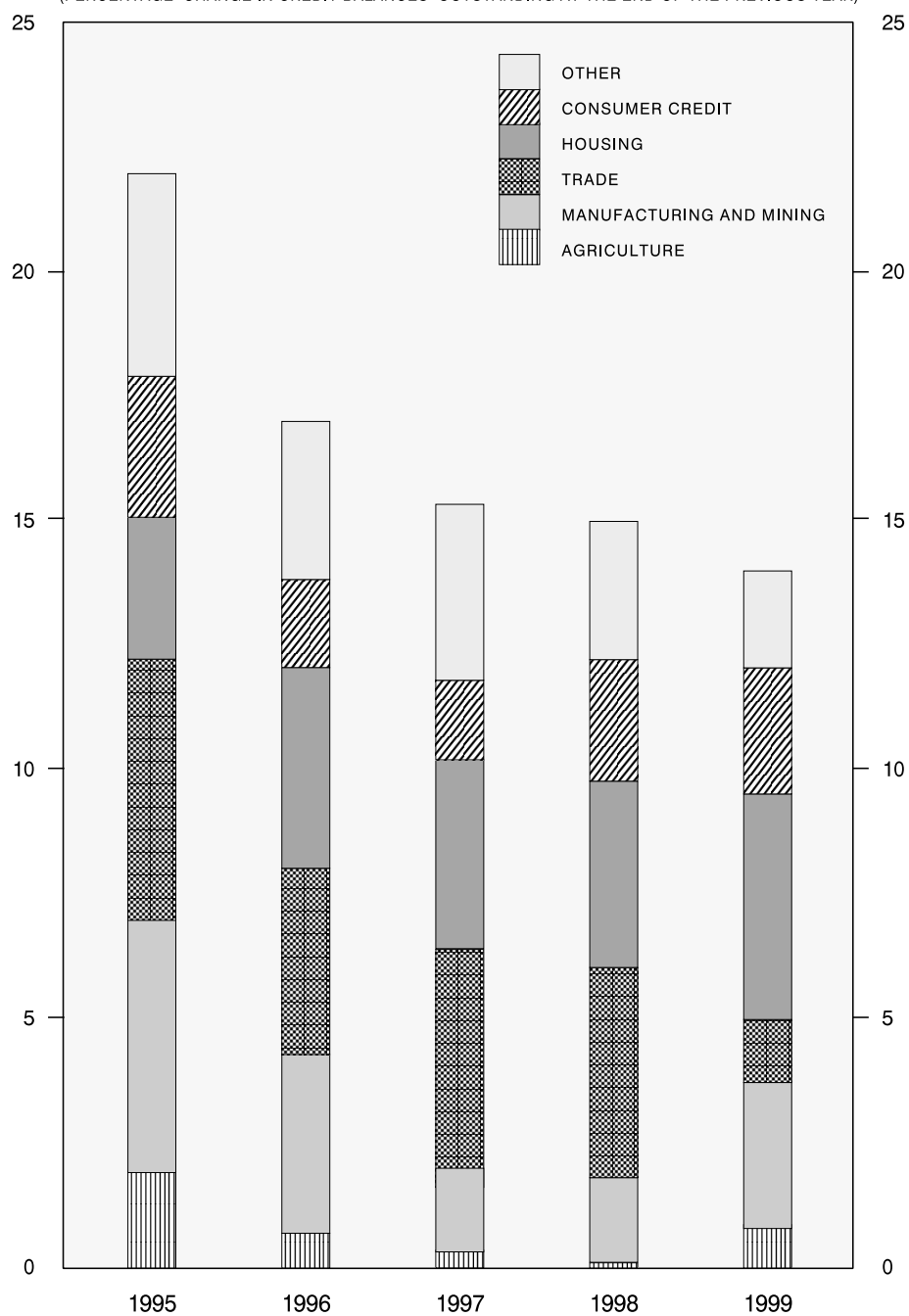
Source: Bank of Greece.

Credit expansion to the agricultural sector accelerated significantly in 1999, with loans increasing by 99 billion drachmas or 8.7 per cent (1998: 10 billion drachmas or 0.9 per cent). As a result, the share of agriculture to total credit expansion rose to 0.8 per-

CHART V.9

**BREAKDOWN OF CREDIT TO THE PRIVATE SECTOR  
BY BRANCH OF ECONOMIC ACTIVITY**

(PERCENTAGE CHANGE IN CREDIT BALANCES OUTSTANDING AT THE END OF THE PREVIOUS YEAR)



Source: Bank of Greece.

centage point in 1999, against 0.1 percentage point in 1998. This acceleration reflected changes in short-term loans (1999: +74 billion drachmas or +17.4 per cent, 1998: -12 billion drachmas or -2.7 per cent), while the increase in long-term loans remained roughly at 1998 levels.

As mentioned above, credit expansion to trade decelerated to 170 billion drachmas or 5.7 per cent, from 475 billion drachmas or 20.5 per cent in 1998. As a result, the share of trade in credit expansion to the private sector was 1.3 percentage points, compared with 4.3 percentage points in 1998. Credit expansion in all types of trade decelerated, most notably in domestic trade. With the exception of the October-November period, credit expansion to trade followed a downward course in 1999. This development was related to the measures taken by the Bank of Greece to contain credit. As mentioned above, these measures concerned specifically loans to domestic and import trade and consumers. However, the deceleration of credit expansion to trade was also related to developments in the capital market. In fact, commercial firms replaced part of their bank borrowing with fund-raising through the stock exchange, which reached 195 billion drachmas in 1999, compared with a mere 27 billion in 1998. It should be noted that before 1999 commercial firms were raising very small amounts from the capital market.

From the beginning of 1999, credit to housing followed an expansionary course, which continued until the end of the year. Housing loans rose by about 584 billion drachmas or 25 per cent in 1999 (1998: 408 billion drachmas or 21.2 per cent) and their share in total credit expansion to the private sector reached 4.5 percentage points, compared with 3.7 points in 1998. The acceleration of housing credit reflected a substantial increase in housing loans by commercial banks (1999: 418 billion drachmas or 26.9 per cent, 1998: 242 billion drachmas or 18.5 per cent) and was related to keen competition between banks to increase their market share. By contrast, the growth rate of loans granted by the Deposits and Loans Fund and the Postal Savings Bank decelerated, although it remained at relatively high levels (1999: 85 billion drachmas or 15.7 per cent, 1998: 112 billion drachmas or 26 per cent). Those two specialised credit institutions offer housing loans to employees of the broader public sector only.

The growth rate of consumer credit decelerated, but this is still the most rapidly expanding category of loans. In greater detail, consumer loans rose by 319 billion drachmas or 31.9 per cent in 1999, compared with 269 billion drachmas or 36.8 per cent in 1998. Their share in total credit expansion to the private sector thus rose to 2.5 percentage points, from 2.4 points in 1998. For a better evaluation of credit expansion to consumers in relation to other categories of credit, it should be noted that the change in consumer loans concerns a real increase and does not include valuation differences, since foreign currency loans account for merely 1.8 per cent of total consumer credit. Consumer loans grew rapidly in the first four months of 1999 and then their expansion started decelerating, a trend which became stronger in the last four months of the year. This development is associated with the measures taken by the Bank of Greece to restrain credit expansion; as mentioned above, these measures were stricter for consumer loans. It should be noted

that the growth rate of consumer loans in 1999 slowed down because of the very small increase in loans requiring supporting documents. By contrast, loans through credit cards, especially personal loans, grew faster. Banks offer personal loans of up to one million drachmas per borrower, without requiring submission of purchase documents. Consequently, the possibility that these loans are used to finance non-consumption expenditure, e.g. the purchase of securities, should not be ruled out.

Credit expansion to shipping companies in 1999 slowed down considerably to 41 billion drachmas or 7.4 per cent, from 58 billion drachmas or 11.7 per cent in 1998. The deceleration is associated with fund-raising by these companies through the stock exchange, amounting to 146 billion drachmas, compared with 65 billion in 1998. Credit to the tourist industry also increased at a slower pace and stood at low levels (1999: 34 billion drachmas or 6.7 per cent, 1998: 48 billion drachmas or 10.4 per cent), while loans to leasing companies dropped considerably, in absolute figures. It should be noted, however, that leasing companies resorted increasingly to the stock market for fund-raising (1999: 30 billion drachmas, 1998: 12 billion drachmas).

### *3.4 Evaluation of Bank of Greece measures to reduce credit expansion*

From the analysis of bank credit to the private sector and to public enterprises and entities in the nine months from April to December 1999, it is obvious that banks, as a whole, did not exceed the limits set by the Bank of Greece on credit expansion to domestic/import trade and consumers, as well as to the “other” branches of the private sector and to public enterprises and entities (see Table V.6). In particular, during the first three months after the introduction of the measures (April-June 1999), credit expansion reached 2.9 per cent for domestic/import trade and consumers and 0.4 per cent for the “other” sectors. Therefore, the 3.5 per cent ceiling was not exceeded in either of the two categories of loans. It should however be noted that the relatively low rate of increase in total credit domestic/import trade and consumers during this period was due to the very low (a mere 0.8 per cent) increase in loans to domestic/import trade, while loans to consumers grew by 8.4 per cent. The sharp increase in consumer loans prompted the Bank of Greece to take additional measures in July 1999.

In the six months from April to September 1999, credit expansion to domestic/import trade and consumers rose to 6.8 per cent and to 4.2 per cent for the other sectors, compared with a 5.5 per cent ceiling for each of the two categories. Thus, the ceiling was exceeded only in the first category, a development attributable to a 12 per cent increase in consumer loans, while credit expansion to domestic/import trade remained relatively low (4.8 per cent). Finally, in the April-December 1999 period, credit expansion to domestic/import trade and consumers reached 9.5 per cent and to the other branches 8.9 per cent, compared with a ceiling of 9.5 per cent for each category. Therefore, the limit was not exceeded for any of the two categories of loans. It should be noted, however, that

TABLE V.6  
FINANCING OF THE PRIVATE SECTOR AND OF PUBLIC ENTERPRISES AND ENTITIES  
(Changes in outstanding balances against March 1999)

	April-June 1999			April-September 1999			April-December 1999*		
	Billion drachmas	Percentage points	Limit of credit expansion net of deposit requirements (percentage points) <sup>1</sup>	Billion drachmas	Percentage points	Limit of credit expansion net of deposit requirements (percentage points) <sup>1</sup>	Billion drachmas	Percentage points	Limit of credit expansion net of deposit requirements (percentage points) <sup>1</sup>
<b>T o t a l</b>	<b>159</b>	<b>1.2</b>	<b>3.5</b>	<b>677</b>	<b>4.9</b>	<b>5.5</b>	<b>1,243</b>	<b>9.0</b>	<b>9.5</b>
— Domestic/import trade and consumer credit	115	2.9	3.5	268	6.8	5.5	372	9.5	9.5
— Other branches of the private sector, and public enterprises and entities	44	0.4	3.5	409	4.2	5.5	871	8.9	9.5

1 Monetary Policy Council Act 13/16 April 1999.

\* Provisional data.

Source: Bank of Greece.



the containment of credit expansion under the first category to the 9.5 per cent ceiling set by the Bank of Greece was due to the limited growth of loans to domestic/import trade (5.7 per cent), while consumer loans rose substantially (19 per cent). Especially as regards consumer loans, in relation to the additional measures introduced in July 1999,<sup>1</sup> during the July-September 1999 period they rose by 3.3 per cent, compared with a 2 per cent ceiling, and by 9.8 per cent during the July-December 1999 period, compared with a 6 per cent ceiling.

These developments show that the measures taken by the Bank of Greece contributed to the containment of credit expansion, especially if account is taken of the trends prevailing in the early months of 1999 and the impact of foreign exchange valuation differences, which, as mentioned above, increased substantially the outstanding balances on foreign currency loans. Nevertheless, the growth rate of loans was still high, so the Bank of Greece decided to extend, until end-March 2000, the measures for the containment of credit expansion. Hence, monetary policy retained its anti-inflationary stance. The ceiling on credit expansion during the period from March 1999 to March 2000 was 12 per cent, for both loans to domestic/import trade and consumers as well as loans to other sectors.

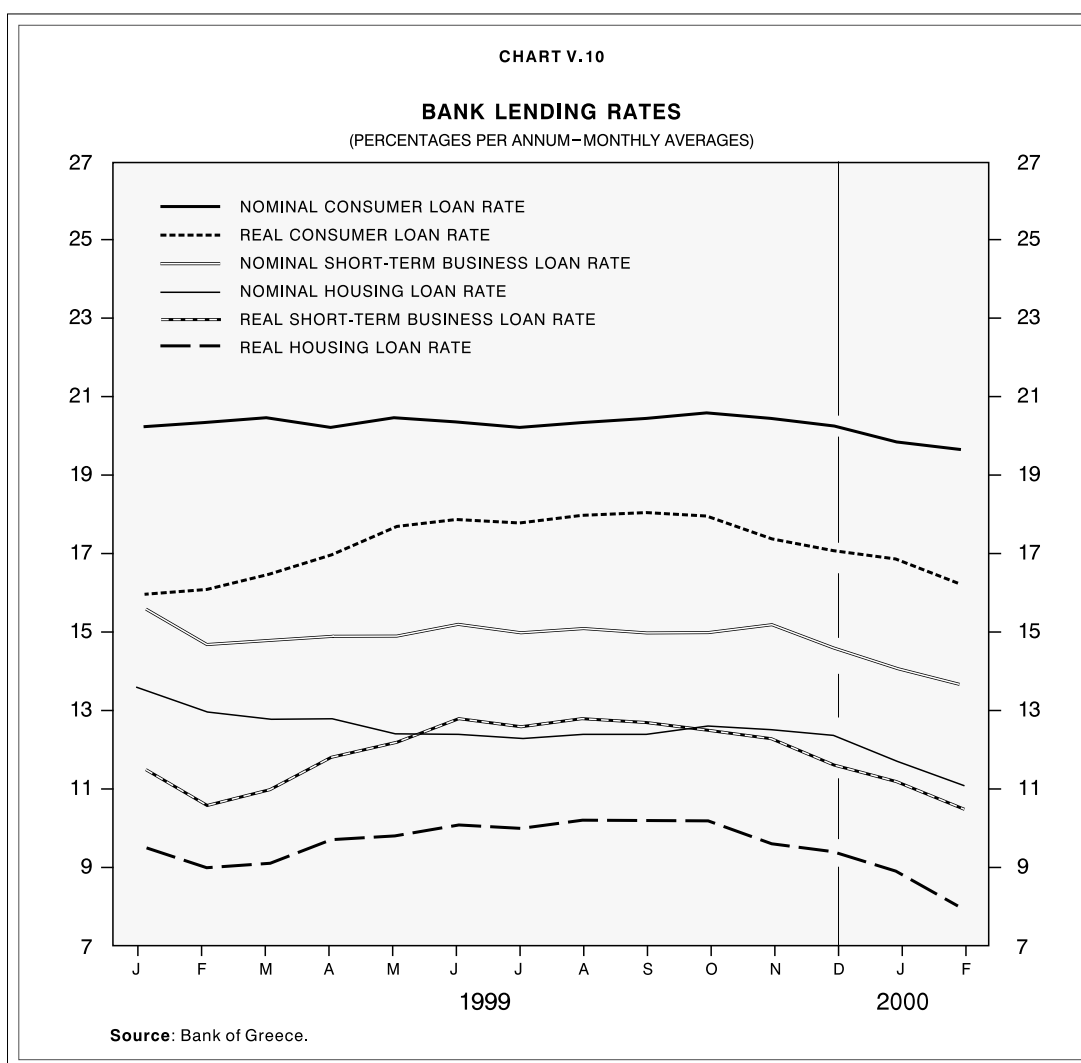
### *3.5 Bank lending rates*

Interest rates on drachma loans to business firms showed little change in 1999 (see Chart V.10). More specifically, the interest rate on short-term business loans fell by 0.9 percentage point in the first two months of 1999, but it then followed an upward course, reaching 15.2 per cent in June and staying almost unchanged until November 1999. In mid-December, after the Bank of Greece cut its interest rates by 0.25-0.75 percentage point, the interest rate on short-term business loans dropped by 0.6 percentage point and at end-1999 was 14.6 per cent, i.e. one percentage point lower than at the beginning of the year. The interest rate on long-term business loans followed a downward course throughout the year and stood at 13.2 per cent in December, compared with 14.4 per cent at the beginning of the year.

Interest rates on housing loans, where competition between banks is quite intense, recorded greater changes. In particular, interest rates on loans maturing in up to five years were cut by about 2 percentage points in 1999. In December, interest rates on fixed-rate loans stood at 7.9 per cent, while those on floating-rate loans reached 12.3 per cent. Changes in interest rates on loans maturing in more than five years were smaller: interest rates on fixed-rate loans were lowered to 8 per cent in December 1999, compared with 10.6 per cent at the beginning of the year, while interest rates on floating-rate loans were reduced to 12.4 per cent in December 1999, from 13.6 per cent at the beginning of the year.

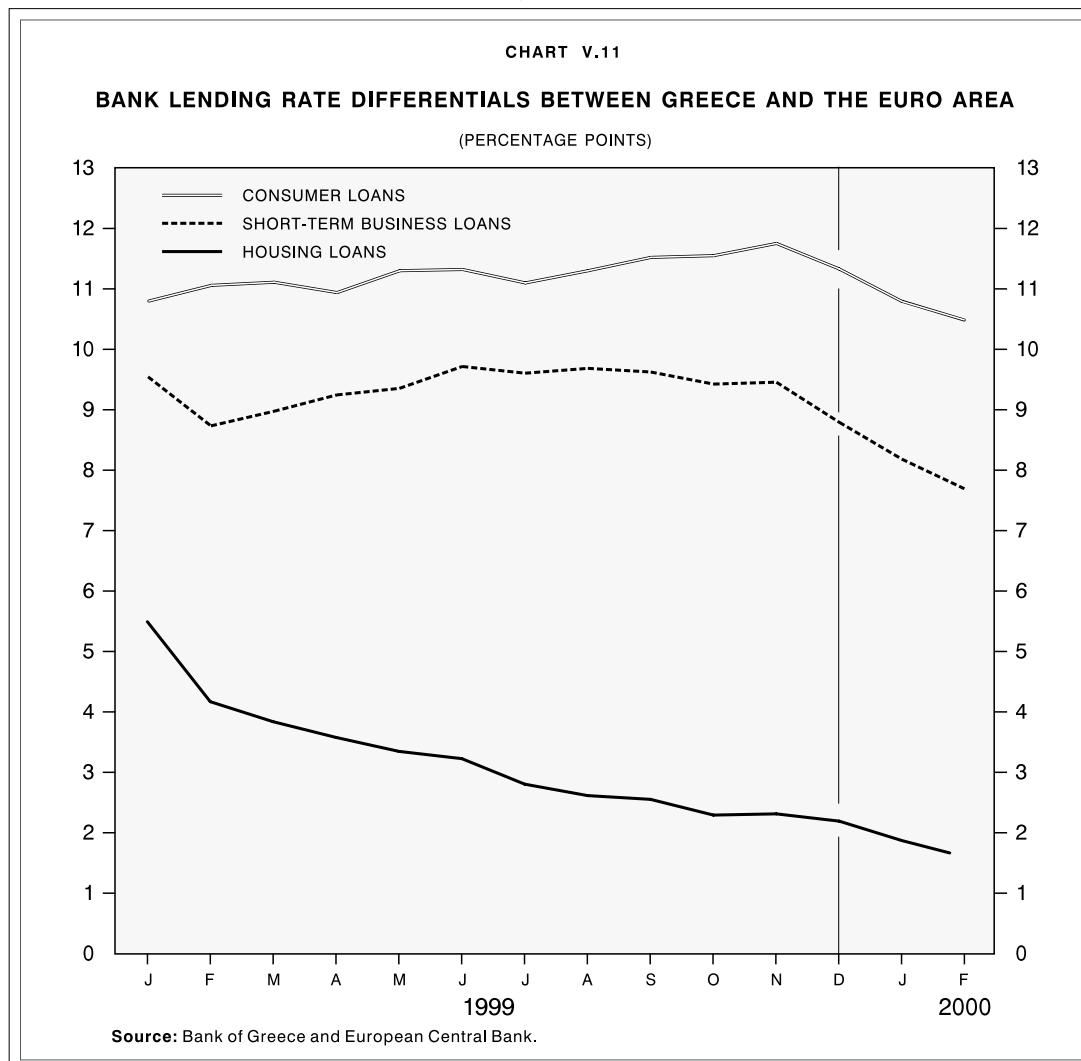
<sup>1</sup> See Monetary Policy Council Act 16/28 July 1999.

Interest rates on consumer loans remained unchanged on average. In greater detail, interest rates on loans through credit cards dropped to 21.9 per cent in December 1999, from 22.4 per cent in January 1999, interest rates on loans against supporting documents remained at 18.2 per cent, while interest rates on personal loans – i.e. the category of consumer loans with the highest demand – rose to 20.7 per cent in December 1999, from 20.4 per cent at the beginning of the year.



The conclusion drawn from the above analysis is that, in real terms, interest rates on all categories of bank loans were higher in 1999 than at end-1998. This was because inflation, calculated on the basis of the twelve-month rate of change in the consumer price index, gradually fell by about 2 percentage points, from 3.9 per cent in December 1998 to 2 per cent in September 1999, rising to 2.7 per cent in December 1999.

The downward trend of lending rates in December 1999 continued in the first two months of 2000, as they were adjusted to lower levels, following the cuts in Bank of Greece rates in December 1999 and January 2000 (see Chart V.10). More specifically, in February 2000, the interest rate on short-term bank credit to business firms was about one percentage point lower than in December 1999 (February 2000: 13.7 per cent, December 1999:



14.6 per cent). Interest rates on long-term credit to businesses showed a similar decrease (February 2000: 12.5 per cent, December 1999: 13.2 per cent). Interest rates on loans to households also fell. More specifically, the average interest rate on consumer loans decreased by 0.6 percentage point (February 2000: 19.7 per cent, December 1999: 20.3 per cent) and that on floating-rate housing loans maturing in more than five years fell by about 1.3 percentage points (February 2000: 11.1 per cent, December 1999: 12.4 per cent).

Differentials between Greek lending rates and the corresponding euro area rates were between 1.7 and 10.5 percentage points in February 2000, depending on loan category (see Chart V.11). The biggest differential (10.5 percentage points) was observed in consumer loans and the smallest (1.7 percentage points) in fixed-rate housing loans maturing in more than five years. The interest rate differential in short-term loans to business firms was 7.7 percentage points, while for long-term loans it was less (6.7 percentage points). In consequence, the convergence of long-term rates was greater, as was to be expected.

## APPENDIX TO CHAPTER V

### CHRONOLOGY OF MAIN MONETARY POLICY MEASURES

#### **11 January 1999**

The terms and conditions concerning the establishment and operation of bureaux de change are updated and codified. In particular, the business scope of these entities is broadened to include purchases of foreign banknotes from authorised banks and/or the Bank of Greece. Bureaux de change may also debit or credit their foreign exchange accounts with cheques and foreign banknotes, while the data they must keep, the relevant control procedure and the penalties that may be imposed on them are laid down.

#### **12 January 1999**

- Effective from 13 January 1999, the intervention rate of the Bank of Greece for the acceptance of 14-day deposits is lowered to 12 per cent from 12.25 per cent.
- Effective from 14 January 1999, the interest rate for the first tier of the deposit facility is lowered to 11.5 per cent from 11.6 per cent.
- Effective from 14 January 1999, the Bank of Greece Lombard rate is lowered to 13.5 per cent from 15.5 per cent.
- Effective from 14 January 1999, the rate on credit institutions' overdrafts from their current account with the Bank of Greece is lowered to 20 per cent from 22 per cent.

#### **29 January 1999**

With a view to adjusting central bank reporting requirements to the requirements for the conduct of monetary policy in the framework of the European System of Central Banks, credit institutions must submit to the Bank of Greece more detailed data on deposit and lending rates.

#### **2 April 1999**

The ceilings on mortgage bank financing of: a) natural persons on personal guarantee and b) business firms for working capital are raised for each of the above categories from 5 per cent to 15 per cent of the lending bank's total outstanding balance of credit.

**6 April 1999**

With the aim of absorbing from the interbank market the part of liquidity which has become of a more permanent nature, the Bank of Greece establishes, on a monthly basis, competitive interest rate tenders for the acceptance of three-month deposits.

**16 April 1999**

With a view to further enhancing the anti-inflationary policy pursued, the Bank of Greece decides that the following amounts shall be deposited with it in a non-interest-bearing account for a period of six months:

i) Any amount of the commercial, housing and cooperative banks' total outstanding balance of consumer credit and loans to domestic and import trade which exceeds the corresponding total balance outstanding on 31 March 1999 by:

3.5 per cent or 150 million drachmas on 30 June 1999,

5.5 per cent or 250 million drachmas on 30 September 1999 and

9.5 per cent or 400 million drachmas on 31 December 1999, whichever is the highest in all cases.

ii) Any amount of the banks' total outstanding balance of loans, other than the above, to the private sector and public enterprises and entities which exceeds the corresponding total balance outstanding on 31 March 1999 by:

3.5 per cent or 200 million drachmas on 30 June 1999,

5.5 per cent or 300 million drachmas on 30 September 1999 and

9.5 per cent or 350 million drachmas on 31 December 1999, whichever is the highest in all cases.

**18 May 1999**

Effective from 19 May 1999, the maximum borrowing of credit institutions from the Bank of Greece through the Lombard facility is adjusted as follows:

a) The additional amount allocated to each credit institution after the allocation of total borrowing is raised from 300 to 700 million drachmas.

b) The additional amount to which a credit institution is entitled if it is a Primary Dealer is raised from 10 to 15 billion drachmas.

**23 June 1999**

With a view to enabling new credit institutions (established from 1 January 1998 onwards) to deal with the special conditions which have emerged in connection with Monetary Policy Council Act 13/16 April 1999 regarding temporary reserve requirements on credit institutions whose credit expansion exceeds the limits set, the Bank of Greece allows the above new institutions to calculate in an alternative way the ceiling on the change in their outstanding balance of loans over corresponding balances on 31 March 1999. This

ceiling is calculated as a percentage of the paid-up share capital or cooperative or endowment capital of the above credit institutions.

### **28 July 1999**

Credit institutions whose outstanding balances on all kinds of consumer credit exceed corresponding balances on 30 June 1999 by:

2 per cent or 50 million drachmas on 30 September 1999 and

6 per cent or 130 million drachmas on 31 December 1999

shall be subject to additional temporary reserve requirements, apart from those provided for in Monetary Policy Council Act 13/16 April 1999. The requirements shall be in the form of a six-month deposit in a non-interest-bearing account with the Bank of Greece of double the amount in excess of the above limits.

### **5 August 1999**

The provisions on the supply of foreign exchange for current transactions between residents of Greece and non-residents, as well as for capital movement, are simplified. More specifically, the maximum amount up to which no supporting documents are required for the supply of foreign exchange to cover personal needs and current transactions of natural persons is raised from 2,000 euro to 10,000 euro. Moreover, supporting documents are not required for small value transactions (up to 2,000 euro). Further, the requirement to submit multiple statistical statements at various stages of the process of capital transfer abroad is abolished.

### **23 September 1999**

Effective from 1 October 1999, the maximum total borrowing of credit institutions from the Bank of Greece through the Lombard facility is raised from 200 to 480 billion drachmas. The amount added after the allocation of total borrowing is determined as follows:

(i) 1 billion drachmas for each cooperative bank authorised to operate throughout the country and 700 million drachmas for each other cooperative bank,

(ii) 2 billion drachmas for each other credit institution.

The additional amount to which a credit institution is entitled if it is a Primary Dealer is raised from 15 to 25 billion drachmas.

In the period 15 November 1999-14 January 2000, borrowing through the Lombard facility is not subject to any quantitative restriction, to the extent that it is covered by an equivalent value of securities valued according to applicable rules.

### **27 September 1999**

— The maximum amount of credit supplied by credit institutions to natural persons on collateral of securities listed on the Athens Stock Exchange is raised from 5 to 15 mil-

lion drachmas; such credit may not exceed 50 per cent of the current market value of these securities.

— Credit institutions are allowed to cover all kinds of financing requirements of investment firms and securities companies.

#### **20 October 1999**

— The intervention rate of the Bank of Greece for the acceptance of 14-day deposits is lowered to 11.5 per cent from 12 per cent.

— Effective from 21 October 1999, the interest rate for the first tier of the deposit facility is lowered to 11 per cent from 11.5 per cent and that for the second tier to 9.25 per cent from 9.75 per cent.

— Effective from 21 October 1999, the Bank of Greece Lombard rate is lowered to 13 per cent from 13.5 per cent.

#### **7 December 1999**

Effective from 10 December 1999, the minimum daily balance of credit institutions' reserve requirements with the Bank of Greece is lowered to 85 per cent from 90 per cent of the respective requirement.

#### **15 December 1999**

— The intervention rate of the Bank of Greece for the acceptance of 14-day deposits is lowered to 10.75 per cent from 11.5 per cent.

— Effective from 16 December 1999, the interest rate for the first tier of the deposit facility is lowered to 10.25 per cent from 11 per cent and that for the second tier to 9 per cent from 9.25 per cent.

— Effective from 16 December 1999, the Bank of Greece Lombard rate is lowered to 12.25 per cent from 13 per cent.

#### **24 December 1999**

Effective from 27 December 1999, the Bank of Greece Lombard rate is lowered to 11.5 per cent from 12.25 per cent.

#### **29 December 1999**

The measures restraining banks' credit expansion are extended until the end of March 2000. In particular, the following amounts shall be deposited with the Bank of Greece in a non-interest-bearing account for a period of six months:



(i) any amount of the total outstanding balance on 31 March 2000 of consumer credit and loans to domestic and import trade which exceeds by 12 per cent or 700 million drachmas the corresponding total balance outstanding on 31 March 1999,

(ii) any amount of the total outstanding balance on 31 March 2000 of loans, other than the above, to the private sector and public enterprises and entities which exceeds by 12 per cent or 850 million drachmas the corresponding total balance outstanding on 31 March 1999.

If the total outstanding balance of consumer credit on 31 March 2000 exceeds by 8.5 per cent or 260 million drachmas the corresponding balance outstanding on 30 June 1999, an additional amount equal to double the one in excess shall be deposited with the Bank of Greece in a non-interest-bearing account for a period of six months.

Alternative drachma ceilings are laid down for small banks and banks which began to operate from 1 January 1998 onwards.

### **26 January 2000**

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

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

— Effective from 27 January 2000, the Bank of Greece Lombard rate is lowered to 11 per cent from 11.5 per cent.

### **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 European System of Central Banks, 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 for Greece for the acceptance of 14-day deposits is lowered to 9.25 per cent from 9.75 per cent.

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

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

- With a view to further adjusting the operational framework for the conduct of monetary policy to the respective framework of the Eurosystem, the amended and codified in a single text provisions concerning monetary policy instruments are put into force as of 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 for this financing, the 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 per cent.

**17 March 2000**

Banks are allowed to finance legal and natural persons for the purchase of shares, provided that, by such acquisition, participation in the share capital of a firm is maintained at, or increased to, at least 5 per cent. 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 by 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 for Greece for the acceptance of 14-day deposits is lowered to 8.75 per cent from 9.25 per cent.

- Effective from 20 April 2000, the interest rate for the first tier of the deposit facility is lowered to 8 per cent from 8.75 per cent and that for the second tier to 7.5 per cent from 8 per cent.
- Effective from 20 April 2000, the Bank of Greece Lombard rate is lowered to 9.5 per cent from 10.25 per cent.

