

BANK OF GREECE

MONETARY POLICY

INTERIM REPORT
2002



NOVEMBER 2002

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To the Greek Parliament and the Council of Ministers

The present Interim Report on Monetary Policy is submitted to the Greek Parliament and the Council of Ministers in accordance with the Statute of the Bank of Greece. This Report examines and analyses economic developments and the course of the Greek economy in 2002, the second year since Greece adopted the euro and implemented the Eurosystem's single monetary policy.

The main points of the Report are briefly presented in Chapter I. Chapter II proceeds to an in-depth examination of developments in the global economic environment in 2002 and presents estimates of the economic outlook for 2003. As shown in this analysis, the recovery of the global economy in 2002 was weaker than expected and the estimates for the year as a whole have been revised downwards, owing to increased uncertainty about the pace and extent of recovery. Therefore, although global economic recovery is expected to continue in 2003, growth rate forecasts are currently less optimistic than they were a few months ago.

Chapter III analyses the macroeconomic and monetary developments in the euro area and the single monetary policy, examines money and capital market developments and presents estimates with regard to the economic outlook for the euro area in 2003. According to the latest forecasts of international organisations, GDP growth in the euro area is expected to slow down to 0.7-0.8% in 2002 from 1.5% in 2001, but is forecast to pick up to 1.8-2.0% in 2003, unless external demand remains subdued. Euro area inflation amounted to more than 2%, but should again gradually fall below 2% in the course of 2003.

Chapter IV examines the course of inflation and

economic activity in Greece; Chapter V, money, credit and capital market developments; and Chapter VI, the prospects of the Greek economy and the challenges to economic policy. Two main conclusions can be drawn from this examination:

First, the increased and globally prevalent uncertainty has had a limited impact on the Greek economy. The growth of economic activity in Greece is estimated to have registered a relatively small slowdown in 2002, in spite of: (a) the significantly weaker than anticipated rate of economic recovery at the global and the euro area level, (b) the substantial decline and volatility of stock prices in world stock markets, and (c) the deterioration of financial conditions in certain emerging markets. The increased confidence and high level of economic stability generated by Greece's accession to the euro area, the substantial inflow of funds from the EU Structural Funds, and investment in large-scale infrastructure projects, including those related to the preparations for the 2004 Olympic Games, have played a decisive role in maintaining the growth rate of economic activity at a relatively high level. Greece (together with Ireland) is thus expected to register the highest rate of GDP growth in the euro area and hence to make further progress towards real convergence.

Second, in spite of the Greek economy's improved performance in recent years, there are still some major challenges to be faced in the near future. The new environment formed with Greece's entry into the wider single currency area calls for the adoption of an appropriate national economic policy and the strengthening of efforts for structural reform to improve the productivity and competitiveness of the Greek economy. This is why this Report highlights the main challenges that will

need to be addressed by fiscal and structural policies. Meeting these challenges successfully will contribute in the long run to securing price stability and further advancing real economic convergence with the other euro area countries.

The need to meet these challenges becomes all the more pressing, considering that the rate of inflation in Greece is higher than the euro area average, that unemployment (in spite of some signs of improvement) also remains high, while the current account deficit is widening. These developments reflect the existence of structural weaknesses and point to the need for further corrective reforms. Moreover, the fact that the public-debt-to-GDP ratio is still particularly high, combined with adverse long-term demographic trends, makes it imperative to improve the fiscal situation in order to reduce this ratio faster.

The gradual return to the conditions of price stability that had been attained in 1999 and early 2000 is an immediate priority. The single monetary policy will undoubtedly contribute to a high level of price stability in the long run, but, being geared towards achieving price stability in the euro area as a whole, it cannot accommodate country-specific conditions within the monetary union. National economic policy must therefore be adjusted and the necessary structural and institutional reforms promoted, so that the rate of inflation can gradually be lowered to a level compatible with price stability. The social partners must also work towards wage increases and pricing policies that will be compatible with price stability. Conducting the appropriate economic policy and ensuring the necessary cooperation between the social partners will increase the dynamism of the Greek economy within the euro area and help meet the targets of real convergence and full employment within a reasonable time frame.

Athens, November 2002

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I. Summary

2002 was the second year during which Greece implemented the single monetary policy of the Eurosystem.¹ Until mid-November, the Governing Council of the European Central Bank (ECB) left its key interest rates unchanged, as set on 8 November 2001,² judging that they remained consistent with the primary objective of the Eurosystem, i.e. the maintenance of price stability in the euro area in the medium term.³ In the first months of 2002, the high rate of M3 growth was attributed to extraordinary factors and was not perceived as a threat to price stability, considering that credit expansion to the private sector was slowing and inflation was gradually subsiding. Starting in May, it was judged that the inflation outlook became less favourable and there was significantly more liquidity in the euro area than would be needed to finance sustainable non-inflationary economic growth. From August onwards, however, risks to price stability appeared to be rather balanced, with credit expansion to the private sector stabilising slightly above 5%, inflation hovering around 2% and the growth of economic activity remaining low. In fact, at its 7 November 2002 meeting, the Governing Council stressed that the ECB would be closely monitoring the factors that have a negative impact on economic growth in the euro area.

Market expectations of higher interest rates in the euro area spurred increases in money market rates, especially for longer maturities, from January through May. From end-May onwards, however, this upward trend was reversed, reflecting a decrease in the expectations of a rise in interest

1 The Eurosystem comprises the European Central Bank (ECB) and the national central banks of the EU Member States that have adopted the euro.

2 At that time, the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility were 3.25%, 4.25% and 2.25% respectively.

3 Price stability is defined by the ECB as a year-on-year increase in the Harmonised Index of Consumer Prices (HICP) of below 2%.

rates and a downward revision of GDP growth projections. As a result, interest rates declined to their December 2001 levels in September 2002. Government bond yields in the euro area followed a similar pattern, influenced by the above-mentioned factors and by stock market conditions and developments in the US bond market.

In the euro area, M3 growth has slowed slightly since the beginning of 2002, but still remains strong, mainly reflecting an acceleration in M1. This persistently high rate of M3 growth is attributed to the low opportunity costs of holding money, associated with low interest rates and increased uncertainty on the stock markets. On the other hand, though, the slowdown and subsequent stabilisation of the rate of credit expansion to the private sector support the view that monetary developments do not signal inflationary risks.

As far as monetary developments in Greece are concerned, the annual rate of increase in the Greek component of euro area M3 subsided considerably from 4.7% in the fourth quarter of 2001 to 1.6% in the third quarter of 2002, remaining steadily lower than the corresponding growth rate of the euro area M3 aggregate. This slowdown in Greek M3 growth is linked to the weakening of total credit expansion. With regard to individual M3 components, repo holdings by the non-MFI private sector decreased substantially (since their yields ceased to be tax-exempt as from 1 January 2002), with savers showing an increased preference for almost all categories of deposits (some of which are not included in M3). Currency in circulation remained steadily lower in the first three quarters of 2002 than in the corresponding period of 2001, for reasons associated with the euro cash changeover (see Chapter V).

The introduction of the euro banknotes and coins in Greece, as in all the euro area countries, began

on 1 January 2002 and was completed by end-February 2002. In spite of its particular complexity, this operation was totally successful owing, *inter alia*, to the country's careful preparations, even though Greece had less time at its disposal than its euro area partners to complete them (i.e. only one year). The Bank of Greece rapidly put the euro banknotes and coins into circulation from the very beginning of 2002, and by end-January 2002 over 90% of all market transactions were being carried out in the new single currency. The withdrawal of drachma banknotes and coins was almost just as rapid: 90% of the currency in circulation at end-2001 had been withdrawn by end-February 2002, and 96% by end-October 2002.

The twelve-month rate of increase in total financing of the economy by monetary financial institutions (MFIs) —i.e. banks and money market funds— fell from 9.3% at end-2001 to 7.1% in September 2002. This was mainly due to a significant slowdown in credit expansion to enterprises and households, while the outstanding balance of credit to general government remained lower than at end-2001. Although central government borrowing requirements on a cash basis increased somewhat during the first three quarters of 2002 over the corresponding period of 2001, the twelve-month rate of change in credit to general government fell to -5.0% in September 2002 from 4.6% at end-2001. Furthermore, the annual growth of bank credit to enterprises and households declined significantly, from 24.8% in December 2001 to 18.3% in September 2002, largely reflecting the weak growth of credit to enterprises and, to a lesser extent, the slowdown in credit expansion to households. The increase in housing loans, however, remains high (September 2002: 36.9%, December 2001: 38.9%). So does the increase in consumer loans (in spite of a slowdown from 42.5% in December 2001 to 29.7% in September 2002), owing to both significant cuts

in consumer loan rates over the last two years and to fierce bank competition in the specific segment of the market. In any case, the slackening rate of increase in consumer loans seems to be attributable to the progressive saturation of the consumer credit market.

Retail bank rates in Greece decreased during the first three quarters of 2002 and converged further on the generally lower euro area rates. As the adjustment of lending rates was faster than that of deposit rates, the differential between the (weighted) average lending rate and the deposit rate continued to decline. This differential has, thus, fallen in total by roughly 3 percentage points from December 1998 to September 2002.

Developments in the Greek government securities markets during the first ten months of 2002 were characterised by a significant increase in secondary market transactions and by a decline (particularly from mid-May until early October) in Greek government bond yields (followed by a slight recovery). The primary market for government paper saw an increase in the amount of funds raised and a significant shift in demand mainly away from securities with a seven-year maturity towards securities with maturities of three and five years, in consistence with secondary market developments. Indeed, bond prices in the secondary market increased, while yields fell across all maturities (as was the case in the euro area and in the United States), especially for three-year bonds, and the volume of transactions rose considerably. These developments reflect a shift in investor preference towards bonds, against the background of uncertainty about the world economic outlook and of adverse conditions in domestic and international stock markets. More specifically, stock prices on the Greek stock exchange *dropped* substantially (particularly from early July to early October, although they recov-

ered slightly afterwards), leading to a downturn in transactions, while the funds raised fell significantly as well. Euro area and US stock markets also dropped sharply (until early October) and were characterised by high stock price volatility. These trends are associated with increased global uncertainty as to the timing and extent of economic recovery, as well as with a decline in business profits and the concerns about recent corporate accounting practices in the US. The domestic stock market was adversely affected by international developments, as well as by the drop in profitability of several firms listed on the Athens Stock Exchange.

* * *

In the euro area, economic recovery in 2002 was slower than expected. For the year as a whole, GDP growth is projected to drop to 0.7-0.8% (from 1.5% in 2001), reflecting the weakness of foreign demand, the slowdown of domestic demand growth, the unfavourable developments and uncertainty prevailing in financial markets, and the structural rigidities of the labour and product markets. However, GDP growth is forecast to rise to 1.8-2.0% within 2003. During most of 2002 (as in 2001), inflation remained around 2%, while core inflation currently stands at roughly 2.5%. Euro area inflation is expected to subside in upcoming months, as the inflationary effect of certain temporary factors is fading away, the euro is appreciating and GDP growth is rather subdued. The course of oil prices remains an unpredictable factor, owing to the tension in the Middle East. Fiscal developments have also been unfavourable, and several Member State economies of the euro area have already been called upon to correct the deviation from their respective fiscal targets. The relatively slow growth of the euro area economy and the persistent high rate of unemployment (above 8%) suggest – to the extent that

they are due to structural factors— that greater efforts are needed in the direction of structural reform.

As for the Greek economy, GDP growth is expected to reach 3.4% in 2002 as a whole, compared with 4.1% in 2001. In spite of this small anticipated slowdown, GDP growth remains strong, at essentially the average annual rate of 3.5% observed from 1996 to 2001, when economic activity was growing at a steadily faster pace in Greece than in the euro area, as is the case again in 2002. This high rate of GDP growth in 2002 directly reflects the increase in private consumer demand and investment; however, it is also an indirect marker of the enhanced macroeconomic stability achieved with Greece's entry into the euro area, the implementation of certain structural reforms and the sharp decrease in interest rates over the last three years. Meanwhile, total employment is rising and the unemployment rate continues to fall (though being still amongst the highest in the euro area). However, the weakening of foreign demand, particularly from the euro area, and the erosion in 2002 of part of the competitiveness gains of the 1998-2001 period are negatively affecting the exports of goods and services, while the growth of manufacturing output, salaried employment and, as estimated, private business investment has markedly slowed. Provided that the external environment does not deteriorate sharply, the growth of economic activity in Greece should pick up in 2003, based on the current expectations of domestic enterprises themselves, the available forecasts of faster GDP growth in the euro area (Greece's major trading partner) and worldwide, the decrease in the tax burden and the significant acceleration in public investment expenditure projected in the 2003 budget, as well as the fact that real interest rates remain at historically low levels.

After decelerating throughout the 1991-1999 period,

Greek inflation picked up again and for the third consecutive year has remained above 3%. Meanwhile, its differential from euro area inflation has been widening over the past two years, causing the Greek economy's competitiveness to deteriorate. The average annual rate of CPI inflation is estimated to rise to 3.6% in 2002, registering a slight acceleration over 2001 (3.4%).⁴ This acceleration is attributed to extraordinary or exogenous factors, such as the rise in oil prices in 2002, the high prices of fresh fruit and vegetables due to the harsh weather conditions of December 2001 and January 2002, and the incidents of upward rounding or increases in prices that took place on the occasion of the cash changeover. There are, however, other accountable factors, such as the increase in profit margins in certain sectors of economic activity with considerable weight in the consumer price index. The combined negative impact of all these factors slightly outweighs the gains associated mainly with imported price developments and the appreciation of the euro, and — secondly— with the decrease in the prices of telecommunication services, owing to intensified competition. The rate of increase in unit labour costs in the *economy as a whole* is estimated to be higher this year (2002: 3.5%, 2001: 2.8%), although no such acceleration is anticipated in the *business sector*.

In any case, unit labour cost growth remains relatively high and continues to be a significant determinant of Greece's persistently high rate of inflation, its upward deviation from the euro area average and, consequently, the deterioration in the Greek economy's competitiveness.

⁴ Based on the Harmonised Index of Consumer Prices (HICP), the average annual rate of inflation in Greece is expected to rise to 3.9% in 2002 (from 3.7% in 2001), while the corresponding rate for the euro area (according to the latest forecasts of the European Commission, 13 November 2002) should decrease to 2.3%, from 2.5% in 2001.

It is estimated that inflation, after remaining close to October levels in November,⁵ will decelerate in upcoming months. This prospect is supported by the following: (i) the impact on annual inflation of the cash changeover (through price rounding practices) should be eliminated (mainly *after* the first quarter of 2003); (ii) the government is committed to containing increases in public utility rates in 2003; (iii) the average annual increase in contractual earnings in the private sector (based on the two-year collective agreements for 2002-2003) is projected to slow down;⁶ (iv) the government wage bill is projected in the budget to increase less than in 2002; and, finally, (v) measures have recently been taken to provide more information to consumers about prices and discourage speculative behaviour.

The implementation of the single monetary policy in Greece has decisively reinforced monetary stability. However, as this policy is formulated exclusively on the basis of economic conditions at the euro area level (and not in individual countries) and country-specific monetary and nominal exchange rate policies are no longer an option, the wage bargaining behaviour of social partners, the pricing behaviour of firms, fiscal policy, and structural policies all have to play a greater part in attaining and maintaining price stability and, of course, in safeguarding and improving competitiveness.

In any case, however, the convergence of Greek inflation on the euro area average must be given top priority, especially in terms of the prices of *tradeable* goods and services. The responsibility of the social partners will be crucial in this respect, since they will be summoned to reach wage agreements that will ultimately help achieve this goal and thereby improve the performance of the economy in terms of competitiveness and, indirectly, boost employment. The pricing policies

of enterprises must also work in the same direction. More importantly, the central government wage policy should provide indications about the desirable general direction that overall wage developments in the rest of the economy should follow.

With regard to fiscal policy, there has been an overall improvement in the general government balance in recent years, but progress has been relatively slow. Based on the recent revisions of key fiscal aggregates, the general government deficit decreased by 0.8% of GDP, against an initial estimate of 2.3%. The primary surplus figure was also revised downwards, but remains significant. Finally, the debt-to-GDP ratio resumed its downward trend in 2002, after coming to a halt in 2000 and in 2001, but still remains high (105.3% in 2002). This, in the view of the Bank of Greece, points to a need for greater efforts towards fiscal consolidation and for higher primary surpluses as a percentage of GDP. Attaining these objectives would enhance public confidence, help tackle inflationary pressures more effectively, accelerate the pace of general government debt reduction, provide more room for fiscal fine-tuning in the face of external shocks and for the conduct of an anti-cyclical policy and, finally, help finance public expenditure on social security. In order to achieve higher primary surpluses, efforts should mainly focus on containing the increase in primary expenditure, completing the tax reform (by widening the tax base and combatting tax evasion more effectively) and carrying out the government's plans to change the expenditure control system. Priority should also be given to speeding up the

⁵ For reasons detailed in Chapter VI.

⁶ However, as of early 2003, the favourable effect from 1 January 2002 onwards from the reduction of non-wage labour costs (as a result of the abolition of stamp duties paid by firms) will cease to exist. As a result, the annual rate of increase in unit labour costs may not decelerate in the business sector.

privatisation process, improving the efficiency of public enterprises and furthering their modernisation and, last but not least, completing the reform of the social security system.⁷

The structural reform policy must address the structural weaknesses of the Greek economy, in an effort to enhance healthy competition, increase labour, product and capital market flexibility, and improve the efficiency of public administration so as, *inter alia*, to attract foreign direct investment. This will bring on a faster increase in productivity and improve competitiveness. Inflationary pressures will ease, the resilience of the economy to external shocks will increase and, generally speaking, unemployment will decrease, thus speeding up real convergence – i.e. the convergence of real incomes and standards of living. Considering that significant structural policy measures have been taken in the last two years, an evaluation of their effectiveness would be instrumental in determining what remains to be done.

The deregulation of the banking system was gradually carried out in the 1990s and has now essentially been completed. During the past three years, the Bank of Greece made structural adjustments to the institutional framework of credit and financial institutions, and in 2002 took additional measures

to enhance competition within the financial market and to protect the interests of depositors and borrowers. Furthermore, in the context of its supervisory functions and in view of its interest in maintaining financial stability, the Bank of Greece has imposed strict capital adequacy and provisioning rules on commercial banks. The Bank of Greece is also looking into the implications of the level and the distribution of household indebtedness. The Bank will weigh the results of this investigation and, in due time and taking overall conditions into account, will decide when to lift the remaining restrictions on consumer credit and determine whether commercial banks need to increase their provisions for bad loans.

In the new and more competitive environment, a faster implementation of the necessary structural and institutional reforms will be vital to increasing the Greek economy's flexibility and dynamism. This would speed up real convergence with our European partners and ensure our social well-being within the expanded European Union of the future. The achievement of the widest possible social consensus is therefore not only desirable, but also essential for the promotion of reforms.

⁷ See Box 2, Chapter VI.

II. The international economic environment of the euro area

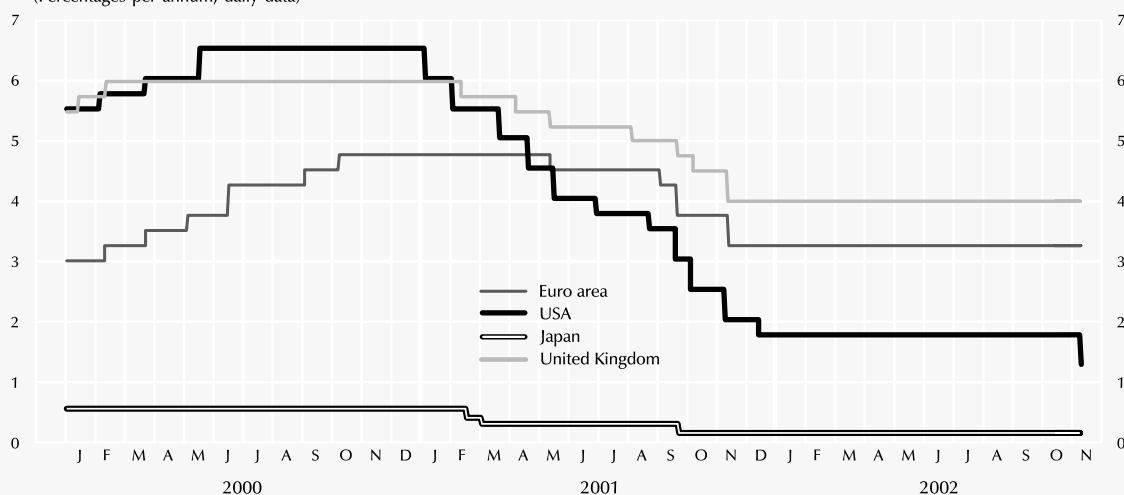
1. General

The recovery of the world economy, which began in the last months of 2001 and continued in the first months of 2002, somewhat decelerated afterwards. Specifically, in the first quarter of 2002 the growth of economic activity worldwide was greater than expected. This was due to the satisfactory economic performance of the USA and the Asian emerging markets, as well as to sustained support by the economic policy pursued, notably in the developed economies.¹ Subsequently, however, recovery slowed down and there was increased volatility and a further drop in stock prices in global financial markets. Under these circumstances, uncertainty about the speed and strength of recovery deepened. As a result, although world economic recovery is expected to continue, the current estimates and forecasts about the growth rate of the world economy during the *second half* of 2002 and the year 2003 are less optimistic than a few months earlier and will probably be revised downwards.

According to the latest forecast, which is identical with that in spring 2002, the average annual growth of world GDP will accelerate to 2.8% in 2002, from 2.2% in 2001. There are, however, discrepancies between the two forecasts as regards the *distribution of growth* over the year. Specifically, compared with the spring forecast, in the recent one the growth rate is higher in the first quarter and lower in the second and third quarters. Following a downward revision of the previous forecasts, GDP growth in 2003 is expected to accelerate to 3.7%.

¹ See IMF, *World Economic Outlook* (25 September 2002, p. 3), for the latest detailed forecasts. The following analysis is based on developments up to early November 2002, Bank of Greece assessments and IMF forecasts.

Chart 1
 Central bank key interest rates
 (1 January 2000 - 8 November 2002)
 (Percentages per annum, daily data)



Sources: For the euro area: European Central Bank (ECB), minimum bid rate on main refinancing operations. For the USA: Federal Reserve, intended federal funds rate. For Japan: Bank of Japan, official discount rate. For the United Kingdom: Bank of England, repo rate.

As mentioned earlier, the moderation of world economic recovery occurred amidst heightened volatility in global stock markets, whose performance deteriorated further. By end-October, the major stock price indices in France, Germany, Japan, the UK and the USA had fallen by 20-30% in comparison with March 2002 (when they had reached an all-year peak), despite the increase observed in the stock markets of Europe and the USA during October.² The widespread feeling that the pace of recovery is weaker than expected appears to have depressed consumer confidence and to have had further adverse effects on stock prices.

Inflationary pressures remain relatively subdued worldwide. Despite the forecast acceleration of economic activity and the rise in oil prices (see below), inflation is expected to be relatively low in 2003. As regards monetary policy, official interest rates (see Chart 1) remained unchanged in the first ten months of 2002 in both the euro area and the USA, Japan and the UK. In early November, there was a cut in official rates in the USA. It is estimated

that the stance of fiscal policy became more expansionary during 2002, as the slowdown in economic activity, the activation of the automatic stabilisers and, in certain cases, discretionary measures led to a widening of fiscal imbalances.

2. Developments in the major industrial countries

Among the industrial economies, in the USA the GDP growth rate was considerably lower in the second quarter (0.3% quarter-on-quarter) than in the first quarter (1.2%), but it partly recovered in the third quarter (0.8%). The big slowdown in the second quarter reflects a very strong import growth, a smaller contribution by inventory changes and a decline in the growth rate of private consumption. Given that corporate profits continue

² They comprise the following indices: France: CAC 40, Germany: DAX, Japan: Nikkei, UK: FTSE 100, USA: Dow Jones industrial average and Nasdaq. Their peaks for 2002 were much lower than their historical peaks.

to drop, private fixed capital formation is expected to remain subdued in the near future. Although recovery is expected to continue, its pace is likely to be more moderate than initially estimated, the growth rate of GDP in the USA remaining below the potential rate until about mid-2003. The deceleration in economic growth caused a rise in the unemployment rate, which is expected to average 5.9% in 2002, compared with 4.8% in 2001. CPI growth is expected to decelerate to 1.5% in 2002, from 2.8% in 2001. The current account deficit, which stood at 3.9% of GDP in 2001, is expected to widen in 2002, reaching about 4.6% of GDP. The expansionary fiscal policy pursued, combined with a considerable shortfall in public revenue, might lead to an increase in the general government deficit to about 2.6% of GDP in 2002, from 0.2% in 2001.

In Japan, domestic demand remains sluggish and the growth rate of economic activity is extremely low. Initial estimates, which put the growth of real GDP at 1.4% in the first quarter of 2002 relative to the last quarter of 2001, were subsequently revised downwards to zero. Between the first and the second quarter of 2002, real GDP grew by 0.8%, led by net exports and public and private consumption. Recent data suggest that export growth may be falling, which adds to the doubts about economic recovery in Japan. Under these circumstances, economic activity in Japan is expected to shrink by 0.5% in 2002, showing a negative growth rate for the second consecutive year. These developments lead to an increase in the unemployment rate, which is expected to reach 5.5% in 2002, i.e. 0.5 percentage point higher than in 2001. At the same time, the economy is in a deflationary phase for the fourth consecutive year. Consumer prices are expected to drop by 1.0% in 2002, compared with a 0.7% fall in 2001. Anti-cyclical macroeconomic policy has neither managed to generate self-sustaining growth nor

prevented the economy from entering a state of chronic deflation. Given that the general government gross debt reached about 145% of GDP at the end of 2001 and nominal short-term rates were close to zero, certain governments and international organisations (including the IMF) have called upon the Japanese authorities, *inter alia*, to make a public commitment on ending deflation within the next 12-18 months in order to boost economic activity.

In the UK, real GDP growth rate, after remaining close to zero in the first quarter of 2002 (0.1% compared with the previous quarter), rose to 0.6% in the second quarter, underpinned by strong private consumption. However, the fall in stock prices, as well as expectations of decreased corporate profits, seem to have hindered gross fixed capital formation, which remained in the second quarter at the already low level of the first quarter. Inflation, as measured by the retail price index (exclusive of mortgage interest payments), is low and is expected to be about 2.0% in 2002, i.e. almost the same as in 2001. Labour market conditions remained virtually unchanged in the second quarter and the standardised rate of unemployment is stable (5.1%). As in most other industrial countries, short-term growth prospects depend partly on the impact of the recent fall in stock prices on domestic expenditure. According to the latest IMF forecasts, the GDP growth rate will decelerate to 1.7% in 2002, from 1.9% in 2001.

3. Emerging markets

Asia (excluding Japan) had the highest GDP growth rate in the world in 2002 and was not affected by the shocks experienced by other emerging markets (in Latin America and Turkey). The GDP growth rate in the emerging economies of Asia is expected to accelerate to about 6% in

2002, from 5% in 2001, while inflation remains low throughout the region. The transition economies of Asia (China, Vietnam etc.) are expected to achieve the highest GDP growth rates – over 7.0% on average in 2002. Hong-Kong, however, still lags behind (only 1.5%). The increase in economic activity in Asia is mainly driven by strong domestic demand, which is fed by the rebound in credit expansion (particularly to households) and the expansionary fiscal policies pursued. A rise was also noted in foreign demand, as there has been some speed-up in demand increase mainly for electronic products. The growth of exports is in some cases attributable to the depreciation of national currencies (in terms of effective exchange rate). Despite this satisfactory performance of exports, current account surpluses narrowed in most Asian countries, reflecting heavy domestic demand.

By contrast, the economies of *Latin America* suffered from the deterioration of financial conditions (as evidenced by the widening spreads for their sovereign bonds), the depreciation of national currencies and, in some cases, the weaknesses of banking systems. The region suffers also from reduced exports and serious fiscal imbalances. Economic activity in Latin America is expected to shrink by 0.6% in 2002, after expanding by only 0.6% in 2001. The sharpest GDP reduction is noted in Argentina, Uruguay and Venezuela. Argentina's GDP is expected to drop by 16% in 2002. Contagion from Argentina has apparently spread to other countries in Latin America. Uruguay has been directly affected, whose GDP will contract by 11% in 2002. In Venezuela, where investors' confidence has been shaken by the political turmoil, GDP is forecast to fall by 6.0%. Most of the other countries in the region are expected to achieve positive, albeit low GDP growth rates in 2002 and 2003. In Brazil, the region's biggest economy, a GDP growth rate of 1.5% is forecast

for 2002. Despite relatively sound macroeconomic policies, uncertainty in Brazil in the run-up to the elections, as well as the adverse debt dynamics following the devaluation of the national currency, worsened the financial market sentiment, with negative consequences for real economy. Certain countries in Latin America (notably Mexico and Ecuador) benefit from the rise in the prices of oil and commodities. Most currencies of the area depreciated in terms of effective exchange rate (the currencies of Argentina, Uruguay and Venezuela lost over 50% of their value). Economic recession, however, helped contain the inflationary impact of these depreciations. The countries of Latin America thus avoided a fresh bout of hyperinflation, although the pick-up of economic activity in 2003 is expected to generate strong inflationary pressures. Current account deficits were generally reduced owing to sluggish domestic demand and the depreciation of national currencies.

4. Accession countries and transition economies³

The prospects for increased activity in the major accession countries continue to be relatively positive, despite the unfavourable international environment and financial instability in certain emerging markets. The annual average GDP growth rate was about 3.0% in 2001 and 2002 and is expected to accelerate in 2003. In many of these countries the fiscal situation deteriorated, but inflation has

³ "Accession countries" are the 12 candidate countries with which formal negotiations for joining the EU have already started (Bulgaria, Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia and Slovenia). Turkey is also a candidate country, but negotiations have not started yet. "Transition economies" are those of the 16 countries of Central and Eastern Europe (10 of which are also accession countries), as well as 13 other countries (the Commonwealth of Independent States (CIS) countries and Mongolia).

fallen to its lowest level since 1989. On average, inflation is expected to drop to 6.5% in 2002, well below the 2001 level of 10%, and to keep decelerating in 2003, but at a slower pace (5.5%).

Many Baltic and Central European economies have shown GDP growth rates higher than 4.0% during the last few years. This performance is mainly attributable to the mass inflow of foreign direct investment, which contributed to the increase in production capacity, and to additional factors, such as a rise in domestic demand, access to the large EU market, as well as low production costs, combined with the availability of skilled labour in some countries. The average annual growth rate in the economies of the three Baltic countries (Estonia, Latvia and Lithuania) was at least 5.0% in 2000 and 2001. In 2002, the GDP growth rate in these countries is expected to be between 4.5% and 5.0%. As regards Hungary, second quarter data show a GDP growth rate of around 3.0%, which reflects a recovery following a slight deceleration in the previous two quarters. In the Czech Republic, the annual GDP growth rate now stands at about 3.3%, mainly sustained by private consumption and gross fixed capital formation. In contrast to these accession countries, in Poland economic activity is expected to remain subdued in 2002 as well, with a GDP growth rate of about 1.0%. In 2003, the growth rate is forecast at 3.0%, while inflation is expected to remain almost unchanged in comparison with 2002 (3.0%). In Cyprus, macroeconomic fundamentals remain solid. The GDP growth rate was 5.1% in 2000 and 4.0% in 2001, while it is expected to decelerate to about 2.5% in 2002, mainly owing to a fall in travel receipts. Inflation is forecast to reach about 2.5%, a level somewhat higher than in 2001. Finally, in Malta the GDP growth rate is expected to be 2.0%, with inflation around 2.0%.

Following the serious financial crisis in Turkey,

GDP shrank by 7.4% in 2001, while inflation remained at the previous year's level (55%). During the first two quarters of 2002, the economy recovered and the annual GDP growth rate reached 3.5%. This rebound is mainly attributable to the very satisfactory course of net exports following the devaluation of the Turkish lira in 2001,⁴ while private consumer and investment demand continued to decline.

As regards CIS and Balkan countries, it seems that the slowdown in the expansion of world economic activity had a limited impact on their growth rates. For 2002, the GDP growth rate is forecast to average 5.0%. The economy of Russia grew at an average rate of around 5.0% in 2001 and 2002, compared with 9.0% in 2000. The GDP growth rate is expected to pick up in 2003, as the increase in private consumption continues to be satisfactory and fixed capital formation is increasing again, favourably affected by the rise in oil prices.

In addition to the overall performance of the CIS and Balkan economies, it would be useful to mention the considerable diversity between these countries on the basis of other indicators. Most of these economies (except for Russia, Tazikistan, Uzbekistan, Belarus and Romania) managed to reduce their inflation below 10.0%. The current account deficits in most CIS and Balkan countries are between 4.0% and 5.0% of GDP, partly reflecting relatively high GDP growth rates in these countries. In Russia, the balance on current account has been in surplus in recent years, partly because of increased receipts in the energy sector. The Ukraine also enjoys small surpluses. Despite progress in reforming the CIS economies, further significant steps are required in the areas of fiscal

⁴ In the first half of 2002, the average exchange rate of the Turkish lira against the US dollar was 51% lower than at the end of 2000.

management, banking sector reform, labour market flexibility, and productivity.

The Balkan countries, including two candidates for accession, Bulgaria and Romania, are expected to achieve GDP growth rates of 2.5% to 6.0% in 2000 and 4.0% to 7.0% in 2003. In most of these countries, inflation is between 2.0% and 6.0%, except for Yugoslavia and Romania, which are expected to experience high inflation in 2002, around 20% and 25% respectively. The Balkan economies face high unemployment, current account deficits and a lack of foreign direct investment.

5. Financial and commodity markets

Following a steep decline worldwide in the aftermath of the 11 September 2001 terrorist attacks, which exacerbated the existing downward trend, global stock prices started to recover amidst high uncertainty until March/April 2002. Afterwards, however, there was a renewed sharp drop in stock prices in international markets, with a high degree of synchronisation. This was attributed by market analysts to several factors: (a) the downward revision of growth rate forecasts; (b) lower than expected corporate profits; (c) investors' increased concerns about corporate governance and accounting transparency, notably in US companies; (d) the implications of a possible US military attack on Iraq; and (e) the severe financial market turbulence in certain emerging markets, especially Brazil and Turkey.⁵ Between the end of July and mid-August, stock prices recouped part of their losses, while they declined again from the end of August to the end of September. A partial rebound occurred in the markets of Europe and the USA during October. Market participants attributed the investors' shift away from stocks (until the end of September) to continuing uncertainty about the strength of economic recovery

and concerns about the economic repercussions of a possible military invasion of Iraq. Besides, the negative climate in the Japanese stock market, which was partly due to the persistence of deflation in the Japanese economy, caused a further drop in the Nikkei index, which fell to its lowest level for the last 15 years in October.

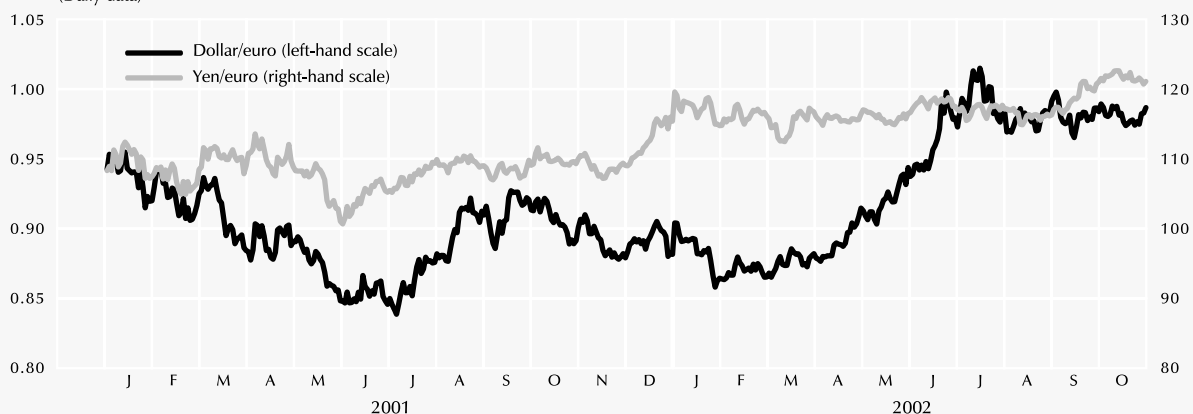
Against this background of falling global stock prices, bond yields declined considerably in most of the major markets. The US ten-year bond yields reached a 40-year low (around 3.6%) at the end of September. This decrease partly reflects the relatively more pessimistic estimates about the growth prospects of the US economy, as well as investors' flight-to-safety shift from stocks to bonds. During October, however, investors returned to stocks and, as a result, yields on US ten-year bonds rose to about 4.0%.

In the foreign exchange markets, the euro strengthened against the US dollar. From its lowest level for 2002 (\$0.86 in January), the euro soared to \$1.01 in mid-July. During the following months till end-October, it moved within a narrow range (\$0.96-0.99). Overall, during the first ten months of 2002, the euro appreciated by about 12.0% against the US dollar. The euro's appreciation is attributable to the market participants' concerns about the economic and financial conditions *in the USA*, notably about the strength of recovery, the considerable imbalances in the current account balance, as well as the accounting practices of certain corporations. The Japanese yen fell against the euro in 2002. At the end of October, the yen depreciated vis-à-vis the euro by

⁵ The upheaval in Brazil and Turkey was partly due to the uncertainty in the run-up to the elections (which were held on 27 October in Brazil and on 3 November in Turkey). In August, the IMF announced that, if needed, it would grant Brazil a new credit facility of \$30 billion. As a result, financial market turbulence in Brazil subsided.

Chart 2

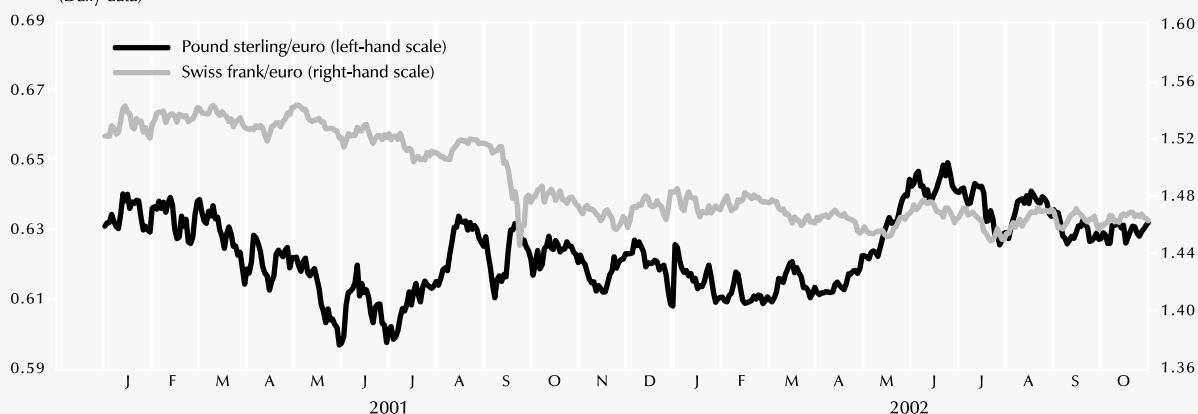
Exchange rate of the euro against the US dollar and the Japanese yen
(January 2001 - October 2002)
(Daily data)



Sources: ECB and Bank of Greece.

Chart 3

Exchange rate of the euro against the pound sterling and the Swiss franc
(January 2001 - October 2002)
(Daily data)



Sources: ECB and Bank of Greece.

11.0% compared with its 2001 average and by 5.0% against its end-2001 level. The yen's weakening against the euro reflects the continuing underperformance of the Japanese economy. The euro also appreciated against the pound sterling by 4.0% compared with its end-2001 level (see Charts 2 and 3).

As regards the commodity markets, the spot price of Brent crude oil reached almost \$29 at the end of September 2002, i.e. about 50% higher than at

the end of 2001. During October, however, oil prices fell to about \$25 and, as a result, the increase, compared with the end of 2001, narrowed to 32%. This rise mainly reflected market participants' estimates about supply-side developments, amidst concerns about a possible military intervention in Iraq (which, however, dampened in October) and market uncertainty about OPEC policy. These supply-side factors more than offset (up to September) the demand-side downward pressures on prices caused by the deceleration of

the growth rate of the world economy. Non-oil commodity prices, after reaching a trough at the end of 2001, recovered in early 2002, as international economic recovery prospects improved. These prices remained broadly stable from April onwards, but have risen by 15% since the end of 2001. The price of gold also increased by about 15% because of investors' safe-haven demand of gold in light of tensions in the Middle East.

6. Trade

It is estimated that the volume of world trade in goods and services will increase in 2002 by about 2.0%, following stagnation in 2001 (-0.1%). Specifically, *in 2001* the dollar value of world trade in goods fell by more than 4.0%. This was the first decrease in more than 20 years. The volume of *trade in goods* is estimated to have fallen

by 0.6% *in 2001*, while the remainder of the decrease in the value of transactions was due to reduced prices, notably of commodities. The fall in trade *in 2001* reflected the synchronised slowdown of world economic growth and the considerable decline of trade in the technology sector. However, developing countries (especially in Asia) and transition economies achieved high growth rates in their imports and exports and played a leading role in sustaining world trade.

Trade in services performed slightly better than transactions in goods *in 2001*. It is estimated that the dollar value of trade in services fell by about 1.0% in 2001. Receipts from tourist services decreased by about 2.5%, reflecting a 1.0% fall in tourist arrivals. According to some preliminary indicators, the growth rate of trade in services will recover *in 2002*, in line with the growth rate of trade in goods.

III. Macroeconomic and monetary developments in the euro area and the single monetary policy

1. Economic conditions in the euro area

Economic recovery in the euro area in 2002 has been slower than expected and the estimates for the year as a whole have become less favourable, as considerable uncertainty prevails. Deep concerns about the course of economic activity are caused by the possibility of a military attack on Iraq, the tension in the Middle East and their likely impact on oil prices and consumer confidence. While according to a spring forecast the GDP growth rate was to reach its potential level in the second half of 2002, according to the latest forecasts this will occur in 2003. For 2002 as a whole, the average annual growth rate of economic activity is expected to be 0.7-0.8%.¹ The slow growth of GDP in the euro area – mainly reflecting subdued external demand, the slowdown in the growth of private consumption and the decrease in investment – is associated with (i) the unfavourable course of financial markets and the prevailing uncertainty, which appear almost uniformly in many countries and are strengthened by concerns about a military intervention against Iraq, and (ii) structural rigidities in the euro area. The GDP growth rate is expected to accelerate to 1.8-2.0% in 2003, but it could be lower if the expected recovery of foreign demand is not confirmed.

During the second quarter of 2002, the GDP growth rate was equal to the first quarter's rate (0.4%). In the first quarter, growth was mainly driven by net exports and high government consumption, but in the second quarter it was probably supported by other components of demand, notably a considerable recovery of private con-

¹ According to the European Commission's *Autumn Forecasts* (13 November 2002), euro area GDP will grow by 0.8% in 2002 and by 1.8% in 2003. Similar forecasts have been released lately by the International Monetary Fund (*Public Information Notice 02/122*, 29 October 2002): 0.7% in 2002 and 2.0% in 2003.

sumption. Investment expenditure, however, decreased for the sixth consecutive quarter. The data from recent conjuncture surveys covering all sectors of the economy suggest that economic growth is continuing at a moderate pace in the second half of 2002.

Economic performance across the euro area has been rather uneven, reflecting the different impact of recent international shocks – e.g. higher oil prices and slower growth of international trade – on each country, as well as differences in fiscal pressures and structural features. Among major economies, domestic demand was particularly sluggish in Germany and Italy, while in France it was somewhat more resilient. Recent GDP growth rates were relatively low in Austria, Belgium, the Netherlands and Portugal, while Greece, Ireland and Spain performed better.

In most of 2001 and 2002, inflation was close to or over 2.0%, while the ECB's target is a price increase lower than 2.0%. At the same time, core inflation has been around 2.5% during 2002. The maintenance of this level is attributable to various factors, such as (i) the indirect impact from the sharp increases in oil prices during most of 2000, which continued to affect retail prices in 2001, (ii) the gradual rise in oil prices during 2002 (until September), (iii) the upward pressures on the prices of fresh fruit and vegetables due to adverse weather conditions, (iv) the upward trend of the wage growth rate, combined with the fall in productivity, and (v) the euro cash changeover, which led to an upward rounding of prices.² Inflation is expected to fall gradually in 2003, owing to the weakening of temporary factors, the appreciation of the euro and the relatively low GDP growth rate. The level of oil prices is an unpredictable factor.

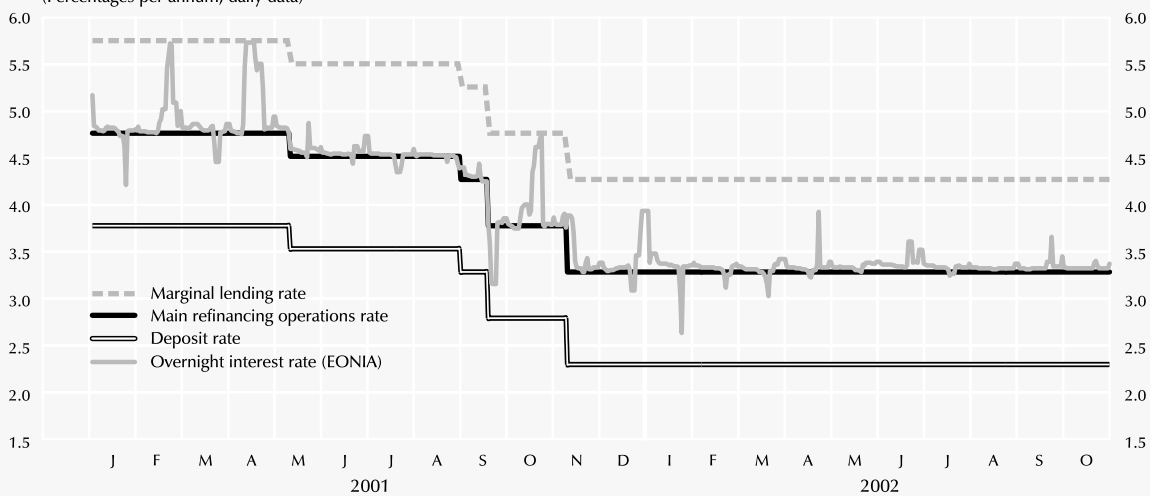
As regards public finance, the latest data suggest a

shortfall in relation to the fiscal targets set for 2002. It appears increasingly possible that most economies of the euro area will not achieve their fiscal objectives for 2002 and that the bigger countries failed to follow the example of most of the smaller countries, which benefited from the relatively high GDP growth rate in the late '90s to promote fiscal consolidation. In Germany, the general government debt-to-GDP ratio is expected in 2002 to be close to the 3.0% limit laid down in the Stability and Growth Pact. Portugal overstepped this limit in 2001 and will probably exceed it also in 2002. France and Italy also face an unfavourable fiscal situation; both countries are expected to show deficits over 2.0% in 2002. Fiscal imbalances raise doubts concerning certain countries' ability to achieve a budget close to balance or in surplus by 2004, as envisaged in their Stability and Growth Programmes. Hence, the European Commission postponed this target until 2006. These unfavourable fiscal developments are mainly attributable to the fact that recovery was slower than expected and to the floods in Central Europe, as well as to the fact that several countries did not stick closely to the adjustment path they had planned initially. Besides, for most euro area countries, the need to improve their fiscal situation is all the more urgent in view of the growing fiscal burden entailed by population ageing.

The relatively low growth rate of economic activity in the euro area and the persistence of high unemployment rates (over 8.0%), in so far as they are attributable to structural factors, suggest that stronger efforts aimed at structural reform are required in order to enhance production capacity. Certainly, important steps have been made in recent years, but there is still much to be done, including, *inter alia*, labour and product market

² According to Eurostat, the effect of rounding was just 0.2 percentage point.

Chart 4
 ECB interest rates and money market overnight rate (EONIA)
 (January 2001 - October 2002)
 (Percentages per annum, daily data)



Source: ECB.

Table I
 Adjustment of key ECB interest rates
 (Percentages per annum)

With effect from ¹	Deposit facility	Main refinancing operations	Marginal lending facility
11 May 2001	3.50	4.50	5.50
31 August 2001	3.25	4.25	5.25
18 September 2001	2.75	3.75	4.75
9 November 2001	2.25	3.25	4.25

¹ The date refers to the deposit and marginal lending facilities. For main refinancing operations, changes in the rate are effective from the first operation following the date indicated. The change on 18 September 2001 was effective on that same day.

Source: ECB.

reform, tax and social security reform, effective integration of capital markets in the euro area, ensuring of healthy competition, and completion of the internal market.

2. Monetary developments

2.1 Monetary policy decisions of the ECB

Since 8 November 2001 the key rates of the European Central Bank (ECB) have remained

unchanged, as the Governing Council considered that their level was consistent with the primary objective of the ECB, i.e. the maintenance of price stability over the medium term. Specifically, the minimum bid rate on the main refinancing operations remains at 3.25% (see Chart 4 and Table I), the marginal lending facility rate at 4.25% and the deposit facility rate at 2.25%.

Specifically, at the meetings of the ECB's Governing Council between the beginning of 2002 and 4 April, it was estimated that the 3-month average of the

annual growth rate³ of M3⁴ was due to the strong uncertainty that prevailed in the economy during autumn 2001, leading to increased demand for investment in relatively liquid assets. It was considered that these investments were temporary and would therefore not affect future inflation. The slowdown in the growth rate of M3 observed since the beginning of 2002, along with the continuing deceleration of credit expansion to the private sector, supported the view that monetary developments did not imply risks for price stability. However, the Governing Council judged that close monitoring of monetary aggregates is essential and expressed its concern about the possible consequences of high liquidity when economic recovery takes place.

As regards the analysis of basic economic indicators under the second pillar⁵ of the ECB strategy, evidence available since the beginning of 2002 confirmed the estimate that economic activity would remain low in the first half of the year. However, the ECB continued to consider that, despite marked uncertainty in the world economy, recovery would gradually gather pace within the year. Therefore, the ECB did not change its estimate that the potential GDP growth rate would be reached in the last quarter of 2002. Specifically, in the first months of 2002 it was assessed that business inventories were reaching the desired level, disposable income was increasing owing to the slowdown in the inflation rate, financing conditions were favourable, exports benefited from the recovery of the world economy and, generally speaking, there were no clear imbalances that would impede economic growth in the euro area. On the other hand, the annual inflation rate was higher than initially expected, because of the steep rise in oil prices but also owing to other factors (adverse weather conditions, higher indirect taxes etc.). The prices of services also rose faster. The Governing Council

considered that inflationary pressures on the demand side would be limited and expected that the annual inflation rate would fall below 2.0% within 2002, provided that wage claims were moderate.

However, at meetings held between May and September 2002, the ECB's Governing Council decided that the prospects for price stability were less favourable and that certain inflationary risks had begun to appear. From August onwards, it was found that these risks were somewhat balanced. The annual growth rate of the 3-month average of M3 was still considered high, mainly reflecting the investors' shift to high liquidity assets, as mentioned before. This was due to the increased uncertainty in autumn 2001, as well as to a subsequent increase in stock market volatility. Moreover, it was estimated that the acceleration of the growth rate of money was associated with the low opportunity costs of money holding. Accordingly, it was judged that there was much more liquidity than that required to finance sustainable non-inflationary economic growth. However, the risk that excess liquidity might generate inflationary pressures was considered low, given weak aggregate demand and

³ The annual rate of change in a monetary aggregate is defined as the percentage change of the balance of this aggregate during the twelve-month period until a specific month. The ECB monitors the average annual rate of change for three consecutive months.

⁴ M3, as defined by the ECB, includes currency in circulation and the balances of certain liabilities of monetary financial institutions (MFIs) in the euro area towards residents (excluding central government), which have a high degree of "moneyness", i.e. overnight deposits, deposits with an agreed maturity of up to two years, deposits redeemable at notice of up to three months, repurchase agreements, money market fund shares/units, money market paper and debt securities issued with a maturity of up to two years.

⁵ The ECB's evaluation of the risks (i.e. possibilities) of upward or downward deviation from the price stability objective rests on two pillars. The first pillar concerns the analysis of monetary and credit developments, in particular money stock (M3). Within the framework of the second pillar, the ECB assesses the outlook for inflation on the basis of a wide range of economic indicators, such as economic activity, wages, the bond yield curve, the exchange rate etc.

the slowdown of credit expansion to the private sector.

As regards the analysis of economic indicators under the second pillar, available evidence confirmed that economic recovery was under way in the euro area and that the potential GDP growth rate would be reached within 2002, although at the September meeting of the Governing Council the date of convergence on this rate was postponed until 2003. At its meetings from May through September, the Governing Council continued to point to the improvement in business and consumer confidence, the absence of economic imbalances, the favourable financing conditions, the rise in disposable income owing to the slowdown of inflation, and the anticipated improvement in economic activity outside the euro area, as factors that would support the growth of economic activity in the euro area. Nevertheless, the earlier fall in stock prices and their increased volatility in international stock markets, uncertainty about the path of oil prices, and the impact of imbalances in the world economy outside the euro area raised doubts about the speed of recovery. The rate of inflation was affected by changes in the prices of services and oil, as well as the temporary impact of the floods that hit certain countries of the euro area in August. However, the expectation that the annual HICP inflation rate would be around 2.0% for the rest of 2002 was confirmed.

At the meetings of 10 October and 7 November 2002, the August estimates that risks to price stability were rather balanced were confirmed. The high growth rate of M3 (the average annual 3-month growth rate in the period from July to September was 7.1%) and, in particular, the rise in the monetary aggregate M1 were once again attributed to the low opportunity costs of holding money and the investors' shift to M3 compo-

nents, owing to the recent uncertainty in financial markets. It was also found that credit expansion to the private sector was stabilised at a level slightly above 5.0%, which, in real terms, is identical with the long-term average level of credit expansion. Moreover, it was pointed out that there is more liquidity than that needed to finance sustainable non-inflationary economic growth. However, under present circumstances, it was felt that this did not increase the risks of inflationary pressures in the near future.

As regards the factors covered by the second pillar, it was found that the GDP growth rate in the euro area during the first half of 2002 was very low (quarter-to-quarter rate of growth of real GDP: first and second quarter 2002: 0.4%). It was assessed that the growth rate of economic activity was also low in the third quarter of 2002 and that the GDP growth rate would reach the growth rate of potential GDP within 2003. It was pointed out that recovery is unfavourably affected by the uncertainty associated with geopolitical tensions, the development of oil prices and the conditions in stock markets. The Governing Council therefore emphasised (at its meeting of 7 November) that it would closely monitor the factors that have a negative impact on the growth prospects of economic activity.

Annual HICP inflation remained slightly above 2.0% in September and October. The strengthening of the exchange rate of the euro and weak economic activity are expected to dampen inflationary pressures, but it is not possible to determine precisely the extent and the timing of their impact. However, the inflation rate will remain close to its targeted level for price stability, provided that oil prices do not rise again and that the upward trend of certain labour cost indicators in the last years is halted. Consequently, the ECB will continue to monitor closely the medium-term development of inflation determinants. Finally,

Table II

Main components of M3 in the euro area

(Annual percentage changes,¹ seasonally adjusted data, unless otherwise indicated; quarterly averages²)

	2001	2002			
	Q4	Q1	Q2	Q3	September
M1	5.5	6.2	6.6	7.6	8.2
Currency in circulation, M0	-18.5	-28.0	-20.0	-7.6	-0.5
Overnight deposits	10.4	13.0	11.7	10.3	9.6
Other short-term deposits (= M2-M1)	6.0	6.7	6.4	5.5	5.2
Deposits with an agreed maturity of up to two years ³	7.3	3.6	2.9	1.5	0.8
Deposits redeemable at notice of up to three months ³	5.0	9.1	9.4	8.9	8.5
M2	5.7	6.5	6.5	6.5	6.6
Marketable instruments (= M3-M2)	19.0	14.6	12.7	10.7	11.7
Repurchase agreements ³	19.5	4.6	2.3	3.1	7.0
Money market fund shares/units ³	26.7	30.4	25.5	22.8	21.4
Money market paper and debt securities issued with a maturity of up to two years ³	1.5	-6.2	-3.0	-9.1	-7.0
M3 (adjusted for non-euro area residents' holdings of all marketable instruments)	7.5	7.6	7.4	7.1	7.4

1 Annual rates of change in the corresponding index, which is compiled on the basis of the balance of the corresponding monetary aggregate in December 1998 and the accumulated monthly flows, adjusted for exchange rate variations, reclassifications etc.

2 The quarterly average is derived from the arithmetic annual averages for each month (calculated as the average of the rates at the end of the reference month and the end of the previous month) and is not the average of the rates at the end of each of the quarter's months (see the "Technical Notes" in the ECB *Monthly Bulletin*).

3 Not seasonally adjusted.

Source: ECB.

the importance of complying with the Stability and Growth Pact and promoting structural reforms was stressed once again.

2.2 The development of M3 and its components

After its continuous acceleration throughout 2001, the growth rate of M3⁶ showed a small deceleration in the first months of 2002 and, as a result, in March it was 7.2%, compared with 7.5% in the fourth quarter of 2001 (see Chart 5 and Table II). The weakening of uncertainty following the September 2001 attacks on the USA, as well as the steepening of the yield curve (i.e. the increase in the difference between long- and short-term rates) owing to the decrease in short-term rates after the summer of 2001 (see Chart 6), must have contributed to the reduced investors' preference for M3 components at the beginning of 2002. After March, however, the growth rate of M3 accelerated until May (7.6%). This cannot be

attributed to a rise in demand for money for transaction purposes, but rather reflects increased money holdings for prudential reasons. Underlying this development was the recent increase in stock market uncertainty, stemming from concern about the accounting practices of a number of firms. Moreover, low opportunity costs, as measured by the difference between the three-month EURIBOR rate and the weighted yield of M3 components, boosted demand for M3 components. Nevertheless, holdings of M3 components in excess of its desired long-term level, whether in nominal or in real terms, remain considerable and increased during 2002. This caused concern within the ECB about possible inflationary pressures when economic recovery takes place in the euro

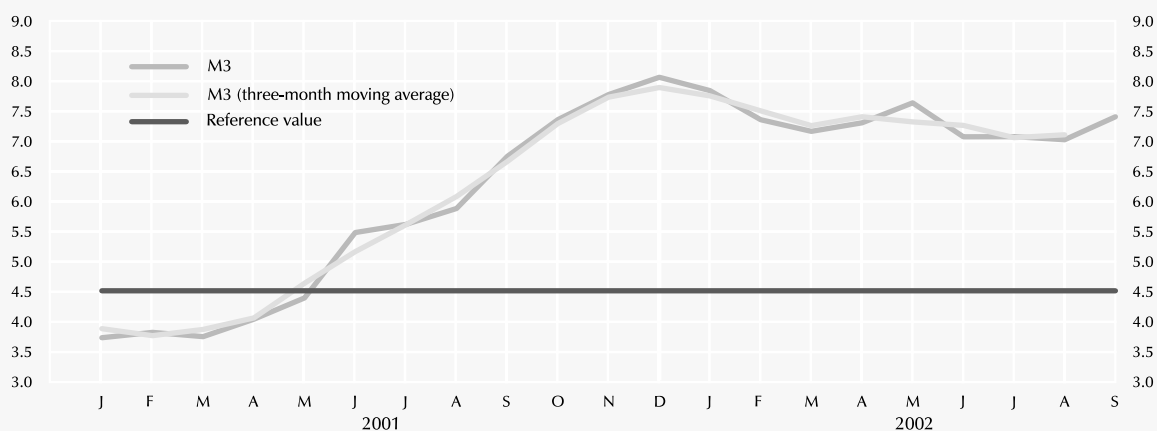
⁶ This rate of change concerns M3 minus marketable instruments (money market fund units, money market paper and debt securities with a maturity of up to two years, which are issued by monetary financial institutions in the euro area) held by *non-residents* of the euro area.