## VI. THE CAPITAL MARKET

### 1. INTRODUCTION

The positive course of domestic macroeconomic aggregates and the approximation of Maastricht Treaty criteria, which are a prerequisite for Greece's entry into the euro area, were the main determinants of developments in the country's capital market. In addition, structural adjustments in EU markets that were caused by the establishment of the euro area and the introduction of the new currency, as well as international capital market developments, particularly in the USA, influenced the behaviour of Greek markets to some extent and are reflected in the yields on Greek government paper. By contrast, the fluctuations observed in the emerging markets had very little effect on the Greek market. This suggests the growing maturity of the latter, now classified by international investment houses as a developed capital market.

The favourable prospects of Greece joining the euro area and the upgrading by international assessment firms of the country's credit standing contributed to the decrease in the yield differential between Greek and comparable euro area bonds. By end-1999, the yield differential between the ten-year Greek bond and the comparable German bond had fallen to less than half the differential recorded at end-1998. Furthermore, the start-up of the financial derivatives market in September 1999 is of particular importance to the markets for shares and fixed-income securities, because of its market-deepening potential.

The large increase in stock market aggregates in 1997 and 1998 continued at an impressive rate in 1999. From mid-September onwards, however, share prices and transactions on the Athens Stock Exchange (ASE) started falling, with sharp fluctuations. Developments on the ASE had a favourable impact on the market for mutual funds and led to a substantial rise in the value of their assets.

### 2. THE MARKET FOR GOVERNMENT PAPER

#### *2.1. The primary market*

Activity in the primary market for government paper in 1999 involved a series of bond issues covering a range of maturities from 3 to 15 years. Two-year savings bonds, targeted at small savers, and Treasury bills maturing in 3, 6 and 12 months were also issued. In addition, a new category of 20-year bonds was introduced in January 2000.

The nominal value of government paper issued in 1999, including 2-year savings bonds, totalled 10.4 trillion drachmas, compared with 10.1 trillion in 1998. New Treasury bill issues accounted for 22.6 per cent of all issues in 1999, compared with 46.2 per cent in 1998 (see Table VI.1). Bonds were therefore substituted for Treasury bills, a fact that

reflects the government's policy of prolonging the average maturity of public debt. As in 1998, 12-month Treasury bills accounted for 4/5 of total T-bill issues. New bond issues rose from 5.4 trillion drachmas in 1998 to 8 trillion in 1999. As in 1998,<sup>1</sup> new issues consisted of 2-year savings bonds, as well as 3-, 5-, 7-, 10- and 15-year bonds, with a more even distribution. In spite of a tendency towards the substitution of 15-year for 10-year bonds, both categories combined accounted for 41 per cent of all bond issues.

Bond and Treasury bill auctions were held successfully on pre-announced dates. Bond auctions were conducted mainly by "reopening" previous issues, so as to take advan-

TABLE VI.1  
NEW ISSUES OF GREEK GOVERNMENT PAPER IN DRACHMAS IN 1998 AND 1999

Maturity (years)	Percentage share by maturity	
	1998	1999
up to 1*	46.2	22.6
2	3.8	8.6
3	8.1	12.9
5	7.5	12.4
7	11.8	11.8
10	15.5	18.0
15	7.1	13.7
<b>Total</b>	<b>100.0</b>	<b>100.0</b>
<b>Total (trillion drachmas)</b>	<b>10.1</b>	<b>10.4</b>

\* Treasury bills.

Source: Bank of Greece.

tage of favourable conditions in the secondary market and to further deepen it. Total demand for auctioned bonds was 2.4 times higher than supply.

Yield levels at Treasury bill auctions, particularly in the case of 12-month bills, which account for the bulk of government issues, declined in 1999. For instance, the yield on the 12-month Treasury bill in the last auction of 1999 was 206 basis points lower than in the first auction of the same year. Auctioned bond yields followed secondary market yield trends.

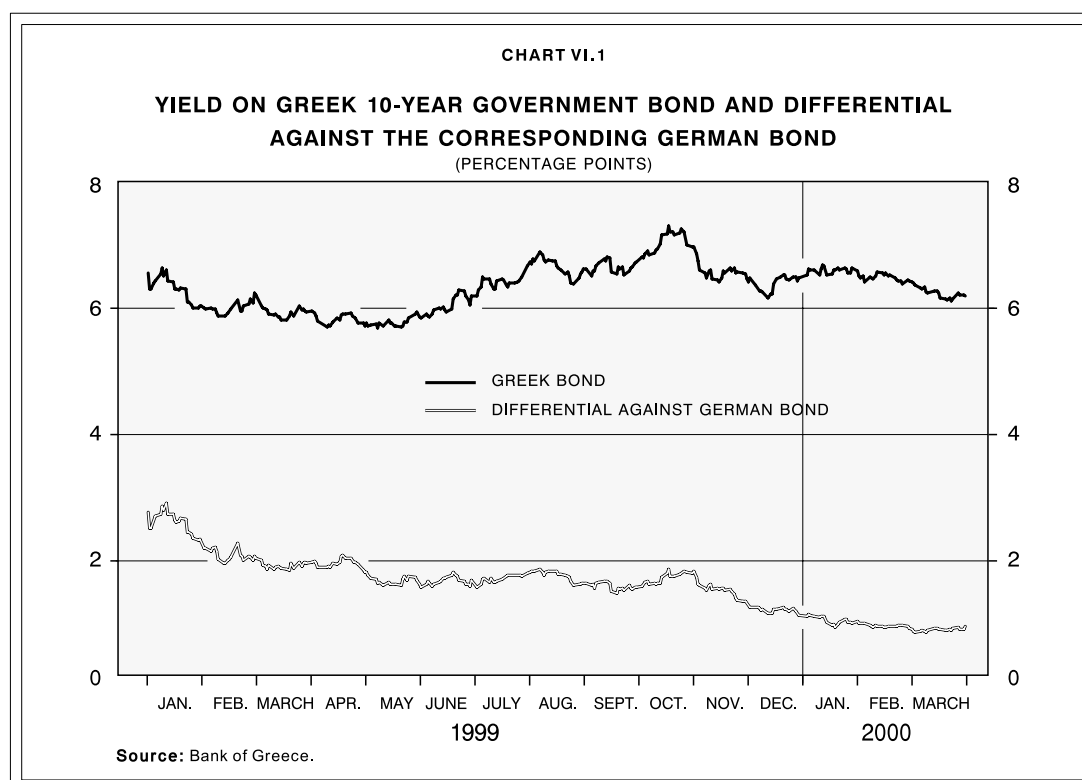
## 2.2 The secondary market

The establishment of the euro area and improved macroeconomic performances in EU countries boosted trading in the European bond market and contributed to a decrease in yields in the first half of 1999. Conditions favourable to a rise in government bond yields

<sup>1</sup> Excluding 2-year (non-savings) bonds, which had a minimal 0.8 per cent share in total government paper issues in 1998.

developed internationally in the second half of the year, as a result of increased inflationary expectations that were mainly due to the pick-up in US economic growth and the subsequent rise in key interest rates in the USA and the euro area. Yields on euro area securities rose by more than 100 basis points above the levels recorded at the beginning of 1999.<sup>1</sup>

The main development in the secondary market for government securities in 1999 was the gradual, albeit substantial, decrease in yields regardless of maturity. The steady drop in yields was all the more important considering that the international environment was marked by rising bond yields in the developed markets.



Specifically, the yield differential between the Greek and the German 10-year bond fell from roughly 270 basis points at end-1998 to about 200 basis points in March 1999 (see Chart VI.1). In the following months until October, this differential ranged between 150 and 180 basis points. The last months of 1999 were marked by a further steep fall in the yield differential to around 110 basis points. The gap between maximum and minimum yields narrowed to less than 165 basis points during 1999, compared with 185 to 200 basis points in the euro area and the USA. Moreover, as a result of moderate short-term fluctuations in bond prices in 1999, price volatility did not exceed the limits set by the

<sup>1</sup> For instance, the yield on the German 10-year bond reached roughly 5 per cent in August 1999, compared with 3.8 per cent at the beginning of the year.

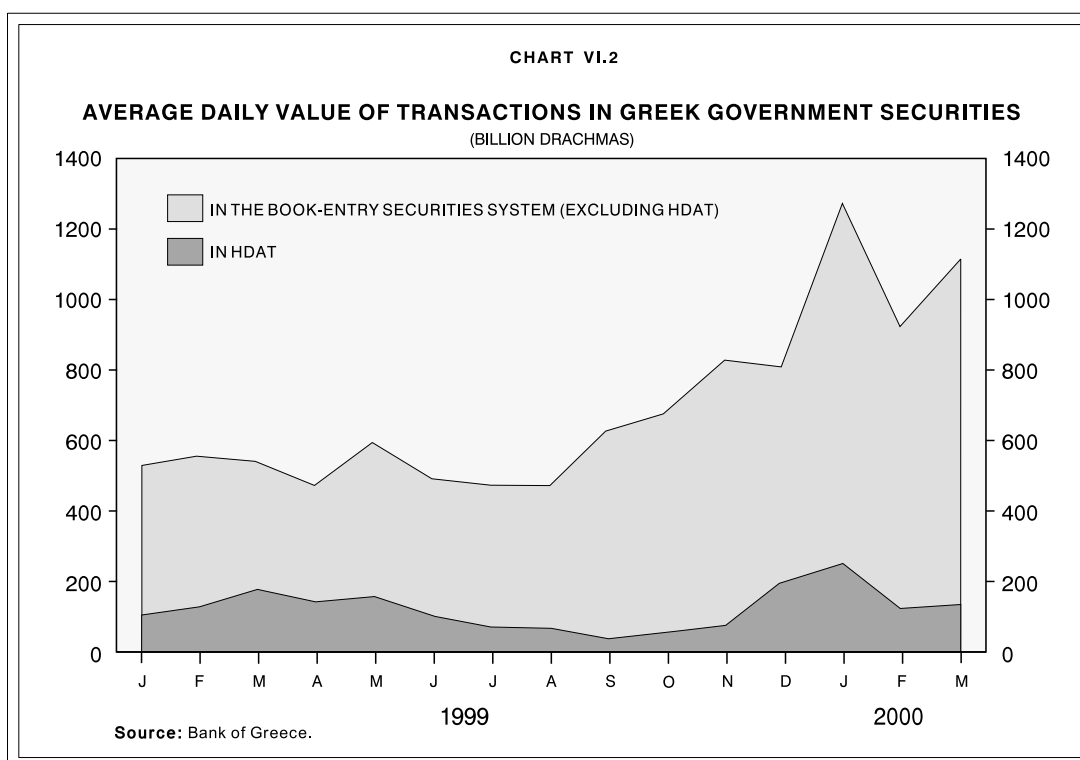
TABLE VI.2  
VALUE AND STRUCTURE OF TRANSACTIONS IN GOVERNMENT SECURITIES IN HDAT

Period	Average daily value of total transactions (billion drachmas)	Percentage share in the total value of transactions						
		Treasury bills	Government bonds				15-year	20-year
			3-year	5-year	7-year	10-year		
1999 Jan.	108.4	–	0.5	10.2	15.1	45.7	28.5	
Feb.	134.6	–	5.0	7.2	24.5	41.9	21.4	
March	179.4	–	4.6	10.7	17.1	40.2	27.4	
Apr.	142.7	–	2.8	9.8	15.6	42.7	29.0	
May	157.3	–	6.4	20.4	24.2	32.3	16.7	
June	106.1	–	8.5	16.5	19.8	35.3	19.9	
July	74.6	–	6.2	12.4	14.7	44.1	22.5	
Aug.	65.4	–	6.5	21.5	27.5	31.4	13.0	
Sept.	42.5	–	3.0	11.0	22.6	39.4	24.0	
Oct.	60.8	–	6.1	12.8	25.2	38.8	17.1	
Nov.	76.6	–	6.4	12.2	19.6	38.8	23.0	
Dec.	202.6	–	7.9	13.4	27.8	32.4	18.5	
2000 Jan.	260.4	–	4.8	11.1	22.6	37.2	19.2	5.1
Feb.	127.1	–	3.6	7.8	13.6	45.0	23.5	6.4
March	138.9	–	4.1	8.9	14.5	42.0	20.2	10.3

Source: Bank of Greece.

European Central Bank (ECB) for euro area securities in order to ensure their eligibility as collateral in intraday liquidity provision. The behaviour of government bond prices in 1998 and 1999 made it possible to use the same risk weighting for Greek bonds as that applied to euro area securities in the provision of liquidity against collateral.

The liquidity of the secondary market for government bonds increased substantially in 1999. The average daily value of transactions through the Book-Entry Securities Clearing System operated by the Bank of Greece gradually increased from roughly 250 billion drachmas in 1998 to 800 billion in November 1999 (see Chart VI.2).



In value terms, nearly 25 per cent of all transactions were conducted through the Electronic Secondary Securities Market (HDAT), in operation since 1998, of which 40 per cent was made up of 10-year bonds. Long-term securities (with a maturity of 10 years or more), including the 20-year bonds launched in January 2000, accounted for over 70 per cent of transactions through HDAT (see Table VI.2 on the previous page). The spread between bid and ask yields in December 1999 narrowed to half the December 1998 level, i.e. to 24 basis points. The smooth operation of HDAT, thanks to the provision of price data for all categories of Greek government securities, enabled the unobstructed evaluation of institutional investors' portfolios and supported the conduct of real-time drachma payments through the HERMES system (operating since March 2000) and thus facilitated the implementation of monetary policy.



A breakthrough in the market for fixed-income securities was the start-up of the Athens Derivatives Exchange, which, in addition to products on shares, will gradually come to include products on fixed-income securities. The first step in this direction was the launching of transactions in futures contracts on 10-year Greek government bonds in January 2000.

### 3. THE MARKET FOR SHARES

The main features of the shares market in 1999 were the impressive increase in both share prices and the value of transactions, as well as substantial fund-raising.

More specifically, the upward trend in share prices and transactions since the beginning of 1999 picked up considerably between early August and mid-September 1999. Both share prices and transactions declined thereafter, albeit with sharp fluctuations (see Chart VI.3 on the next page).

The composite share price index rose by 102.2 per cent to 5,535.1 points at end-December 1999 from 2,737.6 points at end-December 1998 (see Table VI.3 on page 164). At average levels, share prices increased by 108.1 per cent in 1999. The share price index dropped to its lowest level (2,883.3 points) on 15 January 1999 and peaked (6,355.0 points) on 17 September 1999. Share prices were sharply differentiated between individual industries: High rates of increase were registered at average levels by share prices in the parallel market (742 per cent) and the construction industry (658 per cent). Conversely, the increase in the prices of bank shares (83 per cent) and industrial shares (97 per cent) was relatively limited.

In the course of 1999, the average daily value of transactions surged to 441 billion drachmas in September (from 84 billion in December 1998), but then fell sharply during the fourth quarter to 271 billion drachmas in December (see Chart VI.3). Share marketability (number of shares traded over the total number of listed shares) was also high, reaching 12.1 per cent in 1999, compared with 7.3 per cent in 1998 (see Chart VI.3).

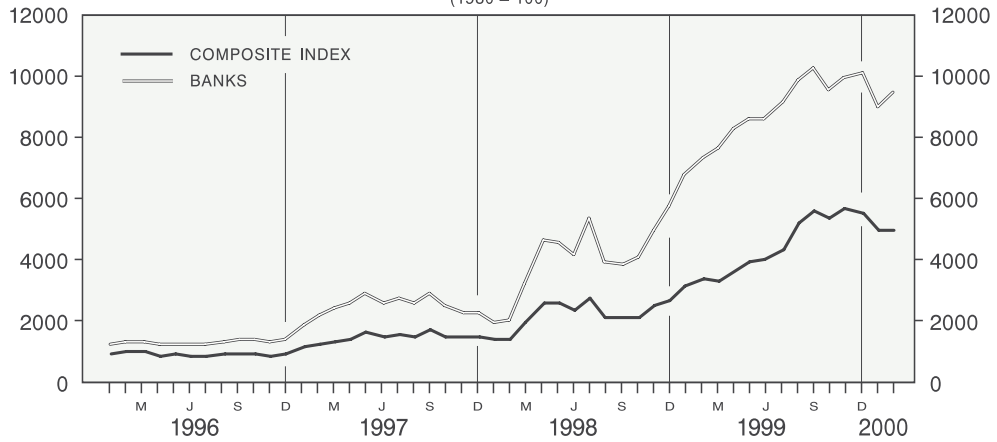
The market for shares was positively influenced in 1999 by a favourable macroeconomic environment and structural adjustments at the level of firms or industries. The prospects of Greece joining the euro area had a particularly favourable effect, owing to the progressive convergence of macroeconomic aggregates, especially inflation, and to the expectations of a decrease in domestic interest rates that stemmed from these developments. The market was also affected positively by the continuing high profitability of most firms with shares listed on the ASE and by the restructuring of many of these firms through mergers and takeovers, as a means of coping with growing international competition.

The total value of trading in shares reached 58,796 billion drachmas in 1999, from 14,084 billion in 1998 and 5,802 billion in 1997 (see Table VI.4 on page 170). This upswing was due to the large increase in trading in all types of shares, but more particularly in the shares of construction companies (1,463 per cent), "other" firms (1,157 per cent) as well

CHART VI.3

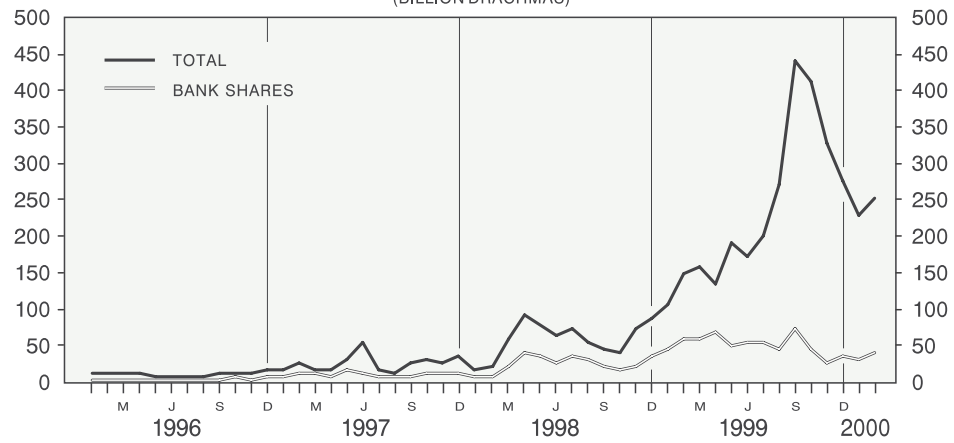
SHARE PRICE INDICES OF THE ATHENS STOCK EXCHANGE

(1980 = 100)



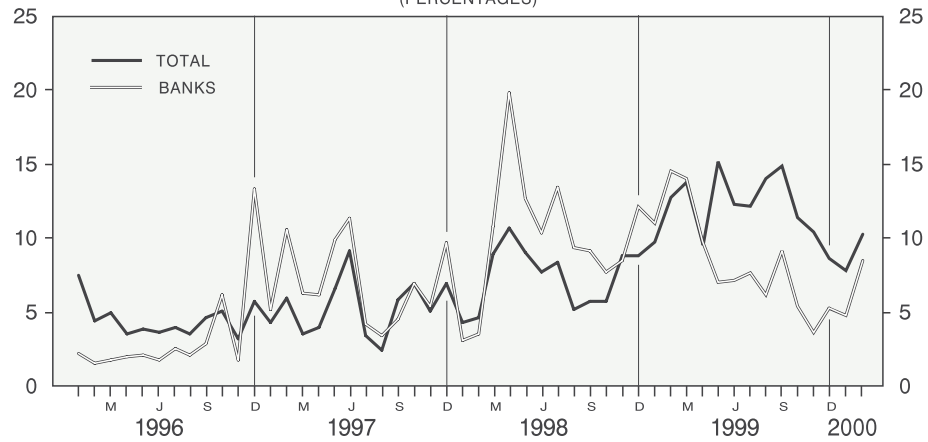
AVERAGE DAILY VALUE OF TRANSACTIONS

(BILLION DRACHMAS)



MONTHLY MARKETABILITY OF SHARES

(PERCENTAGES)



Source: Athens Stock Exchange and Bank of Greece.

TABLE VI.3  
STOCK MARKET AGGREGATES

Year	Share price indices <sup>1</sup> (1980 = 100)		Average daily value of transactions <sup>2</sup> (billion drachmas)	Market capitalisation <sup>1</sup> (billion drachmas)			Market capitalisation (percentage of GDP)			Funds raised through the Athens Stock Exchange <sup>4</sup> (billion drachmas)		
	Composite	Banks		Shares	Bonds <sup>3</sup>	Total	Shares	Bonds	Total	Listed companies	New companies	Total
1996	933.5	1,413.8	8.0	5,945	17,535	23,480	20	59	79	42	93	135
1997	1,479.6	2,303.3	23.4	9,811	13,735	23,546	30	42	72	515	20	535
1998	2,737.6	5,799.4	56.1	22,839	22,801	45,640	64	63	127	494	333	827
1999	5,535.1	10,165.4	235.8	67,311	26,190	93,501	176*	68*	244*	2,926	383	3,309

1 Year-end.

2 In shares.

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

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.

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

as commercial and industrial firms (360 per cent). A breakdown of stock trading value by industry shows a reduced share for banks and telecommunications and an increased share for other industries.

The significant rise in share prices, combined with the increased listing of shares on the ASE, caused market capitalisation to increase to 67,311 billion drachmas or 176 per cent of GDP in December 1999, from 22,839 billion drachmas or 64 per cent of GDP at end-1998 (see Table VI.3). A sectoral breakdown points to a very sharp increase in market capitalisation by construction firms (809 per cent) to 3,348 billion drachmas at end-1999 and by the parallel market (585 per cent, 6,695 billion drachmas). Of the remaining sectors, the market capitalisation of banks rose 132 per cent to 16,878 billion drachmas. It is worth noting that transactions in 1999 were largely affected by the savers' shift towards shares, either directly via share purchases or through the purchase of units of mutual funds of the equity type. More specifically, the mutual funds' new placements in shares listed on the ASE amounted to roughly 2,200 billion drachmas. However, the sharp rise in share prices and value of transactions from early August to mid-September 1999 was caused by the small savers' increased demand for shares, largely as a result of the massive entry of new investors into the stock market. In fact, roughly 270,000 new securities accounts were opened in the Electronic Securities System (SAT) of the ASE in the third quarter of 1999. A definite role in attracting these new investors has been played over the last two years by the large number of increasingly active Sociétés Anonymes for Receiving and Transmitting Orders in many Greek cities.

As discussed above, the rise in share prices halted in mid-September 1999 and the stock market came under considerable pressure. As a means of easing this pressure, at end-September 1999 the Bank of Greece raised from 5 to 15 million drachmas<sup>1</sup> the maximum amount of bank credit to natural persons on collateral of shares listed on the ASE and deregulated the regime under which credit institutions can finance investment firms and securities companies.<sup>2</sup> The Bank of Greece took additional steps in March 2000 concerning e.g. the allocation of credit to natural and legal persons for participation in the share capital of firms, as well as the liberalisation of the terms of maturity for credit allocated to natural persons on collateral of securities.<sup>3</sup>

Fund-raising through the stock market for the purpose of financing the investment programmes of firms and increasing their own funds was considerably higher than in 1998. The total amount of funds raised by issuing new shares increased from 827 billion drachmas in 1998 to 3,309 billion in 1999 (see Table VI.3). These funds were raised by 156 companies (1998: 75 companies), 40 of which (1998: 24) were listed on the ASE for the first time in 1999. A sectoral breakdown indicates that 13 banks raised a total of 1,286 billion drachmas, compared with the 210 billion raised by 8 banks in 1998. Non-financial firms

1 Bank of Greece Governor's Act No. 2452/27 September 1999.

2 Bank of Greece Governor's Act No. 2453/27 September 1999.

3 Bank of Greece Governor's Act No. 2459/17 March 2000.

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

	1996		1997		1998		1999	
	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
<b>Shares</b>	<b>1,989.9</b>	<b>99.8</b>	<b>5,802.0</b>	<b>99.7</b>	<b>14,083.6</b>	<b>99.1</b>	<b>58,796.0</b>	<b>100.0</b>
Main market	1,817.5	91.1	5,540.3	95.2	13,322.5	93.7	52,261.9	88.9
–Banks	486.3	24.4	1,950.0	33.5	5,697.2	40.1	12,150.5	20.6
–Leasing	6.7	0.3	30.3	0.5	77.1	0.5	403.5	0.7
–Insurance	45.5	2.3	145.9	2.5	181.0	1.3	1,111.6	1.9
–Investment	34.0	1.7	127.9	2.2	241.5	1.7	1,806.9	3.1
–Construction	238.7	12.0	360.4	6.2	310.7	2.2	4,856.4	8.3
–Commercial and industrial	792.0	39.7	1,643.9	28.3	4,550.7	32.0	20,909.4	35.6
–Telecommunications	62.6 <sup>2</sup>	3.1 <sup>2</sup>	1,007.3	17.3	1,473.2	10.4	3,253.0	5.5
–Holdings	119.8	6.0	158.6	2.7	340.6	2.4	2,109.5	3.6
–Other	31.9	1.6	116.0	2.0	450.4	3.1	5,661.1	9.6
Parallel market	172.4	8.7	261.7	4.5	761.1	5.4	6,534.1	11.1
<b>Bonds<sup>1</sup></b>	<b>3.2</b>	<b>0.2</b>	<b>18.5</b>	<b>0.3</b>	<b>128.4</b>	<b>0.9</b>	<b>4.4</b>	<b>0.0</b>
<b>Total</b>	<b>1,993.1</b>	<b>100.0</b>	<b>5,820.5</b>	<b>100.0</b>	<b>14,212.0</b>	<b>100.0</b>	<b>58,800.4</b>	<b>100.0</b>

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

2. Value and percentage of total transactions for the period 19 April 1996 - 31 December 1996.

Source: Athens Stock Exchange.

also recorded increased recourse to the stock market, raising roughly three times more funds in 1999 (1,524 billion drachmas) than in 1998 (544 billion). This development boosted firms' investment activity, expanded their capital base and reduced their financial costs.

A more detailed analysis of data related to fund-raising through the ASE in 1999 indicates that: First, total funds raised by companies (excluding banks) exceeded credit expansion (long-term and short-term) to the private sector, thereby helping to contain the demand for bank loans. Second, the sale of existing shares by public subscription through the ASE was also high in 1999. Specifically, the total funds raised (through increases in equity capital and the sale of existing shares) amounted to 4,156 billion drachmas in 1999 (1998: 1,135 billion), of which 847 billion drachmas (1998: 308 billion) were raised through the sale of existing shares. Third, the supply of new shares increased in the last quarter of 1999, through increases in equity capital, which stemmed mainly from companies with shares listed on the ASE, while the sale of existing shares was also high. In the last quarter of 1999, the total amount raised by the issue of new shares rose to 1,648 billion drachmas or about 50 per cent of the amount raised in 1999, while the funds raised through the sale of existing shares amounted to 281 billion drachmas or 33 per cent of the existing shares sold in 1999. It is estimated that the increased supply of new shares from October to December 1999 affected both the course of share prices and the value of transactions over the same quarter.

As mentioned above, bank share prices increased at a lower rate (75.3 per cent), compared with the composite share price index (102.2 per cent), in spite of a sizeable upswing in the first half of 1999. These developments were reflected in the value of transactions in bank shares, which fell from a daily average of 42 billion drachmas in January 1999 to 33 billion in December. The impressive increase in fund-raising (primarily in the first half of 1999) and the consequent supply of new bank shares are estimated to have affected share prices and transactions.

The prices of portfolio investment company shares increased by 222 per cent between end-1998 and end-1999, i.e. almost as much as at average levels (222.8 per cent). This reflects the substantial rise in corporate profits, following a sharp increase in share prices on the ASE.

Leasing company share prices increased by 350.6 per cent compared with end-1998 and by 377.8 per cent at average levels, while the prices of industrials increased by 101.4 per cent compared with end-1998 and by 96.8 per cent at average levels.

#### 4. THE MUTUAL FUNDS MARKET

The value of mutual funds' assets grew by 2,923 billion drachmas or 32.2 per cent to 11,996 billion in 1999 (see below Table VI.5 and Chart VI.4), owing exclusively to the increase in the prices of mutual fund units in circulation. The demand for mutual fund units was met primarily by the sale of units already on the market at the end of 1998 and, to a

lesser extent, by the launching of new mutual funds in 1999. Specifically, 31 mutual funds were established in 1999 (25 of the equity type, 4 of the balanced type, 1 of the money-market type and 1 of the bond type), with total assets valued at 872 billion drachmas at end-1999, representing 29.8 per cent of the increment in the total value of mutual fund assets. Furthermore, 5 mutual funds changed investment purpose, with 4 now registered as mutual funds of the equity type, and one of the money-market type. As a result, the number of mutual funds reached 212 at end-December 1999 from 181 in 1998 (see Table VI.5).

TABLE VI.5  
MUTUAL FUNDS: NUMBER AND ASSETS<sup>1</sup>  
(Assets value in billion drachmas)

Type of mutual fund	1998		1999		Percentage of total assets	
	Number	Assets value	Number	Assets value	1998	1999
<b>Money-market-type</b>	<b>44</b>	<b>5,986</b>	<b>46</b>	<b>4,580</b>	<b>66.0</b>	<b>38.2</b>
Domestic	39	5,966	41	5,570	65.8	38.1
Foreign	2	1	2	1	—	—
International	3	19	3	9	0.2	0.1
<b>Bond-type</b>	<b>67</b>	<b>1,704</b>	<b>66</b>	<b>1,362</b>	<b>18.8</b>	<b>11.4</b>
Domestic	42	1,553	42	1,276	17.1	10.7
Foreign	13	105	13	63	1.2	0.5
International	12	46	11	23	0.5	0.2
<b>Equity-type</b>	<b>41</b>	<b>494</b>	<b>70</b>	<b>5,031</b>	<b>5.4</b>	<b>41.9</b>
Domestic	34	476	55	4,945	5.2	41.1
Foreign	4	12	10	55	0.1	0.5
International	3	6	5	31	0.1	0.3
<b>Balanced</b>	<b>28</b>	<b>859</b>	<b>30</b>	<b>1,023</b>	<b>9.5</b>	<b>8.5</b>
Domestic	20	754	22	907	8.4	7.5
Foreign	2	2	3	6	—	0.1
International	6	103	5	110	1.1	0.9
<b>Special-type</b>	<b>1</b>	<b>30</b>	<b>—</b>	<b>—</b>	<b>0.3</b>	<b>—</b>
Domestic	—	—	—	—	—	—
Foreign	1	30	—	—	0.3	—
International	—	—	—	—	—	—
<b>Total</b>	<b>181</b>	<b>9,073</b>	<b>212</b>	<b>11,996</b>	<b>100.0</b>	<b>100.0</b>

1 Year-end.

Source: Bank of Greece.

The increase in total mutual fund assets was due to the rise in the assets mainly of equity type funds (4,537 billion drachmas) and, much less, of balanced mutual funds (164 billion). The assets of other types of mutual funds decreased. Specifically, the assets of money-market-type funds fell by 1,406 billion drachmas or 23.5 per cent and those of bond-type funds by 342 billion drachmas or 20 per cent.