Chart 5

M3 in the euro area

(January 2001 - September 2002)

(Percentage change¹ over same period of previous year)



¹ Derived from seasonally adjusted data, after deducting the value of all marketable instruments held by non-residents of the euro area.

Source: ECB.

area. From June to August, the twelve-month growth rate of M3 showed a gradual slowdown, which was attributed to base effects. Indeed, during the same period in 2001 there was a shift of funds to short investments included in M3, given the small difference between long- and short-term interest rates. However, in September the twelve-month growth rate of M3 rose to 7.4%.

The annual growth rate of M1⁷ decelerated from January to March 2002 (first quarter average: 6.2%), but then accelerated to 6.6% in the second quarter and 7.6% in the third quarter (see Table II). This reflects low opportunity costs, as well as the fact that euro area residents and non-residents are once more increasing their money holdings after completion of the euro cash changeover. The annual growth rate of overnight deposits (retail bank market),⁸ which had accelerated in line with the reduction in national currency cash holdings before the launch of euro banknotes and coins, decelerated after the first quarter of 2002. The increase in currency holdings was also fuelled by the decrease in other short-term deposits included in M3. The annual growth rate of other short-term

deposits (specifically, the difference between M2 and M1), which make up the bulk of M3, slowed down from the second quarter of 2002, reflecting developments in individual components (such as deposits redeemable at notice of up to three months⁹ and deposits with an agreed maturity of up to two years¹⁰).

The annual growth rate of marketable financial instruments¹¹ slowed down after December 2001 and its average for the second quarter of 2002 fell to 12.7% (compared with 19.0% in the last quarter of 2001), owing to the reversal of investors' preference for relatively more liquid

⁷ M1 comprises currency in circulation and overnight deposits.
⁸ This category mainly includes sight deposits that are fully transferable (by cheque etc.). It also includes non-transferable deposits convertible on demand or until the end of the next working day.
⁹ These are savings deposits that the saver can redeem, without payment of penalty, subject to a notice before an agreed time period, which may be up to three months in this category of deposits.
¹⁰ This category mainly includes time deposits with an agreed maturity which, according to national practices, either are not redeemable before maturity or are redeemable subject to payment of penalty.
¹¹ This category includes repurchase agreements, money market fund units, money market paper and debt securities issued with a maturity of less than two years.

Table III

Main counterparts of M3 in the euro area

(Annual percentage changes,¹ not seasonally adjusted, quarterly averages²)

	2001	2002			
	Q4	Q1	Q2	Q3	September
Longer-term financial liabilities	3.2	4.8	4.8	4.9	4.7
Deposits with an agreed maturity of over two years	-0.2	0.2	0.8	1.9	2.1
Deposits redeemable at notice of over three months	-5.7	-11.5	-13.2	-11.1	-9.6
Debt securities issued with a maturity of over two years	5.9	6.5	7.8	8.3	7.4
Capital and reserves	4.3	9.8	7.0	4.9	5.3
Credit to euro area residents	5.2	5.1	4.5	4.2	4.3
Credit to general government	-0.7	1.7	1.8	1.1	1.7
Debt securities other than shares	-0.7	3.5	3.8	2.5	3.8
Loans	-0.8	-0.8	-0.9	-0.9	-1.2
Credit to other euro area residents	6.9	6.1	5.3	5.1	5.1
Debt securities other than shares	23.8	22.2	14.6	6.8	3.8
Shares and other equity	3.2	2.1	-3.4	1.3	2.7
Loans	6.5	5.7	5.6	5.3	5.3

1 Annual rates of change in the corresponding index, which is compiled on the basis of the balance of the corresponding monetary aggregate in December 1998 and the accumulated monthly flows, adjusted for exchange rate variations, reclassifications etc.

2 The quarterly average is derived from the arithmetic annual averages for each month (calculated as the average of the rates at the end of the reference month and the end of the previous month) and is not the average of the rates at the end of each of the quarter's months (see the "Technical Notes" in the *ECB Monthly Bulletin*).

Source: ECB.

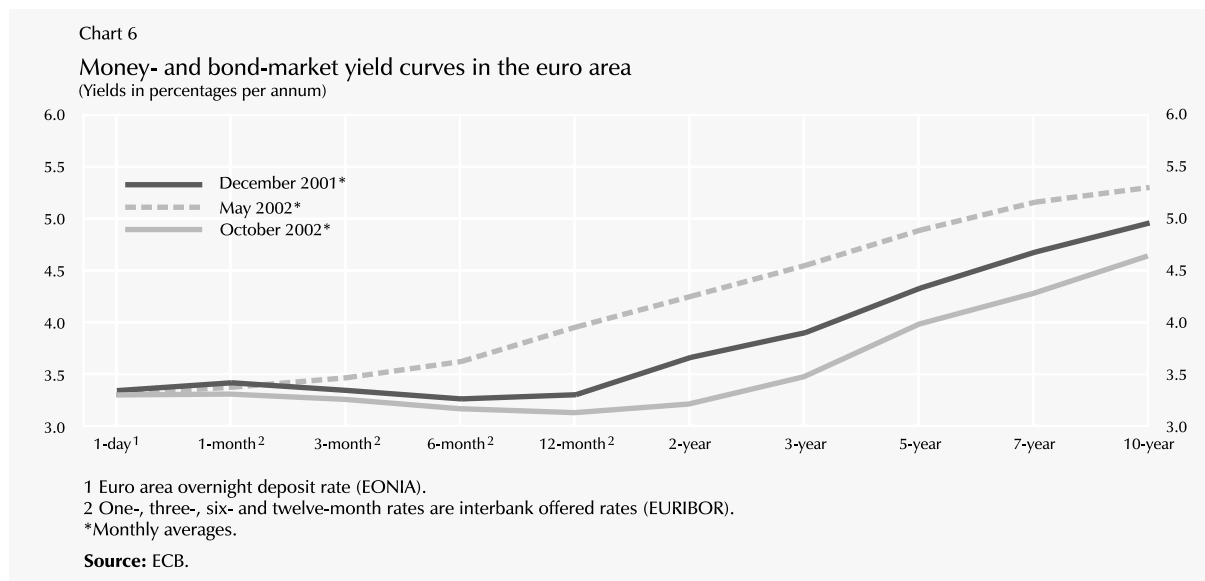
short-term components of M3. Unlike earlier developments, the recent recurrence of uncertainty in stock markets led to a shift of investors to long-term bonds, instead of short-term securities, because they considered that the drop in stock prices reflected more permanent factors and, further, because the difference between long- and short-term rates increased owing to the rise in long-term rates from the end of 2001 to May 2002. Finally, the annual growth rate of marketable financial instruments continued to slow down and stood at 10.7% in the third quarter owing to base effects. As mentioned earlier, in 2001 the small difference between long- and short-term rates led to a remarkable shift to these financial instruments.

2.3 Counterparts of M3

As regards the counterparts of M3, credit expansion to the private sector gradually decelerated

in 2001 and 2002. Its annual growth rate stood at 5.3% in the second quarter of 2002, compared with 6.9% in the fourth quarter of 2001, and slowed down further to 5.1% in the third quarter (see Table III). The annual growth rate of loans to non-financial firms fell to 4.8% in the second quarter of 2002, from 6.1% in the fourth quarter of 2001, reflecting weak economic activity in the euro area, the difficulties of firms in some countries to access credit sources, as well as base effects (increased financing requirements for the purchase of UMTS licences and for mergers and acquisitions in the first half of 2001). In contrast, the annual growth rate of loans to households accelerated to 5.7% in the second quarter of 2002, compared with 5.3% in the last quarter of 2001.

The annual credit expansion to general government in the euro area gradually accelerated after March 2001, from -0.7% in the last quarter of



2001 to 1.8% in the second quarter of 2002, owing to the increased borrowing requirements of general government, which are satisfied through higher government paper holdings by monetary financial institutions (MFIs). In the third quarter, the growth rate of credit to general government stood at 1.1%.

The annual growth rate of longer-term MFI liabilities¹² in the euro area has gradually risen since August 2001, reaching 4.8% in the second quarter and 4.9% in the third quarter of 2002 (from 3.2% in the fourth quarter of 2001). This acceleration mainly reflects investors' shift to long-term investments, following the rise in long-term interest rates from the end of 2001 to May 2002 and the recent increase in stock market uncertainty.

Finally, the net foreign assets of MFIs gradually decreased in the first four months of 2002, while from May to September (except July) this trend was reversed. This reversal reflects the reduction in capital outflows for investment in foreign securities and the liquidation of euro area residents' investment abroad, as well as increased investment in the euro area by non-residents.

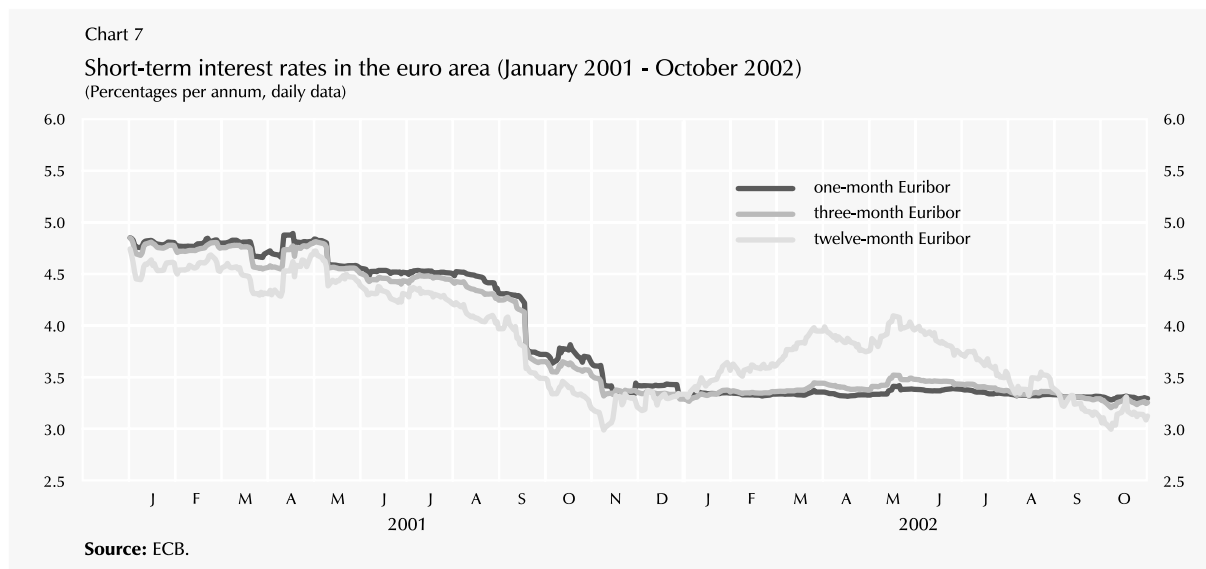
2.4 Money market rates, bank rates and yields on long-term securities

Until May, longer-term rates in the single money market of the euro area followed an upward path and rose faster than shorter-term rates, owing to expectations of a further rise in short-term rates in the future. This led to a steepening of the yield curve, as measured by the difference between long- and short-term rates in the money market (see Chart 6). From mid-May, however, longer-term rates fell considerably, mainly reflecting the revision of expectations about the growth rate of economic activity. This resulted in a flattening of the yield curve.

The interbank rate on overnight operations, as measured by the EONIA rate,¹³ remained throughout the reviewed period slightly above the minimum bid rate on the main refinancing operations

¹² These liabilities include deposits with an agreed maturity of over two years, deposits redeemable at notice of over three months, debt securities with an agreed maturity of over two years, and MFI capital and reserves.

¹³ The EONIA (Euro OverNight Index Average) rate is calculated by the ECB as the weighted average of the interest rates on unsecured overnight lending transactions denominated in euro, as reported by a panel of contributing banks.



of the Eurosystem (3.25%), which is determined by the ECB (see Chart 4).

The three-month EURIBOR rate, which is representative of short-term rates, increased in the first five months of 2002 (see Chart 7). A sharper, continuous rise was noted in longer-term rates (six- and twelve-month EURIBOR rates) until May. As a result, the positive difference between twelve-month and one-month EURIBOR rates increased to 58 basis points in May, compared with a negative difference of 12 basis points in December 2001 (see Chart 6). However, from mid-May, EURIBOR rates, especially at the longer end of the yield curve, followed a downward path, falling below the level of December 2001 (three-month EURIBOR: October 2002 average: 3.26%, December 2001 average: 3.34%) and the rate differential became negative again (-18 basis points) in October.

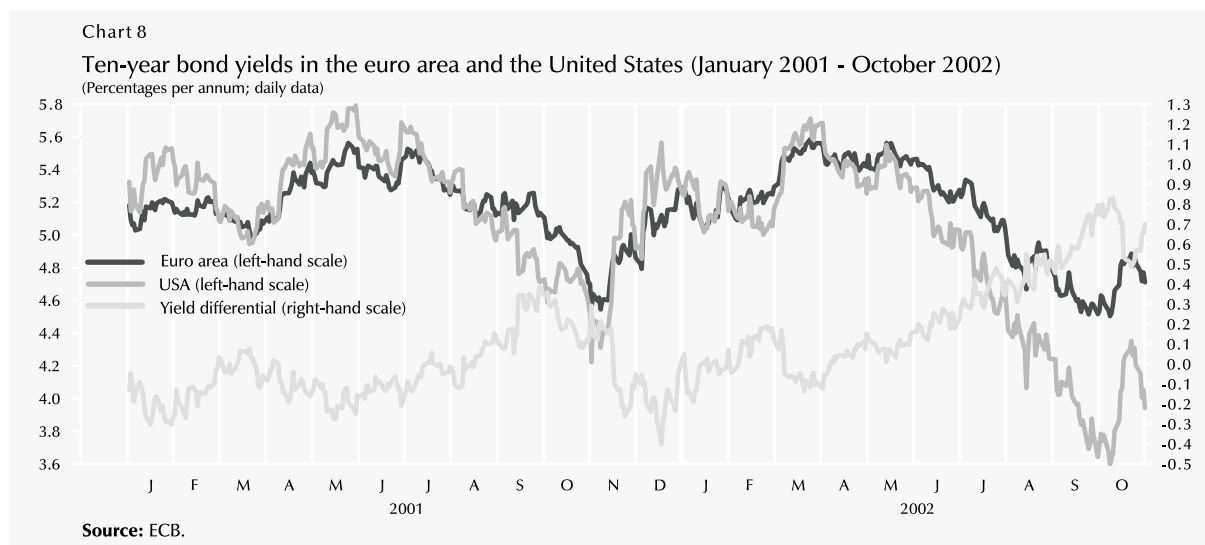
In the first five months of 2002, forward rates in the money market of the euro area suggested expectations of a further gradual increase in interest rates. After mid-May, however, they dropped significantly, reflecting the downward revision of expectations about the pace of economic recovery in the euro area, although they increased some-

what in October. The volatility of futures prices on contracts remained unchanged in the first half of 2002, after it returned at the end of 2001 to the level prevailing before the 11 September 2001 events. Nevertheless, the recent recurrence of uncertainty in the stock markets caused an increase in the volatility of forward rates after July.

Short-term bank rates have changed little since the beginning of the year. Both the overnight rate (in the retail bank market) and the rate on deposits redeemable at notice of up to three months remained almost unchanged, reflecting the relative stability of the three-month EURIBOR rate.

Long-term bank rates rose in the first five months of 2002, while from June they gradually declined, as they followed, with the usual time lag, the path of the yields on medium-term government bonds (notably five-year bonds), as well as because of concern about the credit risk of private firms. This concern is reflected in the increase in the yield differential between bonds issued by these firms and the corresponding government bonds during 2002.

The average monthly yield on government bonds in the euro area (see Chart 8) continued to rise in



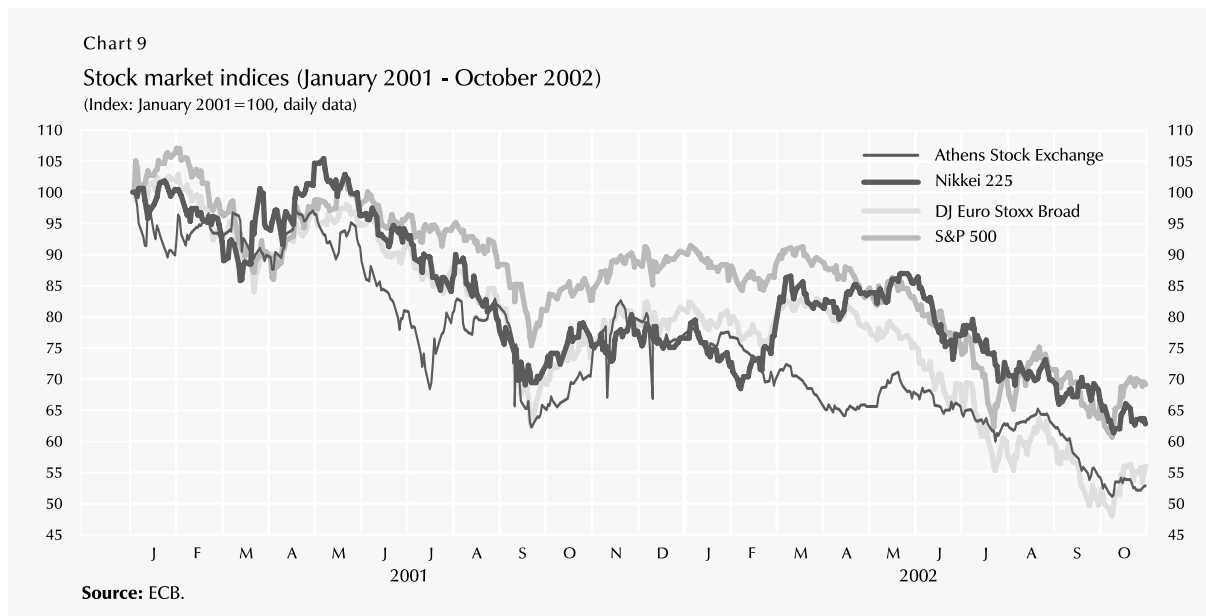
the first quarter of 2002 (average yield on the ten-year government bond: 5.32% in March 2002, compared with 4.96% in December 2001). The increase in the yields on long-term government securities during the first quarter of 2002 reflected an improvement in the expectations of economic recovery in the euro area and the anticipated rise in short-term interest rates. After May, the yield on government bonds, which showed a downward trend (average yield on the ten-year government bond: 4.52% in September), was mainly influenced by the investors' flight-to-safety shift, the revision of market participants' expectations about the prospects of economic growth in the euro area, in line with new releases of statistical data, as well as developments in the US bond market. However, in October the yields on long-term government securities showed an increase (the average yield on the ten-year government bond reached 4.62% in October).

The long-term yield curve, as measured by the difference between the yield on the ten-year bond and the three-month EURIBOR rate, continued to steepen during the first quarter of 2002 (see Chart 6), but then it flattened, reflecting the evolution of bond yields. In the first half of 2002, the

relatively more positive slope of the curve of the implied forward overnight rates suggested increased expectations of a recovery of economic activity over the medium to long term. However, the flattening of the curve after May and its downward shift, mainly in the medium-term yields, reflect the effect of investors' shift from equity to medium-term government securities and the downward revision of market participants' expectations about the rate of economic recovery. Nevertheless, in October this curve shifted upwards.

2.5 Issuance of bonds and other debt securities

The annual growth rate of euro-denominated debt securities issued by banks and other MFIs in the euro area subsided to 4.9% in the second quarter of 2002 from 5.6% in the fourth quarter of 2001, reflecting the adequacy of their financing resources, given the high growth rate of short-term deposits and the reduced demand for loans. Besides, the annual growth rate of debt securities issued by private non-MFIs decelerated to 11.0% in the second quarter of 2002 from 18.6% in the fourth quarter of 2001, owing to the remarkable reduction in the rate of issuance of short-term debt securities. This slowdown reflects (a) the



lower credit rating of certain telecommunications and motor car companies, which accounted for the high issuance rate of bonds in the last three years (given that short-term bonds are usually issued by companies with a high credit rating), (b) uncertainty about the rate of economic recovery, as well as (c) the decrease in mergers and acquisitions during 2001 and early 2002. Furthermore, the conditions of issuance of private debt securities have worsened because of the increase in the spread between corporate and government bonds, as well as the drop in stock prices.

On the other hand, the annual growth rate of the issuance of debt securities by general government in the euro area accelerated to 4.8% in the first quarter of 2002, from 3.1% in the last quarter of 2001. This high growth rate reflects a deterioration of the fiscal situation in certain countries and an increase in general government borrowing requirements.

2.6 Stock market developments

Share prices in the stock markets of the euro area were volatile during the first three months of

2002 (see Chart 9). The Dow Jones EURO STOXX index, which is compiled on the basis of a large number of stock prices from euro area countries, rose by 1.8% between end-December 2001 and 19 March 2002. Changes in share prices mainly reflected the revision of market participants' expectations about the growth rate of economic activity in the euro area, in line with successive releases of macroeconomic data. Hence, the volatility of share prices was particularly increased throughout that period.

Since April, however, share prices have showed a continuous and considerable fall, while since June their volatility has been higher than average volatility in the last two years. On 9 October 2002, the Dow Jones EURO STOXX index reached its lowest level since April 1997, although later the downward trend was reversed to some extent. At end-October this index was 31.5% lower than at end-December 2001. The fall in euro area stock prices followed a similar drop in US stock prices, which is mainly attributable to doubts about the reliability of corporate accounting practices, as well as to the disclosure of corporate mismanagement cases. In addition, share prices in the euro area

were influenced unfavourably by the downward revision of the forecast profits and sales of companies, mainly in the telecommunications and insurance sectors. Finally, the revision of market participants' expectations concerning the rate of economic recovery in the euro area and uncertainty about the situation in the Middle East and the repercussions of a possible rise in oil prices had a further negative impact on stock markets.

Since the beginning of 2002, share prices in the technology and telecommunications industries have shown the steepest fall and the highest volatility, dropping by 45.2% and 34.5% respectively from end-December 2001 to end-October 2002. This is attributable to market participants'

concern about the prospects of firms in the technology sectors and the reliability of their accounting practices. As regards the firms in the telecommunications industry, there is serious concern among market participants about the long-term profitability of their investment in UMTS licences and their ability to pay off their high debts. Finally, the profitability prospects of insurance companies have deteriorated, chiefly owing to the damage caused by floods in Central Europe last August, which led to a 34% drop in the prices of financial company shares between end-December 2001 and end-October 2002. However, the downward path of share prices in these sectors was reversed after 9 October.

IV. Inflation and economic activity in Greece

1. Price developments

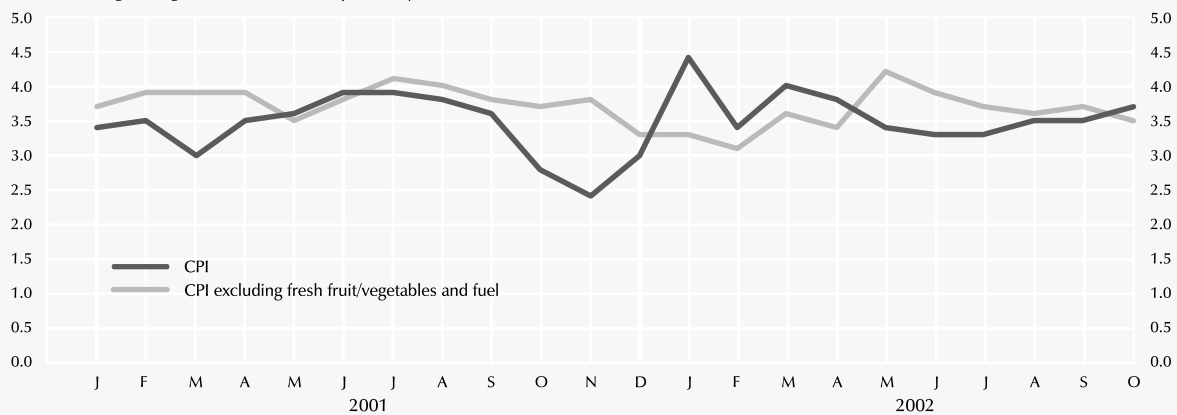
Inflation, as measured by the annual rate of change in the Consumer Price Index (CPI), remained high during the first ten months of 2002, and indeed at levels higher than in the last few months of 2001 (3.7% in October 2002, compared with 3.0% in December 2001 – see Chart 10). On the basis of the Harmonised Index of Consumer Prices (HICP), inflation came to 3.9% in October 2002 (compared with 3.5% in December 2001 – see Chart 11), resulting in a widening of its positive differential over inflation in the euro area as a whole (which was 2.3% in the same month – see Section 3 of this chapter).

Core inflation, as measured by the annual rate of change in the CPI excluding fuel and fresh fruit/vegetables, also remained high and stood at 3.5% in October 2002, compared with 3.8% on average in 2001 and 3.3% in December of that year (see Chart 10). Among the individual components of core inflation, a greater increase is observed in services prices (annual rate of increase: 4.6% in October 2002, compared with 3.3% in December 2001), while the prices of goods other than fuel and fresh fruit/vegetables show a relatively small and decelerating increase (2.8%, compared with 3.4%). The fastest rates of increase are recorded in hotels-café-restaurants (7.3%, compared with 3.8%), in insurance fees (6.8%, compared with 5.3%), in medical services other than those provided in hospitals (5.3%, compared with 4.1%) and in rents (5.1%, compared with 4.1%). The rise in processed food prices also continues at a fast pace (4.1%, compared with 4.6%).¹

¹ Processed food includes non-alcoholic beverages. Food prices excluding fresh fruit/vegetables were increasing in October at an annual rate of 3.3%, against 4.5% in December 2001.

Chart 10

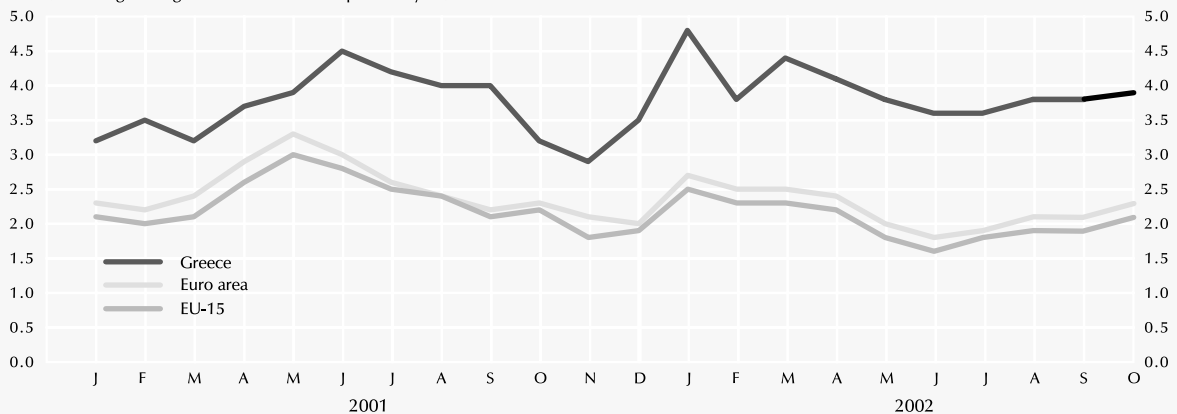
Consumer Price Index and core inflation in Greece
(January 2001 - October 2002)
(Percentage change over same month of previous year)



Source: Calculations based on National Statistical Service of Greece (NSSG) data.

Chart 11

Harmonised index of consumer prices in Greece, the euro area and the European Union
(January 2001 - October 2002)
(Percentage change over same month of previous year)



Sources: NSSG and Eurostat.

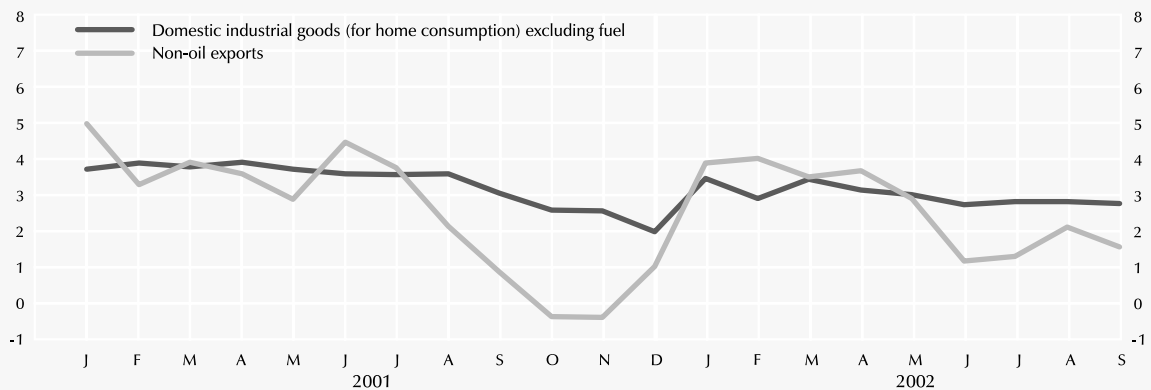
As regards the rates of public utility services (which are no longer provided only by public, but also by private enterprises) and certain other administratively set rates,² it is estimated that in October these prices were increasing at an average annual rate of 1.0% (compared with 1.8% in December 2001), contributing by only 0.08 percentage points to the annual increase in the general CPI. Excluding telecommunication services rates, which show a decrease (annual rate of change: -4.5% in October

2002, compared with -1.9% in December 2001) and thus have a dampening effect (of -0.14 per-

² These include: the rates of the Public Power Corporation (DEH), the Hellenic Post Office (ELTA), the Hellenic Railways Organisation (OSE), the Athens-Piraeus Water Supply and Sewerage Company (EYDAP) and other water supply companies, the Hellenic Telecommunications Organisation (OTE) and private companies providing mobile telephony services, the fares of Olympic Airways (OA) and private airlines, as well as the fares of urban public transport, the rates of hospitals and private clinics, contributions to the Hellenic Radio and Television (ERT), municipal duties, road tolls and road duties.

Chart 12

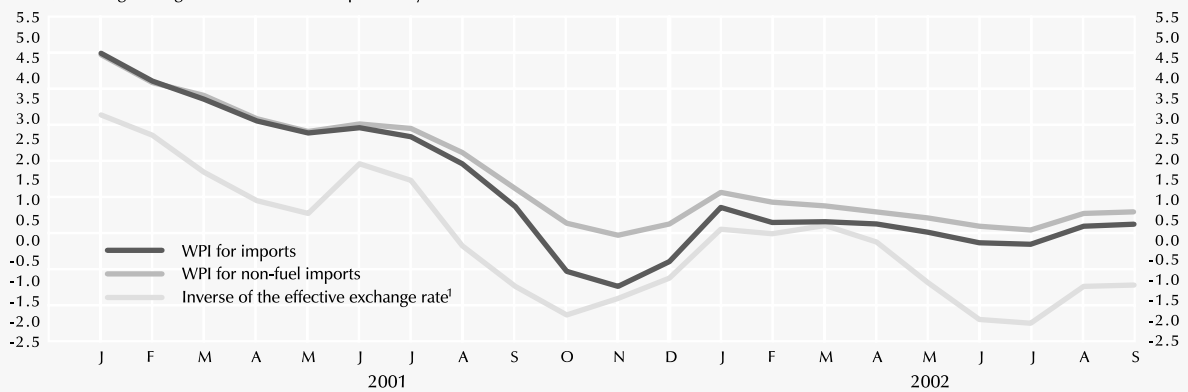
Wholesale price index in Greece (January 2001 - September 2002)
(Percentage change over same month of previous year)



Source: Calculations based on NSSG data.

Chart 13

Import price index and the inverse of the effective exchange rate of the domestic currency
(January 2001 - September 2002)
(Percentage change over same month of previous year)



1 See note in Chart 14.

Sources: NSSG and Bank of Greece.

centage points) on the annual rate of CPI change, all other public utility rates and the various duties were increasing in October at an average annual rate of 3.8%, i.e. almost as fast as the CPI in the same month (3.7%).

Finally, current developments in wholesale prices affect current or future developments in CPI goods prices.³ Specifically, the prices of goods included in core inflation are affected by the evolution of the wholesale prices of “domestic industrial goods for home consumption and imported

goods (excluding fuel)” (see also Charts 12 and 13), which in the January-September 2002 period showed an average annual rate of change (1.9%) significantly lower than in the corresponding period of 2001 (3.3%).⁴

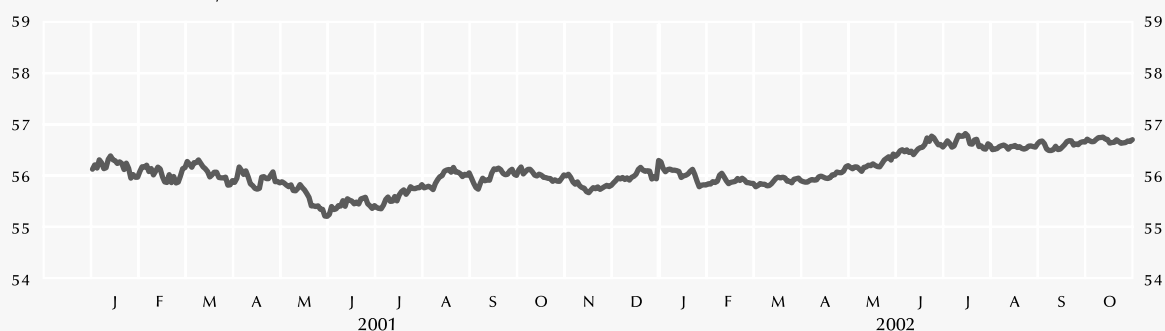
³ See two relevant studies published in the *Economic Bulletin* of the Bank of Greece: (i) G. Hondroyiannis and E. Papapetrou, “The causal link between consumer prices and wholesale prices in Greece” (No. 10, December 1997), and (ii) H. Gibson and S. Lazaretou, “Leading inflation indicators for Greece: an evaluation of their predictive power” (No. 14, December 1999).

⁴ Data revised on the basis of the new WPI (1995=100).

Chart 14

Effective exchange rate index, weighted on the basis of Greece's external trade
(January 2001 - October 2002)

(Index: 1990=100, daily data)



Note: As of January 2001, changes in this index are relatively limited, since Greece's trade with the other euro area countries (which account for a substantial part of the whole) is carried out in euro.

Source: Bank of Greece.

2. Inflation determinants

During the first ten months of 2002, the average year-on-year rate of increase in consumer prices remained at the same, relatively high, level as in the corresponding period of 2001 (3.6%). This was the net result of positive and negative effects of the more permanent determinants of inflation, as well as of some extraordinary factors.

Regarding positive effects, the lagged indirect upward pressure that was exerted on consumer prices by the significant rise – in the course of the year 2000 – in fuel prices, as well as in the US dollar exchange rate vis-à-vis the euro died out during 2002.⁵ This favourable outcome was supported by the appreciation of the euro vis-à-vis the US dollar and the other currencies (specifically if this appreciation is weighted on the basis of Greece's external trade), which was particularly clear from May 2002 onwards (see Chart 14).⁶ Likewise, the continuing deregulation of the telecommunications sector, the strengthening of competition in the mobile telephony market and the opening of the fixed telephony market contributed to a further decline in telephone call

rates, with a positive effect on inflation (as already mentioned).⁷

However, the effects of all other inflation determinants were unfavourable. Beginning with extraordinary and exogenous factors, the following observations can be made:

First, due to the particularly harsh weather conditions in December 2001 and January 2002, the prices of fresh fruit/vegetables soared at very high levels. In fact, because of the slow return of the market to normal, the relevant effects on inflation were noticeable even until end-April.⁸ During the

⁵ The fading away of this effect started to become noticeable with the deceleration in core inflation after July 2001.

⁶ The appreciation of the euro reflected mainly the weakening of the dollar, which was partly linked with the unfavourable climate created by the outburst of great corporate scandals in the United States. Moreover, if weighted on the basis of Greece's external trade, the annual rate of change in the exchange rate of the euro vis-à-vis the other currencies was positive from May onwards (fluctuating between 1.0% and 2.0% in the May-October 2002 period). In the entire period from January to October 2002, this index rose an average annual rate of 0.7%.

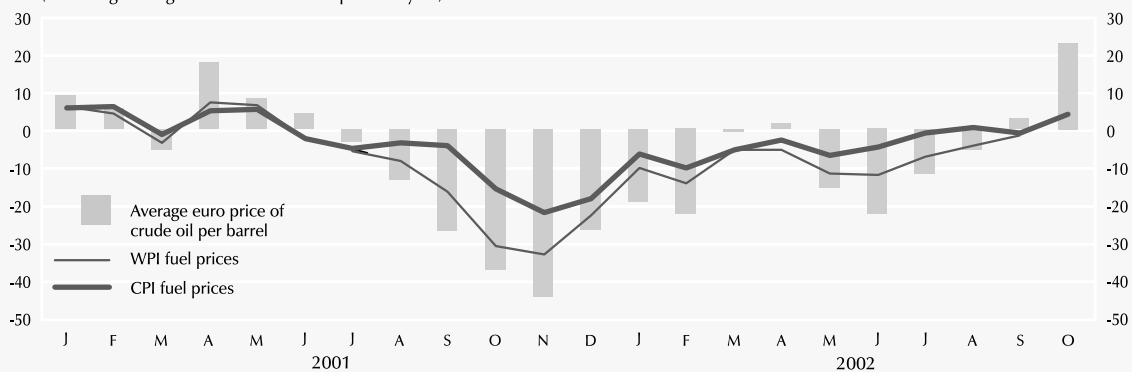
⁷ See Section 1 of this chapter.

⁸ Compared with the preceding month, the prices of fresh fruit/vegetables increased by 19.3% in December 2001 and by 17.5% in January 2002. Their annual rate of change reached 39.6% and 59.0% respectively and remained high in February (38.1%), March (33.4%) and April (26.7%) of 2002. In October, however, the annual rate of change had receded to 8.1%.

Chart 15

Evolution of CPI/WPI fuel prices and of the euro price of Brent crude oil
(January 2001- October 2002)

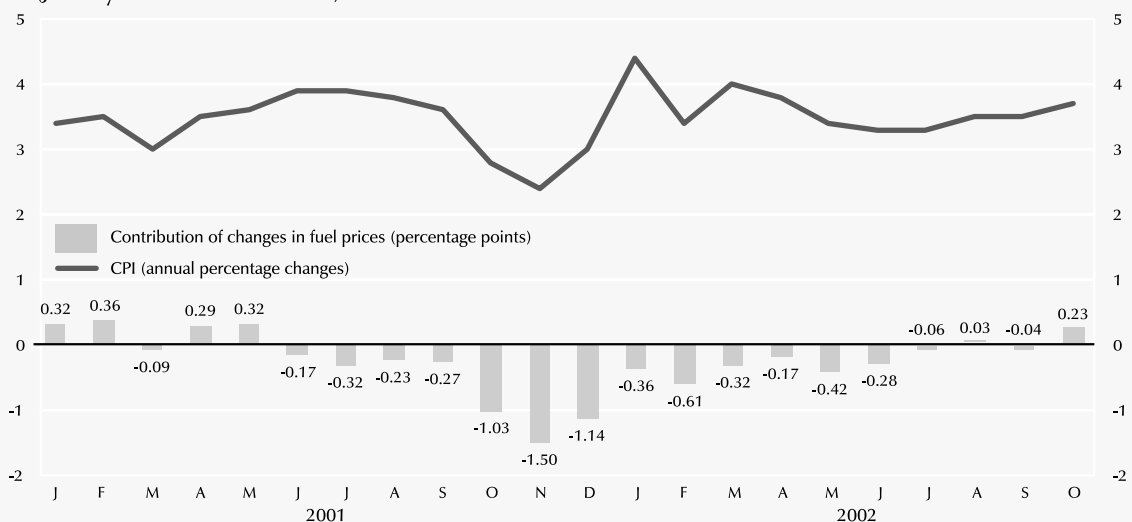
(Percentage change over same month of previous year)



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

Chart 16

Changes in fuel prices: their contribution to inflation
(January 2001 - October 2002)



Source: Calculations based on NSSG data.

same period, the prices of unprocessed food also rose considerably in the euro area as a whole, but not as much as in Greece.⁹

Second, the price of crude oil in world markets, which for the larger part of 2001 and particularly during the last months of that year showed a downward trend, recorded a continuous increase in the first four months of 2002, fell during the

next two months, again showed a steadily upward trend from July to September, but started to decline once more in the course of October. Overall, during the first ten months of 2002 the world prices (in US dollars) of crude oil and the

⁹ The annual rates of increase in Greece and in the euro area were, respectively, 15.7% and 6.3% in December 2001, 20.9% and 8.4% in January 2002 and 13.9% and 7.1% in February.

other raw materials increased (whereas during 2001 they had decreased). This development was only partly offset by the decline in the exchange rate of the US dollar.¹⁰ For this reason, in the period under review, retail and wholesale prices of fuel in the domestic market followed a course similar to that of world prices (see Charts 15 and 16). It should be noted that, compared with the European economy, the Greek economy is more exposed to fluctuations in crude oil prices. According to Eurostat data for the year 2000, domestic energy consumption, expressed in oil equivalents per GDP unit, is 36% higher in Greece than in the European Union.¹¹

Third, the cash changeover to the euro led to an upward rounding of the euro prices of certain consumer goods and services, while in other cases it was used as a pretext for increases that were disproportionate to the respective cost increases. According to estimates published in previous Bank of Greece Reports, the relevant upward contribution to the annual rate of inflation was initially (in January 2002) limited to 0.2 percentage points, but later on it reached 0.5 percentage points,¹² i.e. it was higher than in the euro area as a whole (0.1-0.2 percentage points).¹³

With reference to the unfavourable effects of some of the more permanent determinants of inflation, the following are noted:

First, it is estimated that unit labour costs in the whole economy are increasing in 2002 by 3.5%, i.e. faster than in 2001 (2.8%),¹⁴ while in the euro area their average annual rate of increase is expected to remain close to its 2001 level (2.6%, i.e. almost equal to the one in Greece).¹⁵ In the business sector of the economy,¹⁶ where cost developments have a more direct impact on inflation, it is estimated that unit labour costs continue to increase in 2002 at a relatively fast pace (2.7%),

albeit slower than in 2001 (3.2%). However, according to provisional estimates, an acceleration may be observed in manufacturing (3.5% in 2002, against 2.9% in 2001).

The unfavourable development of unit labour costs in the *whole economy* (see Table IV) mainly reflects the faster increase, compared with 2001, in average nominal earnings in 2002. It is indicatively noted that, according to the two-year National General Collective Labour Agreement for 2002-2003, in 2002 the average annual increase in minimum wages comes to 5.4% (compared with 3.5% in 2001). As derived from the analysis of a sample

10 For the price of crude oil in euro per barrel, see Chart 15, as well as ECB, *Monthly Bulletin*, Table 4.3, page 43*.

11 This index (kilograms of oil equivalents per 1,000 euro of GDP at constant prices of 1995) was 264 for Greece, 194 for the EU and even lower for the euro area (see Eurostat Press Release dated 23 August 2002); it is helpful in estimating the overall effect of changes in fuel prices on the *general level* of prices and not the *direct* effect on the level of consumer prices.

12 See Bank of Greece, *Monetary Policy 2001-2002* (March 2002), Box 5, and *Annual Report 2001* (April 2002), Box IV.1. The detailed assessment of consumer price developments after March 2002 does not lead to a considerable differentiation of estimates concerning the impact of the euro cash changeover.

13 Eurostat (Press Release dated 17 July 2002) and ECB estimates. Only in one euro area country, the Netherlands, the impact was estimated (by the De Nederlandsche Bank) as greater (0.7 percentage points).

14 As regards Greece, these rates refer to the change in total compensation of employees, including employers' social security contributions (at current prices), over GDP (at constant prices). Based on the different definition used by the NSSG and Eurostat (change in the ratio of "total compensation of employees (including employers' social security contributions) per employee" to "GDP per employed person in general"), we get different rates: 3.2% in 2002, against only 0.9% in 2001. The two definitions are equivalent in the case of a business firm or branch where all (or almost all) employed persons are employees; they give different results for an economy such as that of Greece, where the self-employed represent a considerable proportion of employment and the rates of change in total employment are different from those in the number of employees (e.g. -0.8% against +2.2% in 2001 according to the labour force survey, or -0.3% against +1.7% in the same year on a national accounts basis).

15 In the first quarter of 2002, the annual rate of increase in unit labour costs in the euro area was unusually high (3.3%), but in the second quarter it decelerated to 2.5% and it is estimated that for the entire year it will be close to its 2001 level if the cyclical improvement in productivity continues in the second half of the year.

16 Comprising public and private enterprises, and banks.

Table IV

Employees' earnings, productivity and labour costs (2000-2002)

(Annual percentage changes)

	2000	2001	2002 (estimate)
Average gross earnings (nominal):			
– whole economy	6.5	5.2	7.0
– central government ¹	7.1	5.5	5.8
– public enterprises	13.7	8.2	11.3
– banks	6.8 ⁴	6.3	8.9
– non-bank private sector	5.0	5.3	6.5
Minimum earnings	4.2	3.5	5.4
Net² income of an employee with average earnings			
(nominal)	8.5 ⁵	3.8	6.5 ⁶
(real)	5.1 ⁵	0.4	2.8 ⁶
Total compensation of employees (including employers' social security contributions)	7.3	7.1	7.0⁷
Compensation per employee	6.3	5.3	6.3⁷
GDP	4.2	4.1	3.4
Output per person-hour in manufacturing	3.2	2.5	2.3
Unit labour costs:			
– whole economy	3.0	2.8	3.5 ⁷
– business sector ³	2.4	3.2	2.7 ⁷
– manufacturing	2.2	2.9	3.5 ⁷

1 Compensation per employee.

2 Gross earnings less employees' social security contributions less income tax.

3 The business sector comprises private and public enterprises and banks.

4 Excluding a major bank, where average earnings decreased by around 7.5% owing to the retirement of a large number of high-salaried employees (originating from a merged smaller bank), average earnings of bank employees rose by about 10%.

5 Including the refunding (in January 2000) of wage earners (other than civil servants) with a difference from tax withheld; also including the reduction (as from 1 September 2000) in social security contributions of minimum wage earners.

6 Including the abolition (as from 1 January 2002) of stamp duties (0.6% of gross earnings) paid by business sector employees.

7 Including the abolition (as from 1 January 2002) of stamp duties (0.6% of earnings) paid by business sector employers.

Sources: NSSG (provisional data for 2000-2001 GDP, September 2002), Bank of Greece estimates (for GDP in 2002 and for the other annual aggregates in 2000-2002).

of 60 collective agreements and arbitration decisions (almost two thirds of which are of a two-year duration), it is estimated that the increase in contractual earnings at branch level is even higher (5.7%) (they had increased by 4.2% in 2001). This acceleration reflects the corrective pay rise (0.9-1.1%) that was granted in January 2002 (on the basis of the collective agreements for 2000-2001) and, in addition, the fact that the unfavourable developments in the first months of 2002 led to an upward revision of the forecasts for 2002 inflation taken into consideration by social partners during the bargaining round.

As regards productivity, it is estimated that in 2002 GDP per employee will increase less than in 2001 (3.0% compared with 4.4%). However, if

productivity is measured on the basis of GDP per employee in the business sector, then, according to available indications, its rate of increase will be faster in 2002 (reaching approximately 3.5%, from about 2% in 2001). Indeed, according to the Labour Force Survey, total employment is rising in 2002 (whereas it decreased in 2001), but the number of employees is increasing less than in 2001 – and is even estimated as remaining unchanged in the business sector – a fact implying that business firms are trying to economise on labour in view of the slowdown in demand growth. In fact, if non-wage labour costs had not decreased with the abolition of stamp duties (which until the end of 2001 were calculated as a percentage –0.6%– of the compensation of employees and were paid by employers in the

business sector¹⁷), labour cost growth would have been even higher in 2002: by 0.5 percentage points in the business sector, i.e. 3.2% (as high as in 2001), and by 0.3 percentage points in the whole economy, i.e. 3.8%.

Second, available indications concerning the development of profit margins in 2002 (following their clear decrease in 2001) lead to the conclusion that margins increased in certain branches of economic activity that have a particular impact on consumer prices. Nevertheless, *total* profit margins decreased. Specifically, as derived from the analysis of the published summary financial statements, pre-tax earnings¹⁸ decreased for all the companies whose shares are listed on the ASE, while their turnover increased in the first half of 2002, resulting in an appreciable narrowing of profit margins. However, if banks, insurance companies and leasing firms are not taken into account, no significant change is recorded in profit margins. A clear increase in these margins in the first half of 2002 is observed only in certain branches (*food-beverages, tobacco and petroleum products*) and for the Public Power Corporation, while the increase in *construction firms'* profits is also considerable (although smaller than the growth of their turnover).

Third, phenomena such as those already mentioned, i.e. the relatively high rates of increase in the prices of the services supplied by the private sector and of processed food, the widening of profit margins in some branches that have a crucial impact on inflation, as well as the fact that some enterprises imposed price increases under the pretext of the changeover to the euro, indicate conditions of excess demand and/or insufficient functioning of competition in the respective markets.

In particular, the existence of non-competitive

conditions is also manifested through the abuse of the dominant position in the market or through agreements between, and coordinated practices of, sellers in oligopoly markets, i.e. through practices that, according to Law 703/1977, fall in principle within the field of competence of the Competition Committee (which is an independent administrative authority).¹⁹ However, it is very hard to legally document²⁰ such practices. Furthermore, the ineffective functioning of competition in branches with a large number of enterprises, such as hotels-café-restaurants, may be mainly due to the insufficient information available to consumers. Finally, as the deregulation of markets such as those of electricity or domestic sea transports (coastal navigation)²¹ has not been completed and the deregulation of the natural gas market has not yet started, no decreases in the corresponding rates have been recorded so far, unlike what has already been observed in the telecommunications market. More generally, Greece's delays (compared with the euro area as a whole) in deregulating certain markets but also in strengthening competition in markets characterised by an oligopoly structure have contributed to the higher Greek inflation.

With reference to *demand-side* inflationary pressures, private consumption growth remains brisk in 2002. As detailed in the next section of the chapter, this development reflects mainly the

¹⁷ This measure pertained to employees under a labour agreement of private law.

¹⁸ Following the deduction of minority rights.

¹⁹ See also Competition Committee, *Annual Report for the Period 2001-2002* (in Greek), June 2002.

²⁰ See a note of the Chairman of the Competition Committee in the newspaper *To Vima* (13 October 2002), as well as statements made by the Minister of Development in the magazine *Oikonomikos Tachydromos* (12 October 2002).

²¹ According to Law 2932/2001, the supply of services in this sector was liberalised on 1 November 2002. For the deregulation of the electricity market, see Boxes III.1 and III.5 in the *Annual Reports* of the Bank of Greece for the years 2000 and 2001 respectively, as well as Chapter VI.2 herein.

Chart 17
Industrial capacity utilisation rate (manufacturing)
(January 1997 - October 2002)
(Percentages)

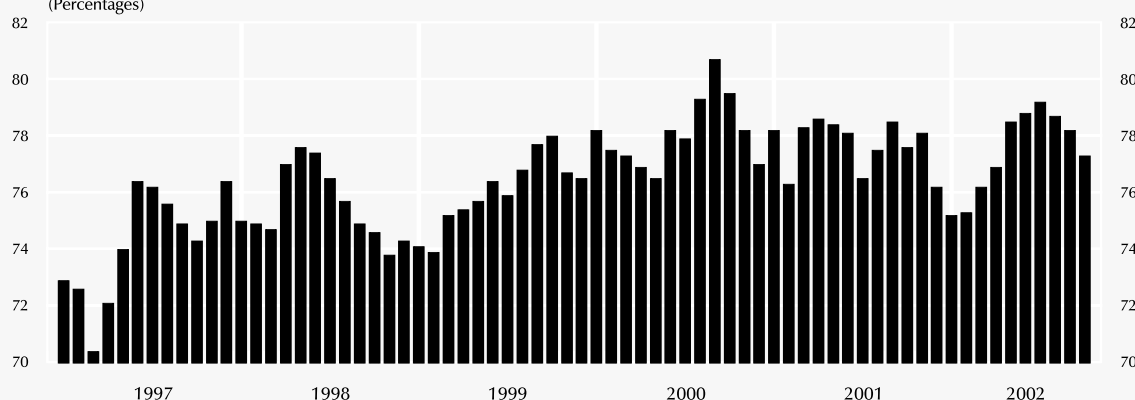
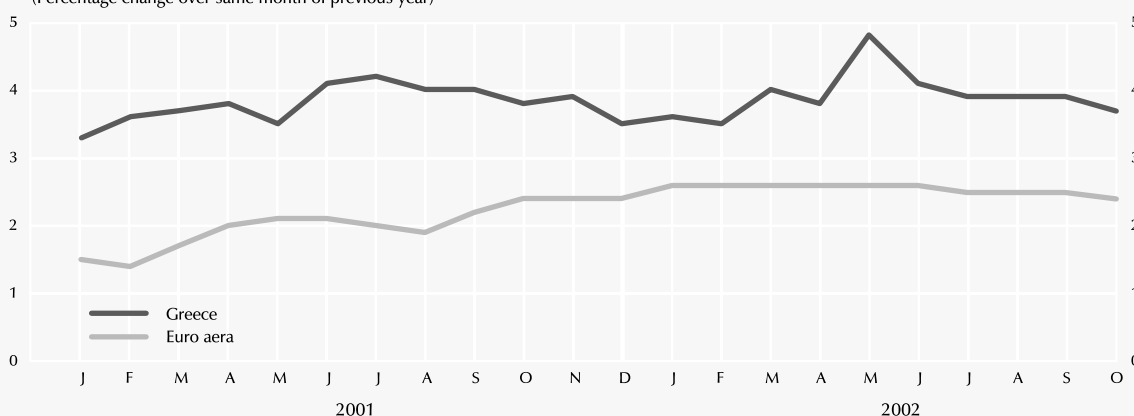


Chart 18

Core inflation in Greece and the euro area on the basis of the HICP excluding energy and unprocessed food (January 2001 - October 2002)
(Percentage change over same month of previous year)



Sources: NSSG and Eurostat.

Table V

Harmonised index of consumer prices:
Greece and the EU (2001-2002)

(Annual percentage changes)

Country	Dec. 2001	2001 average	Oct. 2002
Belgium	2.0	2.4	1.3
Denmark	2.1	2.3	2.7
Germany	1.5	2.4	1.3
Greece	3.5	3.7	3.9
Spain	2.5	2.8	4.0
France	1.4	1.8	1.9
Ireland	4.4	4.0	4.4
Italy	2.2	2.3	2.8
Luxembourg	0.9	2.4	2.5
Netherlands	5.1	5.1	3.6
Austria	1.8	2.3	1.8
Portugal	3.9	4.4	4.1
Finland	2.3	2.7	1.7
Sweden	3.2	2.7	1.7
United Kingdom	1.0	1.2	1.4
European Union	1.9	2.3	2.1
Euro area	2.0	2.5	2.3

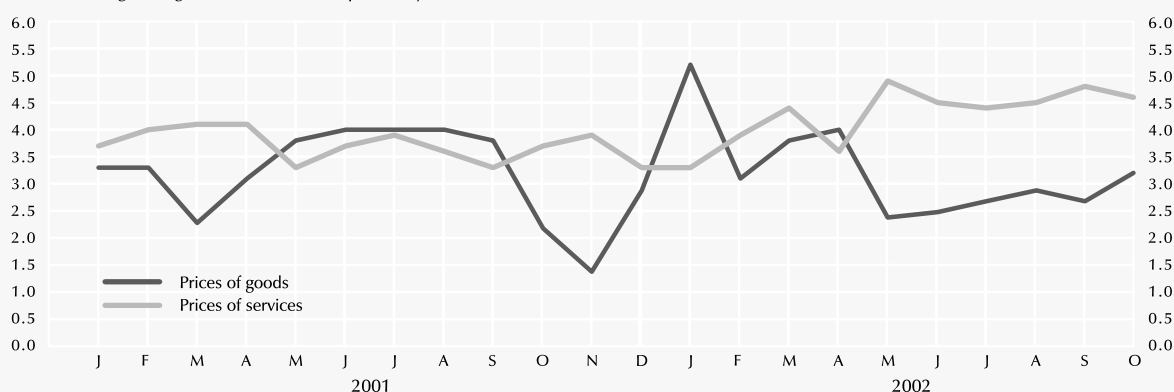
Source: Eurostat.

basis of data from IOBE decreased slightly in the first ten months of the year, compared with the corresponding period of 2001 (to 77.4 from 77.8 – see Chart 17). On the other hand, the rate of unemployment, although reduced in the second quarter of the year, remained high (see Chart 27).

More generally, it should be noted that in the course of 2001 the Greek economy experienced an exogenous boost, due mainly to the adoption of the single monetary policy and – to a lesser extent – to the expansion of some export markets, especially in the Balkans. The additional thrust from investment activities connected with the Olympic Games and the Community Support Framework also strengthened, in the short term, the cyclical component of Greek GDP. At the same time, again according to OECD estimates, potential GDP growth was 3.1% in 2001 (one of the highest rates among OECD countries) and is expected to stand at 3.4% in 2002. In this transitional phase of the Greek economy, it is only normal for production capacity not to be able to swiftly adjust to developing demand, resulting in the emergence of some pressures in individual markets. However, these pressures will be rather short-lived, since the investment programme in progress and the promotion of structural changes are expected to support even higher rates of potential GDP growth in the future.

Chart 19

Prices of goods and services included in the CPI (January 2001 - October 2002)
(Percentage change over same month of previous year)



Source: Calculations based on NSSG data.

3. Inflation differential between Greece and the euro area

As already mentioned, the positive inflation differential between Greece and the euro area as a whole, on the basis of the Harmonised Index of Consumer Prices (HICP), grew in the course of 2002 and stood at 1.6 percentage points in October (from 1.2 percentage points on average in 2001 – see Table V – and 0.6 percentage points in 2000). However, the differential between core inflation in Greece (if measured on the basis of the HICP excluding energy and unprocessed food – see Chart 18) and the corresponding index for the euro area as a whole was slightly reduced in the course of 2002 to 1.3 percentage points in October, from 1.8 p.p. on average in 2001 (but only 0.6 p.p. in 2000).

The previous analysis clearly reveals a number of factors that have directly contributed to the positive inflation differential between Greece and the euro area as a whole, as well as to its increase during the last two years. Specifically, it was noted that:

(a) compared with the European economy as a

whole, the Greek economy is more exposed to fluctuations in crude oil prices (these prices are on the rise in 2002),

(b) the effects of adverse weather conditions in the December 2001-January 2002 period on the prices of fresh food were greater in Greece, and

(c) the upward inflationary pressure which is estimated to have been exerted by the “rounding” of prices and other price increases effected by reason or under the pretext of the cash changeover to the euro was higher in Greece than in the euro area as a whole on average.