The impressive upswing in listed share prices contributed to a substantial increase in the prices of mutual fund units, particularly those of equity-type funds and, to a lesser extent, of balanced-type funds. On the other hand, the prices of bond-type and money-market type fund units increased only moderately. Investors' growing preference for units of mutual funds of the equity type led to a 918.4 per cent rise in their asset value and to

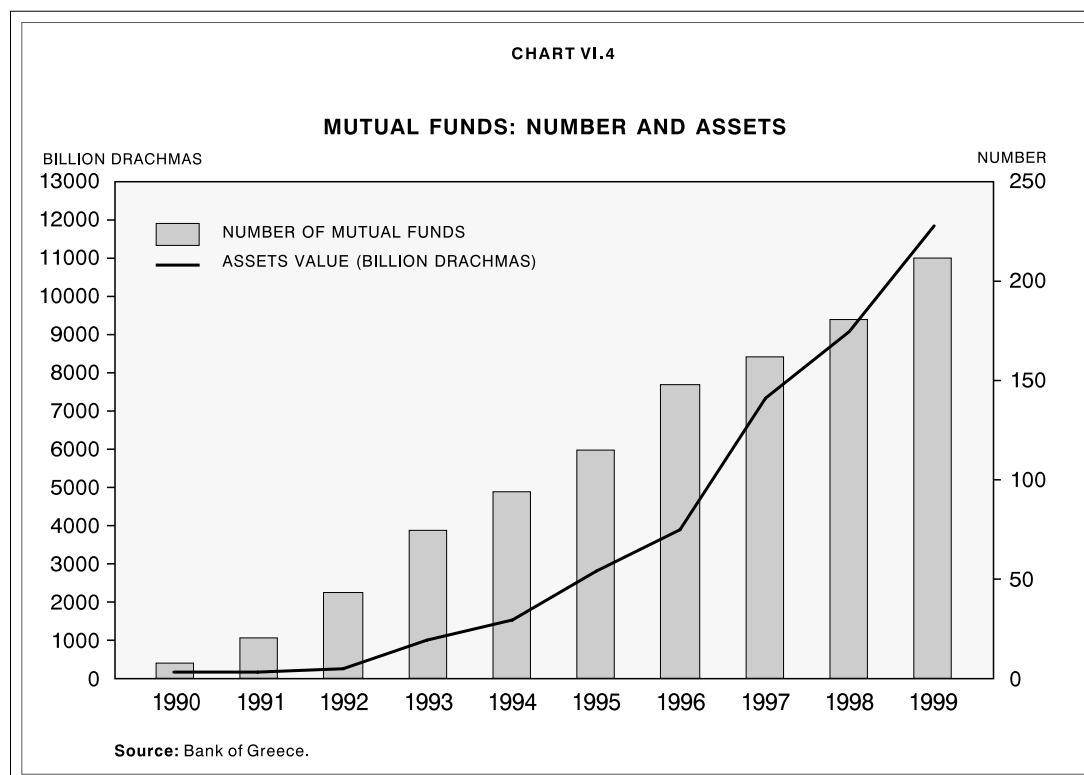


TABLE VI.6  
PORTFOLIO STRUCTURE OF MUTUAL FUNDS  
(Billion drachmas)

	1998 <sup>1</sup>	1999 <sup>1</sup>	Change
<b>Domestic investment</b>	<b>8,701</b>	<b>11,585</b>	<b>2,884</b>
– Shares listed on the ASE	617	4,821	4,204
– Synthetic currency swaps	3,580	2,617	–963
– Greek government bonds	3,315	2,613	–702
– Repos	780	1,174	394
– Deposits and cash	409	360	–49
<b>Foreign investment</b>	<b>205</b>	<b>215</b>	<b>10</b>
<b>Other</b>	<b>167</b>	<b>196</b>	<b>29</b>
<b>Total</b>	<b>9,073</b>	<b>11,996</b>	<b>2,923</b>

<sup>1</sup> At year-end.

Source: Bank of Greece.

an increase in their share in overall asset value from 5.4 per cent at end-1998 to 41.9 per cent at end-1999. In contrast, the share of money-market and bond-type fund assets in overall asset value dropped from 66 per cent and 18.8 per cent in 1998 to 38.2 per cent and 11.4 per cent in 1999, respectively.



The investment pattern followed by mutual funds in recent years shifted in 1999 towards investments in the Greek stock market. Specifically, the increase of 2,923 billion drachmas in mutual fund assets in the 12 months to December 1999 (see Table VI.6) stemmed largely from increased investment in shares listed on the ASE (+4,204 billion drachmas) and in repos (+394 billion). On the other hand, investment in drachma-denominated government bonds and synthetic currency swaps decreased (by 702 billion drachmas and 963 billion drachmas, respectively). At the end of 1999, 40.2 per cent (1998: 6.8 per cent) of all mutual fund portfolios were made up of shares listed on the ASE, 21.8 per cent (1998: 36.5 per cent) of government securities and another 21.8 per cent (1998: 39.5 per cent) of synthetic currency swaps.

## VII. PUBLIC FINANCE

### 1. THE PUBLIC SECTOR BORROWING REQUIREMENT AND ITS FINANCING

Efforts to achieve fiscal consolidation were further intensified in 1999, as the fiscal performance of that year will be the most recent to be taken into account in assessing whether Greece qualifies for joining Economic and Monetary Union. The result of these efforts is deemed satisfactory on the basis of the decline in the general government deficit, which, on a national accounts basis, was reduced further for the fourth consecutive year and reached 1.6 per cent of GDP, namely half of the reference value (3 per cent) of the relevant criterion laid down in the Maastricht Treaty. Progress in the containment of deficits is also reflected in the reduction of the general government deficit, on both an accrual and a cash basis (see Table VII.1).

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

	1995	1996	1997	1998	1999*
<b>General government</b>					
National accounts data <sup>1</sup> - <i>convergence criterion</i>	10.2	7.4	3.9	2.5	1.6
On an accrual basis <sup>2,3</sup>	8.4	7.0	5.4	3.2	2.5
Borrowing requirement (on a cash basis) <sup>2,4</sup>	8.9	10.2	6.8	5.0	3.7

1 Including public enterprises' debt assumed by central government.

2 Excluding capitalised interest.

3 Ministry of Finance and Bank of Greece data.

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

\* Provisional data.

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

Deficit reduction also led to the decline in the debt-to-GDP ratio, which in 1999 fell for the third year in a row (see Section 2.4 below). According to the Treaty, this continuous decrease in the debt ratio and the approaching of the reference value (60 per cent of GDP) at a satisfactory pace fulfils the second public finance criterion as well, i.e the public debt criterion.

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 percentage point to 1.6 per cent of GDP in 1999, from 2.5 per cent in 1998, thus fulfilling both the relevant convergence criterion and the initial target of the Convergence Programme (1.9 per cent). This measure, which is based on national accounts data, is the most representative and internationally comparable measure of the deficit; it is therefore uniformly compiled by all EU Member States, in order to assess the course of fiscal adjustment.

The second measure of the deficit also decreased by 0.7 per cent of GDP (see Table VII.1). This index as well concerns general government, but 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, also declined by 1.3 percentage point of GDP. It should be noted that 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, which is therefore larger than the respective national accounts- and accrual-based deficit.

### *The public sector borrowing requirement*

According to available provisional data, the borrowing requirement of the public sector, on a cash basis (excluding capitalised interest), continued the downward trend of recent years and fell to 3.9 per cent of GDP, from 5.4 per cent in 1998 and 6.4 per cent in 1997 (see Table VII.2). This positive development was due to both the 1.2 percentage point reduction in the general government deficit as a percentage of GDP, compared with 1998, and the 0.2 percentage point of GDP decrease in the deficit of public enterprises (1998: 0.4 per cent of GDP, 1999: 0.2 per cent). Furthermore, the surplus of public entities in 1999 rose by 0.1 percentage point compared with 1998, thus marginally contributing to the reduction in the borrowing requirement for 1999.

The central government borrowing requirement fell from 6.5 per cent in 1998 to 5.3 per cent of GDP in 1999, entirely owing to the reduction of about 50 per cent in the ordinary budget borrowing requirement, compared with 1998 (1999: 1.6 per cent of GDP, 1998: 3.3 per cent). By contrast, the deficit of the public investment budget increased considerably (1999: 3.5 per cent of GDP, 1998: 3.0 per cent), as the implementation of large projects was sped up. Finally, the deficit of special management accounts remained at 1998 levels.

The considerable decline, of 1.7 percentage point of GDP, in the ordinary budget borrowing requirement was due to the particularly satisfactory performance of ordinary budget revenue, which for the second consecutive year overshot, in fact by far, budget forecasts, in spite of cuts in indirect taxation, both in November 1998 and January and September 1999. Moreover, ordinary budget expenditure recorded an only small overrun compared with budget forecasts, which was more than offset by the aforementioned overrun of budgeted revenue. It should be noted that, on a cash basis, 1999 expenditure included interest payments of 118 billion drachmas outstanding from 1998, while corresponding 1999 expenditure paid in the first few days of 2000 amounted to a mere 19 billion drachmas. Thus, the net burden for 1999 was 99 billion drachmas.

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

	1994	1995	1996	1997	1998	1999*
<b>1. Central government <sup>1</sup></b>	<b>2,762.2</b>	<b>2,964.9</b>	<b>3,690.9</b>	<b>2,584.7</b>	<b>2,323.7</b>	<b>2,026.0</b>
<b>Percentage of GDP</b>	<b>11.5</b>	<b>10.9</b>	<b>12.3</b>	<b>7.8</b>	<b>6.5</b>	<b>5.3</b>
– Government budget	2,716.8	2,909.6	3,676.9	2,559.7	2,244.7	1,955.0
(Ordinary budget) <sup>2</sup>	(2,153.1)	(2,328.8)	(2,990.7)	(1,663.6)	(1,178.7)	(607.0)
(Public investment budget)	(563.7)	(580.8)	(686.2)	(896.1)	(1,066.0)	(1,348.0)
– Special management accounts of the State	45.4	55.3	14.0	25.0	79.0	71.0
(Oil account)	(–)	(–)	(–)	(–)	(–)	(–)
(DIDAGEP etc.)	(45.4)	(55.3)	(14.0)	(25.0)	(79.0)	(71.0)
<b>2. Public entities <sup>3</sup></b>	<b>–516.5</b>	<b>–546.4</b>	<b>–647.4</b>	<b>–345.3</b>	<b>–529.3</b>	<b>–597.0</b>
<b>Percentage of GDP</b>	<b>–2.2</b>	<b>–2.0</b>	<b>–2.2</b>	<b>–1.0</b>	<b>–1.5</b>	<b>–1.6</b>
– Financing of social security funds	–28.5	22.0	12.2	2.2	–26.0	–11.0
– Financing of local authorities	8.2	7.3	31.0	5.9	8.0	2.0
– Financing of other entities	48.1	12.6	–47.5	–23.3	–20.0	–8.0
– Liquid assets	–544.3	–588.3	–643.1	–330.1	–491.0	–580.0
<b>General government (1+2)</b>	<b>2,245.7</b>	<b>2,418.5</b>	<b>3,043.5</b>	<b>2,239.4</b>	<b>1,794.4</b>	<b>1,429.0</b>
<b>Percentage of GDP</b>	<b>9.4</b>	<b>8.9</b>	<b>10.2</b>	<b>6.8</b>	<b>5.0</b>	<b>3.7</b>
<b>3. Public enterprises</b>	<b>204.8</b>	<b>–0.7</b>	<b>83.5</b>	<b>–132.6</b>	<b>141.3</b>	<b>73.0</b>
<b>Percentage of GDP</b>	<b>0.9</b>	<b>0.0</b>	<b>0.3</b>	<b>–0.4</b>	<b>0.4</b>	<b>0.2</b>
– Financing of public utilities	129.6	–7.2	57.5	–115.6	65.0	140.0
– Financing of other enterprises	–2.3	–2.9	15.7	18.4	57.0	15.0
– Liquid assets	77.5	9.4	10.3	–35.4	19.0	–82.0
<b>Public sector (1+2+3)</b>	<b>2,450.5</b>	<b>2,417.8</b>	<b>3,127.0</b>	<b>2,106.8</b>	<b>1,935.7</b>	<b>1,502.0</b>
<b>Percentage of GDP</b>	<b>10.2</b>	<b>8.9</b>	<b>10.4</b>	<b>6.4</b>	<b>5.4</b>	<b>3.9</b>
<b>Public sector (including capitalised interest)</b>	<b>2,710.6 <sup>4</sup></b>	<b>2,502.1 <sup>5</sup></b>	<b>3,306.0</b>	<b>2,141.8</b>	<b>1,962.7</b>	<b>1,502.0</b>
<b>Percentage of GDP</b>	<b>11.3</b>	<b>9.2</b>	<b>11.0</b>	<b>6.5</b>	<b>5.5</b>	<b>3.9</b>

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.

4 Including 129 billion drachmas of accrued interest.

5 To prevent double reckoning, 129 billion drachmas of accrued interest, which were paid in 1995 but appear in the results of 1994, have been deducted (see footnote 4).

\* Provisional data and estimates.

Source: Bank of Greece.

The faster implementation of large projects, as well as the extraordinary expenditure related to the September 1999 earthquake in the area of Attica, led to the broadening of the cash deficit of the public investment budget, from 3.0 per cent of GDP in 1998 to 3.5 per cent in 1999. This outcome is also attributable to the small shortfall of receipts from the various European Union Funds, which was covered in the first quarter of 2000. Lastly, it should be noted that investment expenditure includes payments for increases in the share capital of public enterprises.

The net borrowing requirement of the special management accounts of the State (DIDAGEP) remained roughly at 1998 levels, both in absolute terms (1999: 71 billion drachmas, 1998: 79 billion) and as a percentage of GDP (0.2 per cent).

The cash surplus of public entities increased marginally to 1.6 per cent of GDP, compared with 1.5 per cent in 1998, positively influenced by the increased revenue of local authorities.

Finally, the cash deficit of public enterprises, which amounted to 141 billion drachmas in 1998, was limited to 73 billion in 1999. This improvement (which, however, is not confirmed by the accrual data presented in Section 2.3 below) is associated with the effort to modernise and restructure public enterprises, the appointment of new governors, the drawing-up of operational plans etc.

Net PSBR financing (see Table VII.3 on the next page) evolved smoothly during the year and allowed a further drop of about two percentage points in both short-term and long-term interest rates. As in the previous two years, net PSBR was financed mainly by the issue of medium- and long-term drachma-denominated fixed-interest-rate bonds, a large part of which was purchased by non-residents. By contrast, domestic private investors shifted from government paper to the Stock Exchange, because of the upward course of the latter until mid-September 1999. Given that the acquisition of government paper by non-residents is registered as foreign borrowing (see Table VII.3), it appears that foreign borrowing financed the entire PSBR and that, in addition, part of it was used to repay liabilities in drachmas. Financing of a large part of the deficit by non-residents either through the inflow of foreign exchange or by borrowing in drachmas from Greek banks, contributed to the creation of liquidity in the economy, the effects of which were systematically offset by Bank of Greece sterilisation operations.

Unlike domestic private investors, domestic credit institutions increased their portfolio in government paper, thus contributing to the financing of the deficit.

The effort to prolong the average maturity of public debt continued in the course of 1999, with the substitution of long-term bonds for Treasury bills. At the end of 1999, the outstanding balance of Treasury bills amounted to 1,544 billion drachmas (consolidated debt of general government), compared with 3,566 billion drachmas at end-1998 and 4,823 billion in 1997.

Finally, to finance part of its borrowing requirement, the State drew 118 billion drachmas out of its deposits with the Bank of Greece.

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

	1994		1995		1996		1997		1998		1999*	
	Amount	Per-centage of total	Amount	Per-centage of total	Amount	Per-centage of total	Amount	Per-centage of total	Amount	Per-centage of total	Amount	Per-centage of total
<b>BORROWING IN DRACHMAS</b>	<b>2,160.6</b>	<b>88.2</b>	<b>1,954.5</b>	<b>80.8</b>	<b>2,834.0</b>	<b>90.6</b>	<b>967.0</b>	<b>45.9</b>	<b>69.6</b>	<b>3.6</b>	<b>-1,233.0</b>	<b>-74.1</b>
- Treasury bills and bonds purchased by monetary financial institutions	414.3	16.9	744.6 <sup>1</sup>	30.8	489.7 <sup>1</sup>	15.7	625.0 <sup>1</sup>	29.7	-556.5 <sup>1</sup>	-28.7	522.0 <sup>1</sup>	36.9
- Treasury bills and bonds purchased by domestic non-bank sector	1,657.5	67.6	1,670.8 <sup>1</sup>	69.1	2,455.5 <sup>1</sup>	84.6	119.4 <sup>1</sup>	5.7	61.4 <sup>1</sup>	3.2	-1,750.0 <sup>1</sup>	-117.1
- Loans and advances from monetary financial institutions	74.1	3.0	-22.9	-0.9	40.4	-0.9	-4.0	-0.2	346.7	17.9	-123.0	-11.2
- Bank of Greece <sup>2</sup>	14.7	0.6	-438.0	-18.1	-151.6	-18.1	226.6	10.8	218.0	11.3	118.0	17.3
<b>BORROWING IN FOREIGN CURRENCY<sup>3</sup></b>	<b>289.9</b>	<b>11.8</b>	<b>463.3</b>	<b>19.2</b>	<b>293.0</b>	<b>19.2</b>	<b>1,139.8</b>	<b>54.1</b>	<b>1,866.1</b>	<b>96.4</b>	<b>2,735.0</b>	<b>174.1</b>
<b>TOTAL BORROWING</b>	<b>2,450.5</b>	<b>100.0</b>	<b>2,417.8</b>	<b>100.0</b>	<b>3,127.0</b>	<b>100.0</b>	<b>2,106.8</b>	<b>100.0</b>	<b>1,935.7</b>	<b>100.0</b>	<b>1,502.0</b>	<b>100.0</b>

1 Sales of securities also in the secondary market.

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, which purchases were largely financed by Greek banks.

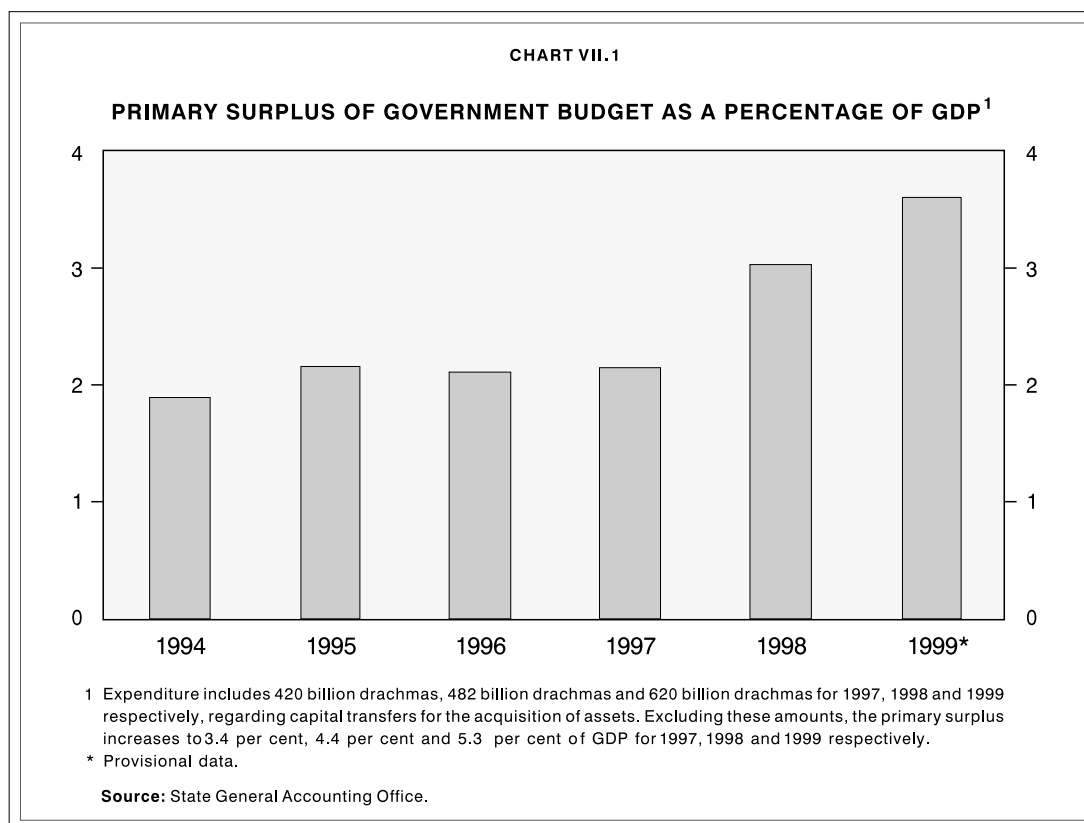
\* Provisional data.

Source: Bank of Greece.

## 2. FISCAL AGGREGATES

## 2.1 The central government budget

According to provisional data from the State General Accounting Office, the net deficit of the government budget, continuing its downward course, decreased to 5.1 per cent of GDP or 1,932 billion drachmas in 1999, from 6.0 per cent of GDP in 1998 and 7.6 per cent in 1997 (see Table VII.9). As detailed below, this deficit reached a level 0.6 per-



centage point lower than the budgeted one. This development was entirely due to the fact that ordinary budget revenue overshoot the budgeted amount and to the containment of interest payments. By contrast, both primary expenditure under the ordinary budget as well as public investment budget expenditure overshoot slightly budgeted levels.

The substantial overrun in budget revenue led to a primary surplus of 3.6 per cent of GDP, compared with 3.0 per cent in 1998 and 2.2 per cent in 1997, despite the small overrun in primary expenditure. Realised primary surplus exceeded budget forecasts by 0.5 percentage point (see Chart VII.1).

## *Revenue*

High revenue yield, which exceeded considerably budget forecasts, characterised fiscal developments in 1999. Ordinary budget revenue increased by 11.4 per cent (12.2 per cent in 1998) to 10,580 billion drachmas (see Table VII.4). This development implies a 1.76 “income elasticity”.

In 1999, revenue exceeded ordinary budget forecasts by 550 billion drachmas. This positive development is attributable to the increased yield of revenue from four sources: personal and corporate income tax (551 billion drachmas), stock exchange transactions tax (159 billion), the special duty on car sales (72 billion) and the real estate sales tax (88 billion). The remaining tax revenue (excluding liquid fuel tax, which recorded a shortfall of 92 billion drachmas) did not deviate significantly from budget forecasts. These developments reflect, on the one hand, the positive effects of 1998 measures on income tax (the measures had a positive effect on revenue in 1999, as well) and, on the other hand, stock market developments, particularly in the second half of the year, in conjunction with the doubling of the relevant tax rate. They are also associated with the large increase in car sales, which more than offset revenue losses from relevant tax reductions, both in November 1998 and in September 1999, as the relative price elasticity of demand is considerably higher than unity. Contrary to the above developments, non-tax revenue fell short of budgeted levels by 240 billion drachmas.

Direct tax revenue rose by 12.4 per cent (29.8 per cent in 1998) to 4,035.5 billion drachmas. This rate far exceeded the budget target (–3.3 per cent), and the growth rate of nominal GDP (6.5 per cent) and hence the share of direct tax revenue in total tax revenue rose to 40.9 per cent, compared with 40.6 per cent in 1998 and 36.4 per cent in 1997, thus converging to the corresponding share of the other European Union countries. This development resulted mainly from the measures taken in early 1998, the normal increase in taxpayers’ income and the arrangements made at end-1998 for the collection of assessed tax arrears.

Revenue from personal income tax rose by 14.9 per cent (22.3 per cent in 1998) to 1,823.7 billion drachmas, overshooting budget forecasts by 382.7 billion drachmas. This overrun, however, is not uniformly allocated in all subcategories of personal income tax, but can be mainly spotted in income tax withheld from wage earners and pensioners (204 billion drachmas), as well as in tax withholding from the self-employed etc. (91 billion), in spite of the limited indexation of the tax scale<sup>1</sup> as from 1 January 1999.

Revenue from corporate income tax increased by 11.6 per cent (58.7 per cent in 1998) to 1,136.7 billion drachmas, overshooting the corresponding budget forecast by 168.4 billion drachmas. This development resulted mainly from firms’ increased profitability in 1998 and is important, given that the extraordinary revenue which stemmed from the taxation of the previously tax-free reserves and was included in 1998 revenue did not exist for 1999.

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1 As from 1988 tax withholding at source is based on the tax scale.



TABLE VII.4  
ORDINARY BUDGET REVENUE  
(Billion drachmas)

	Annual aggregates				Percentage changes		
	1996	1997	1998	1999*	1997/96	1998/97	1999*/98
I. DIRECT TAXES	2,316.1	2,767.1	3,591.4	4,036.5	19.5	29.8	12.4
1. Income tax	1,886.4	2,300.3	3,054.8	3,444.3	21.9	32.8	12.8
– Personal	1,018.9	1,297.5	1,587.0	1,823.7	27.3	22.3	14.9
– Corporate	522.1	641.8	1,018.3	1,136.7	22.9	58.7	11.6
– Special categories of income tax (tax on shipping)	345.4	361.0	449.5	483.9	4.5	24.5	7.7
(tax on interest income from bonds, deposits etc.)	(4.2)	(4.2)	(7.2)	(6.9)	(0.0)	(71.4)	(–4.2)
2. Wealth taxes	(294.2)	(305.6)	(379.5)	(358.6)	(3.9)	(24.2)	(–5.5)
3. Direct taxes collected on behalf of third parties	78.9	123.8	133.4	125.4	56.9	7.8	–6.0
4. Tax arrears	2.1	1.4	1.8	2.9	–33.3	28.6	61.1
5. Extraordinary and other direct taxes	151.4	120.0	149.2	203.4	–20.7	24.3	36.3
	197.3	221.6	252.2	260.5	12.3	13.8	3.3
II. INDIRECT TAXES	4,299.9	4,833.9	5,248.4	5,841.9	12.4	8.6	11.3
1. Customs duties and special contributions on imports-exports	51.6	58.8	65.7	69.6	14.0	11.7	5.9
2. Consumption taxes on imports	360.8	439.3	503.8	618.6	21.8	14.7	22.8
– VAT (non-EU imports)	239.4	302.5	326.4	358.7	26.4	7.9	9.9
– Cars	111.1	123.5	164.6	243.9	11.2	33.3	48.2
– Special consumption tax	8.1	11.4	11.5	15.9	40.7	0.9	38.3
– Other taxes on imports	2.2	1.9	1.3	0.1	–13.6	–31.6	–92.3
3. Consumption taxes on domestic products	3,430.2	3,776.2	4,075.6	4,269.2	10.1	7.9	4.8
– Turnover tax	39.3	39.9	45.0	36.6	1.5	12.8	–18.7
– VAT	1,914.6	2,146.0	2,397.0	2,622.1	12.1	11.7	9.4
– Fuel	834.5	849.0	844.8	794.1	1.7	–0.5	–6.0
– Tobacco	405.5	458.6	513.0	557.9	13.1	11.9	8.8
– Road duties	80.4	97.8	90.8	126.7	21.6	–7.2	39.5
– Special levies and contributions on cars	69.5	77.3	78.6	17.2	11.2	1.7	–78.1
– Other <sup>1</sup>	86.4	107.6	106.4	114.6	24.5	–1.1	7.7
4. Transaction taxes	391.0	475.1	527.7	788.5	21.5	11.1	49.4
– Capital transfers	107.2	163.0	172.9	420.8	52.1	6.1	143.4
– Stamp duties	234.6	259.1	300.6	298.3	10.4	16.0	–0.8
– Banking transactions	49.2	47.7	46.5	62.9	–3.0	–2.5	35.3
– Licence fees for gambling	–	5.3	7.7	6.5	–	45.3	–15.6
5. Other indirect taxes	66.3	84.5	75.6	96.0	27.5	–10.5	27.0
III. TOTAL TAX REVENUE	6,616.0	7,601.0	8,839.8	9,878.4	14.9	16.3	11.7
Non-tax revenue	768.1	866.4	658.7	701.6	12.8	–24.0	6.5
IV. TOTAL ORDINARY BUDGET REVENUE	7,384.1	8,467.4	9,498.5	10,580.0	14.7	12.2	11.4

1 Including the special consumption tax on domestic products.

\* Estimates.

Source: Ministry of Finance, State General Accounting Office.

Revenue from the taxation of interest income (deposits, government paper etc.) recorded a 5.5 per cent decrease, compared with a 24.2 per cent increase in 1998. This development was mainly due to the cut in deposit and government paper interest rates. It is also attributable to the exemption from interest income tax, as from 17 September 1998, of interest on repos, in conjunction with the large shift of funds to this type of investment, as well as to the tax exemption, as from 1 January 1999, of interest on government paper purchased by non-resident investors. Finally, it should be noted that, during 1999, substantial funds were shifted to the Stock Exchange, thus limiting the base of interest income tax.

Revenue from taxes on inheritances, gifts and parental donations decreased by 6.0 per cent in 1999, compared with a 7.8 per cent increase in 1998. This development is associated with the fact that, in view of the increase in "objective" prices from 1 January 1998, those interested in making gifts and parental donations rushed to conclude such transactions in the last two months of 1997 and thus these real property transfers were reduced in 1998 and 1999.

Revenue from "direct-tax arrears" increased by 36.3 per cent, compared with 24.3 per cent in 1998, and came to 203.4 billion drachmas. This increase is attributable to the arrangements in November 1998 (Law 2648/98) for the collection (by instalments) of assessed tax arrears by the State. Given, however, that the deadline for the submission of relevant applications was extended until the 31st of December 1998, the biggest part of instalments was paid in 1999. Moreover, the above revenue was positively influenced by the controls carried out by Financial and Economic Crimes Police (SDOE), as well as the progress made in the computerisation of the Ministry of Finance services (TAXIS etc.). Finally, "other direct tax" revenue recorded a limited increase of 3.3 per cent, compared with 13.8 per cent in 1998.

Revenue from indirect taxes rose by 11.3 per cent, compared with 8.6 per cent in 1998, and stood at 5,841.9 billion drachmas, overshooting budget forecasts by 227.5 billion drachmas. This development is mainly associated with i) the particularly high yield from the taxation of stock market transactions, the respective revenue having overshoot the budgeted amount by about 159 billion drachmas, ii) increased revenue from the special duty on car sales, which overshoot the relevant forecast by 71.5 billion drachmas, and iii) the higher than forecast revenue from real estate sales (88 billion drachmas). By contrast, most of the other categories approached budget forecasts, an important exception being revenue from the tax on liquid fuel, where a 92 billion drachma shortfall was recorded.

As regards individual categories of indirect taxes, revenue from VAT on imports from third (i.e. non-EU) countries rose by 9.9 per cent, compared with 7.9 per cent in 1998. This acceleration is attributable to the overall increase in imports from third countries, particularly car imports, the value of which rose by 41.0 per cent.

As the special consumption tax on cars and the car classification fees have been merged in a single tax, the special duty on cars, we should, for comparability purposes, examine the sum total of revenue from these two categories. This revenue rose by 7.4 per cent in 1999, compared with 21.1 per cent in 1998, and came to 261.1 billion drachmas, in

spite of the reduction in the relevant tax rates both in November 1998 and September 1999. This development, leading to a 71.5 billion drachma overrun of the budget forecast, is entirely attributable to the sharp rise (46.8 per cent) in car sales in 1999.

Revenue from VAT on domestic goods, including VAT on imports from EU countries, increased by 9.4 per cent (1998: 11.7 per cent) to 2,622.1 billion drachmas, approaching the budget target. This revenue was positively influenced by the expansion of economic activity (3.5 per cent growth of real GDP) and the increase in sales of cars imported from EU countries. By contrast, it was negatively affected by cuts in special consumption taxes on fuel, the reduction in the VAT rate on electricity and the drop of inflation.

Receipts from the special consumption tax on liquid fuel decreased by 6 per cent (1998: -0.5 per cent) to 794.1 billion drachmas. This development, which led to a shortfall of 92 billion drachmas compared with the budgeted amount, was associated with reductions in the special consumption tax on petroleum products, which occurred both in the last quarter of 1998 and in the August-September 1999 period. It should also be pointed out that, following the latest reduction in heating oil price in autumn 1999, the difference in the special consumption tax between heating oil and diesel oil amounted to 77 drachmas per litre (about 100 drachmas in the retail price), a development which requires special care to secure the distinction between the two uses.

Revenue from tobacco tax grew by 8.8 per cent, compared with 11.9 per cent in 1998, a fact related to a small increase (2 per cent) in consumption in 1999.

Revenue from road duties grew by 39.5 per cent, compared with a decrease of 7.2 per cent in 1998. This was due, on the one hand, to the large increase in car sales in 1999 and, on the other hand, to the fact that the largest part of road duties in 1998 was included in 1999 revenue, while a smaller part of 1999 road duties was recorded under 2000 revenue.

Revenue from capital transfer tax comprises, from 1998, two main categories of revenue: revenue from real estate sales tax and revenue from tax on stock market transactions. The sum total of these subcategories of revenue increased by 143.4 per cent to 420.8 billion drachmas (of which 219.3 billion from real estate sales and 201.5 billion from stock market transactions). Revenue from tax on stock market transactions overshoot budget forecasts by 158.6 billion drachmas, owing to the particularly large increase in the value of transactions, especially in the second half of the year, and the doubling of the relevant tax rate (from 0.3 per cent to 0.6 per cent) as from October 1999. Revenue from real estate sales tax also increased and overshoot budget forecasts by 88.0 billion drachmas. This outcome was associated with the 25 per cent increase in housing loans in 1999, with the measures taken (Law 2753/99) for the settlement of pending tax cases of real estate sales and with the fact that the budgeted increase (a mere 0.8 per cent) was very small.

Revenue from stamp duties decreased by 0.8 per cent, compared with an increase of 16 per cent in 1998, and was limited to 298.3 billion drachmas.

Receipts from the special tax on bank transactions (EFTE) grew by 35.3 per cent, compared with a decrease of 2.5 per cent in 1998. This is attributable to both the fact that

the negative effects of the reduction in the relevant tax rate (from 4 per cent to 3 per cent) in September 1997 were exhausted in 1998, as well as to the increase in consumer and personal loans, which are granted at high interest rates, and in housing loans.

Unlike the satisfactory performance of tax revenue, non-tax revenue increased by 6.5 per cent, compared with a reduction of 24.0 per cent in 1998, and fell short of budget forecasts by 240 billion drachmas. Thus, the share of non-tax revenue in total ordinary budget revenue was limited to 6.6 per cent, compared with 10.2 per cent in 1997. This was due to the fact that a part of the budgeted revenue from public enterprises' profits did not materialise, and to the delay in inflows from the EU Social Fund.

Revenue under the public investment budget increased by 10.5 per cent, compared with 27.3 per cent in 1998, and came to 1,010 billion drachmas. This revenue, which almost entirely comes from EU Funds, fell short of budget forecasts by 50 billion drachmas.

### *Expenditure*

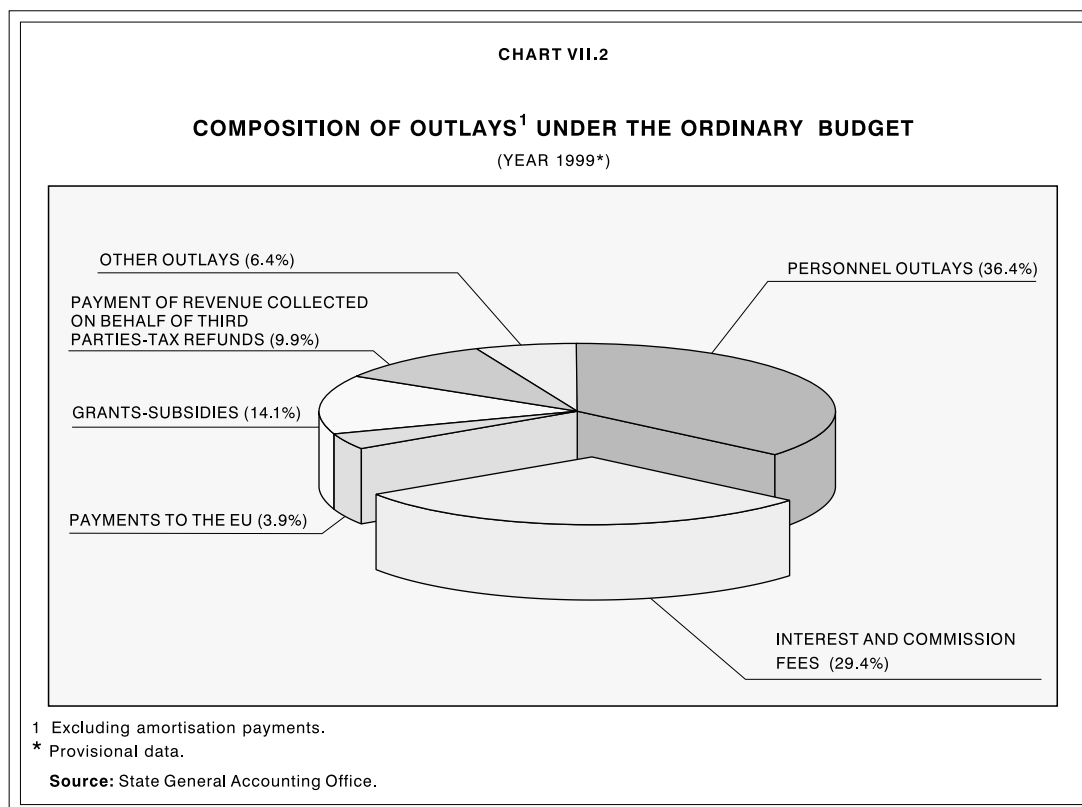
In 1999, extraordinary events, such as the Attica earthquake in September and the Kosovo crisis in spring, contributed to the generation of expenditure that had not been forecast in the budget and resulted in a small overrun of budget targets. Specifically, ordinary budget expenditure increased by 5.6 per cent, compared with a 6.2 per cent rise in 1998, and reached 11,287 billion drachmas, while the budget forecast an increase of 3.4 per cent and expenditure of 11,050 billion drachmas. At the same time, public investment budget expenditure recorded a slight overrun of 40 billion drachmas compared with forecasts and came to 2,235 billion drachmas. Hence, government budget expenditure recorded a total overrun of 277 billion drachmas, which was however offset by the increased yield of revenue. Owing to the aforementioned developments, government budget expenditure rose to 35.4 per cent of GDP in 1999 from 35 per cent in 1998.

The overrun in ordinary budget expenditure regarded exclusively primary expenditure, as interest payments were kept 30 billion drachmas below budget forecasts. In particular, primary expenditure rose by 6.9 per cent (compared with a 3.4 per cent forecast) and amounted to 7,967 billion drachmas, exceeding budget forecasts by 267 billion drachmas.

As regards individual categories of expenditure, personnel outlays increased by 6.9 per cent, compared with 9.3 per cent in 1998, and amounted to 4,104 billion drachmas, overshooting budget forecasts by 190 billion drachmas (see Chart VII.3 on page 185). Personnel outlays, despite their slower growth, still constitute the largest category of ordinary budget expenditure, with a share of 36.4 per cent, compared with 31.2 per cent in 1996. They were pushed upwards owing to a number of recruitments (school teachers, nurses and administrative personnel in hospitals, prison guards, Public Security Forces personnel), some of which were not provided for when the budget was drawn up. Personnel outlays also grew owing to the Greek peace force expedition to Kosovo, the increase

in the number of days on which National Health System (NHS) physicians are on 24-hour call at the hospital, and the rise in hospitalisation and medical care expenses for civil servants. Finally, an increase was observed in both the number of government pensioners (particularly in the second half of 1999) and the pensions of some categories of civil servants (diplomats, NHS physicians and university teachers).

Interest payments increased by 2.7 per cent (1998: 0.5 per cent) to 3,320 billion drachmas. The containment of this kind of expenditure in 1999 was facilitated by the reduction in interest rates on Treasury bills and by the extensive substitution of long-term



fixed-rate government bonds for Treasury bills. Overall, in 1999 personnel outlays and interest payments absorbed 70.2 per cent of ordinary budget revenue.

Payments to the European Union declined by 3.8 per cent, compared with a 20.0 per cent increase in 1998. This is attributable to the reduction in Greece's GDP-based contributions and to the marginal increase of contributions calculated as a percentage of the VAT tax base.

Payment of revenue collected on behalf of third parties grew by 6.8 per cent, compared with an increase of 28.7 per cent in 1998 and 24.5 per cent in 1997. Although the growth rate of this expenditure category decelerated, budget forecasts were overshoot by 40 billion drachmas, owing to the satisfactory evolution of ordinary budget revenue, given

TABLE VII.5  
OUTLAYS UNDER THE ORDINARY BUDGET AND THE PUBLIC INVESTMENT BUDGET  
(Billion drachmas)

	Annual aggregates				Percentage changes		
	1996	1997	1998	1999*	1997/96	1998/97	1999*/98
I. OUTLAYS UNDER THE ORDINARY BUDGET <sup>1</sup>	9,727.4	10,064.3	10,684.0	11,286.8	3.5	6.2	5.6
1. Personnel outlays	3,035.2	3,512.8	3,840.0	4,103.9	15.7	9.3	6.9
2. Interest payments <sup>2</sup>	3,501.1	3,216.2	3,233.7	3,320.0	-8.1	0.5	2.7
(interest payments related to the national defence debt) <sup>3</sup>	(101.3)	(109.7)	(102.0)	(107.0)	(8.3)	(-7.0)	(4.9)
3. Payments to the European Union	355.1	376.8	452.0	435.0	6.1	20.0	-3.8
4. Payment of revenue collected on behalf of third parties <sup>4</sup>	470.1	585.0	753.2	804.2	24.5	28.7	6.8
5. Tax refunds	306.4	291.1	270.5	310.0	-5.0	-7.1	14.6
6. Interest rate subsidies	19.6	20.4	2.7	0.0	4.0	-86.7	-100.0
7. Subsidies to farmers <sup>5</sup>	176.2	126.1	99.5	109.0	-28.5	-21.0	9.5
8. Grants <sup>6</sup>	1,455.7	1,368.6	1,432.1	1,477.5	-6.0	4.6	3.2
9. Guarantees	2.0	1.1	1.4	1.5	-42.9	22.9	7.0
10. Other <sup>7</sup>	486.5	566.2	598.9	725.6	16.4	5.8	21.2
Minus allowances not included in the budget	80.5	-	-	-	-	-	-
II. OUTLAYS UNDER THE PUBLIC INVESTMENT BUDGET <sup>8</sup>	1,095.0	1,626.5	1,877.5	2,235.0	48.5	15.4	19.0
1. Project implementation	715.4	664.0	865.0	...	-7.2	30.3	...
2. Grants	369.6	953.0	1,004.1	...	157.8	5.4	...
3. Administration	10.0	10.0	8.4	...	0.0	-16.0	...
III. TOTAL I + II	10,822.4	11,690.8	12,561.5	13,521.8	8.0	7.4	7.6
a. Primary expenditure under the government budget	7,321.3	8,474.6	9,327.7	10,201.8	15.8	10.1	9.4
b. Primary expenditure under the ordinary budget	6,226.3	6,848.2	7,450.2	7,966.8	10.0	8.8	6.9
Amortisation payments (amortisation payments related to the national defence debt) <sup>3</sup>	3,638.2	3,589.4	3,536.4	3,362.3	-1.3	-1.5	-4.9
	(121.0)	(124.0)	(229.2)	(220.0)	(2.5)	(84.8)	(-4.0)

1 Excluding amortisation payments.

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

3 As of 1994, this category includes only interest and amortisation payments which continue to be 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 comparability purposes, 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 expenditure for investment projects of the ordinary budget (1996: 82.8 billion drachmas, 1997: 7.9 billion).

6 Including expenditure for investment projects of the ordinary budget (1996: 78.1 billion drachmas), while, as of 1997, corresponding expenditure appears under the Public Investment Budget. As of 1996, this item also includes grants to social security funds.

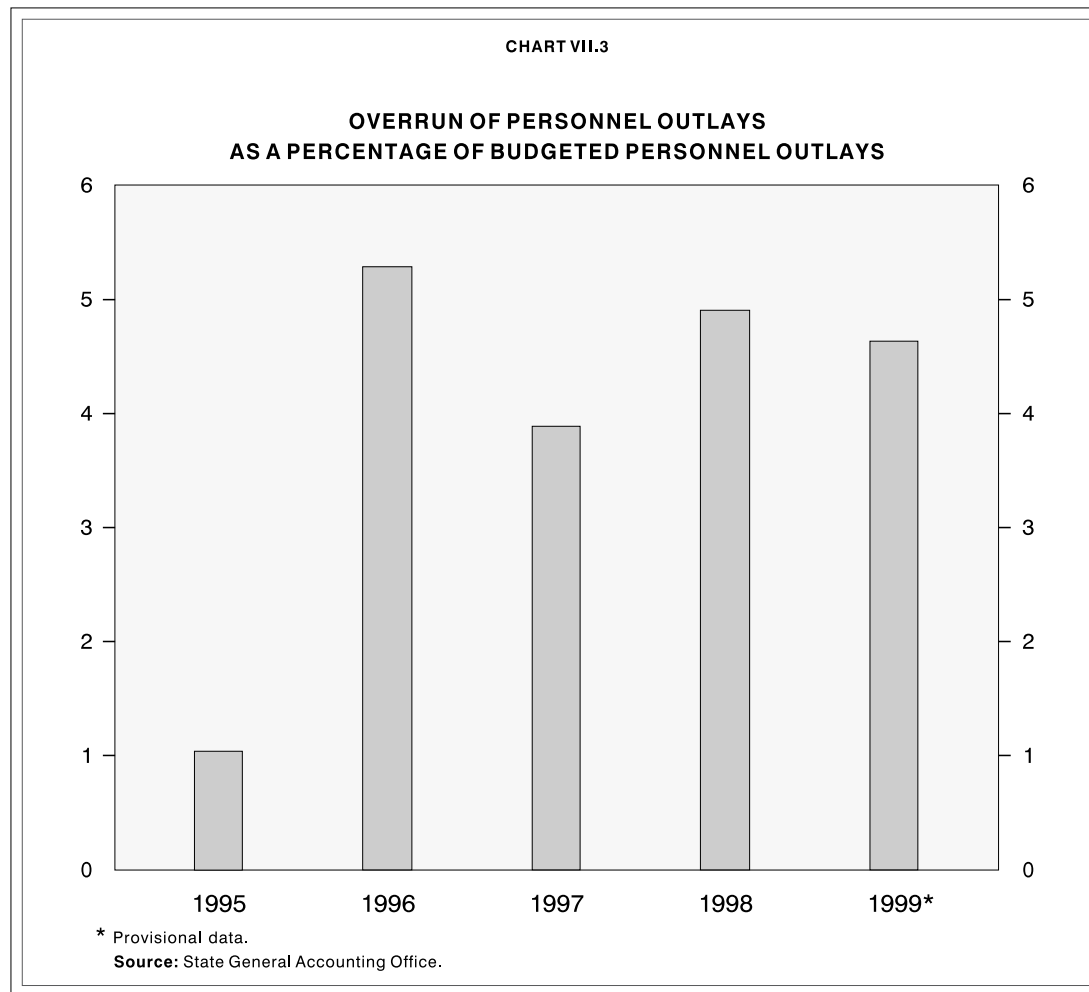
7 Including expenditure for investment projects of the ordinary budget (1996: 18 billion drachmas).

8 Including expenditure (30 billion drachmas) for persons hit by the September 1999 earthquake.

\* Provisional data.

Source: Ministry of Finance, State General Accounting Office.

that the amounts payable are determined on the basis of revenue from specific taxes (income tax, road duties, interest income tax etc.). An increase was also observed in payments of revenue to the Farmers' Insurance Fund (OGA) and the Greek Farmers' Insurance (ELGA), as well as to the Professional Drivers' Pension Fund (TSA), owing to the settlement of long-standing government liabilities.



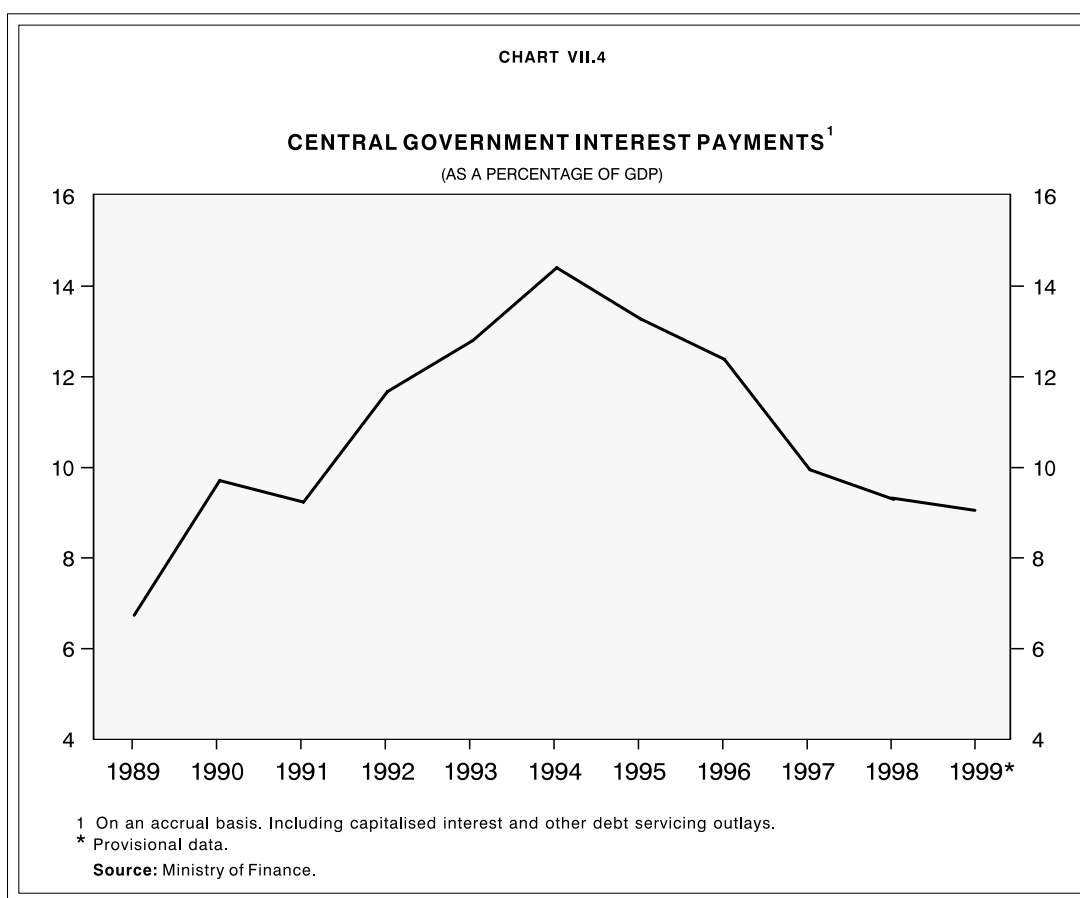
Outlays for tax refunds increased by 14.6 per cent, compared with a decrease of 7.1 per cent in 1998, and reached 310 billion drachmas. This outcome was expected, owing to the tax arrangements in 1998, particularly those which were associated with the withholding and the advance payment of tax and thus entailed tax refunds in 1999.

As of 1999, interest rate subsidies ceased to burden the ordinary budget and are now covered by the revenue of the contribution provided for in Law 128/75, which was readjusted and extended to loans in foreign currency.

Payments for agricultural subsidies increased by 9.5 per cent, compared with reductions of 21.0 per cent in 1998 and 28.5 per cent in 1997. It should be noted that from

1997 onwards all subsidies to agriculture concerning investment programmes appear on the public investment budget.

Outlays for grants, the third largest category of expenditure, increased by 3.2 per cent, compared with 4.6 per cent in 1998, and reached 1,477.5 billion drachmas. The small (24 billion drachmas) overrun of budget forecasts was due to additional grants to OGA, the Ministry of Culture and the Seamen's Pension Fund (NAT), as well as to the settlement of government liabilities to hospitals. By contrast, direct grants to the Social Insu-



rance Fund (IKA) decreased as the repayment of a loan of the Fund was assumed by the government, which had previously forfeited the relevant guarantee.

Finally, "other outlays" increased by 21.2 per cent, compared with 5.8 per cent in 1998, and reached 725,6 billion drachmas. The faster growth rate is attributable to extraordinary outlays for the procurement of equipment and for Armed Forces transportation, as well as to additional outlays for the conduct of the European Parliament election.

Expenditure under the public investment budget grew by 19.0 per cent (1998: 15.4 per cent, 1997: 48.5 per cent) to 2,235.0 billion drachmas. This faster growth was mainly due to the hastening of payments for large projects, as well as to extraordinary



outlays (30 billion drachmas) to cover the needs of those stricken by the earthquake of 7 September 1999.

## *2.2 Social security and welfare funds*

According to accrual data from the Introductory Report on the Budget for 2000, the financial results of the seven major social security and welfare funds were not satisfactory in 1999 (see Table VII.6).

The total revenue of these funds increased by 8.8 per cent, compared with 22.1 per cent in 1998, and amounted to 2,844 billion drachmas. This slower growth is mainly attributable to the subdued increase in revenue of IKA, OGA and Manpower Employment Agency (OAED), as well as of the other funds except NAT, the revenue of which increased, compared with a decrease in 1998. Total expenditure (on both the operating and the capital account) of the major social security and welfare funds rose by 14.8 per cent, compared with 6.7 per cent in 1998, and came to 3,963 billion drachmas. The faster growth of total expenditure was mainly due to the operating account expenditure, the growth rate of which more than doubled compared with the previous year, as a result of the increase in the number of pensioners and in pensions and medical care expenditure of IKA and OGA.

As a result, the total deficit of the consolidated operating and capital account of the major social security and welfare funds rose by 31 per cent to 1,038 billion drachmas, compared with 793 billion drachmas in 1998. As a percentage of GDP, the total deficit recorded a limited increase to 2.7 per cent, compared with 2.2 per cent in the previous year.

About 77 per cent of the deficit was covered by ordinary and public investment budget grants to the seven major social security and welfare funds. More specifically, ordinary budget grants to these funds amounted to 763 billion drachmas (IKA: 188 billion, OGA: 431 billion, NAT: 125 billion). Moreover, grants out of the public investment budget increased by 32 billion drachmas, compared with a decline of 85 billion in 1998.

In spite of increased grants, the broadening of the total deficit created net borrowing requirements of 72.3 billion drachmas in 1999, compared with a surplus of 61 billion drachmas in 1998. This development implies that it is necessary to strengthen efforts for the containment of operational expenditure and the improvement of contribution collection, as well as to speed up the reform and modernisation of the social security system and ensure its viability.

As regards IKA, according to the Introductory Report on the Budget for 2000, the growth rate of revenue under the operating account slowed down considerably (1999: 7.7 per cent, 1998: 20.8 per cent), while the growth rate of expenditure under the same account accelerated (1999: 11.9 per cent, 1998: 8.2 per cent). Hence, the operational deficit of the Fund widened by 34.2 per cent in 1999, compared with a reduction of 30.5 per

TABLE VII.6  
FINANCIAL RESULTS OF SOCIAL SECURITY FUNDS<sup>1</sup>  
AND THEIR FINANCING  
(Billion drachmas)

	1997	1998	1999*	Budget for 2000	Percentage changes		
					1998/97	1999*/98	2000/99*
<b>A' Operating account</b>							
1. Revenue	2,141.0	2,614.4	2,844.4	3,109.8	22.1	8.8	9.3
2. Expenditure	3,132.7	3,329.4	3,796.6	4,186.5	6.3	14.0	10.3
3. Result (1 – 2)	<u>-991.7</u>	<u>-715.0</u>	<u>-952.2</u>	<u>-1,076.7</u>	<u>-27.9</u>	<u>33.2</u>	<u>13.1</u>
<b>B' Capital account</b>							
4. Revenue	–	–	–	–	–	–	–
5. Expenditure	101.1	121.8	165.9	173.3	20.5	36.2	4.5
(Investment)	(46.8)	(108.0)	(156.6)	(119.7)	(130.8)	(45.0)	(-23.6)
(Working capital)	(54.3)	(13.8)	(9.3)	(52.1)	(-74.6)	(-32.6)	(460.2)
(Other)	(0.0)	(0.0)	(0.0)	(1.5)	(-)	(-)	(-)
6. Result (4 – 5)	<u>-101.1</u>	<u>-121.8</u>	<u>-165.9</u>	<u>-173.3</u>	<u>20.5</u>	<u>36.2</u>	<u>4.5</u>
7. Special resources	<u>41.4</u>	<u>44.3</u>	<u>80.0</u>	<u>91.1</u>	<u>7.0</u>	<u>80.6</u>	<u>13.9</u>
<b>TOTAL RESULT (3+6+7)</b>	<u><u>-1,051.4</u></u>	<u><u>-792.5</u></u>	<u><u>-1,038.1</u></u>	<u><u>-1,158.9</u></u>	<u><u>-24.6</u></u>	<u><u>31.0</u></u>	<u><u>11.6</u></u>
<b>FINANCING</b>							
8. Grants	<u>895.5</u>	<u>853.1</u>	<u>965.4</u>	<u>1,110.0</u>	<u>-4.7</u>	<u>13.2</u>	<u>15.0</u>
(Ordinary budget)	(753.4)	(741.5)	(763.0)	(861.4)	(-1.6)	(2.9)	(12.9)
(Public investment budget)	(90.0)	(5.1)	(36.8)	(51.0)	(-94.3)	(621.6)	(38.6)
(European Union etc.)	(52.1)	(106.5)	(165.6)	(197.6)	(104.4)	(55.5)	(19.3)
9. Depreciation	<u>0.3</u>	<u>0.4</u>	<u>0.4</u>	<u>0.4</u>	<u>33.3</u>	–	–
10. Net borrowing requirement	<u>155.6</u>	<u>-61.0</u>	<u>72.3</u>	<u>48.5</u>	<u>-139.2</u>	–	<u>-32.9</u>
<b>TOTAL FINANCING</b>	<u><u>1,051.4</u></u>	<u><u>792.5</u></u>	<u><u>1,038.1</u></u>	<u><u>1,158.9</u></u>	<u><u>-24.6</u></u>	<u><u>31.0</u></u>	<u><u>11.6</u></u>
11. Amortisation payments	136.7	4.7	81.7	50.1	-96.6	1,638.3	-38.7
12. Gross borrowing requirement (10+11)	292.3	-56.3	154.0	98.6	-119.3	–	-36.0

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, and National Welfare Organisation (EOP)].

\* Estimates.

Source: Ministry of National Economy.

cent in the previous year, and amounted to 457 billion drachmas. The significant deceleration of the growth rate of revenue denotes the structural weaknesses of the system, mainly those associated with population ageing and contribution evasion. On the other hand, the faster growth of expenditure was due to the increase in pensions and the number of pensioners, the merging of various supplementary pension funds with IKA and the growth of medical care outlays.

The operating deficit of OGA also increased, compared with a reduction in the previous year (1999: 7.6 per cent, 1998: -12.3 per cent). Thus, the deficit is estimated to reach 358 billion, compared with 333 billion in 1998. This was due to the evolution of both revenue and expenditure of the Fund. Specifically, in 1999 revenue increased at a rate lower than in the previous year, because, on the one hand, the number of the insured did not grow significantly and, on the other hand, contribution payments by those of the insured who were stricken by natural disasters (earthquakes, natural disasters etc.) were suspended. Furthermore, in the context of transitional implementation of the new social security system for farmers under Law 2458/97, medical care continued to be provided irrespective of the existence of overdue liabilities of the insured throughout the year. On the other hand, expenditure increased owing to the expansion of outlays for medicines, the rise in hospitalisation fees and the increased benefits paid out of the Farmers' Main Insurance Fund (these benefits were provided for by the new main insurance fund system under Law 2458/97 and part of them had been transferred to 1999 from 1998 because the new procedures had applied with some delay).

Finally, the operating deficit of NAT increased by 12.8 per cent, reaching 144 billion drachmas, compared with 127 billion in the previous year. As grants remained at 1998 levels, this increase led to new borrowing.

### *2.3. Public enterprises*

The surplus in the operating account of public enterprises, on an accrual basis, recorded a considerable increase in 1999, which, however, was more than offset by the capital account deficit, ultimately leading to a rise in net borrowing requirements. This is concluded from the Introductory Report on the Budget for 2000 and from Ministry of National Economy data, which appear in condensed form in Table VII.7. The growth rate of total expenditure (under the operating and the capital account) of public enterprises in 1999 remained almost unchanged (1999: 10.2 per cent, 1998: 10.7 per cent) and overshoot by 3.7 percentage points the increase in nominal GDP. This rise was mainly accounted for by capital expenditure and more specifically by the continuing increase in investment for the fourth consecutive year and the steep rise in working capital. The growth rate of expenditure under the operating account decelerated relative to the previous year and fell short of the GDP growth rate by 1.4 percentage point. In particular, apart from interest payments, which declined relative to 1998, the growth of the wage bill and of expenditure

TABLE VII.7  
FINANCIAL RESULTS OF PUBLIC ENTERPRISES<sup>1</sup> AND THEIR FINANCING  
(Billion drachmas)

	1997	1998	1999*	Budget for 2000	Percentage changes		
					1998/97	1999*/98	2000/99*
<b>A' Operating account</b>							
1. Revenue	3,568.2	3,915.7	4,181.3	4,633.1	9.7	6.8	10.8
2. Expenditure	3,391.5	3,727.9	3,917.8	4,300.5	9.9	5.1	9.8
3. Result (1 – 2)	176.7	187.8	263.5	332.6	6.3	40.3	26.2
<b>B' Capital account</b>							
4. Revenue	–	–	–	–	–	–	–
5. Expenditure	1,678.2	1,885.0	2,265.9	2,673.0	12.3	20.2	18.0
(Investment)	(1,316.7)	(1,574.8)	(1,718.1)	(2,156.2)	(19.6)	(9.1)	(25.5)
(Working capital)	(47.8)	(4.1)	(273.9)	(97.4)	(–91.4)	(6,580.5)	(–64.4)
(Other)	(313.7)	(306.1)	(273.9)	(419.4)	(–2.4)	(–10.5)	(53.1)
6. Result (4 – 5)	–1,678.2	–1,885.0	–2,265.9	–2,673.0	12.3	20.2	18.0
7. Special resources <sup>2</sup>	670.3	738.1	577.2	585.4	10.1	–21.8	1.4
TOTAL RESULT (3+6+7)	–831.2	–959.1	–1,425.2	–1,755.0	15.4	48.6	23.1
<b>FINANCING</b>							
8. Grants	372.7	388.5	532.9	639.6	4.2	37.2	20.0
(Ordinary budget) <sup>3</sup>	(–10.7)	(–14.7)	(35.7)	(23.8)	37.4	–	–33.3
(Public investment budget)	(346.1)	(348.9)	(458.2)	(546.2)	(0.8)	(31.3)	(19.2)
(European Union etc.)	(37.3)	(54.3)	(39.0)	(69.6)	(45.6)	(–28.2)	(78.5)
9. Depreciation	374.6	393.4	447.6	484.8	5.0	13.8	8.3
10. Net borrowing requirement	83.9	177.2	444.7	630.6	111.2	151.0	41.8
TOTAL FINANCING	831.2	959.1	1,425.2	1,755.0	15.4	48.6	23.1
11. Amortisation payments <sup>4</sup>	399.6	315.9	506.5	296.5	–20.9	60.3	–41.5
12. Repayment of credits <sup>4</sup>	15.4	12.2	19.5	11.4	–20.8	59.8	–41.5
13. New suppliers' credits	52.6	68.6	55.2	49.5	30.4	–19.5	–10.3
14. Gross borrowing requirement (10+11+12–13)	446.3	436.7	915.5	889.0	–2.2	109.6	–2.9

1 Including the public enterprises mentioned in the Introductory Report on the 2000 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 Amortisation payments and credit repayments, for 1999 estimates and the 2000 Budget, totalled 526 and 307.9 billion drachmas, respectively. Owing to a lack of data, these amounts are distributed over the above-mentioned periods according to Bank of Greece estimates.