However, the high rate of inflation in Greece – compared with the euro area – is mainly attributable to the cumulative effect of faster increases in Greek unit labour costs over a number of years (1999: 2.6%, 2000: 3.0%, 2001: 2.8%, 2002: 3.5%), compared with 1.0%, 1.3%, 2.6%, and approximately 2.5%, respectively, in the euro area, and the lagging behind of the Greek economy, compared with the European one, with respect to competitive conditions in product markets. Additionally, it is in principle natural for economies that exhibit relatively high rates of growth and are in the process of economic con-

Table VI
Demand and gross domestic product
(2000-2002)
 (at constant market prices of year 1995)
(Annual percentage changes)

	2000	2001 (estimate)	2002 (forecast)
Private consumption	2.7	3.2	3.0
Public consumption	2.3	0.5	1.5
Gross fixed capital formation:	8.0	5.9	7.7
By institutional sector			
– General government	8.8	5.1	0.5
– Other sectors ¹	7.9	6.1	9.1
By type			
– Dwellings	-4.3	4.4	2.0
– Other constructions	7.7	8.8	12.6
– Equipment	17.6	3.7	6.8
– Other investment	-0.2	8.6	2.0
Change in stocks and statistical discrepancy (percentage of GDP)	(0.0)	(0.1)	(0.0)
Domestic final demand	4.0	3.5	3.8
Exports of goods and services	19.7	-1.3	1.4
Exports of goods	11.3	-4.6	0.5
Exports of services	25.9	0.8	2.0
Imports of goods and services	14.5	-1.9	1.9
Imports of goods	14.8	-2.7	1.7
Imports of services	13.1	1.3	2.5
Gross domestic product at market prices	4.2	4.1	3.8

¹ Including investment of public and private enterprises, as well as of households (mainly residential investment).

Sources: Estimates by the NSSG/National Accounts (September 2002) for 2000 and 2001, estimates by the Ministry of Economy and Finance (November 2002) for 2002. For *Bank of Greece estimates for 2002*, see text.

vergence to have a higher rate of inflation than more advanced economies, due to differences in productivity. Nevertheless, in Greece during the last few years, as a result of the deregulation (or the prospect of deregulation) of certain markets and of the further integration of other markets in the single European market, a number of specific goods and –especially– services have become much more tradeable than before at a cross-border level. This fact could contribute to a faster increase in productivity and a strengthening of competition in services sectors where the earlier lagging in productivity growth (compared with other sectors of the economy) or the inadequate

competitive conditions led to higher rates of price increases and thus contributed significantly to the upward deviation of Greek inflation from that of our European partners.²³ In the case of Greece, although until end-1999 the prices of CPI services were increasing faster than the prices of CPI goods, in 2000 the opposite occurred. However, from 2001 onwards, services prices were again increasing faster than goods prices (3.7%, compared with 3.2% on average in 2001, 4.3%, compared with 3.2% on average in the first ten months of 2002 – see Chart 19), which suggests that the favourable effects of market deregulation on prices are still limited.

4. Economic activity

On the basis of available data and indications, the overall development of economic activity in 2002 appears positive, even if there is some slowdown, according to most short-term indicators. The rate

²³ As also noted in previous Reports of the Bank of Greece, according to the argumentation propounded by Balassa and Samuelson (see “The contribution of the Balassa and Samuelson effect to inflation: cross-country evidence”, in IMF, *Greece: Selected Issues*, December 1999, and *Greece: Staff Report*, November 1999, as well as the article “Inflation differentials in a monetary union”, in ECB, *Monthly Bulletin*, October 1999), in countries which are in the process of economic convergence, the rate of productivity growth in the sectors producing internationally tradeable goods becomes faster and leads to high wage increases, without unfavourably affecting unit labour costs and prices (in these sectors). However, when these high wage increases “spill over” to sectors producing non-tradeables (mainly services), in which the rate of productivity growth remains slower, then prices in these sectors rise faster and overall inflation accelerates, without however affecting competitiveness (since the said price increases pertain to non-tradeable products). According to the study of the International Monetary Fund, the impact of this phenomenon on Greek inflation has been considerable in the past. Specifically, in the 1960-90 period, this impact was estimated at one percentage point per year (with an average annual inflation for the period equal to 11.8%), whereas in the more recent 1990-96 period it came to 1.7 percentage points (with an average annual inflation for that period equal to 14%). As evidenced by a comparative review of various European countries, with respect to the latter period, a significant part of the inflation differential between Greece and these countries (equal to 1.2 percentage points) is attributable to the “Balassa-Samuelson effect”.

Table VII
Indicators of consumer demand (2000-2002)
(Annual percentage changes)

	2000	2001	2002 (available period)
Volume of retail sales ¹	5.4	4.4	5.3 (Jan.-Feb.)
Food	5.3	2.4	0.4 (» »)
Clothing-footwear	4.3	3.5	8.8 (» »)
Furniture-household appliances	6.0	4.7	12.8 (» »)
Books-newspapers-office equipment	5.2	5.9	11.6 (» »)
Retail trade business expectations indicator	-0.5	-8.0	0.5 (Jan.-Oct.)
New passenger car registrations	12.7	-4.4	-4.6 (Jan.-Oct.)
Olympic Airways passengers (passenger-kms)	6.7	-5.0	-12.7 (Jan.-Sept.)
Piraeus Port Authority (OLP) passengers	6.8	7.9	5.7 (Jan.-July)
Tax revenue from mobile telephony fixed fees	40.3	48.2	28.0 (Jan.-Oct.)
Travel receipts at constant prices	21.7	-0.1	1.9 (Jan.-Sept.)
Outstanding balance of total consumer credit extended by banks	42.7 (Dec.)	42.5 (Dec.)	29.7* (Sept.)

¹ Retail sales volume data are not available after February 2002 because they are being revised by Eurostat. The value of retail sales rose at an average annual rate of 9.1% in the period from January to August 2002.

* Provisional data.

Sources: Calculations based on NSSG-Eurostat data (retail sales), NSSG (cars), IOBE (business expectations indicator), Bank of Greece (consumer credit and travel receipts), Ministry of Economy and Finance (mobile telephony fees), Olympic Airways and OLP.

of GDP growth remains high, especially when compared with that of the euro area. Specifically, according to Bank of Greece estimates, GDP growth for the year as a whole will stand at 3.4%²⁴ (compared with 4.1% in 2001), while, as already mentioned in Chapter III, GDP in the euro area is expected to rise by only 0.7-0.8% (compared with 1.5% in 2001). It is, of course, characteristic that the composite economic sentiment index (compiled by the European Commission) fluctuated slightly in Greece during the last 14 months: after a moderate decline following the events of 11 September 2001 (from 101.8 in August to 101.6 in October 2001), it gradually climbed to 102.2 in June of 2002, then slightly declined again during the following months to 101.6 in September, but recovered in October (101.9). By contrast, in the euro area as a whole, the same index initially registered a significant decline (from 100.0 in August to 98.4 in November 2001), later recovered only partly (reaching 99.5 in May 2002) and then gradually declined again during the next five months to 98.9 in October.

Economic activity growth in 2002 is mainly supported by the following factors:

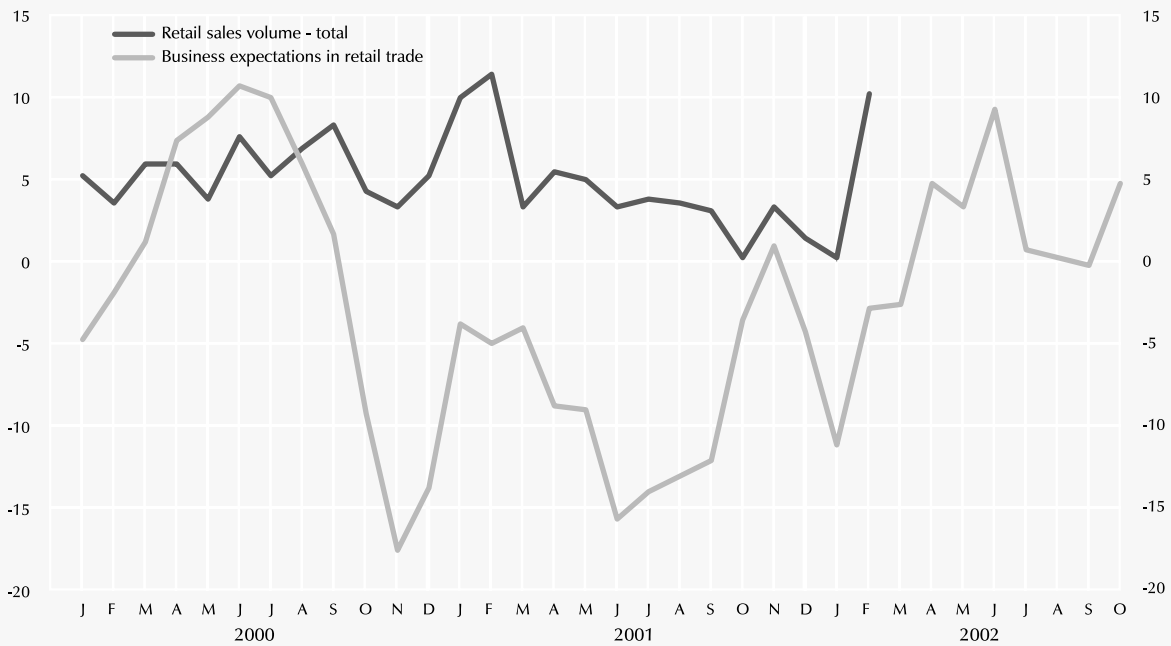
- Private consumer demand, due mainly to the increase in total real disposable income and the expansion of consumer credit, but also to other reasons discussed in detail below,
- business investment, especially those of public enterprises,
- private residential investment, which is encouraged by the fact that costs have been reduced and the supply of housing loans has increased, while dwelling prices are still on the rise,
- public investment related to the preparations

²⁴ The Ministry of Economy and Finance estimates (November 2002) that GDP growth will reach 3.8% in 2002 (see Table VI). According to the OECD (21 November 2002), GDP will increase by 3.6%, compared with a 3.7% forecast of the International Monetary Fund (*World Economic Outlook*, September 2002), and a 3.5% forecast of the European Commission (*Autumn Forecasts*, 13 November 2002).

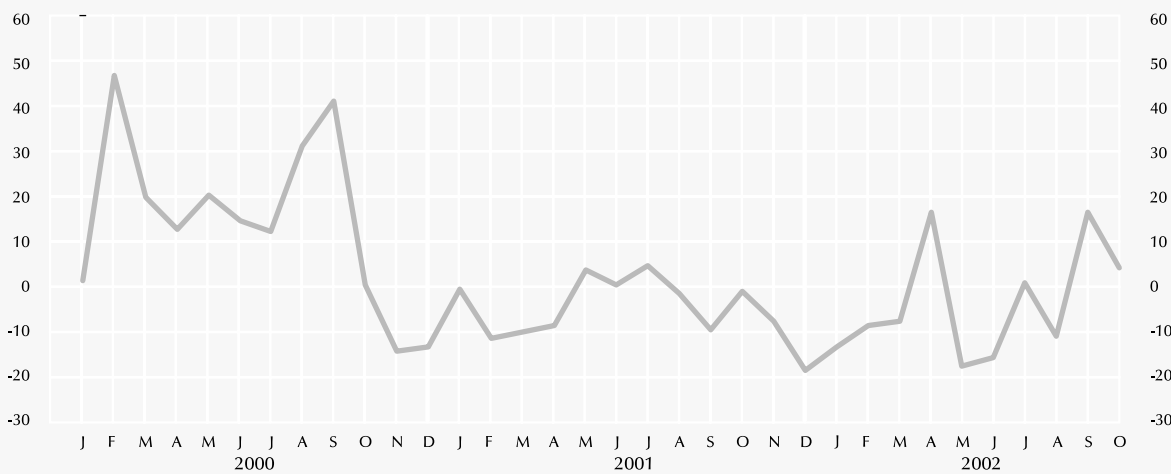
Chart 20

Consumer demand (January 2000 - October 2002)

A. Retail sales volume and retail trade business expectations
(Percentage change over same month of previous year)



B. New passenger car registrations
(Percentage change over same month of previous year)



Source: Calculations based on NSSG (retail sales and cars) and IOBE data (business expectations). Data on the volume of retail sales are being revised. The index of business expectations is constructed on the basis of business firms' estimates on sales and stocks, and of business activity forecasts for the next 6 months.

for the Olympic Games of 2004 and to the major projects under the 3rd Community Support Framework (CSF).

In more general terms, the high rate of GDP growth also reflects a strengthened environment of macroeconomic stability following euro area

entry and the materialisation of certain structural reforms.

On the other hand, the global economic slowdown observed in 2001 and the continuing deceleration of economic growth in the euro area (i.e. Greece's main trading partner) in 2002 have had

an unfavourable impact on Greek exports, which appear reduced in 2002 (according to the available data covering the period up to the end of September), and –by extension– on domestic manufacturing output, the growth rate of which is slowing down. Furthermore, the worsening of the international economic sentiment may have unfavourably affected private business investment as well, although it is estimated that this investment continues to increase and thus to contribute to GDP growth.

In more detail, the growth rate of private consumer demand remains high in 2002 (see Table IV), reflecting mainly the following determinants:

- The average net real income of wage-earners is higher in 2002 than in 2001 (see Table IV), as a result of the faster increase in average real pre-tax earnings and of the reduction in the tax burden of wage-earners. The larger than initially forecast increase in public expenditure for salaries and pensions, as well as tax relief (reduction in income tax, abolition of stamp duties withheld from earnings), have contributed to this development.

- *Total* employment is rising in 2002, whereas it had decreased in 2001.

- The continuing increase in dwelling prices²⁵ is estimated to have more than offset the decline in the current value of equity held by households, especially when considering that dwellings represent a far greater part of Greek household assets than equity (see the Annex of the present chapter). This fact strengthens the propensity to consume, mainly indirectly.²⁶

- The annual growth of consumer credit, although decelerating, remains high (29.7% in September 2002, compared with 42.5% in

Table VIII
Retail sales value index (2002)

(Percentage changes over same month of previous year)

Categories	2002 (Jan.-Aug.)
1 Big food stores	11.7
2 Department stores	10.9
3 Food-beverages-tobacco	6.3
4 Pharmaceuticals-cosmetics	9.0
5 Clothing-footwear	6.4
6 Furniture-electrical appliances-household equipment	5.5
7 Books-stationery-other goods	9.4
8 Retail sales not in stores	-0.6
General index	9.1

Source: NSSG.

December 2001).²⁷ If the sum of consumer credit and credit to trade is taken into consideration, the year-on-year rate of growth is clearly slower in

²⁵ According to data collected by Bank of Greece branches, dwelling prices in 13-17 provincial cities rose at an average annual rate of 10.0% in the first nine months of 2002. Moreover, according to Bank of Greece calculations (on the basis of raw data gathered by "Property Ltd"), the prices of houses offered for sale in the broader Athens area rose at an average annual rate of 18.3% during the January-May 2002 period, which nevertheless is estimated to have decelerated in the following months. In the euro area, according to estimates published in the ECB *Monthly Bulletin* (October 2002, Box 3), the annual rate of increase in dwellings' prices was 6% in the first quarter of 2002 (5-7% in the 1999-2001 period).

²⁶ Net increases in the value of household assets can directly increase expenditure, if the relevant capital gains are liquidated or if –as is the case in the US– the rise in the market value of dwellings allows the refinancing of households' loans. However, in the case of Greece the direct effect is rather limited in view of the high percentage of owner-occupied houses and the current practice of banks as regards refinancing. More important is the fact that the rise in dwellings' prices improves households' prospects for their financial situation in the future, thus encouraging them to resort to borrowing, which in turn can support private consumption. For the relation between changes in the value of household assets and the change in private consumption, see: (a) ECB, *Monthly Bulletin*, September 2002, Box 3; (b) European Commission, *Quarterly Report on the Euro Area*, September 2002, Box 1; (c) International Monetary Fund, *World Economic Outlook*, September 2002, Box 1.1, and April 2002, Chapter II; and (d) Glenn Hubbard (Chairman of the US President's Council of Economic Advisers), "America is not in danger of deflation", *Financial Times*, 10 October 2002.

²⁷ The annual growth rate of total bank credit to households (i.e. consumer credit and housing loans) is higher and has decelerated less (to 34.5% in September 2002, from 40.0% in December 2001).

Table IX
Indicators of investment demand (2000-2002)
(Annual percentage changes)¹

	2000	2001	2002 (available period)
Capital goods output	7.3	5.1	-9.9 (Jan.-Sept.)
Investment expenditure (at current prices) of private industrial firms ²	30.0 ³	-15.2 ⁴	12.1 ⁵
Capacity utilisation rate in the capital goods industry	(80.6)	(81.4)	(79.1) (Jan.-Oct.)
Disbursements out of the public investment budget	11.3	7.3	1.1 (Jan.-Oct.)
Volume of private construction activity (on the basis of permits issued)	5.7	12.1	2.0 (Jan.-July)
Cement production	4.5	4.6	-1.1 (Jan.-Sept.)
Construction business expectations indicator	4.1	-5.6	0.6 (Jan.-Oct.)
Outstanding balance of total bank credit to housing	31.2 (Dec.)	38.9 (Dec.)	36.9* (Sept.)

¹ Excluding capacity utilisation.

² Estimates of firms participating in the IOBE investment survey.

³ Estimate of the March-April 2001 survey.

⁴ Estimate of the March-April 2002 survey.

⁵ Forecast of the March-April 2002 survey.

* Provisional data.

Sources: NSSG (capital goods output, cement production, volume of private construction activity), IOBE (capacity utilisation rate, investment survey, business expectations indicator), Bank of Greece (disbursements out of the public investment budget, housing loans).

2002 (17.2% in September) and has decelerated faster (it was 30.7% in December 2001).

As regards consumer demand (see Chart 20 and Table VIII), the volume of retail sales (of goods excluding cars) is estimated²⁸ to have risen during the first eight months of 2002 at a virtually stable year-on-year rate higher than 5%. If the continuing decline in the number of new passenger car registrations (of 4.6% in the January-October 2002 period²⁹) is also taken into consideration, it is estimated that consumer demand for goods is growing at a rate higher than 4%.³⁰ This estimate is also corroborated by other indications: (a) domestic production of consumer non-durables is increasing fast in the first nine months of 2002 (actually faster than in 2001), (b) consumer goods imports are on the rise in the same period (albeit at a slower rate than in 2001 – see Section 6 of this chapter), and

(c) the usually pessimistic estimates of retail trade firms³¹ are less so in 2002, especially in the second quarter, than in 2001. However, as regards consumer demand for services, available data are insufficient for reliable conclusions to be drawn. Except from the ongoing rapid expansion of demand for mobile telephony services,³² demand

²⁸ Data on the volume of retail sales are under revision and are no longer published by Eurostat. The NSSG however has published data on the value of retail sales until August 2002 (average annual rate of growth in the eight months: 9.1%). On that basis it is possible to approximate developments in volume, using as deflator the price index of CPI goods.

²⁹ It is worth noting that new passenger car registrations increased at an annual rate of 16.6% in September 2002 and 4.2% in October.

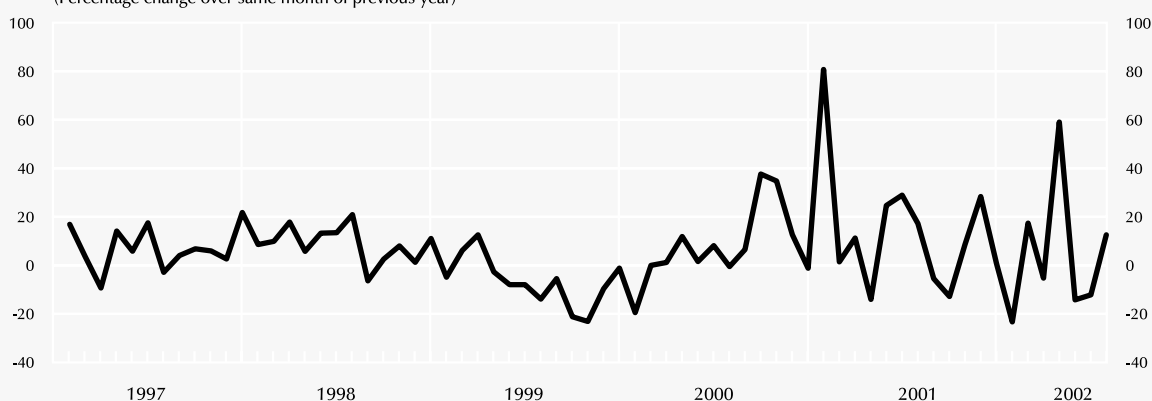
³⁰ It should be recalled that expenditure for the purchase of passenger cars corresponds to approximately 7% of the total consumption expenditure for the purchase of goods.

³¹ As recorded in the relevant business survey of IOBE.

³² Public revenue from mobile telephony fixed rates increased at an average annual rate of 28.0% in the first ten months of 2002, indicating a corresponding increase in the number of subscribers.

Chart 21

Volume of new buildings and extensions (private construction activity) on the basis of permits issued
(January 1997 - July 2002)
(Percentage change over same month of previous year)



Source: NSSG.

for other services – at least according to business firms' own assessments recorded in the new survey of IOBE for the services sector (excluding retail trade firms and banks)³³ – although gradually boosted in the course of the first half of 2002 (without approaching the relatively high levels recorded in the period prior to September 2001), decelerated in the July-October 2002 period. Therefore, if consumer demand for services is increasing at a relatively slow rate, then total private consumer demand (for goods and services) is estimated to be rising at a rate close to 3% (against 3.2% in 2001).

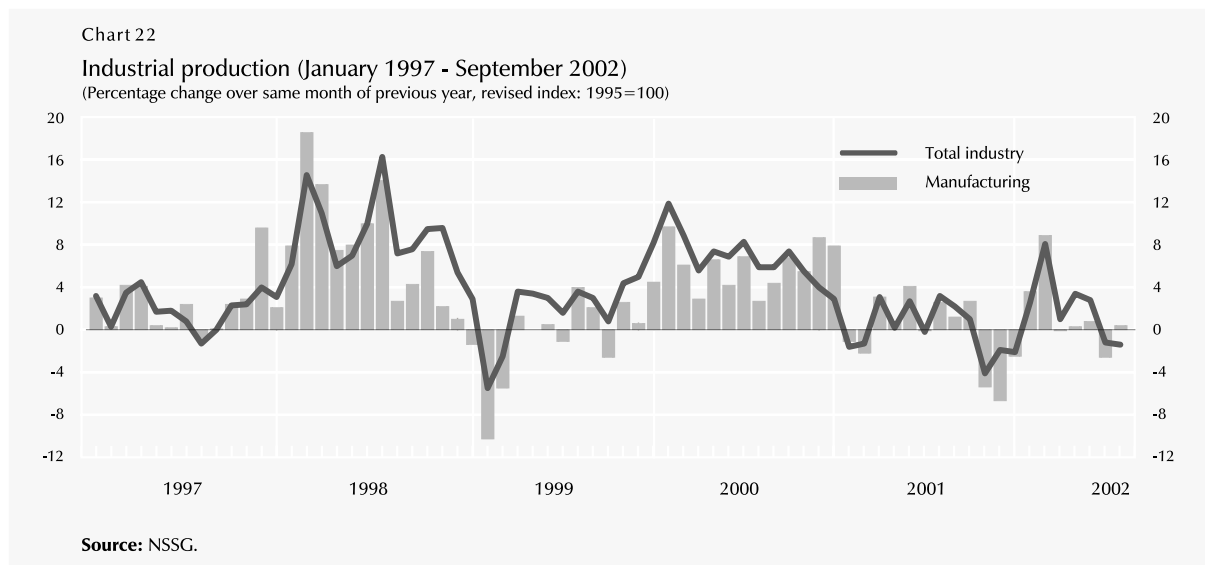
According to the government budget for 2002, public investment expenditure was estimated to increase in 2002 by 9.7% at current prices (by 11.6% excluding equity injections to public utilities and other public enterprises). The data on disbursements out of the Public Investment Budget show a shortfall of expenditure in the first months of 2002 (in the January-October period, expenditure increased by only 1.1%, compared with the corresponding period of 2001 – see Table IX). It is estimated that annual expenditure will eventually rise by only 0.7%. However, excluding the above equity injections, this rate will be 11.4%, mainly

because expenditure for Olympic Game projects rose six-fold and expenditure for basic infrastructure projects also increased substantially.³⁴ In this context, it should be noted that disbursements in 2001 rose by 7.3% at year-end, despite having declined by 7.2% in the January-October period of the year. Moreover, the timing of such disbursements is not strictly connected to the execution of the relevant projects by the contractor firms. The same holds with regard to the inflow of resources from the EU Structural Funds for the co-financing of such projects.³⁵ Finally, according to a recent ex

³³ The survey covers sectors such as hotels and restaurants, travel agencies, land and other transports, advertising and provision of business services, insurance, etc.

³⁴ See the Introductory Report on the Budget for 2003, Tables 2.8 and 2.27. A considerable increase is also expected in investment expenditure in the sectors of: railways, forestry-fishery, energy, agriculture and education.

³⁵ According to detailed balance-of-payments statistics, net – current and capital – transfers from the EU (pertaining both to structural fund resources and the implementation of the Common Agricultural Policy) decreased in the first nine months of 2002 at an average annual rate of 6.0%, but only after they had increased by 18.2% in 2001. Capital transfers (mainly from the European Regional Development Fund – ERDF), which are more directly linked to the financing of the public investment budget, decreased by 19.1% in the same period. On an accrual basis however, it is estimated in the government budget that total receipts from the EU will increase in 2002 by 11.8%, while receipts pertaining specifically to the Public Investment Budget will increase by 27.9%.



post assessment,³⁶ the absorption of EU funds has improved.³⁷

Private residential investment is rising at a fast pace. The estimates of construction companies were constantly positive in the first ten months of 2002 (especially in the second quarter). Data on the volume of private construction activity based on permits issued (which pertain to dwellings as well as other private buildings and constitute a leading indicator) show an average increase of only 2.0% in the first seven months of 2002 (see Chart 21), which is nevertheless attributable to conjunctural factors, without the effect of which the data show an increase in the order of 6-7%.³⁸ This development is connected with the steadily high year-on-year rate of housing credit expansion, which was 36.9% in September 2002, i.e. almost as much as in December 2001 (38.9%). Credit expansion to the housing sector reflects both the increased demand for loans (mainly due to the further cut in interest rates)³⁹ and the increased supply of loans (because of the expansion of commercial bank business to the housing credit market).

Business investment, which displays a strong rise

since the mid-1990s, is initially estimated to be increasing in 2002 as well, especially as far as public enterprises are concerned. As regards industry, the latest data stem from the IOBE investment survey conducted in spring (March-April) 2002. According to these data, private industrial firms estimated that their investment expenditure (at current prices), having decreased by 15.2% in 2001, would increase by 12.1% in 2002. However, the deterioration of the international economic sentiment during the ensuing months and the downward revision of expecta-

³⁶ See Ministry of Economy and Finance, "Developments in the 2000-2006 Community Support Framework – Information Bulletin", August 2002 (12 September 2002).

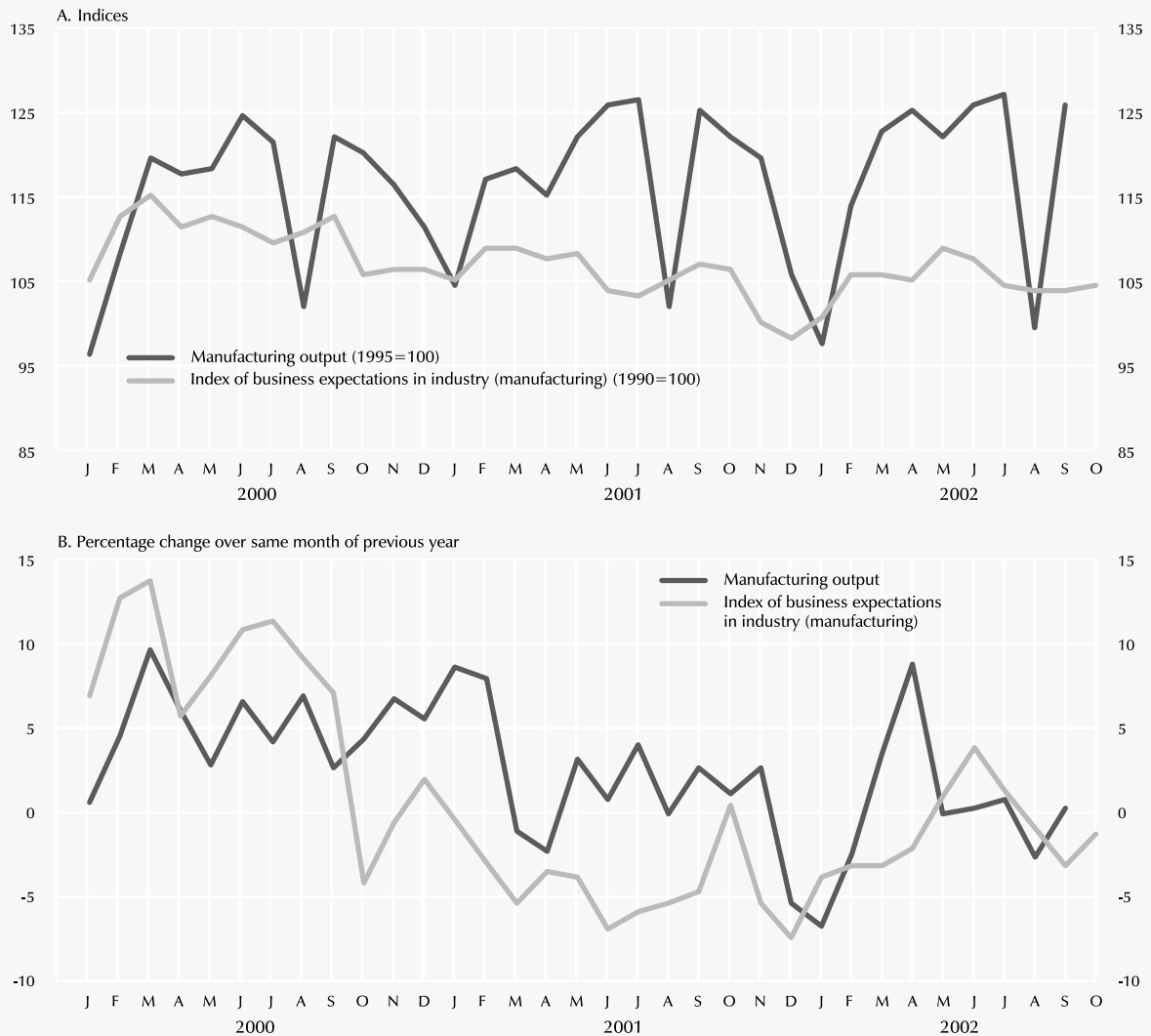
³⁷ More specifically, 97% of the EU contribution corresponding to 2001 has already been collected, while efforts are being made for that corresponding to 2002 to be collected until the end of 2003 – i.e. in both cases absorption will have been completed one year earlier than the expiry date of the relevant deadlines (according to the "v+2" rule, contributions for 2001 and for 2002 have to be collected until the end of 2003 and 2004, respectively).