\* Estimates.

Source: Ministry of National Economy.

for fuel was limited, while the growth rates of the other categories of expenditure slowed down considerably, compared with the corresponding rates of 1998. Primary expenditure (i.e. total expenditure less interest payments) increased by 11.8 per cent in 1999, compared with 10.2 per cent in the previous year. Moreover, revenue under the operating account grew at a slower pace (1999: 6.8 per cent, 1998: 9.7 per cent) to 4,181 billion drachmas, from 3,916 billion in 1998.

The aforementioned developments, in conjunction with the 21.8 per cent reduction in special resources (compared with 1998), resulted in the considerable increase in the total deficit of the consolidated operating and capital account to 1,425 billion drachmas, compared with 959 billion drachmas in 1998. This deficit stemmed entirely from the capital account and the reduction of 161 billion drachmas in special resources (1999: 577 billion drachmas, 1998: 738 billion). This reduction in "special resources" is mainly attributable to the Hellenic Telecommunications Organisation (OTE), the Olympic Airways (OA) and the Public Gas Corporation (DEPA). Of the total deficit, 37.4 per cent was financed by grants (mostly from the public investment budget) and 31.4 per cent by depreciation allowances, while net borrowing requirements rose to 445 billion drachmas, compared with 177 billion in 1998.

The growth rate of the sum total of revenue earned by the Public Power Corporation (DEH), OTE, the Athens Transport Organisation (OASA) and the Water Supply and Sewerage Company (EYDAP) decelerated relative to 1998 (1999: 8.4 per cent, 1998: 17.6 per cent), while OA and Hellenic Railways Organisation (OSE) aggregate revenue declined, compared with an increase in the previous year (1999: -5.6 per cent, 1998: 11.5 per cent). By contrast, a faster growth was observed in revenue earned both by the Hellenic Aerospace Industry (EAB) (1999: 32 per cent, 1998: -9.6 per cent) and by the other smaller public enterprises, the revenue of which accounts for 37.8 per cent of total revenue (1999: 6.8 per cent, 1998: 0.5 per cent).

In particular, the growth of OTE revenue slowed down considerably relative to the previous year (1999: 10.8 per cent, 1998: 25.9 per cent), mainly as a result of the two-stage reduction (March and November 1999) in many categories of OTE rates (urban and trunk call rates, transfer charges etc.). Moreover, the rate of increase in DEH revenue decelerated, compared with the previous year (1999: 6.3 per cent, 1998: 10 per cent), owing to the base effect of 1998 revenue (this effect resulted from increased consumption of electricity and the 3 per cent rise in DEH rates as from the second half of 1998) and the 7.5 per cent reduction in electricity rates for households as from 1 December 1999. OSE revenue declined, against an increase in the previous year (1999: -12.2 per cent, 1998: 26.2 per cent). This decline, however, is expected to turn to a marginal increase when the final data for 1999 will be published. This outcome is associated, on the one hand, with the unchanged pricing policy and, on the other hand, with the limited increase in cargo transport volume, owing both to stronger competition and the crisis in Yugoslavia, while passenger transport volume remained unchanged.

Olympic Airways revenue is estimated to decline, compared with a moderate increase in the previous year (1999: -4.9 per cent, 1998: 10.1 per cent), owing to competi-

tion among private airlines in the domestic network, the crisis in Yugoslavia and the fact that the company's restructuring programme is at a transitional stage.

The growth rate of OASA revenue decelerated (1999: 5.9 per cent, 1998: 24.7 per cent), because of both the decline in passenger traffic and the number of routes, as a result of demonstrations in the centre of Athens, and of staff shortages.

Finally, the growth rate of EYDAP revenue decelerated (1999: 4.2 per cent, 1998: 8.7 per cent), owing to the restrained increase in water consumption (the rates remained unchanged) and to reduced revenue from one-off services (transfers, lifting and lowering of water meters etc.) and sewerage charges.

Operating costs of public enterprises increased by 5.1 per cent, compared with 9.9 per cent in 1998. This deceleration, which is larger than the corresponding slowdown of revenue growth, is chiefly attributable to the containment of interest payments, outlays for fuel and amortisation, and other expenses. More specifically, interest payments decreased by 23.9 per cent to 189 billion drachmas, compared with 249 billion in the previous year.

Consequently, the operating account of public enterprises recorded a larger surplus than in 1998 (1999: 264 billion drachmas, 1998: 188 billion). This development reflected an increase in the surpluses of DEH (1999: 49.1 billion drachmas, 1998: 14.3 billion), OTE (1999: 300 billion drachmas, 1998: 278.8 billion) and EYDAP (1999: 19.8 billion drachmas, 1998: 17.4 billion). By contrast, the aggregate surplus of the other enterprises declined (1999: 112.3 billion drachmas, 1998: 116.5 billion). Olympic Airways recorded a 19.5 billion drachma deficit, compared with a small surplus of 1.6 billion in 1998, while the deficit of OASA decreased (1999: 89.7 billion drachmas, 1998: 94.3 billion) as did that of EAB (1999: 1 billion drachmas, 1998: 6.9 billion).

Capital account expenditure of public enterprises grew by 20.2 per cent, compared with 12.3 per cent in 1998. This is mainly attributable to the increase in working capital requirements to 274 billion drachmas, compared with 4 billion in the previous year. The above outcome was almost entirely related to OTE, the working capital of which recorded a steep rise in 1999 (206 billion drachmas) relative to the previous year (–128 billion drachmas), owing to the growth of OTE current assets in relation to short-term liabilities. The growth rate of investment outlays decelerated (1999: 9.1 per cent, 1998: 19.6 per cent), while “other outlays” recorded a decline (1999: –10.5 per cent, 1998: –2.4 per cent) for the third consecutive year, although both categories of expenditure remained at high levels.

## *2.4 Public debt*

In addition to the deficit reduction, the debt-to-GDP ratio also declined for the third consecutive year, a development fulfilling the convergence criterion of public debt.

According to available provisional data, the consolidated debt of general government fell by one percentage point to 104.4 per cent of GDP in 1999. This reduction

occurred despite the large increase in external debt (in drachma terms), which was mainly due to the depreciation of the euro (and, hence of the drachma) against the US dollar and the Japanese yen.

As was the case in 1998, the reduction in the debt-to-GDP ratio resulted from the continuous improvement in the main determinants of the debt ratio (i.e. interest rates, the primary surplus, and GDP growth), as well as in the other factors causing a direct increase in debt. Moreover, in 1999 there was considerable prepayment of debt, corresponding to 2.8 per cent of GDP.

TABLE VII.8  
CONSOLIDATED DEBT OF GENERAL GOVERNMENT\*  
(Billion drachmas)

	1995	1996	1997	1998	1999**
Treasury bills and short-term bonds	7,120	7,229	4,823	3,566	1,544
Medium-term and long-term bonds <sup>1</sup>	16,252	20,188	24,697	28,281	31,094
Other medium-term and long-term loans <sup>1</sup>	6,231	5,906	6,322	5,987	7,265
<b>Total</b>	<b>29,603</b>	<b>33,323</b>	<b>35,842</b>	<b>37,834</b>	<b>39,903</b>
<b>Percentage of GDP</b>	<b>108.7</b>	<b>111.3</b>	<b>108.5</b>	<b>105.4</b>	<b>104.4</b>
– domestic debt <sup>2</sup>	23,004	26,087	27,512	28,685	29,709
(of which: Bank of Greece debt)	(3,909)	(3,987)	(4,056)	(4,133)	(4,188)
– external debt	6,599	7,236	8,330	9,149	10,194

1 The change in the outstanding balances of these two categories, compared with data in Bank of Greece, *Annual Report 1999*, is due to the transfer of the outstanding balances of long-term bonds from “Other medium-term and long-term loans” to “Medium-term and long-term bonds”.

2 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.

Source: Ministry of Finance and Bank of Greece.

As regards the development of the main determinants of the debt ratio, the continuous drop in interest rates on government borrowing for about five years in a row, the recording of primary surpluses in the government budget for the eighth consecutive year (with a considerable increase in 1999) and faster economic growth from 1994 onwards led to a weakening of debt dynamics and, eventually, first to the stabilisation and then to the decline of the debt-to-GDP ratio in the last three years (see Table VII.8 and Chart II.4).

At the same time, the direct increase in public debt caused by factors other than the annual deficit, such as interest capitalisation, assumption of the debt of public entities not belonging to general government etc., has been considerably reduced, contributing to the decline of the debt-to-GDP ratio. Moreover, the exchange rate policy pursued from 1994 until the end of 1997 also contributed in this direction. On the contrary, the devaluation of

the drachma in March 1998 and the depreciation of the euro against the dollar and the yen in 1999 added 2 and 2.9 percentage points, respectively, to the debt-to-GDP ratio.

Finally, in 1999 (for the second consecutive year) there was a considerable debt prepayment, amounting to 1,070 billion drachmas, through the Public Portfolio Management Company (DEKA S.A.), financed by the 1999 privatisation proceeds.

As in previous years, debt structure changed significantly in 1999, as, on the one hand, the policy aimed at lengthening average debt maturity continued (by the substitution of long-term bonds for Treasury bills and the issue of new 10-year and 15-year securities etc.) and, on the other hand, foreign investors continued to be interested in purchasing long-term fixed-interest-rate government securities, in order to realise capital gains. Thus, on 31 December 1999, 66.9 per cent of the debt was in drachmas, while the remaining 33.1 per cent debt in foreign currencies.<sup>1</sup> It is also estimated that about 82 per cent of the debt consists of negotiable government securities, while the remainder is made up of bonds not directly negotiable in the secondary market.

Finally, as regards term structure, at end-1999 about 3.9 per cent represented short-term liabilities (of one year or less), 77.9 per cent medium- and long-term liabilities (two-year to thirty-year bonds) and the remaining 18.2 per cent medium- and long-term loans and other liabilities.

### 3. THE BUDGET FOR 2000

#### *3.1 The central government budget*

The forthcoming entry of Greece in Economic and Monetary Union (EMU) and the adoption of the euro is expected to have far-reaching consequences on the Greek economy and the manner in which economic policy is pursued. As from 1 January 2002, monetary policy will be conducted by the European Central Bank, while fiscal policy will be conducted at the national level, as laid down in the Stability and Growth Pact.

In this context, fiscal policy, which will continue to be pursued by Member States, will remain oriented towards fiscal consolidation. Fiscal policy will have not only to fill the gaps that will be created because of the lack of a national monetary policy (particularly in cases of asymmetric shocks), but also to attain the medium-term target of the Stability and Growth Pact, which provides for a budgetary position which is close to balance or in surplus. Besides, the reduction in the debt-to-GDP ratio, which requires increased primary surpluses, should be continued.

For these reasons, the government budget provides for a further reduction in the deficit, on an accrual basis, from 5.1 per cent in 1999 to 4.9 per cent in 2000 (see Table VII.9).

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<sup>1</sup> Including the part of Bank of Greece loans with a foreign currency clause (3,003 billion drachmas). By contrast, in Table VII.8 this amount is included in domestic debt.



TABLE VII.9  
REVENUE, EXPENDITURE AND DEFICIT UNDER THE OVERALL GOVERNMENT BUDGET  
(Billion drachmas)

	1996	1997	1998	1999*	Budget for 2000	Percentage changes			
						1997/96	1998/97	1999*/98	Budget for 2000/99*
<b>Revenue</b>									
1. Ordinary budget	7,951.6	9,185.4	10,412.5	11,590.0	12,115.0	15.5	13.4	11.3	4.5
— Direct taxes	7,384.1	8,467.4	9,498.5	10,580.0	10,955.0	14.7	12.2	11.4	3.5
— Indirect taxes	(2,316.1)	(2,767.1)	(3,591.4)	(4,036.5)	(3,690.0)	(19.5)	(29.8)	(12.4)	(-8.6)
— Other revenue	(4,299.9)	(4,833.9)	(5,248.4)	(5,841.9)	(6,246.0)	(12.4)	(8.6)	(11.3)	(6.9)
2. Public investment budget	(768.1)	(866.4)	(658.7)	(701.6)	(1,019.0)	(12.8)	(-24.0)	(6.5)	(45.2)
	567.5	718.0	914.0	1,010.0	1,160.0	26.5	27.3	10.5	14.9
<b>Expenditure</b>									
1.1 Ordinary budget <sup>1</sup>	10,822.4	11,690.8	12,561.5	13,521.8	14,100.0	8.0	7.4	7.7	4.3
Interest payments <sup>2</sup>	9,727.4	10,064.3	10,684.0	11,286.8	11,660.0 <sup>3</sup>	3.5	6.2	5.6	3.3
	(3,501.1)	(3,216.2)	(3,233.7)	(3,320.0)	(3,220.0)	(-8.1)	(0.5)	(2.7)	(-3.0)
1.2 Ordinary budget primary expenditure	6,226.3	6,848.1	7,450.3	7,966.8	8,440.0	10.0	8.8	6.9	5.9
2. Public investment budget <sup>4</sup>	1,095.0	1,626.5	1,877.5	2,235.0 <sup>5</sup>	2,440.0 <sup>5</sup>	48.5	15.4	19.0	9.2
<b>Net deficit (-)/surplus (+)</b>	-2,870.8	-2,505.4	-2,149.0	-1,931.8	-1,985.0	-12.7	-14.2	-10.1	2.8
<b>Percentage of GDP</b>									
1. Ordinary budget	-9.6	-7.6	-6.0	-5.1	-4.9				
	-2,343.3	-1,596.9	-1,185.5	-706.8	-705.0				
2. Public investment budget	-527.5	-908.5	-963.5	-1,225.0	-1,280.0				
<b>Primary deficit (-)/surplus (+)<sup>4</sup></b>	630.3	710.8	1,084.7	1,388.2	1,235.0				
<b>Percentage of GDP</b>	2.1	2.2	3.0	3.6	3.0				
ELEGEF (Revenue = Expenditure)	859.0	819.0	793.0	930.0	981.0	-4.7	-3.2	17.3	5.5
Amortisation payments <sup>2</sup>	3,638.2	3,589.4	3,536.4	3,362.3	4,042.0	-1.4	-1.5	-4.9	20.2

1 Excluding amortisation payments.

2 Including, respectively, interest and amortisation payments related to the national defence debt.

3 Including expenditure (40 billion drachmas in 2000) to support persons hit by the 1999 earthquake.

4 Expenditure for 1997, 1998, 1999 and 2000 includes 420, 482, 620 and 670 billion drachmas respectively, which concern capital transfers for the acquisition of assets. If these amounts, along with those granted in 2000 to support persons hit by the 1999 earthquake are deducted, the primary surplus for 1997, 1998, 1999 and 2000 rises to 3.4 per cent, 4.4 per cent, 5.3 per cent and 4.9 per cent of GDP respectively.

5 Including expenditure to support persons hit by the 1999 earthquake, amounting to 30 billion drachmas in 1999 and 40 billion drachmas in 2000.

\* Provisional data.

Source: Ministry of Finance, State General Accounting Office.

If outlays for the acquisition of assets (i.e. public enterprises' shares) are deducted, the budget deficit is projected to decline from 3.4 per cent to 3.2 per cent. The latter aggregate, on a national accounts basis and at general government level, corresponds to a deficit of 1.6 per cent of GDP in 1999 and 1.2 per cent in 2000.

Budget revenue, in spite of the large increase in 1999 (11.3 per cent), is expected to increase further by 4.5 per cent in 2000, while the growth rate of expenditure is projected to be contained at 4.3 per cent, compared with 7.7 per cent in 1999. This containment will stem primarily from interest payments, which are forecast to drop by 3 per cent in 2000. By contrast, primary expenditure is expected to increase by 6.6 per cent, in spite of the lower rate of increase in public investment expenditure relative to 1999.

Regarding the ordinary budget, revenue is projected to increase by 3.5 per cent to 10,955 billion drachmas. This limited increase reflects the impact of the measures announced on 3 September 1999 (and concerning the year 2000), as well as the large rise in revenue in the last months of 1999, which was not known when the budget for 2000 was being drawn up.

Ordinary budget expenditure is expected to rise only by 3.3 per cent in 2000, compared with 5.6 per cent in 1999, and amount to 11,660 billion drachmas. The growth rate of primary expenditure is also expected to be kept at 5.9 per cent, compared with 6.9 per cent in 1999.

As in the previous year, budgeted expenditure for 2000 has been squeezed and, on the basis of the experience gained in previous years, it is estimated that it will be difficult to keep it at budgeted levels. This estimate is corroborated by two additional reasons: first, expenditure in 1999 overshot budget forecasts by 72 billion drachmas and, second, in the first months of 2000 new measures in favour of lower-income classes were announced (e.g. payment by the government of social security contributions of low-salaried employees, increase in minimum pensions etc.), which will most likely increase expenditure.

Public investment budget expenditure is expected to increase by 9.2 per cent in 2000, compared with 19.0 per cent in 1999 and 15.4 per cent in 1998, and come to 2,440 billion drachmas. This amount includes capital transfers of 670 billion drachmas to public enterprises. Of total investment outlays, about 78 per cent will be used to finance projects co-financed by EU Structural Funds, while the remainder will be used for projects fully financed from national resources. Public investment budget revenue is expected to rise by 14.9 per cent in 2000, compared with 10.5 per cent in 1999, owing to increased receipts from the various EU Funds.

The faster growth of revenue and the slower increase in expenditure will keep the deficit of the public investment budget to 1999 levels, namely to 3.2 per cent of GDP.

Finally, according to the Introductory Report on the Budget for 2000, net EU transfers are expected to increase by 7.6 per cent in 2000 and reach 1,986 billion drachmas (see Table VII.10), following the large rise in 1999 (34.0 per cent). The increase in net transfers stems from larger receipts from the EU, as Greece's contributions remain virtu-



ally at 1999 levels. This increase concerns almost exclusively the public investment budget and stems from the European Regional Development Fund and the European Agricultural Guidance and Guarantee Fund-Guarantee Section.

### *3.2 The budget of public enterprises and social security and welfare funds*

According to the Introductory Report on the Budget for 2000 (see Table VII.6), the seven major social security and welfare funds are expected, on the one hand, to record a smaller increase in their overall deficit (on an accrual basis) and, on the other hand, to receive increased grants, thereby reducing their net borrowing requirements. In particular, while their overall deficit is expected to reach 1,159 billion drachmas, increasing by 11.6 per cent compared with 1999, their net borrowing requirements are expected to be contained at 49 billion drachmas, i.e. to be 32.9 per cent less than in 1999. The deficit-to-GDP ratio is budgeted at 2.9 per cent, almost as much as in 1999.

The projected containment of the overall deficit of the seven major funds is mainly based on the continuing efforts to curb contribution evasion (under Law 2556/1997), rationalise expenses and pricing policy for medical drugs, increase employment, and control more effectively hospitalisation fees.

The total deficit of the seven major funds will be partly financed by increased grants to these funds, which will reach 1,110 billion drachmas in 2000 from 965 billion in 1999. As mentioned above, this development, combined with a small increase in the deficit, will reduce the borrowing requirements of these funds to 49 billion drachmas in 2000, compared with 72 billion drachmas in the previous year.

According to the Introductory Report on the Budget (see Table VII.7), the total deficit of public enterprises is expected to rise in 2000, though less than in 1999, and come to 1,755 billion drachmas (1999: 1,425 billion). This is attributable to the considerable increase of 407 billion drachmas in the capital account deficit, while special resources are projected to record a limited rise of only 8 billion drachmas, compared with a 161 billion reduction in 1999.

The operating account surplus is projected to rise, though less than in 1999, and reach 333 billion drachmas, compared with 264 billion in 1999. This is accounted for by the fact that the faster growth of revenue, although important (2000: 10.8 per cent, 1999: 6.8 per cent), is expected to be largely offset by a corresponding speed-up of the growth rate of expenditure (2000: 9.8 per cent, 1999: 5.1 per cent).

On the other hand, the capital account deficit is expected to rise significantly, owing to the increase in investment outlays (2000: 2,156 billion drachmas, 1999: 1,718 billion) and in "other outlays", which are projected to increase by 146 billion drachmas, compared with a reduction of 32 billion in 1999.

The contained rise in the total deficit of public enterprises is expected to lead to a smaller growth of their net borrowing requirements relative to 1999, thus enabling a more

limited increase in grants. More specifically, total grants are projected to rise to 640 billion drachmas, from 533 billion in 1999, owing to the forecast increase in grants mainly from the public investment budget (2000: 546 billion drachmas, 1999: 458 billion) and, to a lesser degree, because of the increase in receipts from the EU (2000: 70 billion drachmas, 1999: 39 billion). By contrast, grants from the ordinary budget are projected to decrease by 33.3 per cent, compared with the previous year. As the increase in the total deficit is not fully financed by larger grants, net borrowing will rise to 631 billion drachmas, compared with 445 billion in 1999.

## APPENDIX TO CHAPTER VII

### FISCAL POLICY MEASURES

In contrast with the previous two years, 1999 was a year during which extensive tax reforms took place and measures provided for by laws enacted in previous years were put into effect. These arrangements had many goals, such as to reduce inflation (for 1999), increase tax revenue, combat unemployment, encourage firms to introduce new technologies, and, of course, curb tax evasion and achieve a more equitable distribution of the tax burden among tax payers.

Specifically, under Law 2742/1999 “Spatial planing and sustainable development, and other provisions”, the special tax imposed on the value of stock market transactions increased, as from 8 October 1999, from 0.3 per cent to 0.6 per cent.

Under Law 2743/1999 “Pleasure boats, and other provisions”, the special consumption tax on gasoline, as well as passenger car classification fees are reduced. More specifically, as from 5 August 1999: (a) the rate of the special consumption tax on unleaded gasoline up to 96.5 octanes is reduced from 103,000 to 98,000 drachmas per kilolitre and (b) the rate of the special consumption tax on high-compression leaded gasoline is reduced from 119,000 to 114,000 drachmas per kilolitre. These rates are the lowest set by the European Union on the basis of the drachma/euro parity in October 1998. Under the same law, as from 3 September 1999 passenger cars classification fees are reduced by 30 to 56 per cent, as the case may be.

Law 2753/1999 “Simplification and reliefs in income taxation, and other provisions” provides for the indexation of the tax scale, the imposition of new taxes, the abolition of, or cut in, tax deductions and tax exemptions, and for other changes in direct and indirect taxation. More specifically, in personal income tax, the tax-free amount for wage-earners and pensioners is increased to 1.9 million drachmas for incomes earned in 1999 and to 2.3 million drachmas for incomes earned in 2000. For the other taxpayers, the tax-free amount is increased to 1.6 million drachmas for incomes earned in 1999 and to 2.0 million for incomes earned in 2000. For the incomes of 1999, the tax scale is indexed by 2.5 per cent, while the tax deduction for each child is increased to 35,000 from 25,000 drachmas for the first two children. For a taxpayer with three, four, five and six children, the tax deduction is increased to 50,000, 60,000, 70,000 and 80,000 drachmas, respectively.

Moreover, for incomes earned in 1999 an upper limit of 250,000 drachmas is set for the deduction from taxable income of outlays for main residence rent, insurance premiums, tuition fees for private schools (frontistiria) and the purchase or installation of household appliances operating with natural gas. The total amount of each of these outlays is deducted if it does not exceed 150,000 drachmas; if it exceeds 150,000 drachmas, 40 per cent of the amount in excess is deducted; in any case, the tax-free amount for each such outlay cannot exceed 250,000 drachmas. As from 1 January 2000, interest on housing

loans for main residence is deducted only for dwellings up to 120 square metres, while for bigger dwellings the amount of the outlay that is deducted is limited to that corresponding to 120 square metres. Also, for incomes earned in 1999, the limits for the taxation of imputed income from owner-occupied dwellings are raised, depending on the number of the taxpayer's children (the rise applies when at least two children exist), while the supplementary tax on income from owner-occupied dwellings is reduced to 1.5 per cent from 3 per cent.

Besides, the "objective criteria" for the taxation of 1999 incomes of traders, artisans and the self-employed are abolished. They are replaced by a new system, which establishes three alternative ways for the calculation of the "true" income and corresponding tax. These three ways are the following: a) the accounting method, where calculation is made on the basis of accounting books, b) the expenditure criterion, where the calculation is based on the taxpayer's professional expenses and c) a calculation which uses criteria not based on accounting book data and applies to certain categories of taxpayers, such as medical doctors, lawyers, artists and business financial consultants.

Under the same law, the tax paid for the incomes of 1999 by certain categories of professionals, who are taxed "by a lump-sum amount" (taxi drivers, vendors) is increased. Deadlines for the submission of the tax return are changed: for wage earners and pensioners the deadline is prolonged until 2 May and is changed respectively for the other taxpayers. The obligation to submit a tax return is abolished for those who are over 25 and do not have any income. Finally, the deduction of the extraordinary contribution imposed in 1989 is abolished.

As concerns corporate income tax, the tax rate of partnerships is reduced to 30 per cent from 35 per cent for the incomes earned in 1999 and to 25 per cent for the incomes of 2000. As from 17 November 1999, the sale value of shares not listed on the Athens Stock Exchange is separately taxed at a 5 per cent rate. Furthermore, firms are offered the possibility to proceed to one-off amortisation of their expenses for the purchase of personal computers and software.

Under the same law, a type of "objective criteria" is established, to check the proper payment of VAT by businesses keeping accounting books of category B or, optionally, books of category C. The law also provides for the final settlement, from 17 November 1999 through end-May 2000, of pending tax cases concerning the taxation of real estate sales, donations, inheritance and parental gifts, as well as the taxation of large real estate. The procedure for the issuance of a document declaring that the taxpayer has fulfilled his obligations is simplified and the fines imposed for breaches of the Accounting Books and Data Code are rationalised. In an effort to reduce unemployment, for the period from 17 November 1999 through 31 December 2001, 50 per cent of employers' social security contributions for newly recruited employees is deducted from firms' profits.

Finally, under the same law, the special consumption tax on heating oil is reduced to the lowest limit provided for by the European Union, namely to 6,100 drachmas per kilolitre for the period 15 October 1999 through 28 April 2000.

## VIII. BALANCE OF PAYMENTS

### 1. INTRODUCTION

The current account deficit increased from €3,286 million in 1998 to €4,808 million in 1999. This deterioration was mainly due to an increase in the trade deficit, but also to a decrease in the surplus on current transfers. By contrast, the surplus on services increased substantially, while the deficit on the income account was roughly halved.

TABLE VIII.1  
BALANCE OF PAYMENTS

	January – December (million ECU/euro) <sup>1</sup>			Percentage changes		January – December (billion drachmas)			Percentage changes	
	1997	1998	1999*	1998/97	1999/98	1997	1998	1999*	1998/97	1999/98
<b>Current account balance</b> (percentage of GDP)	<b>-4,266.3</b> (-4.0)	<b>-3,286.5</b> (-3.0)	<b>-4,808.5</b> (-4.1)	-23.0	46.3	<b>-1,359.8</b>	<b>-1,144.3</b>	<b>-1,570.0</b>	-15.9	37.2
<b>Trade balance</b> (percentage of GDP)	<b>-15,234.8</b> (-14.2)	<b>-14,823.4</b> (-13.7)	<b>-16,892.7</b> (-14.4)	-2.7	13.9	<b>-4,722.6</b>	<b>-4,937.2</b>	<b>-5,507.2</b>	4.5	11.5
Goods exports	5,689.8	5,922.9	8,030.3			1,751.2	1,962.4	2,617.1		
Goods imports	20,924.6	20,746.3	24,923.0			6,473.8	6,899.6	8,124.3		
Non-oil trade balance	-13,298.6	-13,659.4	-15,454.6	2.7	13.1	-4,123.8	-4,553.8	-5,037.8	10.4	10.6
Oil trade balance	-1,936.2	-1,164.0	-1,438.0	-39.9	23.5	-598.8	-383.3	-469.4	-36.0	22.4
<b>Services balance</b>	<b>5,738.9</b>	<b>6,072.6</b>	<b>6,846.5</b>	5.8	12.7	<b>1,759.6</b>	<b>2,006.4</b>	<b>2,231.0</b>	14.0	11.2
Receipts	8,989.1	9,968.3	15,575.5			2,765.5	3,301.6	5,078.0		
Payments	3,250.2	3,895.7	8,729.0			1,005.9	1,295.1	2,847.0		
<b>Income balance</b>	<b>-1,391.1</b>	<b>-1,381.8</b>	<b>-626.5</b>	-0.7	-54.7	<b>-432.7</b>	<b>-458.0</b>	<b>-203.8</b>	5.8	-55.6
Receipts	1,109.6	1,362.0	2,414.1			341.2	451.4	786.4		
Payments	2,500.6	2,743.8	3,040.6			774.0	909.4	990.1		
<b>Current transfers balance</b>	<b>6,620.6</b>	<b>6,846.1</b>	<b>5,864.1</b>	3.4	-14.3	<b>2,035.9</b>	<b>2,244.5</b>	<b>1,909.9</b>	10.2	-14.9
Receipts	6,656.0	7,276.4	6,746.5			2,046.8	2,388.6	2,198.0		
Payments	35.4	430.3	882.4			10.9	144.1	288.1		
<b>Financial account balance</b>	<b>5,673.3</b>	<b>3,394.6</b>	<b>4,748.8</b>			<b>1,598.0</b>	<b>1,012.3</b>	<b>1,557.7</b>		
<b>Errors and omissions</b>	<b>-1,406.9</b>	<b>-108.1</b>	<b>59.7</b>			<b>-238.2</b>	<b>132.0</b>	<b>12.3</b>		
<b>Foreign exchange reserves</b> (end of period)	<b>12,075.6</b>	<b>15,576.2</b>	<b>18,836.9</b>			<b>3,769.0</b>	<b>5,140.3</b>	<b>6,222.8</b>		

1 ECU for 1997 and 1998, euro for 1999.

\* Provisional data.

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

The adoption of the new balance of payments compilation method for all balance of payments data has increased the accuracy of recording. Comparability with previous years, however, remains limited, even with regard to 1998, when the new method was first implemented, because the distinction between residents and non-residents was not



introduced simultaneously by all commercial banks during 1998. Data comparability between 1999 and 2000 is expected to improve, as the transition to the new system will have been completed.

Current account developments were affected, first, by Greece's GDP growth rate, which exceeded that of its main trading partners and, second, by the 40.3 per cent rise in international crude oil prices in 1999, triggered by the decision of oil-producing countries to cut back on production, while demand remained strong. The rise in demand is attributed to high GDP growth in the US and to economic recovery in SE Asia. Also, the trade balance was significantly burdened by massive passenger car imports, following the abolition of the special consumption tax and its partial substitution by the classification tax, which was then reduced in September 1999. The import bill also increased because of the high growth rate of investment in equipment and the faster growth of private consumption, compared with 1998. Finally, in spite of the slower growth of world economic activity compared with 1998 – at least in the countries which are Greece's major trading partners – and the concomitant slower growth of external demand,<sup>1</sup> export receipts grew substantially.

Price developments do not seem to have had a major impact on balance of payments items, with both import and export prices estimated to have fluctuated around 1998 levels.<sup>2</sup>

The favourable developments in the balance for services and in the income account are mainly attributed to the rise in real incomes across the EU, restrained price increases in domestic tourist services, the normalisation of international sea transport and the rise in income (interest, dividends and profits) from residents' investments abroad. The decrease in the surplus on current transfers resulted from the doubling of transfer payments and from the drop in receipts from emigrants' remittances. Finally, the small decrease in net inflows from the EU is attributable to a deferment of transfers, which were comparatively limited in the last months of 1999 and therefore substantially larger in the early months of 2000.

Financial transactions were mainly affected by the drop in the public sector borrowing requirement (PSBR) in 1999 and by the rise in Greek investments abroad, particularly in the Balkan countries, where Greek enterprises have been enhancing their presence. Foreign exchange reserves rose to \$18.9 billion at end-1999 from \$18.2 billion a year earlier.

1 According to OECD estimates, GDP growth in the EU fell from 2.7 per cent in 1998 to 2.1 per cent in 1999, but increased across the OECD from 2.4 per cent to 2.8 per cent over the same period. The growth rate of the total volume of imports by OECD countries slowed from 7.6 per cent in 1998 to 7.2 per cent in 1999, while the corresponding rate in the countries of destination of Greek exports fell from 8 per cent in 1998 to 7 per cent in 1999. Finally, according to IMF estimates, GDP growth also slowed in Central and Eastern Europe.

2 The drachma prices of imported and exported goods and services are proxied by sub-indices 3 and 4 of the wholesale price index (WPI) compiled by the National Statistical Service of Greece (NSSG). Both sub-indices remained roughly unchanged in 1999, with export prices falling 0.2 per cent and import prices rising by 0.5 per cent.

## 2. CURRENT ACCOUNT BALANCE

## 2.1 Trade balance

On the basis of provisional payments data for 1999, the trade deficit amounted to 14.3 per cent of GDP, compared with 13.7 per cent in 1998. In absolute terms, the increase of €2,069 million in the trade deficit reflects both an increase in the non-oil

TABLE VIII.2  
EXPORT AND IMPORT PRICES AND VOLUME  
(Percentage change)

<b>Exports</b>			
	1997*	1998	1999 <sup>1</sup>
Value (million euro)			
Total	23.5	4.1	35.6
Excluding fuel	26.1	2.4	31.5
Export prices <sup>2</sup>			
Total	0.6	-4.2	1.6
Excluding fuel	2.6	-4.7	0.4
Volume			
Total	22.7	8.6	33.4
Excluding fuel	22.9	7.5	31.0
<b>Imports</b>			
Value (million euro)			
Total	8.5	-0.9	20.1
Excluding fuel	8.7	2.6	18.3
Import prices <sup>2</sup>			
Total	-0.2	-1.9	2.3
Excluding fuel	-0.1	-1.7	2.0
Volume			
Total	8.7	1.0	17.5
Excluding fuel	8.8	4.4	15.9

1 Provisional data.

2 Calculated on the basis of the respective Wholesale Price Index compiled by NSSG, as well as of the course of the drachma/euro exchange rate.

\* The comparison between 1997 and 1996 data is affected by the adjustment of 1997 (but not of 1996) data to the new method of balance of payments compilation.

Source: Bank of Greece.

trade deficit and a higher net oil import bill, following the steep rise in oil prices in the world market. The increase in the non-oil trade deficit was due to the rise in the import bill, which more than offset the significant increase in export receipts. Moreover, the part of the import bill which is covered by export receipts grew considerably, from 29 per cent in 1998 to 32 per cent in 1999, owing to the improved export performance of the Greek economy and the shift of exports towards products of higher value added.

The customs statistics compiled by the NSSG offer a picture of Greece's trade balance rather different than that offered by settlements statistics. According to the former source, in addition to the reduction in the trade deficit, import value and volume also fell. Export receipts rose, while export volume remained at 1998 levels. A possible explanation for this difference is that customs statistics are provisional and, until finalised, underestimate the value of transactions, especially at intra-EU level.

Quarterly settlements statistics indicate that the trade deficit in the first quarter of 1999 was lower than in the first quarter of 1998, owing primarily to the reduction in both net oil imports and the non-oil trade deficit. It then rose in the second and third quarter of 1999, compared with the respective quarters of 1998. The impact of the rise in world crude oil prices was particularly marked in the fourth quarter, causing the oil balance deficit to more than double, compared with the last quarter of 1998.

### *2.1.1 Exports*

Non-oil export receipts increased significantly in 1999. Given that export prices, according to the respective NSSG wholesale price sub-index, remained virtually unchanged during 1999, export volume increased much more than in 1998. The price competitiveness indicator, as measured by relative unit labour costs in the manufacturing industry,<sup>1</sup> as well as by the WPI and the CPI, also remained almost unchanged. It should be noted that the impact of the tight exchange rate policy on competitiveness has largely been offset by the mitigation of inflationary pressures and expectations, the reduction of enterprises' financial costs and the favourable outcome of structural changes in the economy in recent years. It should be recalled that most Greek export firms are price takers in international markets. Therefore, any fluctuations in the production costs of Greek firms will, at least in the short term, only affect their profit margins. Greek enterprises may be able to improve their export performance over the long term, provided that they succeed in reducing their production costs by introducing structural changes concerning production and marketing.<sup>2</sup>

With regard to the determinants of external demand, economic activity in Greece's major trading partners is estimated to have increased at a slower pace than in 1998, thereby affecting Greek export trade.

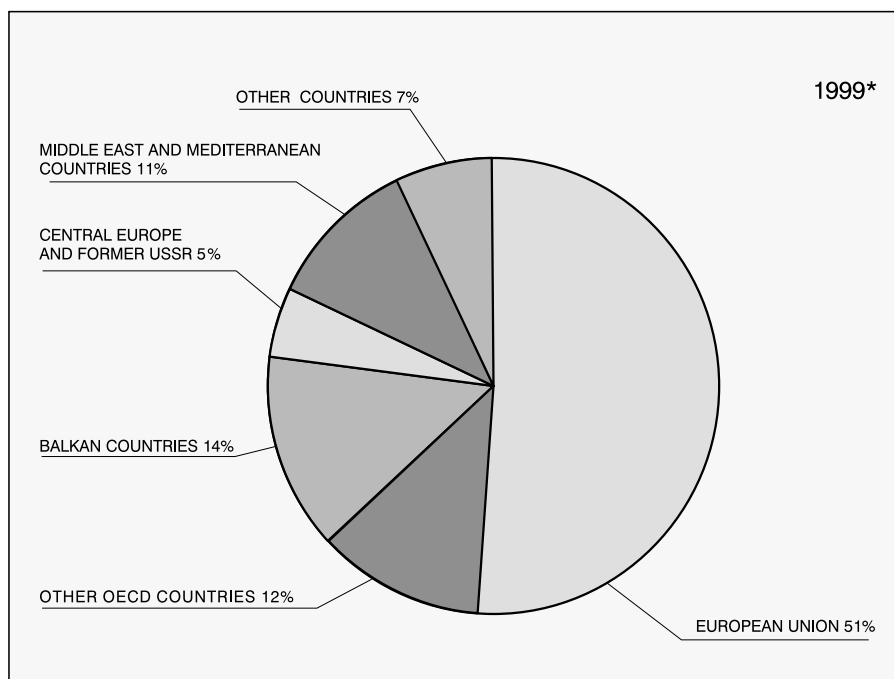
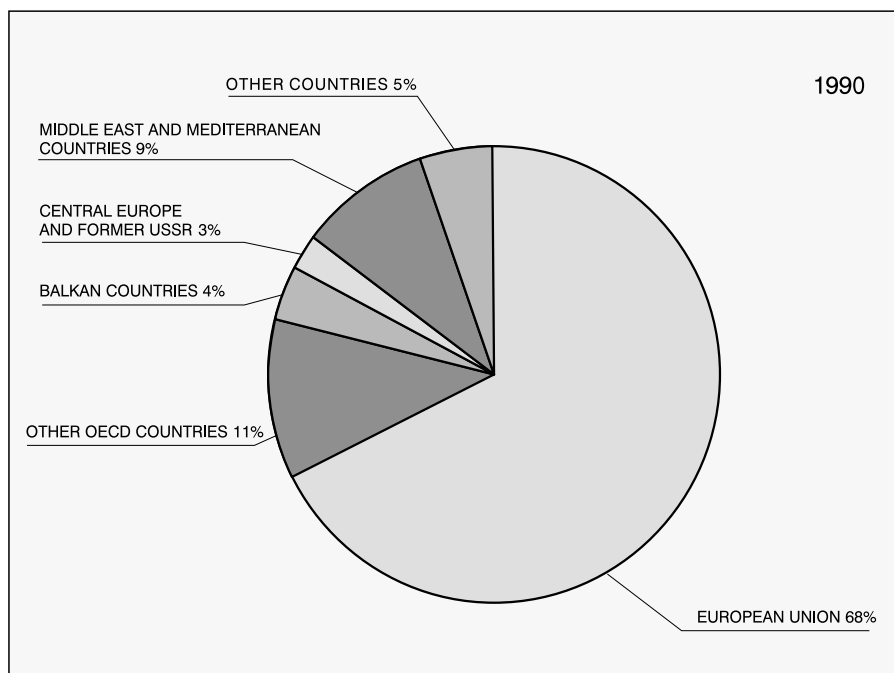
OECD countries, and the EU countries in particular, are the traditional destinations for over 60 per cent of Greece's exports, although these exports, especially to EU markets, face strong competition from products originating in low-cost countries. A shift in the geographical distribution of Greece's exports has been observed in recent years,

1 These developments were due to a combination of two factors: the growth rate of unit labour costs in Greece (2.5 per cent), which was fairly close to the rate of the competitor countries (2.1 per cent), and the limited depreciation of the drachma in 1999.

2 Export performance is measured as the ratio of export value to gross production value.

CHART VIII.1

GREEK EXPORTS BY DESTINATION

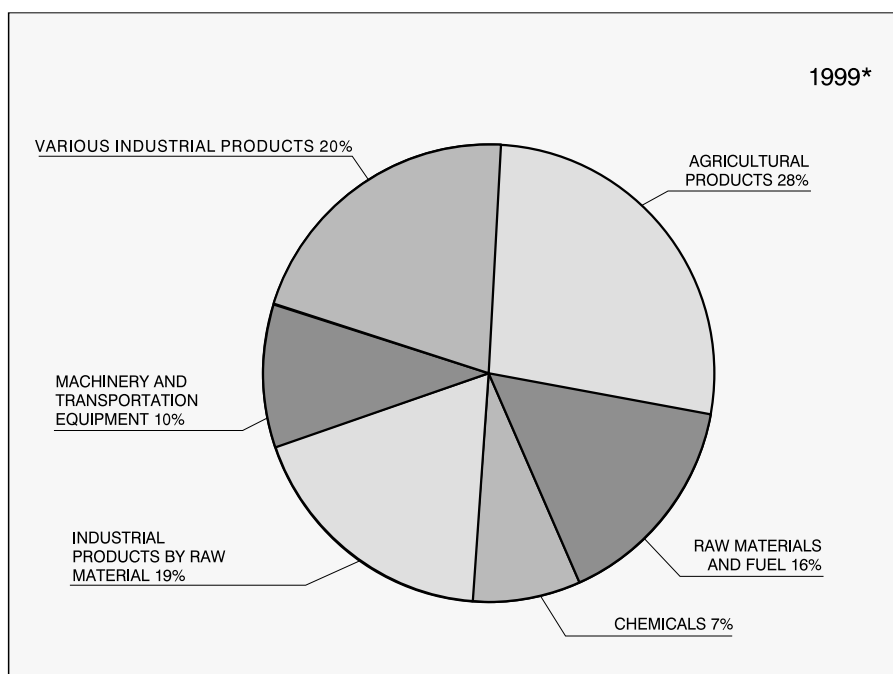
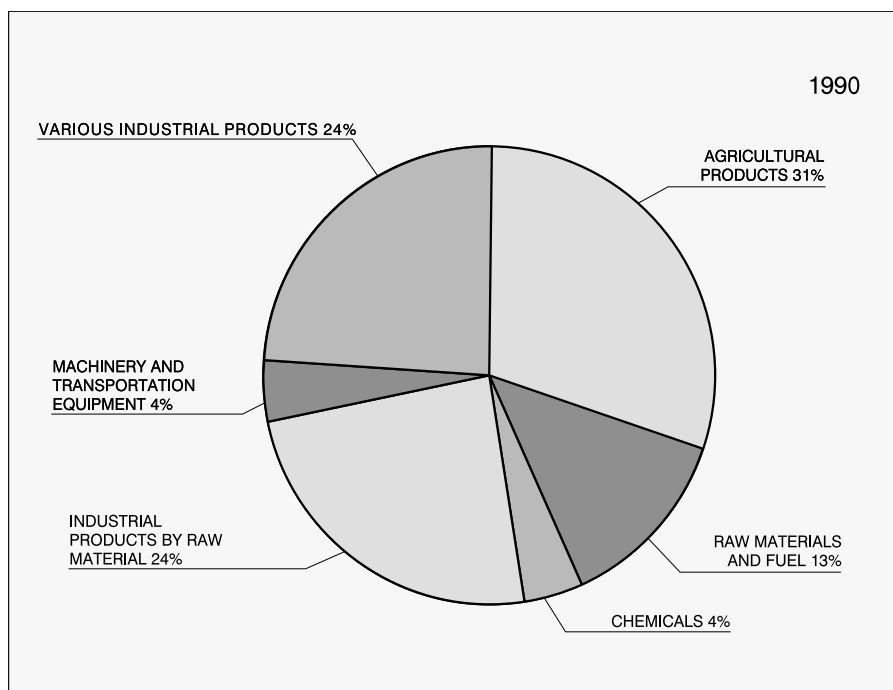


\* Provisional data.

Source: NSSG.

CHART VIII.2

## GREEK EXPORTS BY PRODUCT CATEGORY



\* Provisional data.

Source: NSSG.

**BOX VIII.1****Restructuring of Greek exports**

Greek export activity has been growing in parallel to a restructuring in terms of product categories. This has been considered as an essential step towards improving the competitiveness of exported goods and services in the international markets and increasing export receipts. More specifically, since the early 1990s, an increasing share of export volume has been accounted for by “high-technology” products. These, having been introduced in the Greek manufacturing industry fairly recently, incorporate new production methods or advanced technology (e.g. machinery and equipment for energy production, industrial applications, telecommunications, medical and pharmaceutical goods, scientific and monitoring machinery and instruments, etc.). Meanwhile, the share of traditional industrial products has begun to decline, as a result of competition from low-cost countries. According to a recent study by the Panhellenic Exporters’ Association, the percentage share in total exports accounted for by selected high-technology sectors increased from 6 per cent in 1993 to roughly 9 per cent in 1997. Over this 5-year period, export receipts of this category increased by an annual average of 19 per cent, while total export value grew, on average, by only 8 per cent.

The manufacturing branches the external trade share of which increased significantly over the last five years are: plastics and rubber (in particular, packaging products and plastic piping), chemicals and pharmaceuticals, machinery and appliances, electrical appliances and machinery (in particular, telecommunications materials and appliances, as well as PCs) and transportation equipment. These branches, considered amongst the most dynamic in Greek manufacturing, are characterised by considerable investment activity, rapid export performance growth since the early 1990s and export competitiveness gains. The Greek manufacturers’ main competitors are their other European counterparts, while the most important destinations of Greek exports are the Balkan and Eastern European countries, as well as the EU.

According to detailed NSSG data, Greek exports of “agricultural products” and “industrial goods classified on a raw material basis”, accounting for the most important traditional goods categories, have seen their share in total Greek export value decrease between 1990 and 1999. Conversely, “chemicals” and “transportation machinery and equipment”, comprising several high-technology products, account for an increasing share. This tendency towards Greek export diversification is prevailing with respect to both traditional destinations and, primarily, newly established markets. Similar conclusions have been drawn on the basis of detailed settlement statistics collected by the Bank of Greece, available up to 1997.

with a constantly growing share of exports going to countries with rising demand for Greek products in the Balkans, Central Europe and the former Soviet Union. This trend partly persisted throughout 1999.<sup>1</sup>

<sup>1</sup> According to NSSG data for 1999, the volume of exports to the EU decreased by 3 per cent, while that to the Balkan countries increased by 12 per cent. The volume of exports to Central Europe and the former Soviet Union was lower, while that to non-EU OECD countries increased, owing to higher exports to the United States.

These developments have occurred parallel to the continuing change in the composition of Greek exports, involving a growing share of high-technology products. This is a very important step towards improving the competitiveness of Greek products in the world markets. It is worth noting that some industries, fairly new in the international market, have achieved a rate of export performance which increases faster than import penetration in the same industries. Regarding individual product categories, chemicals, machinery and transportation equipment, as well as electrical appliances and machinery, which include high-technology products, account for substantial percentages of export volume. However, traditional industries, such as textiles, still rank high in terms of export performance. Iron and steel, textile materials, ready-made clothing, as well as food, beverages and tobacco, are the major traditional industries accounting for a large part of total export receipts.

### *2.1.2 Imports*

The non-oil import bill increased compared with 1998. Considering that import prices, according to the NSSG wholesale price sub-index, remained roughly at 1998 levels, it appears that import volume grew at more than double the 1998 rate.

The import bill was burdened by the accelerated growth of both investment in equipment and private consumption, compared with 1998, and additionally by the substantial rise in passenger car imports, after the November 1998 and September 1999 consumer tax reductions. The number of passenger car registrations in 1999 was 47 per cent higher than in 1998 (roughly 60 per cent higher in the first quarter of 1999).

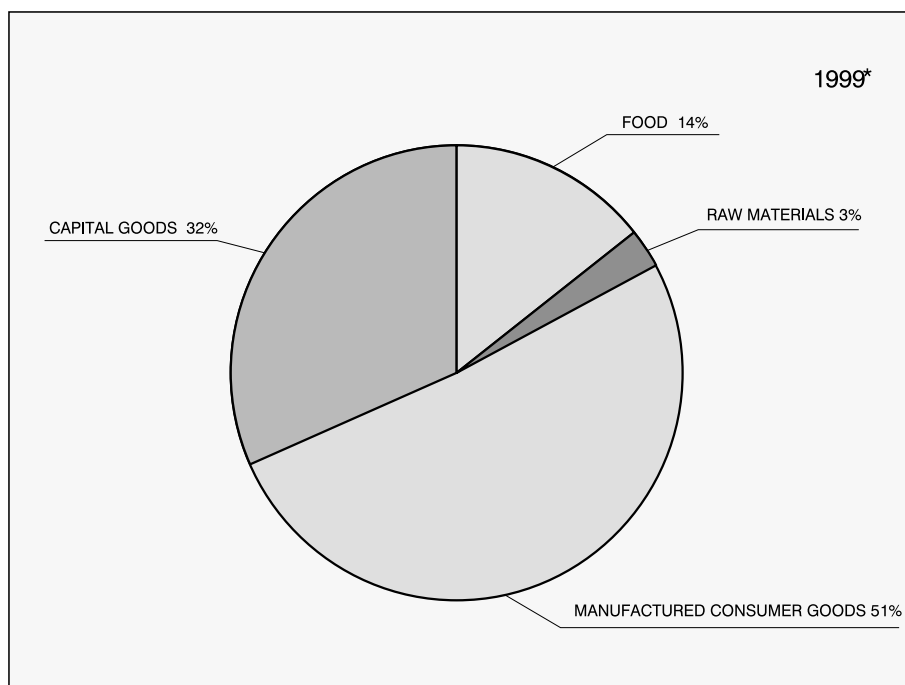
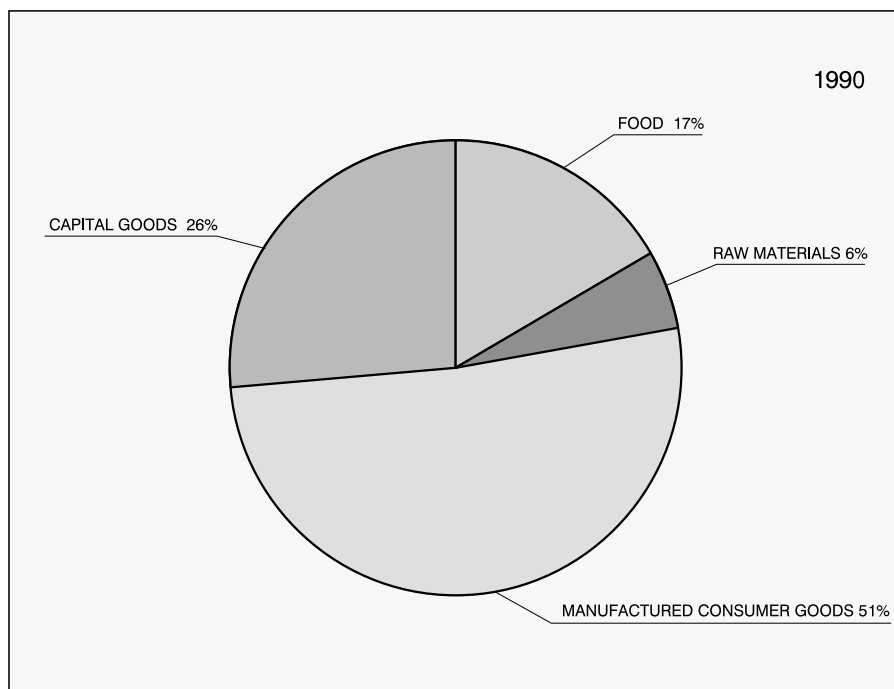
The substantial increase in import payments related to the above categories and to industrial goods in general was to be expected, considering the high growth rate of the Greek economy in 1999 and the combination of high income elasticity with low price elasticity. According to detailed payments data for 1999, apart from the “oil products” and “automobiles and automobile parts” categories, “machinery and transportation equipment” and “electrical appliances and machinery” also accounted for a significant share of the import bill: both these categories presented a particularly high degree of import penetration<sup>1</sup> in the corresponding segments of domestic production, owing to the limited degree of import substitution. The large share of iron and steel in the import bill is associated with increased export activity in these product categories, combined with reduced building activity in the home market. Finally, according to IOBE (Foundation for Economic and Industrial Research) data, the substantial rise in expenditure for imports of pharmaceuticals in recent years is due to the fact that a wide range of domes-

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<sup>1</sup> Import penetration is measured as the ratio of import value to apparent consumption, the latter being the algebraic sum of the gross value of output and net import value.

CHART VIII.3

GREEK IMPORTS BY PRODUCT CATEGORY



\*Provisional data.  
Source: NSSG.



**BOX VIII.2****Extra trade balance burdens**

Trade balance developments were substantially affected in 1999 by the course of international crude oil prices and their impact on the oil balance. The attempt of oil-producing countries to increase oil prices by cutting back on production initially began in 1998, but became more pronounced in March 1999 with the rise in international demand for oil.<sup>1</sup> Thus, the reduction in the oil deficit, which had begun in 1998, continued in 1999, though at a slower rate after the first quarter

**OIL IMPORTS AND EXPORTS**

	1996	1997	1998	1999
<b>Imports</b>				
(million US dollars)	2,879.7	2,805.0	2,024.3	2,674.0
(percentage change)		-2.6	-27.8	32.1
<b>Exports</b>				
(million US dollars)	651.8	601.3	726.7	1,148.4
(percentage change)		-7.7	20.9	58.0
<b>Oil trade balance</b>				
(million US dollars)	-2,227.9	-2,203.7	-1,297.6	-1,525.6
(percentage change)		-1.1	-41.1	17.6
<b>Crude oil price</b>				
(US dollars per barrel)	20.7	19.1	12.7	17.9
(percentage change)		-7.6	-33.3	40.3
<b>Import volume</b>				
(million barrels)	139.4	146.9	158.9	149.7
(percentage change)		5.4	8.2	-5.8

**Source:** Bank of Greece.

of the year. In the January-September period of 1999, net oil imports were lower than those in the corresponding period of 1998. This trend was reversed in the last quarter of the year, leading to a higher net oil import bill for the entire year, although net oil imports, in volume terms, were lower in comparison with 1998. These developments clearly indicate that the burden on the trade balance in 1999, accounted for by oil imports, was exclusively due to the rise in international crude oil prices.

The size of the burden on the oil balance in 1999 attributable to the price increase can be estimated as follows: Considering that oil prices increased substantially since the beginning →

<sup>1</sup> At the beginning of 1999, crude oil prices decreased to half their early-1997 level and remained at this low level throughout the first quarter. While the rate of change in the average price over the cumulative period was still negative in June 1999, crude oil prices began to increase in March 1999 and had more than doubled by the end of the year. More specifically, the average price (UK Brent) was 40 per cent higher in 1999 than in 1998.

→ of the year and that domestic oil needs fluctuate considerably month over month, a weighted average price was calculated for 1999, expressed as the average of monthly prices, in which the weights used were the monthly percentages in the total volume of net oil imports. The estimated annual price of \$19 per barrel was 36 per cent higher than the forecast average price of \$14 per barrel at the beginning of the year. Given the country's annual requirements in crude oil and oil products, and the 1999 expenditure of \$1,400 million for net oil imports, it can be estimated that \$500 million or 36 per cent of this net oil bill was absorbed by the rise in international oil prices. It should be borne in mind, however, that price increases have only been roughly estimated, given the difference between international prices and prices corresponding to each separate crude oil import transaction.

Another burden on the 1999 import bill was the substantial increase in passenger car imports after the November 1998 tax reduction. This tax reduction, part of a package of special government measures aimed at curbing inflation, was due to the abolition of the special consumption tax, partly replaced by the classification tax, which was reduced in turn in September 1999. The number of passenger cars which first circulated in 1999 was roughly 50 per cent higher than that of 1998. A total of about 267,000 new registrations were recorded in 1999, i.e. 85,000 more than in 1998, causing an estimated extra burden of \$850 million on the 1999 trade balance.

Finally, certain additional imports burdened the 1999 balance of payments by roughly \$350 million, with approximately half of this amount going to the purchase of passenger vessels and aircraft and a substantial share to the import of trains for the Hellenic Railways Organisation (OSE).

As a result of the above, the 1999 trade balance was increased by extra imports amounting to roughly \$1,700 million or €1,600 million.

tically produced medicines has been substituted by imports, on the basis of cost-effectiveness criteria.<sup>1</sup>

## 2.2 Services balance

The surplus on services rose to €6,846 million in 1999, financing 41 per cent of the trade deficit, i.e. the same percentage as in 1998. Foreign exchange transactions related to travel and transportation, which are now more accurately recorded under the new system of balance of payments compilation, contributed to the large increase in receipts from services. Specifically, travel receipts increased from €921 million in 1998 to €8,296 million in 1999. In spite of the events in Yugoslavia, which had a negative impact on overland tourism in Northern Greece, the number of arrivals and overnight stays of foreign tourists increased substantially,

<sup>1</sup> The domestic production of pharmaceuticals, which covered roughly 65 per cent of domestic market needs in the early 1990s, now covers little more than 30 per cent. Conversely, the share of market needs met by imported medicines has risen from 30 per cent to almost 55 per cent. (Source: Pharmetrica for IOBE).

according to provisional data.<sup>1</sup> Furthermore, the moderate rise in hotel rates charged to foreign visitors had favourable effects on external demand for Greek tourist services, despite the slowdown in the growth rate of real incomes in the EU.<sup>2</sup> In any case, the impact of the positive development of economic variables on tourism is enhanced by the more accurate recording of transactions ensured by the new balance of payments compilation system.

Travel payments also rose substantially in 1999 (by €2,203 million, compared with €380 million in 1998), owing to the growth of domestic disposable income, as well as to the increased expenditure for studies abroad, which constitutes part of this item.

The improved recording of transactions was the main reason for the large increase in transportation receipts.<sup>3</sup> Specifically, net transportation receipts amounted to €2,606 million in 1999, having risen by €1,104 million compared with 1998. In spite of the partial normalisation of freight market conditions after a period of excess capacity, fares remained relatively low, increasing only to a small extent towards the end of the year. This was due in part to the slow growth of world sea trade for a second consecutive year and to the relatively high capacity. It is also worth noting that the increased inflow of foreign currency from shipping activities in 1999 may also be related to the considerable expansion of stock market transactions.

### *2.3 Income balance*

The income balance also improved considerably, as the deficit decreased by €755 million. This improvement was due to increased receipts of interest, dividends and profits from residents' investments abroad. A notable increase in inflows from wages and salaries also contributed to this improvement. At the same time, however, despite the stabilisation of external debt, payments for interest, dividends and profits increased by €389 million, mainly owing to a rise in interest payments by individuals, which accounted for 27 per cent of total interest payments in 1999, compared with almost 13 per cent in 1998.<sup>4</sup>

### *2.4 Transfers balance*

The surplus on transfers decreased by €982 million in 1999, owing to a small drop in receipts from the EU as well as reduced inflows of emigrants' remittances

1 According to these data, the number of charter flight passengers to major Greek airports increased by about 14 per cent from April to end-October 1999. Moreover, the increase in the number of overnight stays was also substantial in most tourist areas.

2 Price increases were in line with inflation and did not exceed 5 per cent. The hotel occupancy rate was thus satisfactory, especially in resort areas where most incoming tourists came from other European countries.

3 More specifically, the size and contribution of shipping activity to the balance of external transactions are more accurately reflected in the new system, which records all transactions of resident shipping companies.

4 Under the new classification, interest on non-residents' deposits with domestic banks is included in interest payments of the private sector.

(€453 million less). Net inflows from the EU — although higher in the first three quarters of 1999 than in the first three quarters of 1998 — totalled €4,250 million by year-end, i.e. €77 million less than in 1998. This was due to the fact that the 2nd Community Support Framework (CSF) was drawing to its close and inflows of certain funds, under

TABLE VIII.3  
BALANCE ON SERVICES, INCOME AND CURRENT TRANSFERS  
(Million euro)

	1997	1998	1999
<b>Services balance</b>	<b>5,738.9</b>	<b>6,072.6</b>	<b>6,846.5</b>
<b>Receipts</b>	<b>8,989.1</b>	<b>9,968.3</b>	<b>15,575.5</b>
Travel	4,593.1	5,513.8	8,296.2
Transportation	1,658.7	1,931.7	4,871.5
Other services	2,737.3	2,522.8	2,407.8
<b>Payments</b>	<b>3,250.2</b>	<b>3,895.7</b>	<b>8,729.0</b>
Travel	1,177.2	1,557.5	3,760.8
Transportation	325.8	429.4	2,265.5
Other services	1,747.2	1,908.8	2,702.6
<b>Income balance</b>	<b>-1,391.0</b>	<b>-1,381.8</b>	<b>-626.5</b>
<b>Receipts</b>	<b>1,109.6</b>	<b>1,362.0</b>	<b>2,414.1</b>
Wages, salaries	249.0	335.1	576.5
Interest, dividends, profits	860.6	1,026.8	1,837.6
<b>Payments</b>	<b>2,500.6</b>	<b>2,743.8</b>	<b>3,040.6</b>
Wages, salaries	300.2	323.2	231.2
Interest, dividends, profits	2,200.4	2,420.5	2,809.4
<b>Current transfers balance</b>	<b>6,620.6</b>	<b>6,846.1</b>	<b>5,864.1</b>
<b>Receipts</b>	<b>6,656.0</b>	<b>7,276.4</b>	<b>6,746.5</b>
General government (EU transfers)	4,057.6	4,327.4	4,250.1
Other sectors (emigrants' remittances, etc.)	2,598.4	2,949.0	2,496.4
<b>Payments</b>	<b>35.4</b>	<b>430.3</b>	<b>882.4</b>
General government	11.0	10.7	190.1
Other sectors	24.4	419.6	692.3

Source: Bank of Greece.

the final 1999 allocation, were deferred to the first months of 2000. Thus, net transfers from the EU in the first quarter of 2000 were €705 million higher than in the first quarter of 1999. On the basis of payments out of the EU budget, over the 1994-1999 period Greece received more than 80 per cent of the funds provided for by the 2nd CSF. It should be noted that the inflow of funds under the 2nd CSF will continue through 2001,

while inflows from the 3rd CSF – which extends from 2000 to 2006 – will start in the year 2000.