³⁸ For example, not taking into account the considerable decrease recorded in the volume of new buildings on the basis of permits issued for the areas of Thessaly and Continental Greece (Sterea Ellada) – where in the first half of 2001 permits were issued for the construction of large industrial, agricultural and livestock production units – the increase for the rest of the country comes to 6.8%.

³⁹ In the January-September 2002 period, the weighted average interest rate on housing loans dropped by almost one percentage point, compared with the first nine months of 2001.

Chart 23

Output and business expectations in manufacturing (January 2000 - October 2002)



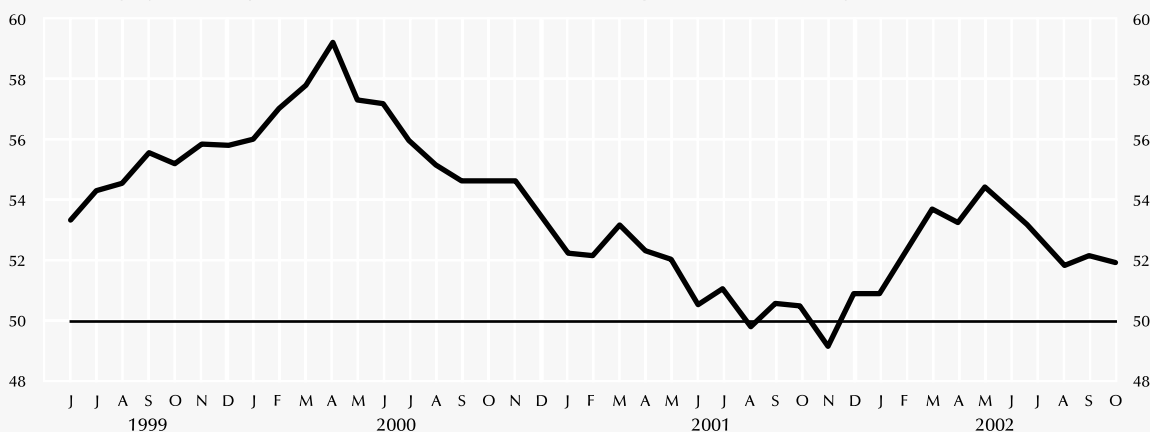
tions regarding world economic activity may have unfavourably affected private business investment in Greece as well. An indirect indication to this is the fall both in production and imports of capital goods in the first nine months of 2002.⁴⁰ On the other hand, financing costs continued to decrease. Indeed, the weighted average interest rates on short- and long-term business loans in the first nine months of 2002 were 1.3-1.4 percentage points lower than in the corresponding period of 2001.

In the first nine months of 2002, the average annual growth of the general industrial production index accelerated to 1.3% (from 1.0% in 2001), due to the recovery in electricity production and mining (see Charts 22 and 23). However, the effects of the external economic environment seem to have also contributed (along with the

⁴⁰ The volume of capital goods production shrank by 9.9% (nine-month period), while the value of capital goods imports fell by 7.3% (eight-month period – see Table XII.B).

Chart 24

Purchasing Managers' Index (PMI) for manufacturing (June 1999 - October 2002)
(Seasonally adjusted index, positive deviations from the value of 50 indicate an expansion of economic activity)



Sources: NTC Research and Hellenic Purchasing Institute.

adverse weather conditions, which impeded or made impossible the operation of production plants in many areas of the country in December 2001 and January of 2002) to the appreciable deceleration in manufacturing output growth. Its average year-on-year rate of growth was only 0.3% in the first nine months of 2002, compared with 1.8% in 2001 as a whole,⁴¹ and was supported mainly by the increase in the production of consumer non-durables (as already mentioned).⁴² It should be noted however that the Purchasing Managers' Index (PMI) gives a positive picture for manufacturing, as it steadily stands above the threshold of 50 (which indicates unchanged production), at the same time implying an acceleration in manufacturing output growth in the second quarter and a deceleration in the third quarter and in October 2002 (see Chart 24).

5. Employment and unemployment

Total employment, which had decreased by 0.8% in 2001 (its annual rate of change had already been negative since the second quarter of 2001), recovered only during the second quarter of 2002 (annual rate: +0.8%), according to the NSSG

labour force survey. A different development was observed in the number of employees, which seems to be affected more directly by fluctuations in economic activity: its year-on-year rate of change was relatively high and fluctuated between 2.3% and 2.9% in the first three quarters of 2001, then decelerated to 0.8% in the last quarter of 2001 and came to nil in the first quarter of 2002, before recovering to 0.8% in the second quarter. According to these data, in 2002 the number of employees is increasing (at an average rate of 0.4% in the first six months) clearly slower than in 2001 (2.2% on average).

As regards employees, useful indications are also provided by the business surveys of IOBE, according to which the employment outlook by the surveyed businesses themselves was strongly positive in the construction sector during the first ten months of 2002. The outlook was rather moderately positive in retail trade and other services (excluding banks), but only until June. In manufacturing, the outlook was slightly positive until June and negative in

⁴¹ Revised index, 1995=100.

⁴² By 5.0% in the first nine months of 2002, compared with 4.1% in 2001.

Chart 25

Business forecasts¹ on employment (January 2000 - October 2002)
(Percentage balances)



¹ Firms' responses concern the prospect of an increase in the number of employees in the forthcoming period.

² Excluding banks and retail trade firms.

Source: IOBE, Business Surveys.

the following four months (see Chart 25).⁴³ Finally, according to Ministry of Economy and Finance data, the number of civil servants (including the staff of public hospitals) increased at a year-on-year rate of 3.8% in the first half of 2002, exclusively because the number of employees in Prefectural Authorities (whose wage bill is henceforth included in ordinary budget expenditure) was also counted in. Not taking account of these employees, the year-on-year rate of change is estimated to be negative (-0.2%). The number of employees in public enterprises⁴⁴ dropped by 4.9% in the first six months of 2002 (see Chart 26).

Total employment rose in the second quarter of 2002, compared with the corresponding period of 2001, by 31,000 persons (20,000 of which were employees), while at the same time the number of the unemployed declined by 24,000 persons. This is particularly positive when compared with developments in 2001, when both the number of the unemployed and employment had decreased simultaneously (suggesting a withdrawal from the labour market due to discouragement). The rate of unemployment fell in 2002 below 10%, for the first time in the last few years: it stood at 9.6% in

the second quarter of 2002, from 10.9% in the immediately previous quarter and 10.2% in the second quarter of 2001 (see Chart 27). It is worth noting that: (a) the increase in employment pertains mostly to the 30-64 age group and surpasses the relatively small decrease in the number of the unemployed in the same group and (b) the decrease in the number of the unemployed is more pronounced in the 15-29 age group, in which a small decrease is also observed in the number of the employed. These developments suggest an increased labour force participation rate of the 30-64 age group, something attributable to the favourable cumulative effect of economic growth, as well as to the implementation of

⁴³ Moreover, Manpower Employment Agency (OAED) data on employment flows in the private sector indicate that, in the nine-month period from January to September 2002, recruitments increased and dismissals decreased (at the same time, however, voluntary quits increased), and hence the net balance, which is an indication of new jobs, came to 124,000 persons (as opposed to 79,000 during the corresponding nine-month period of 2001 – see Table X). The net balance derived from employment flows data is an overestimation of new jobs, in view of the fact that data on recruitments and dismissals are more reliable than those on voluntary quits: the latter are not fully recorded, because they are not always declared by employers.

⁴⁴ Including the Hellenic Telecommunications Organisation (OTE), for the sake of comparability.

Table X

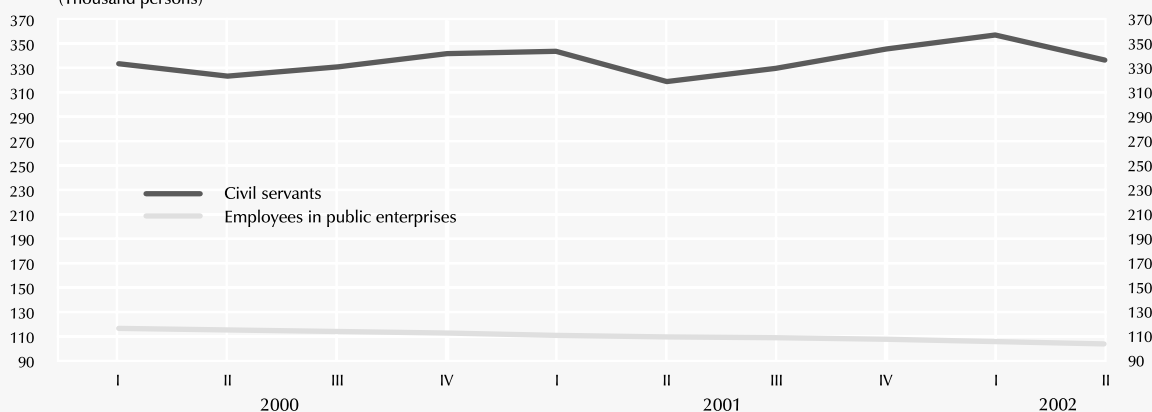
Private sector employment flows

	Year		January-September	
	2000	2001	2001	2002
Recruitment notifications	978,266	1,033,085	753,613	826,409
Dismissals	534,805	597,575	386,805	383,761
Voluntary quits	341,195	386,043	287,697	318,492
Net balance (new jobs) ¹	102,266	49,467	79,111	124,156

1 The net increase in jobs stemming from the flow data is an overestimate, as the data on recruitment notifications and dismissals are more reliable than those on voluntary quits, because not all voluntary quits are recorded.

Sources: Manpower Employment Agency (OAED) and Ministry of Labour.

Chart 26

Public sector employees (2000 - 2002)
(Thousand persons)

Source: Ministry of Economy and Finance. Civil servants do not include employees in public hospitals.

employment promotion programmes. The decline observed in the participation rate of persons aged 15-29 years is mainly connected to their increasing participation in education and training.

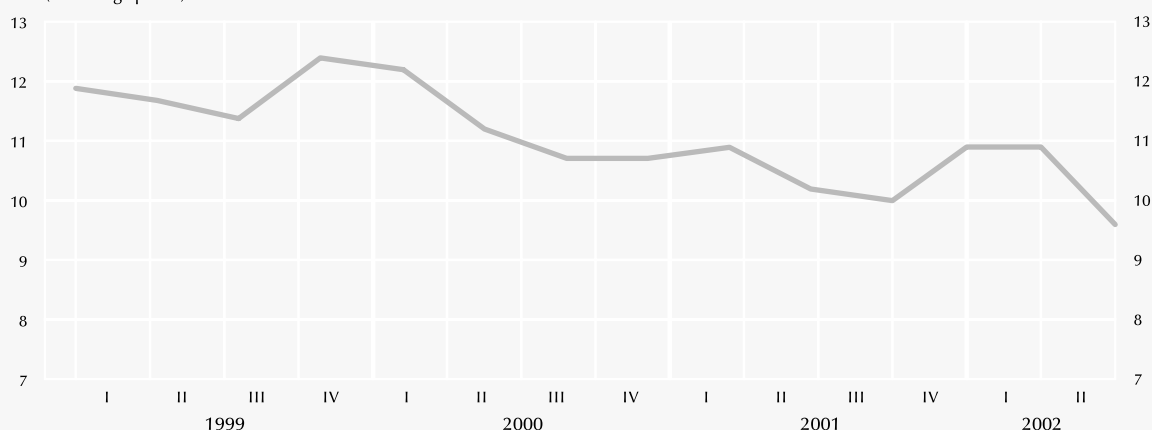
Finally, in the course of 2002, part-time employment as a percentage of total employment increased (to 4.5% in the second quarter of 2002 from 4.1% in the second quarter of 2001), although it remains lower than the relatively high percentage recorded in Greece in the first quarter of 1999 (6.9%) and the considerably higher percentage recorded in the European Union (approximately 18%). However, it should be noted that the decrease of 94,000 persons in part-time employment between

1999 and 2002 reflects mainly the rise observed in full-time employment⁴⁵ and the increased preference of the workers themselves for full-time employment.⁴⁶ Still, the supply of part-time labour is considerable. Indeed, as noted by the NSSG, in the second quarter of 2002, 36% of the 420,000 registered unemployed express an exclusive preference for full-time employment, but 54.6% express their readiness to work either full-time or

⁴⁵ Between 1999 and 2002 the number of part-time workers who declared that they could not find full-time employment decreased by 55,000.

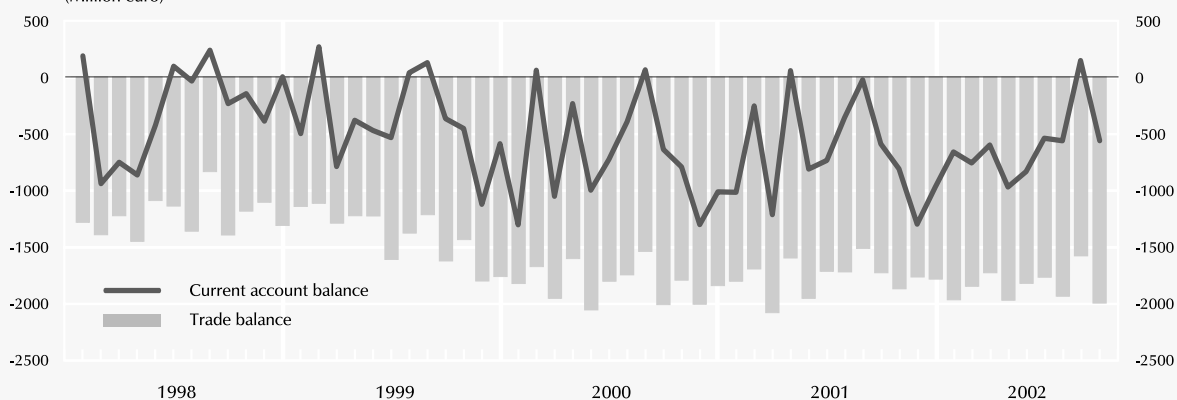
⁴⁶ Between 1999 and 2002 the number of part-time workers who declared that they did *not* want full-time employment decreased by 28,000.

Chart 27
Total unemployment rate (1999 - 2002)
(Percentage points)



Source: NSSG, Labour Force Survey.

Chart 28
Trade balance and current account balance (January 1998 - September 2002)
(Million euro)



Source: Bank of Greece.

part-time and 1.7% express an exclusive preference for part-time employment.

6. Balance of payments

Summary

In the nine-month period from January to September 2002, the current account deficit increased by €406 million, compared with the corresponding period of the previous year, and

stood at €5,372 million. This development is attributable, first, to the widening of the non-oil trade deficit and the increase in net oil imports, second, to the reduction in the transfers surplus and, third, to the increased income account deficit. In the same period, the services surplus grew. Finally, as regards the financial account, the considerable net capital inflow, which was largely directed towards interbank deposits and the purchase of Greek government bonds, overshoot the current account deficit (see Chart 28, as well as Table 4 in the Statistical Appendix).

During the period under review, current account developments were affected by the faster – compared with the EU as a whole – growth rate of the Greek economy. Furthermore, the current account balance was also affected to some extent by the relative prices of exported and imported goods and services, as well as the change in the exchange rate of the euro, although such effects are often manifested with some delay (see also below). The appreciation of the euro vis-à-vis the US dollar as of March 2002 altered the euro area terms of trade in relation to third countries. Commodities imported in the euro area and priced in US dollars or Japanese yen became cheaper, with favourable effects on inflation, while euro area exports became more expensive, aside from those priced in other currencies which weakened vis-à-vis the euro. In the latter case however, export receipts expressed in euro decreased. Other current account components, such as income from transport services, which pertain to transactions carried out in US dollars, were similarly affected.

Furthermore, it should be noted that a key determinant connected with the high trade deficit, despite the progress made in recent years, is the relatively low competitiveness of the Greek economy, as evidenced by a series of qualitative indicators compiled by international organisations.⁴⁷

Trade balance

The widening of the trade deficit in the nine months from January to September 2002 reflects mainly the enlarged non-oil trade deficit, but also the increase in the net oil import bill.⁴⁸ The non-oil trade deficit rose by €392 million, compared with the same period of 2001, as export receipts decreased by 7.7%. At the same time however, the import bill also decreased, by 0.8%.⁴⁹ Once the change in prices (on the basis of the respective wholesale price indices compiled by the NSSG)

is also taken into account, it is estimated that non-oil export volume has declined by 10%, while import volume has shrunk by approximately 1.5%, compared with the same period of 2001.

The performance of Greek exports has been affected by developments in international demand and changes in the price competitiveness of Greek products. Although world trade volume is estimated to have increased in 2002 (after remaining unchanged in 2001), the rate of GDP growth in the EU decelerated from 3.4% in 2000 to 1.7% in 2001 and is expected to stand at 1.0% in 2002.⁵⁰ A slowdown, albeit smaller, was also observed in GDP growth in transition economies (i.e. the Central and Eastern European countries,

⁴⁷ According to the 2002-2003 *Global Competitiveness Report* of the World Economic Forum, based on an evaluation by more than 4,600 leading executives of business firms, Greece is placed 38th and 43rd among 80 countries with respect to the composite indices of Growth Competitiveness and of Microeconomic Competitiveness, respectively. In 2001 it occupied the 36th and 46th places among 75 countries, respectively. Moreover, according to the *World Competitiveness Yearbook 2002* of the International Institute for Management Development, in 2002 Greece ranked 36th (among 49 countries), compared with the 30th place it occupied in 2001.

⁴⁸ The increase in the net oil import bill reflects the apparent considerable decrease in fuel export receipts, which is due to the fact that, as from January 2002, fuel export statistics no longer include – as was the case in the past – certain quantities for vessel refuelling within the boundaries of the Greek state. In the period under review, the oil import bill represented 13.7% of the value of total imports, and oil export receipts accounted for 11.1% of total export receipts, while the net deficit of the oil import bill represented 14.9% of the trade deficit.

⁴⁹ In the corresponding nine-month period of 2001, non-oil export receipts had risen at an annual rate of 19.3% and the non-oil import bill had increased at a year-on-year rate of 3.8%. Of course, it should be noted that, in recent years (up to and including 2001), the relatively high growth rate of Greek exports, as derived on the basis of balance of payments statistics compiled by the Bank of Greece, was overestimated, since it partly reflected the *gradual improvement in the recording* of the actual data. However, with respect to 2002, it should be pointed out that in the first seven months of the year the commodity trade statistics compiled by the NSSG also show a decline of 1.6% and 0.2%, respectively, in export receipts and in the import bill (both in euro and excluding oil products), compared with the corresponding period of 2001.

⁵⁰ European Commission (*Autumn Forecasts*, 13 November 2002). Exports to the EU represent approximately 50% of Greece's total non-oil exports.

Table XI

Export price index and effective exchange rate weighted on the basis of Greece's external trade (2001-2002)

(Percentage change over same month of previous year)

	Effective exchange rate of domestic currency ¹	Wholesale prices of exported products			
		Total		Excluding oil	
		In domestic currency	In the currencies of Greece's trading partners ¹	In domestic currency	In the currencies of Greece's trading partners ¹
2001 Jan.	-3.1	5.3	2.1	5.0	1.8
Feb.	-2.5	3.3	0.7	3.4	0.8
March	-1.7	2.6	0.9	4.0	2.2
Apr.	-1.0	4.2	3.1	3.7	2.6
May	-0.7	3.1	2.4	2.9	2.2
June	-1.9	3.0	1.0	4.5	2.6
July	-1.5	2.1	0.6	3.8	2.3
Aug.	0.1	0.4	0.5	2.2	2.3
Sept.	1.1	-2.4	-1.3	0.9	2.1
Oct.	1.8	-5.2	-3.5	-0.3	1.5
Nov.	1.4	-5.1	-3.7	-0.3	1.1
Dec.	0.9	-1.7	-0.8	1.1	2.0
2002 Jan.	-0.3	2.4	2.1	3.9	3.7
Feb.	-0.2	1.9	1.7	4.1	3.8
March	-0.4	2.8	2.4	3.6	3.2
Apr.	0.0	2.8	2.8	3.7	3.8
May	1.0	1.2	2.2	3.0	4.0
June	1.9	-0.3	1.6	1.2	3.2
July	2.0	0.5	2.5	1.4	3.3
Aug.	1.1	1.6	2.7	2.2	3.3
Sept.	1.1	1.7	2.8	1.6	2.7
Oct.	1.2

1 See note to Chart 14. The currencies of Greece's trading partners include the euro.

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

the countries of the Commonwealth of Independent States, and Mongolia), from 5.0% in 2001 to 3.9% in 2002.⁵¹ Moreover, it is estimated that the price competitiveness of Greek products, which had improved significantly in 2000 and remained almost unchanged in 2001, is deteriorating in 2002⁵² (for developments in export prices expressed in the currencies of our trading partners, see Table XI).

On the basis of available Bank of Greece data on the breakdown of non-oil exports by product category (see Table XII.A), in the *January-August* period of 2002 exports of consumer non-durables increased. By contrast, exports of durables,

raw materials and semi-manufactured products decreased appreciably.

Despite the high –albeit decelerating in 2002– rate of GDP growth in Greece, the volume of Greek

⁵¹ International Monetary Fund estimates, *World Economic Outlook*, September 2002.

⁵² To measure price competitiveness, account is taken, on the one hand, of the effective exchange rate of the currency, and, on the other hand, of either unit labour costs in manufacturing, or consumer prices or wholesale prices in Greece, compared with 15 competitor countries. On the basis of unit labour costs, competitiveness improved by 6.4% in 1998, deteriorated by 0.9% in 1999, improved by 2% in 2000 and 0.6% in 2001, while it is estimated to deteriorate by 2.5% in 2002. On a consumer price basis, competitiveness improved by 2.8% in 1998, deteriorated by 0.7% in 1999, improved by 5.2% in 2000, deteriorated by 0.5% in 2001, while it is estimated to deteriorate further by 2.5% in 2002.

Table XII

Breakdown of Greece's external trade by product category (excluding oil)

A. Export receipts	January - August				
	Percentage share of each product category in total export receipts			Percentage changes	
	2000	2001	2002	2001/2000	2002/2001
Food, beverages, tobacco	26.8	29.7	29.7	23.3	0.7
Consumer non-durables	36.4	34.1	39.1	4.2	15.1
Consumer durables	5.1	8.4	6.2	84.5	-25.9
Raw materials (excluding oil) and semi-manufactured products	28.0	25.0	22.2	-0.8	-10.4
Capital goods	3.2	2.6	2.6	-8.8	0.8
Other goods	0.5	0.2	0.1	-48.6	-37.7
Total ¹	100.0	100.0	100.0		

B. Import bill	January - August				
	Percentage share of each product category in total import bill			Percentage changes	
	2000	2001	2002	2001/2000	2002/2001
Food, beverages, tobacco	15.1	14.8	15.2	6.1	2.2
Consumer non-durables	27.1	29.3	30.6	17.2	4.3
Consumer durables	8.8	8.5	8.6	4.5	1.0
Raw materials (excluding oil) and semi-manufactured products	14.3	14.5	13.8	9.8	-4.3
Capital goods	15.1	14.4	13.3	2.9	-7.3
Computers and accessories	3.0	3.2	2.8	16.3	-13.7
Fixed and mobile telephony	2.9	2.2	2.4	-16.3	8.6
Passenger cars	13.0	12.1	12.3	1.1	1.6
Other goods	0.7	1.0	0.9	41.7	-9.5
Total ¹	100.0	100.0	100.0		

¹ Detailed data by product and country do not cover total export receipts and the total import bill, as the product or country code number is not always included in the information compiled by banks. As a result, data evaluation should be based rather on percentage shares and changes than on absolute figures.

Source: Bank of Greece.

non-oil imports shows a slight decrease (approximately 1.5%) in the period from January to September 2002. However, according to detailed data (pertinent to the January-August eight-month period – see Table XII.B), imports of both consumer durables and consumer non-durables, including passenger cars⁵³ and fixed and mobile telephony equipment, increased, while a decrease was recorded in all other categories of imported products. The increase in consumer goods imports is broadly in line both with the considerable rise in household real disposable income and the fast consumer credit expansion, as well as with the very small increase

in domestic manufacturing output. However, the decrease in capital goods imports is, *prima facie*, not compatible with the considerable (albeit less than in 2001) increase in gross fixed capital formation and may be connected with the current phase of the time profile of major infrastructure projects and with the substantial imports of equipment that took place during the *previous* years.

⁵³ It should be noted that the increase in the import bill for passenger cars, combined with the decrease in the number of new registrations, suggests, in view of the increase (of approximately 10%) in expenditure per car, that – on average – cars with higher horsepower motors are being imported.

Table XIII
Geographical breakdown of Greece's external trade

A. Percentage share of each area of destination in total export receipts

	1999	2000	2001	2001 (8 months)	2002 (8 months)
OECD ¹	83.1	86.1	82.4	80.8	78.8
European Union	55.9	51.5	49.1	47.5	55.0
Euro area	43.7	37.2	34.9	35.1	39.5
USA	19.0	26.2	27.3	27.7	17.0
Balkan countries ²	3.0	3.4	5.2	5.3	6.5
Central Europe and former USSR ³	1.8	1.7	2.5	2.3	2.9
Middle East and the Mediterranean ⁴	10.4	7.0	7.2	6.4	8.7
Other countries	1.7	1.9	2.6	5.1	3.1
Total ⁵	100.0	100.0	100.0	100.0	100.0

B. Percentage share of each area of origin in total import bill

	1999	2000	2001	2001 (8 months)	2002 (8 months)
OECD ¹	87.9	85.4	83.2	83.2	82.6
European Union	60.7	58.2	61.8	60.7	62.1
Euro area	49.2	47.4	51.4	50.6	51.8
USA	12.7	18.8	13.9	14.9	12.7
Balkan countries ²	1.4	1.3	1.5	1.5	1.9
Central Europe and former USSR ³	2.4	3.6	5.3	5.3	5.8
Middle East and the Mediterranean ⁴	2.7	3.8	3.7	3.4	3.0
Other countries	5.6	5.9	6.3	6.6	6.6
Total ⁵	100.0	100.0	100.0	100.0	100.0

1 Twenty-four OECD Member States except for the Czech Republic, Hungary, Mexico, Poland and South Korea.

2 Albania, Bulgaria, Romania, and former Yugoslavia countries (Bosnia, Croatia, FYROM, New Yugoslavia and Slovenia).

3 Czech Republic, Hungary, Poland, Slovakia, and former USSR countries.

4 Greece's major trading partners in Northern Africa, the Middle East and the Mediterranean (Cyprus and Malta).

5 See footnote to Table XII.

Source: Bank of Greece.

According to available data regarding the geographical breakdown of exports (see Table XIII), an increase is recorded in the share of exports directed to the euro area and the EU in general, but also to the Middle East, Mediterranean and Balkan markets, as well as to the markets of Central and Eastern European countries. By contrast, no significant changes are observed in the geographical breakdown of imports.

Services balance

The services surplus appears to have increased by 15.1% in the period from January to September 2002, compared with the corresponding period of

2001, and offset 50.6% of the trade deficit (compared with 45.4% in the corresponding period of 2001). This increase is due to the *apparent* rise in net travel receipts, which more than offset the decrease in net transport receipts. Still, it should be noted that the introduction of the euro and the withdrawal of the legacy currencies of the euro area countries made the measurement of transactions connected with travel services more difficult in 2002. For this reason, as of May of 2002, travel receipts and payments are no longer recorded on the basis of the data announced by commercial banks, but on the basis of data from a sample survey ("border survey"), which however are *not fully comparable with those for 2001*. Therefore, it would

be more accurate that conclusions on tourist activity in 2002 be drawn on the basis of other indicators (see below). As regards the decline in net transport receipts, it is partly attributable to the decrease in world market freights.⁵⁴ Moreover, given that transactions of shipping companies are more often than not settled in US dollars, the depreciation of the American currency naturally reduces the value of such transactions when expressed in euro.