### 3. FINANCIAL ACCOUNT

The items of the financial account roughly correspond to those of the net capital movement recorded under the old balance of payments compilation method. Depending on their nature, financial account transactions are divided into four basic categories: direct investment, portfolio investment, other investment – mainly deposits and loans – and, finally, changes in foreign exchange reserves.

The financial account did not fluctuate much over 1999, mainly reflecting the normal conditions that prevailed in both the domestic and the international environment. The

TABLE VIII.4  
FINANCIAL ACCOUNT BALANCE

	Million euro			Billion drachmas		
	1997	1998	1999	1997	1998	1999
<b>Financial account balance (I+II+III+IV)</b>	<b>5,673.3</b>	<b>3,394.6</b>	<b>4,748.8</b>	<b>1,598.0</b>	<b>1,012.3</b>	<b>1,557.7</b>
<b>I. Direct investment</b>	<b>1,463.2</b>	<b>309.2</b>	<b>9.9</b>	<b>445.5</b>	<b>102.6</b>	<b>1.6</b>
<b>II. Portfolio investment</b>	<b>1,433.7</b>	<b>10,700.0</b>	<b>5,706.0</b>	<b>426.2</b>	<b>3,490.8</b>	<b>1,847.9</b>
<b>III. Other investment</b>	<b>-2,546.7</b>	<b>-3,219.7</b>	<b>-518.2</b>	<b>-920.6</b>	<b>-1,162.2</b>	<b>-163.8</b>
Assets	-7,698.0	-5,693.6	-4,457.1	-2,394.9	-1,928.5	-1,460.5
Liabilities	5,151.3	2,473.8	3,938.9	1,474.4	766.3	1,296.7
(General government loans)	(3,245.0)	(2,174.1)	(604.3)	(995.5)	(688.3)	(196.1)
<b>IV. Foreign exchange reserve changes</b>	<b>5,323.2</b>	<b>-4,394.9</b>	<b>-448.9</b>	<b>1,646.9</b>	<b>-1,418.8</b>	<b>-128.0</b>
<b>Errors and omissions</b>	<b>-1,406.9</b>	<b>-108.1</b>	<b>59.7</b>	<b>-238.2</b>	<b>132.0</b>	<b>12.3</b>

Source: Bank of Greece.

normalisation of the domestic market was due to the favourable course of the Greek economy. This, combined with the stability of the exchange rate of the drachma, which became stronger after joining Exchange Rate Mechanism II (ERM II), substantially restricted short-term capital volatility. As for the global environment, events such as the war in Kosovo had only a limited impact on international markets.

These developments obviously influenced the financial account, which recorded a surplus of €4,749 million. Portfolio investment absorbed net capital inflows totalling €5,706 million, which were several times higher than outflows under the heading “other investment”. Furthermore, the increase in foreign direct investment abroad by Greek residents almost completely offset corresponding inflows, leading to a net inflow of €9.9 mil-

lion, the algebraic sum of €518 million outflows and €528 million inflows. The actual size of direct investment outflows is, however, an achievement in itself, as it denotes the boosting of Greek business activity abroad, especially in the Balkan region.

A breakdown of direct investment reveals that the outflows, in their overwhelming majority, reflect business activity abroad, either through takeovers or via participation in capital increases. As regards inflows, they represent, in most cases, takeovers and capital increases, while the share of real estate purchases is also important. It should be noted, however, that the substantial decrease in the debt obligations of subsidiaries to their parent companies abroad was recorded as a disinvestment of nearly €132 million, thereby reducing total inflows.

Portfolio investment recorded substantial inflows (€6,129 million), while outflows in this category (€425 million) mainly corresponded to Greek investors' purchases of foreign bonds. The inflows, which involved investment in Greek bonds, were partly offset by equity sales, particularly in the second half of 1999.

### **BOX VIII.3**

#### **Financial account balance**

Balance-of-payments transactions are classified according to the fundamental principle that any transaction giving rise to a payment by a Greek resident to a non-resident is recorded as debit (and is thus preceded by a negative sign); conversely, any transaction giving rise to a payment by a non-resident to a resident is recorded as credit (and is therefore registered with a positive sign). This classification calls for particular attention with respect to the interpretation of the term "financial transaction".

More specifically, capital inflows, which are recorded as credits, correspond either to a decrease in residents' assets or an increase in residents' liabilities vis-à-vis non-residents. Such inflows induce an increase in external debt only in the event of loan contracting by residents or of bond purchases by non-residents.

Capital outflows, on the other hand, which are recorded as debits, correspond either to an increase in residents' assets or to a decrease in residents' liabilities. An increase in the residents' net assets, as a result either of an increase in assets or of a decrease in liabilities, points to an improvement in the economy's financial position. Particular reference must be made to residents' direct investments abroad, which, although listed as outflows, represent in fact an activity particularly beneficial to the Greek economy. Greek strong entrepreneurial activity in the Balkan region in recent years exemplifies the importance of direct investment outflows, aiming to expand the market shares of Greek firms in these countries.

A clarification also needs to be made concerning changes in foreign exchange reserves. According to the above rationale, an increase in foreign exchange reserves corresponds to a growth of residents' assets vis-à-vis non-residents and, as such, it is recorded as debit (preceded by a negative sign). Conversely, a decrease in reserves, which corresponds to a decline in residents' assets vis-à-vis non-residents, is recorded as credit (thus, preceded by a positive sign).

Net capital outflow under “other investment” was the result of an inflow of €3,939 million, on the one hand, which represented undertaking of obligations by Greek residents, and of €4,457 million in outflows, on the other, corresponding to an increase in residents’ external assets. As far as inflows are concerned, particular reference must be made to the substantial decrease in general government’s borrowing (to €604 million), primarily owing to the steady reduction in public deficits and to the normalisation of conditions in the international foreign exchange markets.

As a result of the above developments in the current and financial accounts, foreign exchange reserves rose to \$18.9 billion at end-December 1999, from \$18.2 billion one year earlier.

#### 4. EXTERNAL DEBT IN FOREIGN CURRENCY

The general government’s external debt in foreign currency, according to provisional data, amounted to \$31.8 billion in 1999, i.e. to roughly end-1998 levels. This stabilisation is at least in part attributed to the appreciation of the US dollar against most cur-

TABLE VIII.5  
GENERAL GOVERNMENT: EXTERNAL DEBT AND INTEREST AND AMORTISATION  
PAYMENTS IN FOREIGN CURRENCY  
(Million US dollars)

	1997	1998	1999**
<b>External debt (total)</b>	<b>29,167.0</b>	<b>32,129.0</b>	<b>31,850.0</b>
<b>External debt as a percentage of GDP</b>	<b>24.1</b>	<b>26.4</b>	<b>25.5</b>
<b>Interest and amortisation payments</b>	<b>7,123.0</b>	<b>7,609.0</b>	<b>6,247.0</b>
Interest payments	1,887.0	2,047.0	1,927.0
Amortisation payments*	5,236.0	5,562.0	4,320.0
<b>Ratio of interest and amortisation payments of general government to current account receipts (percentages)</b>	<b>28.1</b>	<b>27.8</b>	<b>17.9</b>

\* Including loan repayments in advance in 1997 and 1998, but not in 1999.

\*\* Estimates.

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

rencies and, combined with the rise in GDP, caused the general government debt-to-GDP ratio to fall from 26.4 per cent in 1998 to 25.5 per cent in 1999.

The general government’s interest and amortisation payments totalled \$6,247 million, broken down to \$4,320 million amortisation payments on long-term loans and \$1,927 million interest payments. The substantial decrease, of roughly \$1,360 million, in interest and amortisation payments over 1998 was mainly due to the decrease in amortisation pay-

ments, as there was no loan repayment in advance in 1999. Finally, the ratio of interest and amortisation payments to current account receipts fell from 27.8 per cent in 1998 to 17.9 per cent in 1999, owing to the decrease in interest and amortisation payments and to the substantial increase in current account receipts.



## IX. THE BANKING SYSTEM AND ITS SUPERVISION

### 1. INTERNATIONAL TRENDS

Recent progress in information technology (IT) and telecommunications has had a profound impact on the operation of several sectors of the economy, as it has contributed significantly to the supply of new products and has changed the practices applied in the production and distribution of goods and services. Banking business has been strongly affected, as technological progress, in conjunction with market deregulation and the liberalisation of capital movement, has led to the internationalisation of competition between banks and to the globalisation of the market for financial products and services.

World banking has undergone major changes. The traditional role of banks as intermediaries accepting deposits and granting loans is gradually diminishing. During periods of low inflation and reduced interest rates, as is currently the case in developed economies, depositors in search of higher yields increasingly invest in securities, either directly or through mutual funds. Furthermore, the expansion of capital markets has encouraged particularly large and sound business firms to raise the funds they need from the stock market at lower than bank loan costs. Consequently, the contribution of capital markets to business financing is steadily growing.

The expansion of disintermediation and the enhancement of competition in both the globalised market and the integrated financial area of EMU are exerting strong pressure on bank profitability, as a result of a decrease in bank income, especially from traditional interest-earning operations. In response to these trends, banks are making efforts to reduce their operating costs and are seeking alternative sources of income by diversifying and expanding their business.

Operating costs can be reduced in various ways, for instance through more efficient organisation, adoption of advanced IT systems, promotion of electronic banking and by taking advantage of synergies and economies of scale, where available.

Expanding bank operations entails providing a wider range of or new services in the sectors of retail banking (consumer and housing loans), investment banking, insurance, private and institutional investors' (e.g. social security funds) asset management, financial derivatives, etc.

New technologies – IT development in particular – have contributed significantly to the banks' overall effort. Relevant studies<sup>1</sup> indicate that advances in this field affect banks mainly in two ways: (i) by substantially reducing the costs of collecting, storing, processing and transmitting data; (ii) by generating new ways of accessing customers and supplying new bank products and services. The expansion of kiosk banking (ATM-based ser-

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<sup>1</sup> European Central Bank, *"The effects of technology on the EU banking systems"*, July 1999.

vices) and telephone banking and, more recently, the development of online PC banking and Internet banking have revolutionised banking practices, causing a radical transformation in the market for bank products and services.

Since the banking sector relies on the timely and proper use of large volumes of data, banks tend to be leaders in the implementation of new technologies which help reduce data management costs. The use of new technologies does not, however, affect all banking activities to the same extent. It is estimated, for instance, that a larger cost reduction would, in the medium to long term, be feasible in retail banking and payments. However, in spite of the indisputable decrease in the costs per banking transaction, it remains to be seen whether overall costs will be reduced with the introduction of advanced IT systems. The substantial initial investment and staff training costs, the need – at least in the short term – to maintain parallel systems and the considerable length of time required before customers can alter their habits and adopt the new electronic banking methods are just some of the reasons for this uncertainty.

With regard to the penetration of remote banking channels, kiosk banking and telephone banking are the most common, although there are considerable differences across countries. According to a recent survey of telephone banking penetration in some EU countries, this form of remote banking accounted for 2-6 per cent of the retail customer base, while amounting to 10 per cent in two countries (United Kingdom and France). The more recent PC banking, which comprises online PC banking and Internet banking, may still not be very widespread, but has the highest potential and is expected to dominate in the future. Of these two new forms of banking, online PC banking is the most frequently encountered and is primarily offered to corporate clients. Internet banking is still at an early stage, but is expected to expand faster than all the other remote channels over the next few years.<sup>1</sup> Regardless of technological developments, however, it is anticipated that the more sophisticated services will continue to be provided in the traditional manner, i.e. with face-to-face contact between the customer and the bank employee.

Banks have begun to revise their overall production and distribution strategies. Traditional practices, which mainly focused on the production and distribution of standardised mass transactions, are progressively being replaced by customer-oriented policies based on the better knowledge and analysis of customer needs. IT developments can thus make a major contribution in this direction, by facilitating product diversification and the more efficient targeting of specific market segments. Another definite change to be expected from the introduction of modern technology concerns the way bank branches are organised and operate, with the emergence of a trend towards bank branches of reduced

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<sup>1</sup> Surveys conducted in Germany and the United Kingdom amongst individuals with Internet access revealed that an important share of bank customers (60 per cent in Germany, 31 per cent in the United Kingdom) would like to carry out their banking transactions via the Internet, but would also like to have direct access to a particular branch. A substantial share (10-20 per cent) of those with access to the Internet appeared to be interested only in online PC links with banks (Salomon Smith Barney, “*Net Winners and Losers – European Banks and the Internet – An Update*”, March 2000).

size with a small number of highly skilled and specialised staff. According to this new approach, supporting operations would only be handled by the head office, meaning that redundant personnel could be employed to promote new products and ensure better customer service. The modern bank branch is rapidly evolving into a supplier of a wide range of up-to-date high quality services at the lowest possible cost.

It is not easy for banks to determine the optimal size of their branch network, nor can any such decision apply to all banks. Maintaining a large branch network obviously entails higher operating costs, but offers a comparative advantage in terms of deposit collection and lending, especially to small and medium-sized firms. Network expansion can therefore be part of a bank's strategy to acquire a larger market share or to increase the volume of its retail banking business. A strong local presence also enables banks to expand into other activities, such as portfolio management and investment services, collective investments and insurance products, all of which are, according to certain analysts, expected to be in greater demand in the future. On the other hand, recent advances in IT and telecommunications provide customers with remote access to a wide range of financial products and services and are therefore reducing the importance of branch networks in product distribution. Hence bank strategies are focusing on developing an efficient distribution network, capable of combining an optimal number of modern branch offices with the implementation of new technologies and automation for the remote provision of financial products.

## 2. THE GREEK BANKING SYSTEM

The Greek financial market has been undergoing continuous changes since the mid-1980s, as a result of its adaptation to the new conditions stemming from the deregulation of national markets, the establishment of the single market under EMU and the internationalisation of competition. During an initial stage, from the mid-1980s to the early 1990s, the primary concern was the institutional adjustment of the financial sector. Changes, therefore, consisted in gradually deregulating the banking system, lifting barriers to capital movements, introducing new institutions and promoting market modernisation measures. During the subsequent post-adaptation phase, Greek banks shifted their attention to portfolio consolidation, restructuring their activities and enhancing their competitiveness. In the last 3-4 years in particular, a trend towards increased concentration and integration has emerged. In line with international developments, Greek credit institutions have entered a phase of mergers and acquisitions<sup>1</sup>

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<sup>1</sup> Merger and acquisition activity is dictated by the need, first, to increase bank size, thereby reaping the benefits of possible economies of scale in certain market segments or accomplishing greater geographical expansion, and, second, to achieve product and service diversification. Although it is questionable whether economies of scale actually exist in the banking sector, it is generally accepted that, owing to the implementation of IT and telecommunication technologies, the optimal size of a banking institution is larger today than it was in the past.

(see Table IX.1), which has brought about a substantial restructuring of the banking sector and a new equilibrium in the Greek financial market (see Table IX.2). Apart from steps taken to strengthen their domestic market position, some credit institutions have expanded the scope of their activity abroad, and not merely in countries where they were already established owing to the presence of large Greek communities. While focusing mainly on the Balkan and the Black Sea countries (Albania, Bulgaria, FYROM, Yugoslavia, Romania), Greek credit institutions have also sought to secure a position in major financial centres (London and New York). In addition, they have concluded strategic alliances and co-operation agreements at local and international levels.

The further integration of the Greek banking industry is not to be precluded, considering the ongoing restructuring of the financial sector in Europe and worldwide.

TABLE IX.1  
BANK MERGERS AND ACQUISITIONS IN GREECE, 1996-1999

Year	Buying bank	Acquired bank
1996	EFG Eurobank	Interbank
1997	National Mortgage Bank of Greece	National Housing Bank of Greece
	Piraeus Bank	Chase Manhattan (network in Greece)
1998	Piraeus Bank	Macedonia-Thrace Bank, Credit Lyonnais Grèce, Xiosbank
	EFG Eurobank	Athens Bank, Cretabank
	Egnatia Bank	Bank of Central Greece
	National Bank of Greece	National Mortgage Bank of Greece
1999	Piraeus Bank	Nat. Westminster (network in Greece)
	Alpha Credit Bank	Ionian Bank
	Telesis Brokerage Firm	Dorian Bank
	EFG Eurobank	Ergasias Bank

Source: Bank of Greece.

Greek banks can be expected to deepen their strategic alliances and co-operation agreements with Greek and foreign financial institutions, with the aim of strengthening synergies, expanding distribution networks and securing know-how transfers. For the time being, the efforts of banking groups that have played a leading role in acquisitions appear to be focused on mergers and the operational integration of the various banking institutions. Integration is a necessary step to ensure operational efficiency and take advantage of economies of scale on the basis of an overall plan for developing operations.

Favourable conditions in the capital market in recent years have enabled banks to raise considerable funds through the stock exchange. This has helped them strengthen their capital base and improve their solvency, while allowing them to finance their expan-

sion either independently or through acquisitions. In 1999 banks succeeded in raising an all-time high of 1,286 billion drachmas from the stock exchange, i.e. more than triple the total amount raised over the previous four years (1995-1998).

Greek banks have attached particular importance to expanding their activities and improving their service quality. New opportunities have opened up with market deregulation, the internationalisation of transactions and the implementation of new technologies. The strengthening of competition as a result of technological developments, increased disintermediation and the establishment of the single European financial market are the key factors that have caused Greek credit institutions to look for new operations and upgrade their products and services. Consumer and housing loans, foreign cur-

TABLE IX.2  
BANKS' MARKET SHARES<sup>1</sup> ON THE BASIS OF TOTAL ASSETS, LOANS AND DEPOSITS  
(Percentages)

	1995				1999		
	Total assets	Loans	Deposits		Total assets	Loans	Deposits
National Bank of Greece	26.1	17.7	33.4	National Bank of Greece's Group	26.5	23.2	35.6
Alpha Credit Bank	7.1	7.5	6.9	Alpha Credit Bank's Group	16.3	15.1	16.0
Agricultural Bank of Greece	12.0	22.4	14.5	Agricultural Bank of Greece	10.6	18.6	11.9
Commercial Bank of Greece	9.2	9.6	10.7	Commercial Bank of Greece	9.5	9.9	10.5
EFG Eurobank	0.9	0.7	0.6	Eurobank Group	9.7	10.0	8.4
Piraeus Bank	0.6	0.7	0.4	Piraeus Bank's Group	6.0	5.4	4.8
Other Greek commercial banks	16.0	17.0	17.1	Other Greek commercial banks	4.5	5.0	3.7
Foreign banks	15.4	7.9	8.5	Foreign banks	14.1	8.8	8.6
Specialised credit institutions	12.6	16.2	7.8	Specialised credit institutions	2.4	3.3	0.3
Cooperative banks	0.2	0.3	0.1	Cooperative banks	0.3	0.6	0.3
Total of credit system	100.0	100.0	100.0	Total of credit system	100.0	100.0	100.0

1 Excluding the Postal Savings Bank and the Deposits and Loans Fund.

Source: Bank of Greece.

rency operations and financial derivatives are only some of the sectors where significant developments have occurred. At the same time, banks have begun providing investment and stock market services, insurance products and mutual fund units, either directly or via specialised subsidiaries.

It is worth noting that, as a share of total bank credit to the private sector and to public enterprises and entities, the outstanding balance of consumer loans nearly doubled from end-1995 to end-1999 (1995: 4.2 per cent, 1999: 8 per cent), while the share of housing loans increased over the same period from 12.2 per cent to 17.6 per cent. Consequently, the banking system's total financing of households in 1999 represented 25.6 per cent of total bank credit to the private sector and to public enterprises and entities, compared with 16.4 per cent at end-1995. In spite of this substantial increase, the share of

bank loans to households in Greece remains appreciably lower than in the euro area (December 1999: 49.5 per cent).

Mutual fund assets rose to 31.3 per cent of GDP at end-1999 from 9 per cent at end-1995. This development reflects the public's growing interest in new investment alternatives with higher yields than bank deposits. Assuming the management of mutual funds was one form of bank response to the phenomenon of disintermediation. This is why, both in Greece and in almost all EU countries, more than 80 per cent of all mutual funds are managed by banks.

Greek banks have expanded their activities into various other sectors: real estate companies have been founded to manage the banks' real property and seize the opportunities offered by the Greek real estate market with the completion of major infrastructure projects and the hosting by Athens of the 2004 Olympic Games. Co-operation with IT and telecommunication companies is also being promoted to develop innovative products and secure new distribution networks. One such example is the recent initiative of two major Greek banks and the Hellenic Telecommunications Organisation (OTE)<sup>1</sup> to set up a company for electronic signature authentication that will facilitate electronic commerce. Furthermore, a company will be set up to issue and manage "smart cards" for use in relatively low-value transactions (up to 10,000 drachmas). The use of these cards is not particularly widespread in the EU and the development of this means of payment has, in general, been somewhat slow.<sup>2</sup>

The Greek credit institutions' penetration of the insurance market has been equally impressive: today, almost all banks either have their own insurance subsidiary or co-operate with insurance companies. According to modern practice, new insurance products that are replacing traditional insurance packages must have investment features that combine better coverage with higher yields. Comparative studies indicate that the development of the Greek insurance market is not commensurate with the country's level of economic growth. In 1997, insurance premiums amounted to a mere 1.8 per cent of GDP in Greece,<sup>3</sup> compared with 7.6 per cent in the rest of the EU. Considering that in comparably developed countries, such as Spain and Portugal, insurance premiums amount to more than 5 per cent of GDP (1996: 5.2 per cent and 5.6 per cent respectively), the Greek insurance market (1.9 per cent of GDP in 1998) has a definite growth potential.

The prospects for Greek credit institutions within EMU are largely determined by the size of the domestic market. The major banks are attempting to benefit from Greece's comparative advantages in the Balkans and in the Southeast Mediterranean region

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1 Similar agreements have been recently concluded by Commerzbank and Deutsche Telefon in Germany and by Banco Bilbao Vizcaya Argentaria and Telefonica in Spain. The rapid expansion of the Internet and mobile telephony has intensified links between the banking and telecommunications industries worldwide, as their profitability increases with product innovation.

2 The total number of smart cards in circulation at-end 1997 was roughly 46 million. The vast majority of these cards (35 million) was concentrated in one country (Germany), while in several countries this means of payment was still only at an initial or pilot stage (European Central Bank, *"Payment Systems in the European Union"*, January 1999).

3 Association of Insurance Companies – Greece, *"Private Insurance in Greece in 1998"* (1999).

(knowledge of local conditions, traditional economic ties and Greek corporate interests). Their objective is to attain regional bank status with a dominant position in retail banking and to penetrate the wholesale banking market either independently, by relying on their presence in large financial centres, or through co-operation agreements. Expansion into these countries takes place mainly through takeovers of local credit institutions, establishment of branches and participation in joint ventures involving banks and/or financial companies (e.g. venture capital companies).

The smaller Greek credit institutions are trying to profit from their flexibility and to concentrate on specific market segments, exploiting their expertise and providing faster and personalised service to their customers. Some banks — and not just the most recently founded ones — are increasingly focusing on sectors with a higher growth potential, such as retail and investment services.

The performance of Greek banks has been satisfactory in recent years. In fact, on the basis of available data, pre-tax profits in 1999 were 100 per cent higher than in 1998, although part of these profits was due to the appreciation of equity prices in 1999 and was therefore conjunctural. Furthermore, Greek credit institutions face increased competition and a loss of income, as certain operations, in particular those involving foreign exchange, will inevitably shrink once Greece joins the euro area. To remain competitive and profitable, Greek banks will, in addition to expanding their operations and improving the quality of their services, have to reduce their operating costs, which account for a markedly higher percentage of their total assets than in other EU countries. An encouraging sign is that Greek commercial banks' operating costs as a percentage of their total assets at average annual levels are steadily decreasing (1996: 2.87 per cent, 1997: 2.82 per cent, 1998: 2.57 per cent), after having increased between 1993 and 1996. This reduction was due to the containment of administrative and personnel expenses, which are relatively inelastic.

As regards branch networks, an analysis of relevant data reveals that, based on the criterion of inhabitants per branch, the number of bank branches in Greece is amongst the lowest in Europe. However, based on the GDP-per-branch ratio, usually considered a better indicator of the demand for banking services, the number of branches operating in Greece comes close to the EU average (see Table IX.3). In terms of bank branch size, Greek commercial banks have considerably lower total assets, deposits and loans per branch than their EU counterparts. As seen in Table IX.4, total assets per branch in 1997 amounted to 63.1 billion drachmas in Germany, 54.8 billion in France and 45.8 billion in the United Kingdom, compared with 15.5 billion drachmas in Portugal, 13.3 billion in Greece and 8.8 billion in Spain. As already mentioned, however, the ongoing changes in banking services and their distribution are altering both the set-up and the size of bank branches and are therefore affecting the number of branches considered necessary for the effective promotion of modern bank products.

Greek banks will have to maintain relatively extensive branch networks in order to benefit from the comparative advantage they have over foreign banks in the retail-

TABLE IX.3  
GDP AND RESIDENTS PER BRANCH IN 1997

Country	GDP (billion drachmas)	Residents
France	14.4	2,221
Germany	13.3	1,908
Italy	14.0	2,577
Spain	3.9	1,045
Netherlands	14.1	2,220
Finland	25.0	3,936
Greece	13.7	4,376

**Source:** Bank of Greece and OECD, *"Main Economic Indicators"*, January 2000.

banking sector. At the same time, however, they will have to improve network efficiency, taking into consideration the potential resulting from technological advances in

TABLE IX.4  
TOTAL ASSETS, LOANS AND DEPOSITS PER COMMERCIAL BANK BRANCH IN 1997  
(Billion drachmas)

Country	Total assets	Loans	Deposits
France	54.8	17.5	13.5
Germany	63.1	34.4	26.5
United Kingdom	45.8	24.3	24.1
Spain	8.8	3.9	3.9
Portugal	15.5	5.2	7.2
Sweden	32.8	11.9	14.2
Finland	45.7	25.4	25.2
Greece	13.3	4.2	10.5

**Source:** Bank of Greece and OECD, *"Bank Profitability"* (1999).

the supply and distribution of financial services through bank branches and/or alternative networks.

### 3. THE INSTITUTIONAL FRAMEWORK OF BANKING SUPERVISION INTERNATIONALLY AND IN GREECE

The main banking supervision issues addressed at an EU level concern the revision of the capital adequacy framework that applies to credit institutions and investment firms with respect to credit risk and the establishment of a supervisory framework for financial



conglomerates, in particular those which include insurance companies apart from credit institutions and investment firms. The European Commission has already begun consultations on the proposals for the revision of the capital adequacy framework, taking account of parallel developments in the Basle Committee on Banking Supervision. With regard to the supervision of financial conglomerates, the Commission has set up a Mixed Technical Group which is examining such issues as group-wide capital adequacy and risk concentration, intragroup transactions and exposures, the definition and responsibilities of group coordinators-supervisors, and co-operation and information-sharing between supervisory authorities at national and transnational levels. The European Commission's objective is to submit specific proposals in the form of draft Directives or Recommendations by the end of 2000.

With regard to electronic money (e-money), the Council of Ministers has adopted a Joint Position, which establishes a minimum supervisory framework, pending the adoption of the relevant Directive. This framework, which is similar to the one governing credit institutions but far less strict, will, once in effect, regulate the setting up and operation of e-money issuers other than credit institutions.

As to the supervision of credit institutions in Greece, the Bank of Greece has recently complemented the existing framework in terms of capital adequacy and risk concentration provisions,<sup>1</sup> thereby establishing a more effective prudential supervision framework for the branches operating in Greece of credit institutions authorised outside the EU and putting all credit institutions operating in Greece on an equal footing. The basic principle on which this new framework is founded is the following: the branch of a foreign-based credit institution will not have to maintain own funds locally to meet the capital requirements for the credit and market risks incurred from its activity in Greece, nor will it be locally subject to large exposure limitations, so long as the parent undertaking meets certain financial and other requirements and is subject to adequate supervision in the country where it is authorised. Should the parent undertaking, however, fail to meet these conditions, the branch shall — at a solo level — (on the basis of its activity in Greece and its locally maintained own funds, as defined in the new supervision framework) be subject to the capital adequacy and large exposure regime, which applies to credit institutions authorised in Greece.

Considering that another purpose of supervision is to ensure the transparency of the procedures and terms of transaction used by the supervised credit institutions,<sup>2</sup> the Bank of Greece is currently elaborating and will soon be implementing certain basic principles and minimum requirements per category of transaction so as to ensure that customers have access to extensive, timely and reliable information. More specifically, the Bank of Greece aims to codify existing provisions and ensure the availability of further, when necessary, information to bank customers.

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<sup>1</sup> See Bank of Greece Governor's Act No. 2461/5 April 2000.

<sup>2</sup> As mentioned explicitly in Law 2548/1997 and the Statute of the Bank of Greece.

## 4. KEY INDICATORS OF CAPITAL ADEQUACY FOR COMMERCIAL AND COOPERATIVE BANKS

According to the prudential data reported by banks to the Bank of Greece, the Greek commercial banks' prudential own funds on a non-consolidated basis rose by 97 per cent in the period from 31 December 1997 to 30 June 1999, reaching 2,758.8 billion drachmas. The basic components of own funds (capital, reserves, results brought forward) account for almost all of Greek commercial banks' prudential own funds. On the other hand, risk-weighted total assets and off-balance-sheet-items on a non-consolidated basis, including the notional assets corresponding to capital requirements to cover market risks, rose by 40 per cent over the same period and stood at 18,816.9 billion drachmas at the end of June 1999.

Thus, the total capital adequacy ratio of Greek commercial banks rose steadily, from 10.3 per cent at end-1997 to 11.3 per cent at end-1998 and 14.7 per cent at end-June 1999. This upward trend is expected to continue, given that, from 1 July 1999 to end-March 2000, commercial banks raised additional capital totalling 730 billion drachmas. This amount corresponds to 26 per cent of the outstanding balance of the banks' prudential own funds on 30 June 1999 and is estimated to more than offset the rise in risk-weighted assets over the same period, without taking account of retained profits of the financial year 1999.

With regard to cooperative banks, their total capital adequacy ratio decreased slightly during the period under review (from 41.6 per cent on 31 December 1997 to 40.6 per cent on 31 December 1998 and 38.5 per cent on 30 June 1999), but nevertheless remains high.

## 5. OTHER SUPERVISORY ISSUES

*Prevention and suppression of money laundering*

Within its money laundering prevention and suppression competence,<sup>1</sup> the Bank of Greece continued to issue circulars and directives aimed at adjusting the regulatory framework in effect to the requirements stemming from the more advanced technologies now used by banks —for instance, in internet banking— and from international community specifications, as stipulated in the Directives-Recommendations of the OECD financial action task force, i.e. the highest coordinating body worldwide for the prevention and suppression of money laundering.

Controlling the proper implementation of Bank of Greece directives and circulars is an important part of the on-site inspections performed by the Bank's auditors. These inspections and other available information have enabled the Bank of Greece to identify certain shortcomings and delays that still characterise some of the banks and financial

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<sup>1</sup> As defined in Law 2331/1995 re: "Prevention and suppression of money laundering".

institutions that come under the Bank's supervision. These shortcomings and delays are, for the most part, attributed to insufficient staff training and awareness on money laundering issues, as further evidenced by the relatively small number of suspicious transactions that these banks report to the competent authority. It needs to be stressed that responsibility for detecting and reporting suspicious transactions to the competent authority lies with credit and financial institutions,<sup>1</sup> which have to take all the necessary measures to discourage money-laundering activities.

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<sup>1</sup> Law 2331/1995.

## APPENDIX TO CHAPTER IX

### MAIN BANKING SUPERVISION MEASURES

#### **22 January 1999**

- The Deutsche Bank is authorised to acquire 10 per cent of the share capital of Eurobank.
- The Bank of Piraeus is authorised to acquire 43.08 per cent of the share capital of Xiosbank.

#### **29 January 1999**

With the aim of improving the quality and further enhancing the soundness of banks' loan portfolios, the Bank of Greece establishes a general framework of minimum quantitative criteria for assessing the adequacy of provisions made by credit institutions for claims arising from lending.

#### **25 February 1999**

Authorisation is granted for the establishment and operation in Greece of a new bank, the "Autofin Bank S.A.".

#### **2 April 1999**

The Lesbos-Limnos Civil Credit Cooperative L.L.C. is authorised to establish and operate a credit institution under the name "Cooperative Bank of Lesbos-Limnos L.L.C.".

#### **15 April 1999**

Alpha Credit Bank is authorised to acquire 51 per cent of the share capital of the Ionian Bank.

#### **25 May 1999**

The Bank of Piraeus is authorised to extend its branch network by acquiring the five branches of the National Westminster Bank operating in Greece, as the latter bank has ceased to engage in banking in our country.

#### **29 June 1999**

The ceilings on large exposures to: a) subsidiaries of credit institutions which, as parent undertakings, are subject, together with these subsidiaries, to supervision on a con-

solidated basis by the Bank of Greece and b) the parent undertaking (credit or financial institution) of a credit institution, under the same condition as above, shall not apply on a sub-consolidated or solo basis.

### **8 July 1999**

Commercial and investment banks no longer need a Bank of Greece permission to obtain a qualifying holding in the share capital of a financial institution, provided that, by the above investment, the total amount of the participation does not exceed 100 million drachmas.

### **30 July 1999**

Consolidated Eurofinance Holdings S.A. (parent firm of Eurobank) is authorised to increase up to 50.1 per cent its qualifying holding in the share capital of Ergobank.

### **12 November 1999**

The Postal Savings Bank is authorised to sell, for travel purposes, foreign bank-notes to residents of Greece and non-residents.

### **17 December 1999**

Authorisation is granted for the establishment and operation in Greece of a new bank, the "Investment Bank of Greece S.A.".

### **23 December 1999**

Alpha Credit Bank is allowed to acquire 65.05 per cent of the share capital of the Skopja-based "Kreditna Banka A.D.-Skopje".

### **17 March 2000**

The Bank of Piraeus 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 per cent of the share capital of the Skopja-based "Stopanska Bank A.D.-Skopje".

**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 branch of a credit institution operating in Greece is located, is considered as equivalent to that carried out by the supervisory authorities of EU Member States, provided that compliance with the internationally acceptable regulations on capital adequacy and spread of risks is ensured.

## X. PREPARATION BY THE BANK OF GREECE FOR THE CHANGEOVER TO THE SINGLE CURRENCY

### 1. MONETARY POLICY INSTRUMENTS

In 1999 and in the first quarter of 2000, the Bank of Greece continued its policy of gradually adjusting the framework and the technical parameters of monetary policy conduct to the corresponding ESCB model. In this context, consultations with competent ECB services also took place, in order to achieve timely and effective coordination of monetary policy instruments at Eurosystem level. The degree and pace of the adjustment were determined by (i) the conditions under which monetary policy is conducted in Greece, as they are described in detail in other chapters of the present Report, and (ii) the need for the timely familiarisation of credit institutions, as well as of the competent services of the Bank of Greece, with the euro area mechanisms.

#### *1.1 Open market operations*

The Bank of Greece proceeded to the broadening of the range of instruments it has at its disposal for regular interventions and for fine-tuning operations in the interbank money market. The new instruments, which are absolutely consistent with the Eurosystem's operational framework, were instituted in March 2000.

The new instruments include:

a) fine-tuning operations by the Bank of Greece with a limited number of credit institutions. The choice of these credit institutions will be based on the extent of their participation in the interbank money market, on their experience, effectiveness and ability to carry out large value operations, and on the value of their available securities. For these operations, Bank of Greece counterparties, just as in the case with ECB counterparties for the corresponding categories of operations, will each time be selected among all credit institutions which fulfil the above criteria in order to ensure that all credit institutions participate alternately.

b) outright operations for the purchase or sale of securities, with a view to absorbing or providing liquidity in extraordinary cases. These operations are effected bilaterally (without tender) with one or more credit institutions.

Regular weekly liquidity-absorbing/providing 14-day tenders at a fixed interest rate remained the main open market instrument in 1999. Moreover, seven monthly tenders with a maturity of 3 months were conducted, by the method of competitive interest rate bids, for the absorption of part of the structural liquidity surplus. In extraordinary cases, the Bank conducted fine-tuning tenders, in order to reduce sharp changes in short-term interest rate changes. By these interventions, liquidity was provided or absorbed for a period of two to seven days.

### *1.2 Standing facilities*

As regards the two types of standing facilities, i.e the marginal lending facility and the deposit facility, the Bank of Greece proceeded to the following adjustments:

a) It abolished the quantitative ceiling on marginal lending against collateral of government securities (Lombard facility). Thus, the ceiling, per credit institution, on this type of lending is now determined by the value of securities pre-deposited with the Bank of Greece.

b) The maturity of credit extended under the Lombard facility was decided to be overnight and is equal to the maturity of deposits under the deposit facility. Consequently, on the next working day, when the HERMES payment system starts to operate, either borrowed funds are repaid by credit institutions or the financing is renewed.

Furthermore, as from the launching of the HERMES payment system, the current account of credit institutions, out of which they could make overdrafts should they exhibit a debit balance at the end of the day, was effectively abolished; it was replaced by a settlement account, through which all bank operations in the interbank market are effected. Similar to the provisions governing the operational framework of the Eurosystem, any end-of-day negative balance on the settlement account is automatically considered by the Bank of Greece to be a request for recourse to the marginal lending facility. The respective end-of-day positive balance is automatically included in the calculation of credit institutions' required reserves, unless a specific credit institution requests that part or the total of its positive balance be placed in the deposit facility account.

In the context of the basic rules governing the operation of the payment system, the possibility of back-dated entries in credit institutions' accounts with the Bank of Greece ceased to exist. This arrangement has a significant positive effect on the efficient management of credit institutions' reserves and at the same time helps the Bank of Greece to assess more accurately the amount of liquidity in the interbank market.

The only remaining adjustment, due to materialise in the ensuing months, regards the unification of the two tiers of the deposit facility. The Bank has already led the interest rates of the two tiers to a gradual convergence, so that their spread was reduced from 1.85 percentage points on 1 January 1999 to 0.50 percentage point on 20 April 2000. This was done in order to mitigate fluctuations in interbank overnight rates and facilitate the smooth unification of the two tiers, which define, depending on the amount of credit institutions' available reserves at the end of the day, the lowest limit of the interbank interest rate.

### *1.3 Required reserves*

At the beginning of December 1999 the proportion up to which banks may draw funds from their required reserves accounts, on condition that they meet reserve requirements on an average monthly basis, was increased to a daily 15 per cent of the total require-



ment, compared with 10 per cent previously. Following this change, the amount that banks may manage freely on a daily basis is around 400 billion drachmas. This amount does not differ much from the corresponding amount credit institutions will manage after entry into EMU, when the reserve requirement ratio will be 2 per cent and the possibility of averaging will concern 100 per cent of required reserves.

In March 2000 the interest-bearing and the non-interest-bearing part of required reserves were unified and the interest rate of the now single account was set at 5.5 per cent (average of yields on previously existing two parts). This was another step towards harmonisation with the respective framework of the Eurosystem, and the operation of the HERMES payment system in drachmas was facilitated.

To achieve full harmonisation with the euro area operational framework, the reserve requirement ratio should be reduced to 2 per cent from the present 12 per cent. Since this reduction entails a considerable increase in interbank liquidity, the Bank, in order to ensure smooth transition to the new regime, will proceed to appropriate arrangements, such as issuance of securities, the terms of which (maturity, interest rate and extent of negotiability) will be decided upon by the Monetary Policy Council in the next few months.

#### *1.4 Eligible assets*

In March 2000 the Bank adopted a new system for the valuation of securities accepted as collateral both in monetary policy operations and for the purposes of the HERMES payment system. Valuation is now performed at current market prices and ESCB haircuts and margins apply to the value of securities, while, during the last decade, a 20 per cent haircut on the nominal value of securities was applied. The reference price in the Electronic Secondary Securities Market (HDAT) is used as current price, while haircuts are applied on the basis of the residual maturity of the security.

By this adjustment the Bank's valuation system was fully harmonised with that of the Eurosystem. At the same time the opportunity cost incurred by the credit institutions that use securities as collateral to cover their liquidity needs through the Bank of Greece financing was reduced. In order to facilitate the participation of credit institutions in tenders and the use of standing facilities, the Bank of Greece has proceeded to the adjustment of the relevant provisions of its Statute so that, after the ratification by law of the relevant decision of the General Meeting of Shareholders, it will be possible to replace the currently applying system of transaction-specific assets with the pooling system. This system will allow credit institutions to use all of their securities deposited with the Bank of Greece as collateral for the whole of their operations with it.

When Greece joins Monetary Union, the Bank will broaden the range of eligible securities for the conduct of monetary policy, to include all the securities of the other euro area members which have been deemed eligible by the ECB. Credit institutions will be able to use, through the Correspondent Central Banking Model, developed by the ESCB,

securities meeting the requirements of the ECB, which are issued by or deposited in EMU member states.

## 2. CHANGES IN THE FIELD OF EXCHANGE RATE POLICY

Following the adoption of the euro as the single currency in the 11 member-states of Monetary Union, the Bank of Greece proceeded to adjust the institutional framework of the domestic foreign exchange market through the issue of relevant guidelines.

By means of a circular the conversion of the European Currency Unit (ECU) into euro on the basis of 1 ECU=1 euro was transposed into Greek law. At the same time, specific issues regarding the transitional period 1 January 1999-31 December 2001 were dealt with and relevant arrangements were made for foreign exchange transactions in euro, foreign exchange deposits (in euro or in the national currency units of euro area member states). Matters pertaining to the conversion rates, from and into the euro, of the national currency units of the 11 euro area countries were also addressed.

Bank of Greece securities denominated in ECU and in the national currency units of euro area member states, which are kept with EUROCLEAR (a securities depository) were redenominated in euro. At the same time, accounts in euro were opened in all euro area countries where accounts of the Bank in the respective national currency unit already existed. In the same period, the Foreign Exchange Department of the Bank opened accounts in drachmas with the Bank of Greece in the name of the ECB and the national central banks of the countries which participate in the Exchange Rate Mechanism II (ERM II).

The aforementioned circular also made the changes required by the introduction of the euro and concerning the conduct of the fixing session and the issuance, after the end of the meeting, of the quotation of official exchange rates. More specifically, trading of euro area currency units was abolished. Special quotations with reference rates for these currencies are now issued for the needs of domestic credit institutions. These rates are compiled on the basis of the euro exchange rate arising from the fixing procedure and of the irrevocable conversion rates of these currencies against the euro. Credit institutions operating in Greece are already quite familiar with the use of the euro and the irrevocable exchange rates.

Monitoring of interbank market developments and of the implementation of exchange rate policy in the domestic foreign exchange market was also adjusted to the new requirements, to ensure the smooth course of the drachma until Greece joins EMU.

Monetary gold trading has recently been liberalised and the details of operation of the domestic gold market, as well as the modalities of reporting by credit institutions to the Bank of Greece, have been determined.

As of the launch of the EURO-HERMES system, on 4 January 1999, the Foreign Exchange Department of the Bank of Greece began to provide intraday liquidity to credit

institutions operating in Greece and effecting large value payments through the TARGET payment system.

In view of Greece's entry into the euro area, when the Bank of Greece will be assigned the management of part of the ECB foreign exchange reserves on the basis of Greece's key for the subscription of the ECB's capital (2.0564 per cent), the Foreign Exchange Department monitors progress in preparatory work. In particular, with a view to ensuring required technical infrastructure, the process for the operation of an integrated computerised system for the management of foreign exchange reserves (Front Office, Middle Office, Back Office) is underway. This system will serve the management by the Bank of Greece of both the part of the ECB foreign exchange reserves the Bank manages on a decentralised basis and the Bank's own reserves. In this context, the Foreign Reserves and Gold Management Section was restructured by the establishment of the Middle Office for the assessment and management of the risk assumed and the measurement of yields.

At the same time, preparations continue at an ever faster pace for the amendment of the institutional framework and the operating procedures of the domestic foreign exchange market, as from 1 January 2001, following Greece's entry into EMU, as well for the adaptation of financial data to ECB requirements.

### 3. STATISTICAL DATA AND STANDARDS

In the 1998-1999 period, the Bank of Greece proceeded to an extensive revision of the reporting system employed by credit institutions with regard to money and banking statistics. Specifically, in early 1998 the Bank of Greece established a new monthly financial statement<sup>1</sup> with 8 annexes, which credit institutions are required to submit, in electronic form, to the central bank. This revision aimed to harmonise the money and banking statistics reporting system with European Union standards.

The forthcoming entry of Greece into Economic and Monetary Union as from 1 January 2001 has recently necessitated the partial amendment<sup>2</sup> of the above monthly financial statement, so as to fully adjust to euro area standards the compilation of statistics in Greece. Data reporting on the basis of the amended financial statement will enable the Bank of Greece to gather all the information required to support the single monetary policy of the Eurosystem, in conformity with the Treaty on the European Union. It should be noted that the ESCB statistics collection framework is still subject to revisions, depending on the requirements set by the conduct of monetary policy, given the emergence of new financial products and the prospect of euro area enlargement. For this reason, credit institutions must be able in the near future to produce a thorough breakdown of their accounts by country and currency.

As from October 2000, the Bank of Greece will begin to submit regularly money and banking statistics to the ECB, to allow for the smooth inclusion of Greek statistics in

<sup>1</sup> Bank of Greece Governor's Act 2430/12 February 1998.

<sup>2</sup> Bank of Greece Governor's Act 2458/1 March 2000.

the corresponding ones of the euro area, in view of Greece's participation in EMU as from 1 January 2001. This was decided following consultations between ECB and Bank of Greece officials in the two-day meeting held at the Bank of Greece in March 2000.

Similar changes were brought about in the system for the compilation of balance of payments statistics. As from January 1999 the Bank of Greece began to release statistics on Greece's external transactions according to the conceptual framework set by the International Monetary Fund in its Balance of Payments Manual (5th edition, 1993). In spite of inevitable delays owing to merger and acquisition activity in the banking sector, credit institutions responded satisfactorily to the requirements of the new balance of payments compilation method.

In particular, regarding financial transactions, the Bank continued to gather additional information directly from market participants, such as investment companies, mutual funds and portfolio investment companies. At the same time, with a view to improving the information provided, efforts were made to harmonise the monthly balance of payments statistics with changes in the external position, as this is depicted in the monthly financial statement submitted by credit institutions to the Bank of Greece.

In order to meet the requirements arising from Greece's forthcoming participation in EMU, statistics pertaining to Greece's external transactions and external position have already started to be submitted to the ECB. Strong efforts are being made, in cooperation with credit institutions, to meet all ECB and Eurostat requirements with respect to the completeness of information provided and the reduction in transmission time.

#### 4. PAYMENT SYSTEMS

##### *4.1 The HERMES payment system*

The launching, as from 4 January 1999, of the EURO-HERMES system, which is linked to the corresponding RTGS (Real Time Gross Settlement) systems of the other 14 EU countries and to the ECB payment system, considerably facilitates the gradual integration of the Greek money (and capital) market into the single European market. Full harmonisation and integration will be achieved after the abolition of the specific restrictions which have been set by the ECB on payments in euro by countries with derogation and are referred to in Bank of Greece Annual Report 1998. In spite of these restrictions, the volume and value of payment orders settled through the system gradually increased in 1999. More specifically, 63,452 payment orders totalling 207.1 billion drachmas were settled in 1999. Of these, 88.2 per cent were cross-border payments totalling €201.9 billion and 11.8 per cent domestic payments amounting to €5.2 billion.

As from 10 March 2000, the HERMES payment system started to operate successfully in drachmas, after a three-month trial period and the gradual integration of the individual applications it supports. The new system, which allows direct settlement of interbank payment orders and monetary policy operations in drachmas, contributes to a more effec-

tive operation of the interbank market and a better management of credit institutions' reserves and of the Bank of Greece financial system monitoring mechanism. As from 10 March through 31 March 2000 a total number of 67,677 payment orders were settled, worth 94,575.9 billion drachmas, with a daily average of 4,511 orders.

At the same time, the operating hours of the interbank drachma market were extended to coincide with the operating hours of the HERMES payment system, particularly with end-of-day procedures and with the timeframe during which credit institutions may have access to Bank of Greece standing facilities. The new operating hours coincide with those of the Eurosystem, so that Greek credit institutions may be gradually familiarised with the new operational framework before Greece joins Monetary Union. Credit institutions responded effectively to this adjustment.

The Bank of Greece is rapidly proceeding to the further adjustment of the payment systems sector and in particular to the unification of the EURO-HERMES system with the HERMES drachma payment system. By this unification and the lifting of specific restrictions on intra-day and overnight financing in euro, the HERMES/TARGET payment system will contribute decisively, once Greece joins the euro area, to the harmonisation of the interbank money market with the single euro area money market; the former market will thus reap in full the relevant benefits for its more efficient operation, as was the case with the markets of the 11 current members of the euro area.

#### *4.2 Securities settlement systems*

##### *Book-entry Securities Settlement System*

In 1999 the operations of the Book-entry Securities Settlement System were further developed. The launching of the system (May 1995) was the basis for the organisation of the Greek government securities market. The new system is fully automated and furnished with continuously operating machinery and can settle transactions in the secondary market either in real time or in consecutive settlement cycles during the day, or cumulatively at the end of the day on a netting basis. Also, it can operate in any currency.

The new operational characteristics of the system meet all the requirements of monetary policy conduct in the Third Stage of EMU (securities used as collateral for the provision of intra-day liquidity, for cross-border transactions, etc).

The new system is already going through a period of trial operation parallel to the existing application, and it is expected to replace the current application completely by the end of 2000.

##### *Electronic Secondary Securities Market (HDAT)*

Law 2515/97 provided the institutional framework and mechanisms that were necessary for modernising the market.

On 6 May 1998 the Bank of Greece established the Electronic Secondary Securities Market (HDAT), of which it is the manager. This market is linked to the Securities Settlement System, a fact which is extremely important for the security of transactions. HDAT is one of the most sophisticated, organised markets operating in the OECD countries and currently numbers 37 members, Greek or foreign banks located in Greece.

At the same time, after the issuance of relevant Ministerial Decisions, the institution of Primary Dealers was put into effect. These dealers compulsorily operate within HDAT. At present, 13 credit institutions are qualified to operate as Primary Dealers.

Recently, the adjustments allowing foreign banks not permanently established in Greece to participate directly, through remote access, as members in HDAT have been completed. These banks, according to the previous operating framework of HDAT, were able to participate only through banks which were members of the system. This is a pioneering arrangement on a European scale, since it is the first time that banks not located in a specific country may participate directly in the corresponding bonds market without having to be physically present in that country. Also there are plans to offer Greek mutual funds the possibility to participate directly in HDAT. These developments will help to expand the secondary market for government securities and thus further increase its liquidity.

As from 15 March 1999, pursuant to Law 2651/1998, the Bank of Greece, on the basis of actual prices in HDAT, issues a daily list of Government Securities Market Prices, which is used by mutual funds, insurance companies and all companies that are required by law to value their portfolios at current market prices.

On 6 October 1999, in the context of HDAT, the electronic market for repos was put into operation and the total value of its transactions amounted to 557 billion drachmas by 30 December 1999. The establishment of an organised repos market in Greece was a prerequisite for the further broadening and deepening of the Greek government securities market.

The automation of the repos market, as well as its interlinking and parallel operation with the electronic spot market for Greek government securities through the HDAT network, is of particular importance. With the concurrent operation of the electronic derivatives market of the Athens Derivatives Stock Exchange, the Greek government securities market has now acquired all the qualifications and key features (breadth, depth, liquidity, transparency, flexibility and efficiency) of modern securities markets worldwide.

## 5. EURO BANKNOTES AND COINS

### *5.1 Production of euro banknotes and coins and preparation for the withdrawal of drachma banknotes and coins*

In 1999, preparatory work continued for the circulation of euro banknotes and coins, which is expected to start on 1 January 2002. The Bank's Printing Works (IETA) is planning to begin producing euro banknotes in the second half of 2000, in order to ensure their timely circulation.

Procedures for the purchase of the main additional production equipment, including the equipment required for quality control, have been completed. Equipment was supplemented with a modern electronic design system, a computer system and various laboratory instruments. In the context of this preparation, a small quantity of paper has already been purchased for the trial production of 20-euro banknotes.

The ECB has adjusted specifications and quality requirements on the basis of the difficulties faced by all the printing works that have already started production. The Quality Control Plan, which will ensure compliance with the common specifications for euro banknotes, is about to be completed.

In November 1999 the IETA began to procure blanks for the trial production of euro coins. The first quantities of blanks have already been delivered to the Works and the regular production of euro coins is expected to start in the second half of 2000.

A detailed timetable is being drawn up for the circulation of the new currency and the withdrawal of drachmas. Furthermore, the Bank's branches have been divided in collection centres and branches assigned responsibility.

Regarding the destruction of drachma banknotes after withdrawal, the necessary preparations have already been made and a high-capacity destruction complex has been installed at the IETA. As for the withdrawal of coins, a study is being carried out, in cooperation with the Ministry of Finance, specifying the process and the modalities for the receipt, storage and destruction of withdrawn coins.

Finally, the competent ECB committee is preparing to set up a Counterfeit Analysis Centre, as well as a database for forged euro banknotes and coins, which will be located at the ECB and have the central banks as members.

## *5.2 Participation of the Bank of Greece in the ECB programme offering citizens information on the circulation and use of euro banknotes and coins*

In April 2000 the ECB signed a contract with the public relations company "Publicis", which will undertake to support a two-year programme providing information to citizens on euro banknotes and coins, which will be circulated as from 1 January 2002 in the member states of the Monetary Union.

This programme will be implemented on a pan-European level and its estimated cost will be €80 million. The Bank of Greece participates fully in the formulation and implementation of the programme, with the agreement of the ECB.

The programme aims to inform and familiarise citizens inside and outside the euro area with the new banknotes and coins, with security features, subdivisions and circulation of the new currency as well as with issuing banks.

The strategy of the programme is based on the cooperation of various bodies such as banks, firms, educational institutions, governmental and other public authorities, which can act as "information multipliers" at European and national level.

The initial stage of this programme, which has already started, covers cooperation with the above bodies, with a view to facilitating both the preparation and implementation of their activities, related to the provision of information, and the training of large population groups which are involved in the handling of cash on a daily basis (e.g. cashiers).

During the second half of 2001, the public will be receiving a continuous flow of documented information, so that the transition to the new banknotes and coins will be smooth and successful. To this end, plans have been made for the use of all the appropriate mass media, such as printed information material, TV and radio messages, newspaper advertisements and events. Special care has been taken to provide appropriate information to people with special needs.

## 6. RESTRUCTURING OF THE ACCOUNTING SYSTEM

In 1999 preparatory work for the restructuring of the Bank's accounting software and chart of accounts continued. The aim is to adopt systems that will be fully compatible with ESCB accounting standards. In this context, in 1998 and 1999 several new applications were introduced and existing ones were improved, as a result of concerted action by the competent services of the Bank of Greece.

The research carried out by the consulting firm which undertook to coordinate accounting issues has already been completed and a relevant report has been submitted to the competent committee, including comments from the various departments of the Bank. The report (i) describes the current situation, (ii) records the Bank's requirements as regards information and (iii) outlines the new Cost Accounting System, based both on the principles of the Greek Banks' Chart of Accounts and the principles set out by the ESCB.

Since procedures must be automated if accounting data are to be available in real time, it was decided to re-examine existing applications of the Bank, mainly those concerning deposit accounts, so that they can be updated and operated in real time and in a unified network covering the entire Bank (Head Office-Branches-Agencies).

Project implementation was awarded by tender to an IT company, which carried out a comprehensive feasibility study. According to this study the following requirements will have been met by end-October 2000: updating of all deposit accounts in real time, application of all accounting principles adopted so far by the ESCB, meeting of all ECB needs for information on a daily or periodical basis and adoption of the euro as the main currency in the operation of new (accounting and transactions) applications, with parallel presentation of account movements and balances in drachmas (in the transitional period from 1 January to 31 December 2001).

Execution of the new expanded project has been assigned to two committees. The Project Guidance Committee, chaired by one of the Deputy Governors of the Bank of Greece and comprising the Directors of the co-competent Departments, is the decision-making body, while the Project Management Committee, which is chaired by a Director-



Adviser of the Bank and consists of experts, coordinates all necessary actions, including initial project planning and implementation within strict time-limits.

#### 7. CONVERGENCE WITH THE ESCB IN THE FIELD OF INFORMATION TECHNOLOGY

Following Greece's entry into the euro area, the Bank of Greece will need to use new information technology systems. Specifically, properly adjusted IT systems will have to function in every sector of business activity. These systems were either developed from scratch or by adapting and upgrading existing ones.

System preparation will mainly concern monetary policy, foreign exchange market operations, statistics, production and circulation of euro (as well as drachma) banknotes and coins, payment systems and securities settlement systems.

The IT systems which are being developed or adjusted for this purpose are divided into two categories:

- Communication systems. Their organisational structure is in line with that elaborated and proposed by the competent IT Committee of the ECB, which will also be their administrator. These systems enable, *inter alia*, communication with the ECB and the national central banks of euro area member states.

- Internal IT systems, which are being developed and adapted by the Bank of Greece, with a view to facilitating operations at a national level and linking with the corresponding communication systems.

The IT systems being developed are the following:

- those that will have to operate in euro as from 1 January 2001 (Stage I),
- those whose operation in euro may start on 1 January 2002 (Stage II).

The Bank of Greece has already made considerable progress in developing and adapting the required systems. In this procedure, which continues at a fast pace and whose main criterion is user requirements, a useful element is the experience acquired by the Bank of Greece from its participation in the general rehearsal of major communication systems round the end of 1998.

#### 8. LEGAL ADJUSTMENTS

Pursuant to Article 109 of the Treaty on European Union, the national legislation of EMU member states must be compatible with the Treaty and the ESCB Statute. In this sense, the Treaty does not require full harmonisation of national central bank Statutes with each other or with the ESCB Statute. The term "compatible" implies that an adjustment is required, so that national legislations and national central banks' Statutes will not run counter to the Treaty and the ESCB Statute. The existence of national peculiarities is not prohibited as, in conformity with Article 14.4 of the ESCB

Statute, national central banks are allowed to carry out operations other than those laid down in the Statute.

As regards its Statute, in 1997 the Bank of Greece proceeded to a first drastic intervention so as to adapt it to the key requirements of the Treaty, as these are depicted in national legislation by Law 2548/1997, "Provisions relating to the Bank of Greece". The task was completed by the enactment of Law 2609/1998 ratifying the decisions of the Extraordinary General Meeting of the Bank's Shareholders on 22 December 1997. The main purpose was to transpose most of the provisions of Law 2458/1997 into the Bank's Statute. This amendment concerned mainly the provisions of Law 2548/97 pertaining to:

- the Bank's objective and main tasks,
- its independence,
- the establishment of the Monetary Policy Council and the curtailment of the General Council's tasks, as well as
- the supervision of credit institutions, the instruments for the conduct of monetary policy, and the collection of statistical data.

In view of Greece's entry into EMU, the need has emerged to further adjust the Bank's Statute to the provisions of the Treaty and supplement the Bank's operating framework, particularly with regard to the sanctions the Bank may impose. Further amendments to the Statute in conformity with these guidelines are about to be completed.

The cornerstone of the amendments awaiting approval and a landmark in the Bank's history is the substitution of the euro for the national currency. This is expressly stated in Article 2 of the Statute, which defines the role of the Bank as an integral part of the ESCB after the date of euro area entry and stipulates that the Bank will also act according to the ECB guidelines and instructions. The above landmark also concerns a host of other provisions to be approved, including:

— The further evolution of the tasks of the Monetary Policy Council (Article 35A), which, following the adoption of the euro, will analyse economic and monetary developments, will examine the effect of the monetary policy formulated in the ESCB context, and will act according to ECB guidelines and instructions when executing tasks carried out through the ESCB.

— The compatibility clause with the relevant provisions governing the ESCB, which is mentioned in Article 55 with respect to the Bank's operations and monetary policy instruments and is repeated in several individual provisions of this article.

— The provision that, following the adoption of the euro, sanctions for violations relating to Monetary Policy Council tasks — these sanctions are systematically set out in Article 55B — will be established and imposed, according to applicable rules in the ESCB context.

Furthermore, the provisions of Article 55A on administrative sanctions imposed on entities supervised by the Bank were complemented, with a view to ensuring effectiveness and required flexibility in the determination and imposition of these sanctions (particularly by the introduction of a "sanction pooling system"). Besides, through the refor-

mulation of this article an explicit distinction is made between sanctions imposed in the context of banking supervision and those imposed in connection with the Bank's tasks performed through the Monetary Policy Council.

With respect to the overall adaptation of national legislation not falling within the Bank's field of competence, the Bank appointed representatives in a law-drafting committee set up by the Ministry of National Economy. The committee's main duty was:

- to record the legislative provisions which have to be amended,
- to identify gaps in current legislation and
- to draft provisions, which, after finalisation, will be incorporated in the Framework Law pertaining to the introduction of the euro.

At the same time, the Bank of Greece has set up a committee of officials from all competent departments in order to:

- record legislative provisions falling within the Bank's field of competence and needing to be amended or repealed in view of the introduction of the euro, and
- draft provisions on the required amendments, which will be brought to the attention of the law-drafting committee of the Ministry of National Economy.

Finally, it should be mentioned that the Bank of Greece took an active part, through its delegates, in law-drafting committees and contributed substantially to the law-drafting work performed by the Ministry of National Economy. This work concerned the transposition into Greek legislation of the European Parliament and Council Directive 97/5/EC/27 January 1997 on cross-border credit transfers (already transposed into Greek law by Presidential Decree 33/16 February 2000) and b) European Parliament and Council Directive 98/26/EC/19 May 1998 on the irrevocable settlement in payment systems and securities settlement systems (Law 2789/2000).