The *apparent* net increase in travel receipts (based on balance-of-payments statistics) stems from a rise in gross export receipts (i.e. travel payments of foreigners in Greece) during the nine-month period from January to September 2002 and from a considerable decline in gross payments (i.e. travel payments of Greeks abroad) during the same period, that is to say from measurements based on data that are *not comparable* with the corresponding ones of 2001. By contrast, available data on the number of tourist arrivals and overnight stays in hotels in certain regions of the country (such as Chalkidiki and Northern Greece in general, Cyclades, Crete and the Dodecanese islands), and data on the passenger traffic of certain airports (Cyclades, Crete, the Dodecanese and Northern Greece) and ports (Piraeus and Patras), as well as estimates of the Greek National Tourism Organisation (EOT) and professional agencies of the tourist market, but also estimates of the tourist industry's enterprises (travel agencies, hotels, restaurants) which participate in the conjunctural survey conducted by IOBE in the broader sector of services, clearly lead to the conclusion that, during the summer season of 2002, tourist activity (arrivals and overnight stays) *decreased*, compared with the same period of 2001. This development is related to the strong deceleration of private consumption growth in certain European economies, especially Germany (wherefrom a significant percentage of arrivals usually originates), but also to the intense

competition that the Greek tourist industry is faced with from other tourist destination countries (mainly Turkey, following the substantial depreciation of its currency in the last 18 months). On the basis of available data, it also appears that the decrease in arrivals from abroad was not fully offset by the increase in domestic tourism.

Income and transfers balances

The income account deficit recorded a minor increase in the period under review, given that the decrease in receipts from interest, dividends and profits overcompensated the decline in corresponding payments, while net receipts from wages and salaries also decreased slightly. The decline in receipts and payments of interest, dividends and profits is connected with the reduction in interest rates and dividend yields in 2002.

Moreover, the narrowing of the transfers surplus during the period under review was largely accounted for by the decline in net receipts of the "other sectors", particularly the decrease in emigrants' remittances, which is attributed to the slowdown of economic activity at an international level, especially in Germany, and – to a lesser extent – by the decrease in net transfers from the EU and the increase in general government payments. Net transfers from the EU decreased by €224 million, compared with the corresponding period of 2001.⁵⁵

⁵⁴ On the basis of available indices, average international freight prices (in US dollars) in the first nine months of 2002 came to levels lower than those in 2001.

⁵⁵ Approximately 50% of gross receipts in the period under review originates from the Guarantees Section of the European Agricultural Guidance and Guarantees Fund (EAGGF) and pertains to the implementation of Common Agricultural Policy (CAP) measures, while the remainder originates from the Structural Funds and the Cohesion Fund and concerns primarily the implementation of programmes under the 3rd CSF and secondarily payments under the 2nd CSF. Any discrepancies between the data compiled by the Ministry of Economy and Finance and those compiled by the Bank of Greece, as the latter are depicted in the balance-of-payments statistics, are due to the fact that the former data are expressed on an accrual basis whereas the latter on a cash basis.

Financial account

In the January-September 2002 period, financial investment, i.e. the sum of direct investment, portfolio investment and “other” investment, recorded a net inflow of €8,006 million, compared with a net outflow of €2,217 million in the corresponding period of 2001. This development came exclusively as a result of the considerable net inflow of funds for portfolio investment, amounting to €9,736 million, given that in both “other investment” and “direct investment” there was a net outflow, of €1,305 million and €425 million respectively.

The financial account surplus, particularly the considerable inflow of funds for the purchase of Greek bonds by non-residents despite the convergence of interest rates within the euro area, suggests that foreign investors show confidence in the positive course of the Greek economy. In particular, during the first nine months of 2002, net capital inflows overshot the current account deficit.

As regards non-residents’ direct investment in Greece, a small capital outflow (€27 million) was recorded in the period under review, compared with a considerable inflow during the January-August 2001 period (€1,540 million).⁵⁶ Residents’ investment abroad came to €398 million, i.e. to a level lower than in the corresponding period of 2001 (€533 million). A significant share of both inflows and outflows reflects the conclusion or repayment of loans between subsidiary and parent companies. In more general terms, the significant decline in flows of foreign direct investment at an international level in 2001 appears – at least hitherto – to be continuing during 2002, thus unfavourably affecting capital inflows in Greece as well.

Inflows of funds for portfolio investment remained

high, reaching €10,883 million, compared with an inflow of €7,989 million in the corresponding period of 2001. This development is almost exclusively connected with the continuing considerable inflow of funds for the purchase of Greek government bonds. More specifically, purchases of Greek bonds rose to €9,947 million, compared with €5,916 million in the corresponding period of 2001, despite the further slight decrease in yield differentials between Greek bonds and those of the other euro area countries. Besides, purchases of foreign bonds by residents (mostly banks), amounting to €783 million, compared with sales of €1,335 million in the corresponding period of 2001, were the main reason for the increase of €1,147 million in residents’ assets. The sizeable capital inflow for the purchase of bonds, as well as the notable corresponding outflow, reflect the shift of investors towards low-risk investments, owing to the stock market turmoil and the decline of stock prices.

Capital inflow for portfolio investment in equity (€1,096 million in the period from January to September 2002, compared with €2,041 million in the corresponding period of 2001) pertains largely to the purchase by non-residents of shares of the Hellenic Telecommunications Organisation (OTE) in June and of the Greek Soccer Pools Organisation (OPAP) in July, amounting to €400 million and €420 million, respectively.⁵⁷ At the

⁵⁶ Net difference between investments and disinvestments by non-residents. During the period under review, the most important investment pertained to the increase in Crédit Agricole’s participation in the share capital of the Commercial Bank of Greece, while during the corresponding period of 2001 it pertained to the acquisition by the Dutch company Eureko of part of the share capital of Interamerican Greece. Disinvestments concerned decreases in foreign companies’ participation in the share capital of their subsidiaries in Greece (e.g. of ING in that of Nationale-Nederlanden Greece).

⁵⁷ These purchases occurred following the sale of 8% and 18%, respectively, of the share capital of the two organisations; these percentages were owned by the Greek State (and, as far as OPAP is concerned, by the Greek Public Securities Corporation – DEKA).

same time, capital outflows for purchases abroad decreased significantly (from €1,008 million in 2001 to €172 million in 2002).

In the category of “other” investments, the relatively small net capital outflow is a result of the considerable rise in residents’ external assets and liabilities. Specifically, the increase in external assets (of €6,861 million) was offset to a great extent by the rise (of €5,556 million) in external liabilities. The considerable increase in residents’ deposits abroad and non-residents’ deposits in Greece was the main reason for the respective rise in both cases. These transfers, which reflect mostly short-term interbank transactions, are an indication of our country’s growing integration in the international financial system and of the ability of Greek financial institutions to draw liquidity from international markets. Furthermore, with respect to liabilities, it should be noted that repayments of general government loans were quite substantial (rising to €2.7 billion, i.e. a level slightly higher than in the corresponding period of 2001). This

fact should however be taken into consideration along with the considerable increase in bond purchases by non-residents. Such purchases, as already mentioned, reached €9,947 million during the period of 2002 under review, compared with €5,916 million in the corresponding period of 2001. Therefore, what is observed is a substitution – to some extent – of general government direct long-term borrowing in foreign currencies with – mostly – bond issues in euro.

At the end of September 2002, the country’s reserve assets (as defined according to the rules set by the ECB)⁵⁸ stood at €8.9 billion, whereas at the end of December 2001 they stood at €7 billion.

⁵⁸ As of 1 January 2001, the country’s reserve assets *no longer include* claims in euro against non-euro-area residents, claims in foreign currency and euro against euro area residents and, finally, the contribution of the Bank of Greece to the ECB capital and reserve assets. Therefore, Greece’s reserve assets *do include* monetary gold, the “reserve position” in the IMF, “special drawing rights” and Bank of Greece claims in foreign currency against non-euro-area residents.

Changes in the value of household assets (dwellings and equity) in recent years (1995-2001)

During the 1990s, the value of household assets (household wealth) increased impressively in most EU countries,¹ mainly because of large rises in equity prices. This development seems to have contributed to a drop in the saving rate of households.² It should be noted that before the 1990s, household wealth had been increasing at relatively low rates.

In what follows we attempt to estimate the value of two key Greek household assets in the course of the 1990s: dwellings and equity. The estimation of the level of household wealth should be of interest, insofar as it can answer topical questions about macroeconomic aggregates, such as to what extent the increase in wealth has contributed to the slowdown of the saving rate of households during the last decade and whether this effect has become stronger over time. Specifically, it would be interesting to determine whether the increase in household wealth stemming from the dwellings component was larger than the decrease stemming from the equity component as a result of the steep fall in equity prices from September 1999 onwards.

For the purposes of this analysis, it would be useful to break down the gross wealth of households³ into two categories:

a) *Financial assets*, i.e. shares, bonds, bank deposits, mutual fund units etc.

b) *Non-financial (real) assets*, i.e. real estate (residential, commercial, etc.) and consumer durables.

By deducting the financial liabilities of households (mainly composed of housing and consumer loans) from the

above sum, net household wealth can be obtained. As already mentioned, however, *this analysis is limited to the estimation of two wealth components: (1) the value of ASE-listed shares and (2) the value of dwellings.*

The composition of household wealth in EU countries has undergone significant changes over the last 20 years: during the 1980s households focused mostly on non-financial assets, while during the 1990s there was a shift towards financial assets.⁴ Thus, the value of equity holdings in the latter decade increased sharply, both in absolute figures and as a percentage of total household wealth. In the past, developments in stock markets were considered of minor importance to economic activity, especially in the countries of the European Union (except for the United Kingdom), and both the value of share holdings by households and the percentage of households investing in equity were relatively low. By contrast, during the 1990s the demand for equity increased considerably both by households already holding such securities and by new household investors. The upward trend of stock prices in the euro area came to a halt in early 2000 and was subsequently reversed.

In line with these developments in the value of equity, the value of dwellings also rose significantly from the mid-1990s; it has been rising until recently in all EU countries, with the exception of Germany, where house prices have fallen. Thus, the negative impact that the drop in equity prices had on household wealth and private consumption was largely offset.

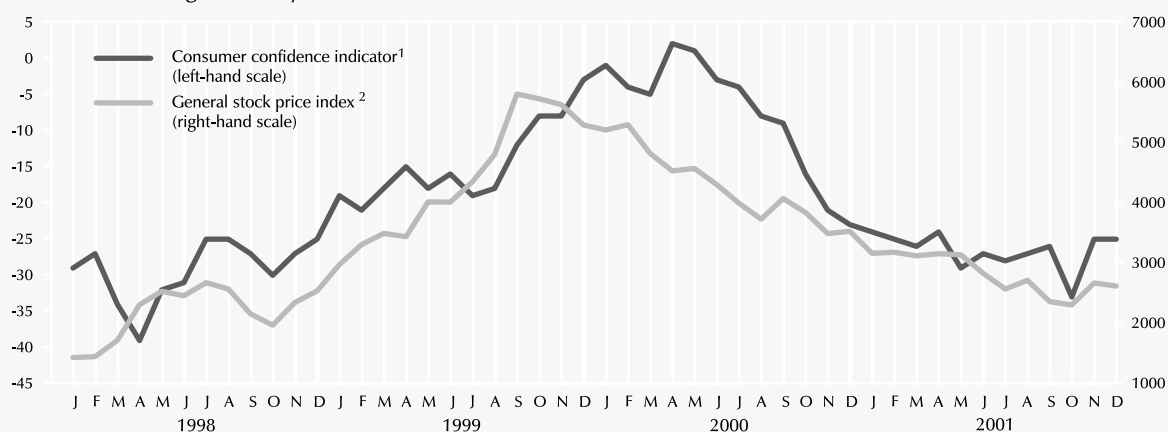
¹ A similar pattern can be observed in the other developed economies, with the exception of Japan, where household wealth recorded a fall.

² See Bank of Greece, *Annual Report 2001*, Box III.1, for a detailed account of developments in savings of Greek households in recent years.

³ The term "wealth" as used here does not include human capital (education, training and skills etc.).

⁴ The share of dwellings in the total value of household assets remained high during the 1990s both in the United States (24%) and the European Union (30-40% in the major European countries), in spite of a drop relative to the 1980s. (See OECD, *Economic Outlook*, December 2000).

Evolution of the consumer confidence indicator and the general stock price index of the Athens Stock Exchange (January 1998 - December 2001)



1 Percentage balances (index: 1980=100).
 2 Monthly averages (index: 1980=100).
Sources: Bank of Greece and European Commission.

Similar were the developments concerning household assets in Greece during 1995-2001. In particular, the market capitalisation of shares listed on the Athens Stock Exchange (ASE) as a percentage of GDP came to 121.8% in 1999 from 13.7% in 1995, before falling back to 77.9% in 2001 (see Table on page 71). The strong demand for equity observed during 1995-1999 reflected the massive shift of institutional investors and, mainly, of savers towards the stock market. It is characteristic that the number of units in the Book-Entry Securities System (of the Central Securities Depository) from 355,000 in 1998 rose by 1,104,000 in 1999, by 291,000 in 2000 and by 42,000 in 2001. The first Chart of this Annex illustrates the positive correlation between developments in the stock market and consumer confidence as measured by household assessments of their own financial situation. Indeed, during 1998-2001 the average monthly index of share prices had a lead of a few months over the consumer confidence indicator and the two measures seem to be strongly correlated (correlation coefficient: 0.84). Moreover, annual surveys⁵ show that household optimism about the ASE was sustained into 2000, while in 2001 developments in the ASE had a negative effect on the financial situation of households.

Estimates of the value of household assets in equity and

dwellings are presented in the Table, showing that the average annual value of household equity portfolios soared between 1995 and 2000, rising to 11 times the levels recorded in 1995, while in 2001 it fell by 38.1%⁶ (see Table and second Chart of the Annex). As a result, the value of household equity, from 8.5% of households' disposable income, increased to 68.5% in 1999, to 68.2% in 2000, and despite a drop, to the relatively high level of 40.8% in 2001. The value of equity holdings by households, as a percentage of GDP, followed a similar pattern in the period under review (see Table).

Changes in the value of household assets were mostly driven by increases in Greek house prices during the period under review. Since the mid-1990s, house prices have been increasing at a rate much higher than inflation mainly in Athens as well as in other urban centres, averaging 14.6% and 8.7% respectively over the five years (1997-2001), against an average annual increase of 3.9%

⁵ These surveys, entitled "Greek households: assessments and expectations", are carried out by ICAP S.A. The impact of ASE activity on the financial situation of households was first included in these surveys in 1999.

⁶ All values in this analysis are expressed in drachmas, as they refer to the period 1995-2001, i.e. before the introduction of the euro banknotes and coins.

Change in the value of households' assets in shares and dwellings

	1995	1996	1997	1998	1999	2000	2001
I. Value of shares held by households							
ASE general stock price index ¹ (1980=100)	888.6	936.7	1,479.5	2,184.0	4,405.0	4,282.7	2,822.6
Percentage change over previous year	-3.7	5.4	57.9	47.6	101.7	-2.8	-34.1
Market capitalisation of ASE shares ² as a percentage of GDP	13.7	18.2	28.2	49.8	121.8	121.4	77.9
Value of shares ² held directly or indirectly ³							
by households (billion drachmas)	2,008	2,020	3,660	7,208	21,602	22,380	13,861
Percentage change over previous year	10.4	0.6	81.2	96.9	199.7	3.6	-38.1
Value of shares held by households:							
– as a percentage of GDP	7.4	6.7	11.0	20.0	56.2	54.0	31.1
– as a percentage of disposable income ⁴	8.5	7.9	13.1	24.0	68.5	68.2	40.8
II. Value of households' dwellings							
Dwellings price index ¹ (1997=100)							
– Athens	80.1	88.9	100.0	115.5	129.6	149.1	175.4
Percentage change over previous year	9.2	11.0	12.5	15.5	12.2	15.1	17.6
– Other urban areas (17 provincial cities)	84.9	93.4	100.0	113.3	119.9	127.1	141.6
Percentage change over previous year	7.8	10.0	7.1	13.3	5.8	6.0	11.4
– Total for urban areas ⁵	82.6	91.2	100.0	114.4	124.5	137.6	157.7
Percentage change over previous year	8.5	10.5	9.7	14.4	8.9	10.5	14.6
– Total for all areas ⁵	83.6	92.2	100.0	113.9	122.5	133.0	150.5
Percentage change over previous year	8.2	10.2	8.5	13.9	7.5	8.6	13.2
Value of total stock of dwellings (billion drachmas)	90,165	101,980	114,133	134,290	148,750	166,836	195,056
Percentage change over previous year	10.5	13.1	11.9	17.7	10.8	12.2	16.9
Value of the stock of dwellings:							
– as a percentage of GDP	331.1	340.7	344.5	372.6	386.9	402.5	437.2
– as a percentage of disposable income ⁴	381.2	399.1	409.2	447.8	472.0	508.5	573.9
III. Value of households' assets in shares and dwellings							
Total value (billion drachmas)	92,173	104,000	117,793	141,498	170,352	189,216	208,917
Percentage change over previous year	10.5	12.8	13.3	20.1	20.4	11.1	10.4
Total value:							
– as a percentage of GDP	338.4	347.4	355.5	392.6	443.1	456.5	468.3
– as a percentage of disposable income ⁴	389.7	407.0	422.3	471.9	540.5	576.7	614.7
Value of households' shares as a percentage of households' assets in shares and dwellings	2.2	1.9	3.1	5.1	12.7	11.8	6.6
IV. Households' financial liabilities							
a. Housing loans (billion drachmas)	1,219	1,554	1,924	2,332	2,928	3,841	5,333
Percentage change over previous year	19.4	27.5	23.8	21.2	25.5	31.2	38.9
Housing loans:							
– as a percentage of GDP	4.5	5.2	5.8	6.5	7.6	9.3	12.0
– as a percentage of disposable income ⁴	5.2	6.1	6.9	7.8	9.3	11.7	15.7
b. Consumer loans (billion drachmas)	423	575	732	1,001	1,316	1,878	2,676
Percentage change over previous year	83.4	35.8	27.3	36.8	31.5	42.7	42.5
Consumer loans:							
– as a percentage of GDP	1.6	1.9	2.2	2.8	3.4	4.5	6.0
– as a percentage of disposable income ⁴	1.8	2.2	2.6	3.3	4.2	5.7	7.9
Total financial liabilities (a+b)	1,642	2,129	2,656	3,333	4,244	5,719	8,009
Percentage change over previous year	31.2	29.6	24.8	25.5	27.3	34.8	40.1
Total financial liabilities:							
– as a percentage of GDP	6.0	7.1	8.0	9.2	11.0	13.8	18.0
– as a percentage of disposable income ⁴	6.9	8.3	9.5	11.1	13.5	17.4	23.6

1 Year average.

2 Average annual value.

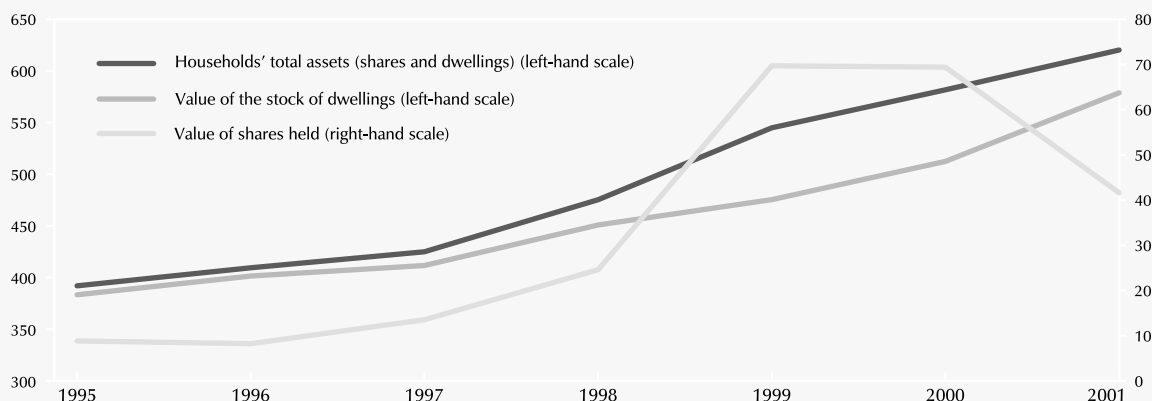
3 Average annual value of (ASE and foreign) shares corresponding to money-market fund units held by households.

4 Households' gross disposable income.

5 Weighted average of individual indices, on the basis of the dwellings stock of each area.

Sources: Bank of Greece, Athens Stock Exchange (ASE), NSSG, Ministry of Economy and Finance.

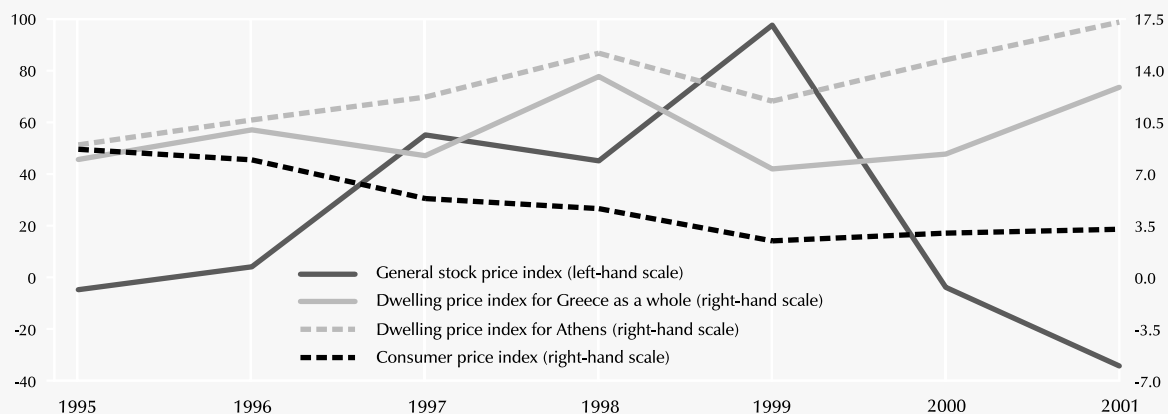
Evolution of households' assets (in the form of shares and of dwellings) as percentages of disposable income (1995 - 2001)¹



¹ See the Table of the Annex.

Sources: Bank of Greece, Athens Stock Exchange and Ministry of Economy and Finance.

General stock price index of the Athens Stock Exchange, dwelling price indices and consumer price index (1995 - 2001)
(Percentage changes in annual averages)



Sources: Bank of Greece, NSSG and Athens Stock Exchange.

in consumer prices (see third Chart of the Annex). For the country as a whole, house prices rose at an average annual rate of 10.3%, compared with about 3.5% in the euro area, recording much faster growth rates in the last year of the period under review. In 2001, house prices rose by 17.6% in Athens, by 11.4% in the other urban centres and by 13.2% in the country as a whole, i.e. more than double the respective euro area rate (see Table in this Annex and footnote 25 on page 53).

Regarding the determinants of these developments, a

number of points may be made. First, the increase in house prices in real terms – to the extent that it does not reflect an increase in land prices – is mainly due, on the demand side, to a rise in the disposable income of households and, on the supply side, to the widening of the already high profit margins of construction firms active in the housing market and/or real estate agencies. Indeed, during 1997-2001, the total cost for the construction of houses (NSSG data) increased at an average annual rate of 4.4%, which was only slightly higher than inflation. Housing supply is estimated to have mirrored

the respective demand until 1999, thus preventing a larger increase in prices. However, after 1999 the subdued supply of old and new dwellings, combined with increased demand, resulted in a rise in house prices. Second, the upward course of house prices in recent years is associated with declining real interest rates, especially after 1999, but also with favourable terms of financing to households against a background of intense competition among banks, which led to the rapid expansion of housing credit (2000: 31.2%, 2001: 38.9% – see Table). Third, the significant fall in the prices of ASE-listed shares from September 1999 onwards, as well as the absence of other attractive investment options (e.g. bank deposits, bonds), is estimated to have caused households to shift to the housing market, which involves high returns and low risks. It is worth noting in this respect that dwellings are widely perceived as an investment option and not only as a means for satisfying housing needs. Furthermore, expectations of high capital gains, which are in part connected to the favourable tax treatment of first home owners (mortgage interest is deducted from taxable income), seem to have stimulated households' demand for dwellings as an investment option during the past years.

The average growth rate of the value of dwellings came to 12.8% during 1995-1999, and accelerated to 14.5% in the next two years (2000-2001), more than offsetting the drop in the equity value in 2001. Thus, total household assets (dwellings and equity) increased by 11.1% in 2000 and 10.4% in 2001 (see Table and second Chart of the Annex). In particular, the total value of these two components is estimated to have come to about 209 trillion drachmas or 615% of disposable income in 2001, up from about 92 trillion drachmas or 390% of disposable income⁷ in 1995, implying an average annual increase of 14% during 1995-2001. The value of equity accounted for 11.8% of the total value of the two components in 2000, compared with 2.2% in 1995 and 6.6% in 2001.

Households' liabilities vis-a-vis credit institutions (aris-

ing from housing loans) rose to 15.7% of their disposable income in 2001 from 5.2% in 1995, while total household liabilities from housing and consumer loans came to 23.6% of disposable income in 2001, from 6.9% in 1995 (see Table).

The valuation of households' assets is quite difficult, mainly due to insufficient statistical data. The present analysis has used the following data for the valuation of the value of the two components:

Value of dwellings

– For the housing stock in the wider Athens area and the other urban and semi-urban/rural areas:

The housing stock in the respective regions in 1991 has been estimated using data from the NSSG "population-buildings" 1991 census. Annual private construction activity based on new building permits for the years 1992-2001, as well as NSSG data on extensions, legalisations and demolitions of dwellings, have also been taken into consideration.

– For the average annual house price indices of the wider Athens area, the other urban areas and the semi-urban and rural areas of the country:

House price indices for the first two regions have been calculated by the Bank of Greece.⁸ The price index of semi-urban and rural areas has been estimated on the basis of the relation between house prices in these areas and other urban areas (70.5%), as provided for by the NSSG Household Survey for 1999. The value of dwellings in the Table is probably an overestimation of the actual value of households' dwellings, since the average age of houses (number of years since they

⁷ See Table for the corresponding percentages on GDP.

⁸ Based on data collected: (i) for Athens, by Property SA (since January 1997) and Danos & Associates (for the period 1994-1996) and (ii) for the other urban areas, by the local branches of the Bank of Greece.

were first built) in the sample taken for the calculation of the average price is smaller than the one arrived at by the NSSG census. It is however noted that the average house price of this sample reflects the houses' real age, and therefore takes into account their degree of obsolescence.

Value of ASE-listed shares

- For the value of equity directly held by households:

This value was estimated for the period 1995-2001 on the basis of (i) studies and surveys relating to the composition of the market capitalisation of ASE-listed shares, (ii) households' investment behaviour and (iii) data on the equity portfolios of the public sector

and institutional investors. In more detail, there were used studies of the Capital Market Commission on the dispersion of ASE-listed shares, research of the Central Securities Depository as to the breakdown of the ASE-listed shares' market capitalisation by types of investors, as well as surveys of ICAP S.A. on the financial situation of households and of ALCO LTD on households' investment pattern.

- For the value of equity indirectly held by households:

This was calculated on the basis of mutual fund holdings (for all types of mutual funds) in shares listed both on the ASE and foreign stock exchanges, as well as on an estimation of the units in circulation held by households.

V. Money, credit and capital markets in Greece

1. Developments in monetary aggregates

The annual growth rate of the Greek component of the euro area M3¹ declined markedly in the January-September 2002 period, from 4.7% in the fourth quarter of 2001 to 1.6% in the third quarter of 2002, reaching 2.4% in September (see Table XIV). Throughout January-September 2002, the annual growth rate of the Greek M3 was lower than the corresponding euro area rate and averaged about one third of that rate (see Chart 29).

This drop in the Greek M3 growth rate is associated with the slowdown in total credit expansion, which stemmed mainly from the significant weakening of credit expansion to enterprises and households. Although the borrowing requirements of central government increased slightly during January-September 2002 relative to the corresponding 2001 period, the outstanding balance of general government's debt remained lower than at the end of 2001, as the non-MFI (Monetary Financial Institutions) private sector's net holdings of government paper were more than double the respective 2001 figure (see Section 3 of this chapter). Besides, the weaker growth of the Greek M3 over the period under review as compared with the euro area M3 growth mainly reflects the fact that credit expansion decelerated more strongly in Greece than in the euro area. The decrease in the M3 growth rate during January-September is also associated with the evolution of MFIs net external assets, which fell

¹ As from August 2002, the Greek M3, in line with the ECB's definition (see footnote 4, Chapter III.2.1) includes money market fund units. In order to calculate the new M3, claims and liabilities between credit institutions and money-market funds were offset. The Greek M3 is added to its euro area countries' counterparts to yield the euro area M3. Even though the ECB's single monetary policy takes into consideration developments in the euro area M3, the evolution of the national component provides a useful indicator of monetary conditions in Greece.

Table XIV

Greek contribution to the monetary aggregates of the euro area

(Not seasonally adjusted data)

	Outstanding balances on 30.09.02 (million euro)	Annual percentage changes ¹					
		2001		2002			
		Q3 ²	Q4 ²	Q1 ²	Q2 ²	Q3 ²	September ³
1. Currency in circulation, M0	6,626	4.0	0.4	-16.7	-17.2	-12.7	-8.2
2. Overnight deposits	14,696	-9.4	5.5	13.1	12.0	15.8	20.5
3. M1 (1+2)	21,322	-4.9	3.7	2.6	1.3	5.2	9.8
4. Savings deposits and deposits redeemable at notice of up to three months	59,940	8.6	13.0	16.5	16.3	14.6	14.0
5. Deposits with agreed maturity up to two years	25,421	-6.2	-8.3	-2.0	2.4	6.4	10.7
6. M2 (3+4+5)	106,683	1.4	4.7	8.4	9.4	10.6	12.5
7. Repurchase agreements	22,926	68.4	38.3	10.3	-10.1	-20.2	-21.7
8. Money market fund units	9,094	-28.4	-38.4	-32.6	-25.9	-18.8	-13.1
9. Debt securities up to two years	95	9.1	-1.1	-27.8	-87.1	-79.3	-55.4
10. M3 (6+7+8+9)	138,798	6.5	4.7	4.1	2.3	1.6	2.4

1 Annual rates of change in the corresponding index, which is compiled on the basis of the balance of the corresponding monetary aggregate in December 1998 and the accumulated monthly flows, adjusted for exchange rate variations, reclassifications etc.

2 The quarterly average is derived from the arithmetic annual averages for each month (calculated as the average of the rates at the end of the reference month and the end of the previous month) and is not the average of the rates at the end of each of the quarter's months (see the "Technical Notes" in the ECB *Monthly Bulletin*).

3 Annual rates of change on the basis of the corresponding index at the end of the month.

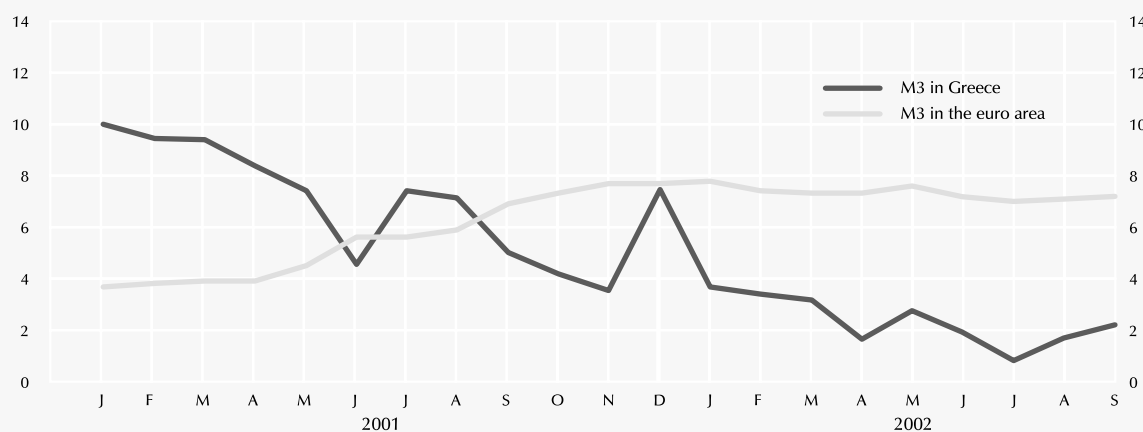
Sources: Bank of Greece and ECB. (Data for September 2002 are provisional.)

Chart 29

M3 in the euro area and Greece

(January 2001 - September 2002)

(Percentage change over same period of previous year, data not seasonally adjusted)



Sources: Bank of Greece and ECB. (Data for September 2002 are provisional.)

further, mainly because of an increase in Greek credit institutions' liabilities against their euro area counterparts. It should be noted that, in the past few years, both claims and liabilities of Greek

credit institutions against their euro area counterparts have increased significantly, indicating the gradual integration of the Greek banking market to the market of the euro area.

As far as the components of M3 are concerned, throughout the period January-September 2002 currency in circulation (M0) was at a lower level than in the corresponding 2001 period. In the third quarter of 2002 M0 decreased at an annual rate of 12.7%, compared with an increase of 0.4% in the fourth quarter of 2001.² The sharpest deceleration of M0 was recorded in the early months of 2002 (as was also the case in the euro area), reflecting the impact of the euro cash changeover on 1 January 2002, as households reduced the amount of cash holdings in favour of bank deposits. From May onwards, however, this deceleration lost momentum, as with the completion of the cash changeover, currency holdings seem to have rebounded to levels exceeding transaction requirements.

The annual growth rate of deposits by Greek and other euro area residents³ with credit institutions operating in Greece accelerated in the third quarter of 2002, compared with the last quarter of 2001, for all deposit types. To a significant extent, this development reflects a shift to savings accounts from (i) repos, whose yields have once more become subject to tax as from 1 January 2002, and (ii) shares, since the uncertainty caused by stock exchange developments boosted demand for more liquid assets, especially shorter-term deposits. In more detail, overnight deposits (sight deposits and current accounts), following a marked increase in December 2001,⁴ maintained relatively high growth rates throughout the January-September 2002 period. Their 12-month growth rate rose gradually from 5.5% in the fourth quarter of 2001 to 15.8% in the third quarter of 2002. Deposits in savings accounts and deposits with an agreed maturity of up to three months also rose at a relatively high annual rate during the nine-month period under review without considerable fluctuations. Thus, their annual growth rate came to 14.6% in the third quarter of 2002, up from

13% in the fourth quarter of 2001. An increase was also recorded in the growth rate of deposits with an agreed maturity of up to two years, whose 12-month growth rate rose to +6.4% in the third quarter of 2002, after taking a negative turn (-8.3%) in the fourth quarter of 2001. This development in deposits with an agreed maturity is also related to the increase in interest rates on this particular instrument between January and September 2002.

Non-MFI private sector's repo holdings shrank considerably in the period under review and, as they had begun to decline since October 2001 (see Chart 30), their annual growth rate turned negative for the first time in April 2002. The outstanding balance of repos in September 2002 was 21.7% less than in the corresponding month of the preceding year, after recording a 38.3% increase in the fourth quarter of 2001.⁵ This development is directly related to the taxation⁶ of repo yields at a rate of 7% for agreements made as from January 2002 and with the abovementioned shifts from repos to deposits and government paper. Finally, the decrease in money market fund units continued in 2002. The value of such units held by the non-MFI private sector was reduced by 13.1% in September 2002, relative to the cor-

² It should be noted that, since part of the euro banknotes and coins in circulation in individual euro area countries is held by residents of other euro area countries (and residents of third countries), the national components of M0 cannot easily be measured with a sufficient degree of accuracy. The volume of banknotes in circulation in individual countries since the beginning of 2002 is calculated on the basis of each country's capital key, which defines its participation in the capital of the ECB. Thus, the 2002 M0 is not fully comparable with the 2001 figure (see also footnote 13 in Section 2 of this chapter).

³ Deposits by residents of other euro area countries in September 2002 corresponded to a mere 0.8% of total deposits included in the Greek M3.

⁴ Overnight deposits increased by 20.4% in December, as households placed part of the currency in circulation in such deposits, with a view to ensuring its automatic conversion into euro.

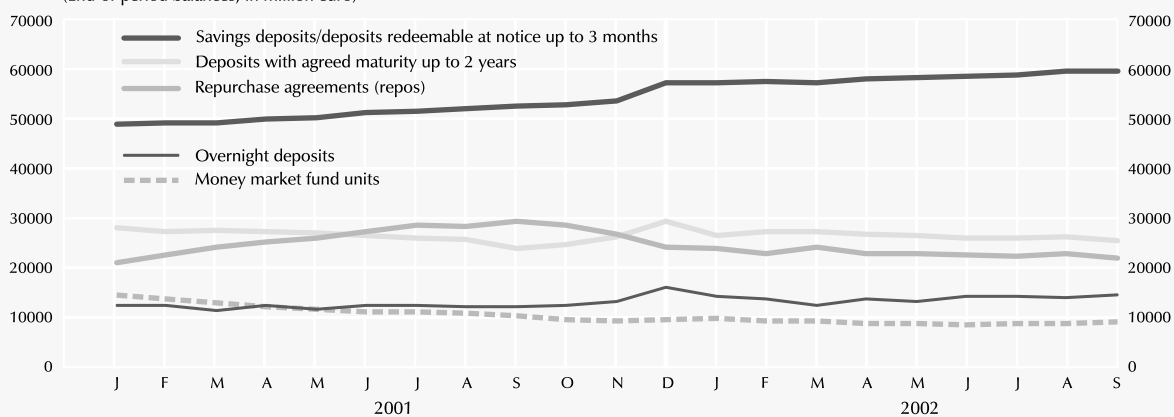
⁵ The outstanding amount of repo holdings in September 2002 was €6,352 million lower than the peak reached in September 2001.

⁶ The decision to tax repo yields was announced in November 2001.

Chart 30

Deposits, repurchase agreements and money market fund units in Greece¹ (January 2001 - September 2002)

(End-of-period balances, in million euro)



¹ These aggregates concern deposits, repos and money market fund units which, according to the ECB definition, are included in M3.

Source: Bank of Greece. (Data for September 2002 are provisional.)

responding month of 2001, while its annual rate of decrease in the fourth quarter of 2001 was even higher (38.4%). This development is partly linked to the course of stock exchange aggregates, which also had an impact on the prices of money market fund units, but mainly reflects the liquidation of units by savers who want to gain liquidity and look for more profitable investment alternatives (see Section 5.3 of this chapter).

Total deposits by Greek residents (households and enterprises) in euro and other currencies decreased by €733 million during January-September 2002; still, their outstanding balance remained higher than in the corresponding period of 2001. Thus their annual growth rates in the first nine months of 2002 have been positive, between 10% and 15% approximately. The decline in deposits during the period under review is accounted for by deposits in currencies other than the euro. The outstanding balance of these deposits fell by €5,664 million. By contrast, deposits in euro (which made up 83.6% of deposits by households and enterprises at end-September) grew by €4,931 million over the

same period, reflecting public confidence in the single currency. This development is also related to the widening of the positive spread of interest rates on deposits in euro over deposits in US dollars,⁷ as well as to the weakening of the US dollar against the euro.

2. The euro cash changeover

The introduction of euro banknotes and coins in Greece, as in the other euro area countries, began on 1 January 2002 and was completed by end-February 2002. Despite its complexity, the task was carried out successfully, due to careful preparations during previous years. It should be noted that Greece had a transition period of only one year, as opposed to three years for the other participating countries, since it joined the Economic and Monetary Union (EMU) on 1 January 2001.

⁷ The spread between the interbank rate for deposits in euro with a maturity of three months and the corresponding rate for deposits in US dollars grew from 142 basis points in December 2001 to 151 basis points in September 2002.

In the context of the preparations for the euro cash changeover, the Bank of Greece, in cooperation with the Ministry of Economy and Finance and other competent authorities, undertook the production of euro banknotes and coins, the formulation of a legal framework for the euro and its transposition into Greek law, the drawing-up and application of the “National Plan for the Cash Changeover” and the implementation of a comprehensive communications programme.⁸

The Bank of Greece established a network for supplying the whole country with euro banknotes and coins. This network included, apart from the Bank’s Head Office and its 27 branches, 96 branches of the National Bank of Greece, where the Bank of Greece holds cash reserves. The Bank assessed the geographical breakdown of needs for euro banknotes and coins by denomination, taking into account the share of each prefecture in the GDP as well as certain local factors. Based on this breakdown, the Bank increased the reserves of its branches in areas where the frontloading of euro banknotes and coins to credit institutions had been smaller than the estimated local needs for cash.

Special emphasis was given to the timely frontloading of euro banknotes and coins to credit institutions, enterprises and the public, considering the country’s geography (e.g. mountainous areas and remote parts of the mainland and islands). The frontloading of euro coins to credit institutions started earlier than the frontloading of euro banknotes, the former task being harder.⁹ Euro banknotes and coins of a total value of €6,097.4 million (i.e. approximately 70% of the legacy currency in circulation at end-2001¹⁰) were frontloaded to credit institutions. In total, 3,233 branches of credit institutions and the Hellenic Post Offices were frontloaded with euro and were thus fully prepared to meet

demand for the new currency from the very first day of 2002.

As from 17 December 2001, 3 million starter kits containing euro coins were supplied to the public and were soon sold out.¹¹ No sub-frontloading of euro banknotes to the public took place, because the Governing Council of the ECB considered that this might give rise to confusion and the premature circulation of new banknotes before 1st January. Euro coins and small-denomination banknotes or euro coin rolls were frontloaded to approximately 107,000 enterprises, i.e. 43% of active enterprises with authorised cash registers.¹² Although demand from enterprises for frontloading was much less than expected, the market operated smoothly during the first days of January 2002, mainly due to sufficient frontloading to credit institutions throughout the country and the steady supply of the market by the Bank of Greece.

Credit institutions ceased to pay out drachmas on 1 January 2002 and adapted their Automated Teller Machines (ATMs) to supply the public with euro from the very first day of 2002. Adaptation of

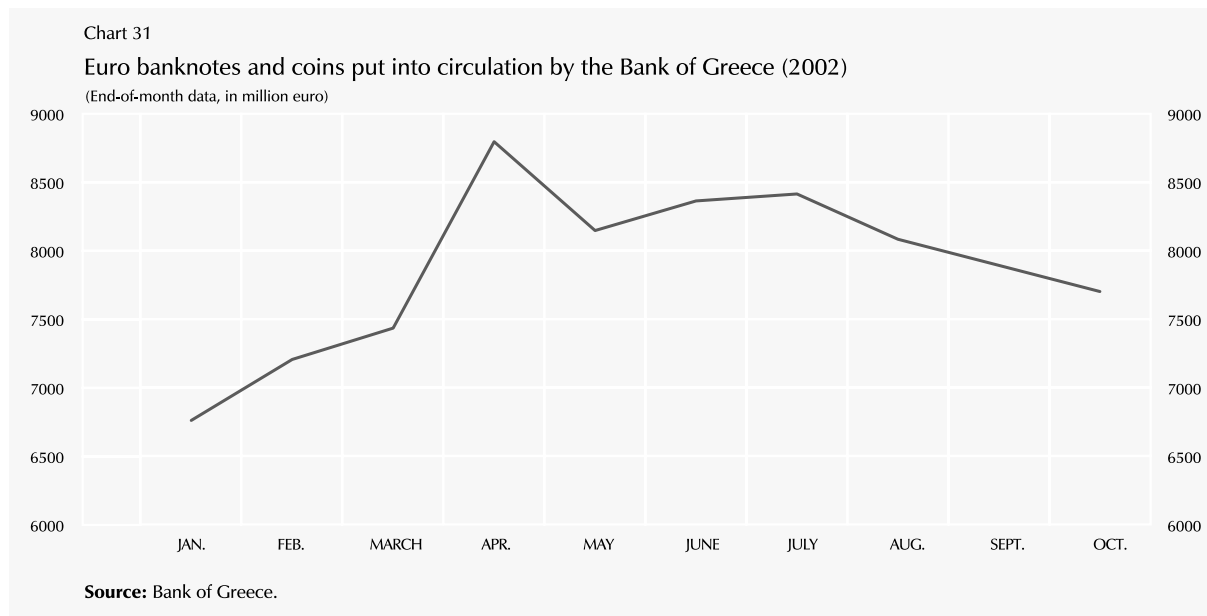
8 Communication activities moved along two axes: the Bank of Greece participated in the Information Campaign Euro 2002, which was organised by the European Central Bank (ECB) in collaboration with the national central banks of the Eurosystem. At the same time, with a view to covering the specific needs of the Greek public, the Bank proceeded with independent communication activities (production of additional TV spots, advertisements in the Press, information shows, production and distribution of the board game “Euroraces”, the comic book “Euroknowledge”, etc.).

9 The frontloading of euro coins to credit institutions began on 1 September 2001, whereas the frontloading of euro banknotes began on 1 October 2001.

10 In this section, “currency in circulation” means drachma banknotes and coins outside the Bank of Greece (but not *outside other MFIs*). Currency in circulation at the end of 2001 was approximately equivalent to €8,708 million.

11 Each starter kit contained 45 coins with a total value of €14.67. With the starter kits, 130 million euro coins had been made available to the public by 31 December 2001.

12 In December 2001 there were 248,221 active firms with authorised cash registers, according to data from the Ministry of Economy and Finance.



ATMs throughout the country was completed within three days (92% of the machines were adapted on the first day of euro circulation).

The quantity of euro banknotes and coins put into circulation by the Bank of Greece during the first two months of 2002 amounted to €7,216 million, i.e. about 83% of the value of the legacy currency in circulation at the end of 2001. Euro inflows were occasionally recorded, because some quantities of euro banknotes and coins were returned by credit institutions to the central bank. This reflected the banks' need to restructure the banknote reserves of their branches, since the demand for specific euro denominations by certain credit institutions was sometimes less than expected. By the end of October 2002, the Bank of Greece had put into circulation euro banknotes and coins totalling €7,702 million (see Chart 31).¹³

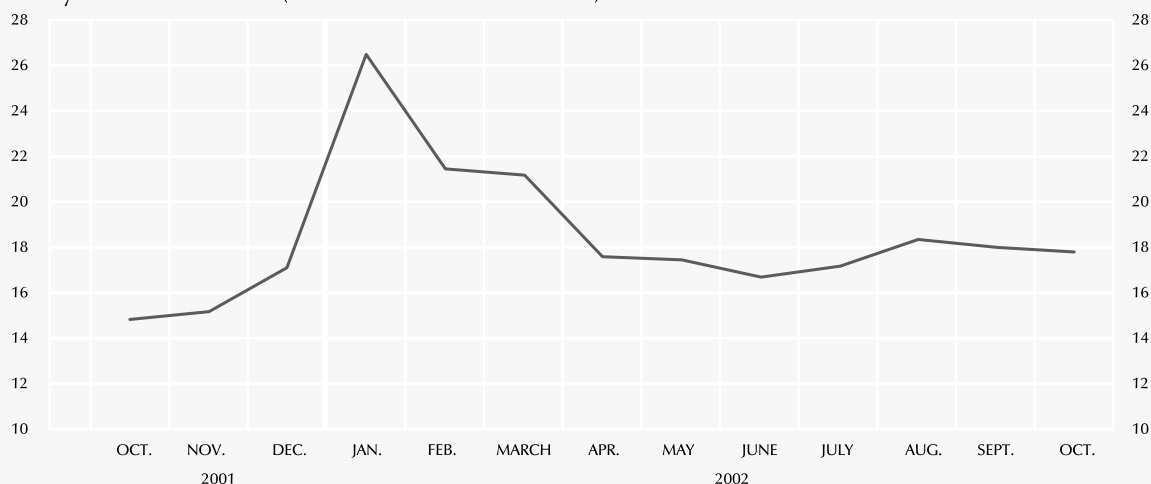
Credit institutions hold euro banknotes as "cash", chiefly in order to facilitate transactions with the public and to feed their ATMs. The evolution of euro banknote holdings during the period under review is interesting, since, at the beginning of January, owing to their frontloading, credit institu-

tions were holding increased volumes of banknotes. Because of the prompt supply of euro banknotes to the public, however, this aggregate was rapidly reduced to usual levels (see Chart 32). It should be noted that during their withdrawal, drachma banknotes and coins did not accumulate in the credit institutions' reserves but were for-

¹³ It should be noted that the aggregate "currency put into circulation by the Bank of Greece" referred to in this section, is quite different from M0, as their definitions differ. The banknotes put into circulation by the individual central banks of the Eurosystem are added up to yield the banknotes in circulation for the euro area as a whole. Of this sum, 8% is deemed to have been issued by the European Central Bank, while the remaining 92% is attributed to the national central banks of the Eurosystem, based on their respective capital key for subscription in the capital of the ECB, and is reported in their balance sheet under "banknotes in circulation". Thus, banknotes actually put into circulation by a central bank are not the same as those appearing in its balance sheet as "banknotes in circulation". The difference appears in the balance sheet of each central bank under "Intra-Eurosystem claims or liabilities in respect of the issue of banknotes". Besides, following the euro cash changeover, it is no longer possible to ascertain the exact amount of euro banknotes circulating in each euro area country, i.e. the national component of the euro area M0, since banknotes in circulation in one country of the euro area may be held by residents of another country or even a country outside the euro area. This phenomenon may be more pronounced in countries with large tourist flows, such as Greece, Italy, Spain and Portugal, as tourists may be leaving one euro area country to travel to another with euro banknotes already in their pockets.

Chart 32

Currency holdings of credit institutions as a percentage of the currency put into circulation by the Bank of Greece (October 2001 - October 2002)



Source: Bank of Greece.

warded without delay to the Bank of Greece, despite their immense volume.

The withdrawal of drachmas proceeded at a fast pace. By 28 February 2002, the total amount of drachmas withdrawn was 2.7 trillion drachmas (€7.8 billion), corresponding to approximately 90% of the currency in circulation on 31 December 2001. By the end of October 2002, this amount had come to 2.84 trillion drachmas (€8.3 billion) or about 96% of the currency in circulation at the end of 2001. Higher-denomination banknotes were returned to the Bank of Greece at a fast pace, while lower-denomination banknotes and coins were returned at a slower pace (see Charts 33 and 34).¹⁴ Returned banknotes and coins are in the process of being destroyed.

The pace at which the euro cash changeover was carried out was evident from the fact that, by the end of January 2002,¹⁵ over 90% of market transactions were paid for in euro.

The Counterfeit Monitoring System (CMS), which includes the European network of National

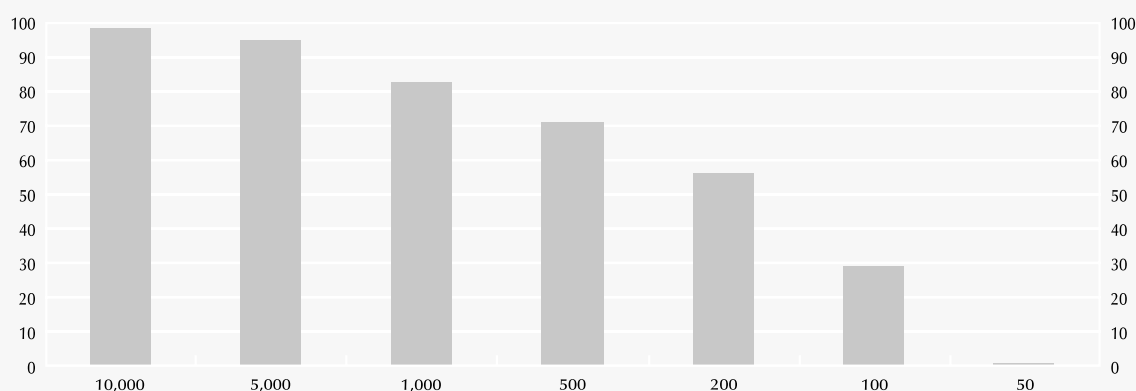
Analysis Centres (NAC) and a database located at the ECB for storing and processing information concerning counterfeit euro banknotes and coins, has been operating in the euro area from the beginning of 2002. The Bank of Greece has established a National Counterfeit Centre (NCC). This centre, which has undertaken to co-ordinate the centres established in Greece, serves as a link between the central bodies of the network and is responsible for monitoring and controlling the implementation of the Counterfeit Monitoring System in Greece. At the same time, National Analysis Centres (NAC) and Coin National Analysis Centres (CNAC) have been set up, whose responsibility and operation has been undertaken by the Hellenic Police. Counterfeit euro bank-

¹⁴ By the end of October 2002, approximately 97% of drachma banknotes and 42.4% of drachma coins in circulation at the end of December 2001 had been withdrawn. As illustrated in Chart 34, an exception from the rule that higher denominations are returned faster are the 500-drachma coins, a large part of which will not have been returned by 1 March 2004 (deadline for the withdrawal of drachma coins), since they are being held as collector's items.

¹⁵ Data from a survey carried out by Metron Analysis and presented by the Ministry of Economy and Finance at the meeting of the National Co-ordinating Committee for the Euro, which was held at the Zappeion on 1 February 2002.

Chart 33

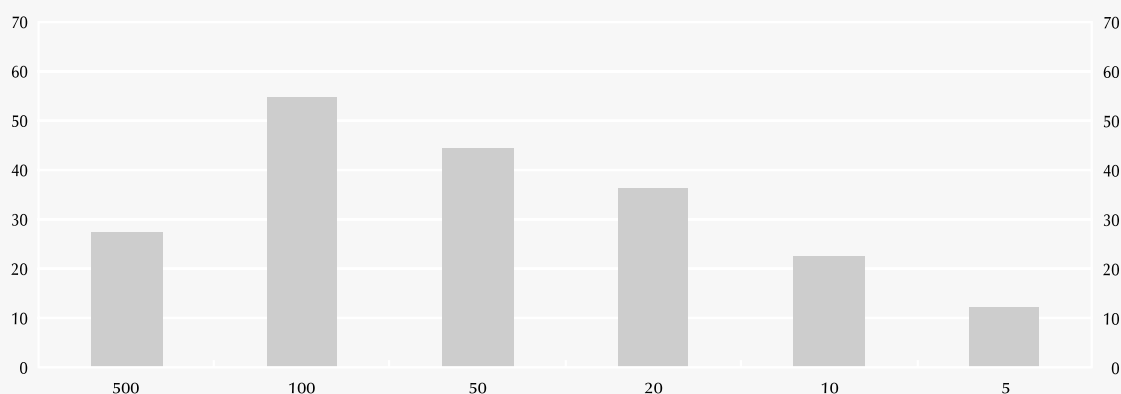
Drachma banknotes (per denomination) withdrawn by 31 October 2002 as a percentage of banknotes in circulation on 31 December 2001



Source: Bank of Greece.

Chart 34

Drachma coins (per denomination) withdrawn by 31 October 2002 as a percentage of coins in circulation on 31 December 2001



Source: Bank of Greece.

notes and coins are delivered to the national analysis centres for banknotes and coins, respectively, for control and verification and for updating the database.

3. Credit expansion

The 12-month growth rate of credit extended by the MFIs to the economy as a whole decelerated

in the first nine months of 2002, falling to 7.1% in September 2002, from 9.3% at the end of 2001. This slowdown was mainly due to the evolution of credit expansion to enterprises and households, while the 12-month growth rate of credit to general government remained negative (see Table XV).

During the period January-September 2002, the outstanding balance of MFI credit to general gov-

Table XV

Total credit expansion in Greece

(Percentage change of balances over same month of previous year)

	December		September 2002
	2000	2001	
1. Total credit expansion	15.3	9.3	7.1
2. Credit expansion to general government ¹	6.1	-4.6	-5.0
3. Credit expansion to business firms and households	27.6	24.8	18.3
3.1 Credit expansion to business firms	24.9	18.7	11.2
3.2 Credit expansion to households	34.8	40.0	34.5

¹ Percentage change in the sum of bank loans to general government and government paper holdings of credit institutions and money market funds.

Source: Bank of Greece.

ernment¹⁶ fell by 1.9%, after having declined by 1.5% in the corresponding period of 2001; thus, its 12-month growth rate stood at -5.0% in September 2002, compared with -4.6% at the end of 2001. This development is connected to the increased holdings of government paper by the non-MFI private sector (January-September 2002: €800 million, January-September 2001: €329 million). Besides, the central government borrowing requirement on a cash basis was only slightly higher in the nine-month period January-September 2002 than in the corresponding 2001 period (January-September 2002: €2,363 million, January-September 2001: €2,252 million).

Bank credit to enterprises and households

The annual growth rate of bank lending to enterprises and households decelerated to 18.3% in September 2002 from 24.8% in December 2001 (see Table XVI). This slowdown took place gradually from the beginning of the year onwards and mainly reflected the limited increase in credit to enterprises. A slowdown was also recorded in credit expansion to households, in particular consumer loans, although these loans continued to increase at high rates. The decline in credit expansion to enterprises was mainly due to the

marked decrease in loans granted by the Agricultural Bank of Greece to the agricultural sector,¹⁷ as well as to the reduction of bank lending to the shipping industry. As far as consumer loans are concerned, it should be noted that the very high growth rates recorded in recent years reflect (i) the gradual convergence of the households' debt-to-income (DTI) ratio towards the levels in other European countries, (ii) the significant fall in interest rates,¹⁸ and (iii) keen competition between banks in the field of consumer credit. The high rates also reflect consumer expectations regarding their financial situation and their ability to fulfil their debt obligations in the future. In any case, the gradual slowdown in the growth rate of consumer loans was expected and is connected with the gradual saturation of the consumer credit market.

As in 2001, the 12-month growth rate of short-term loans during the period under review remained relatively lower than that of long-term loans. Thus, the

¹⁶ MFI financing to general government comprises (i) loans granted by credit institutions, (ii) the sum total of government paper held by credit institutions and money-market funds.

¹⁷ See below.

¹⁸ The interest rate of personal loans dropped from 20.8% in December 1999 to 11.2% in September 2002.

Table XVI

Credit to business firms and households in Greece by branch of economic activity

	Outstanding balances on 30.09.02 (million euro)	Annual percentage changes				
		2001		2002		
		December ¹	Q1 ²	Q2 ²	Q3 ²	September ¹
– Agriculture	3,213	-4.1	-15.1	-17.9	-16.1	-15.9
– Industry ³	13,786	6.7	7.7	7.7	7.6	7.3
– Trade	16,060	25.5	25.2	21.3	16.8	11.1
– Housing	19,504	38.9	39.2	39.8	38.7	36.9
– Consumer credit	9,228	42.5	39.1	34.8	31.1	29.7
– Other	20,872	29.0	26.1	17.8	18.3	20.0
Total	82,663	24.8	23.5	20.4	19.5	18.3

1 Annual percentage change at the end of the month.

2 The quarterly average is derived from the arithmetic annual averages for each month (calculated as the average of the rates at the end of the reference month and the end of the previous month) and is not the average of the rates at the end of each of the quarter's months (see the "Technical Notes" in the *ECB Monthly Bulletin*).

3 Including manufacturing (industry and small-scale manufacturing) and mining.

Source: Bank of Greece.

share of short-term loans in the outstanding balance of bank credit to enterprises and households fell to 54% in September 2002 from 55.5% in December 2001 and 57.5% in December 2000. This reduction reflects both a marked increase in housing loans¹⁹ and competitive pressures that force banks to turn towards longer-term relationships with their corporate customers by offering appropriate loan products and by rationalising the maturities of such loans. Yet, despite its decrease in recent years, the share of short-term lending continues to be more than double the euro area figure, which does not exceed 21%, according to the latest available data (June 2002).

It is worth noting that in 2002 the increase in loans is attributable solely to loans denominated in euro. By contrast, loans in other currencies continued to decrease, resulting in a drop in their share in total lending from 9.9% in December 2001 and 15.6% in December 2000 to 8.1% in September 2002. Thus, the currency composition of Greek banks' loan portfolios is rapidly converging towards that of banks in the other euro area countries, in which the share of non-euro loans in total lending does not exceed 5%. It is obvious

that, after the adoption of the euro and the convergence of Greek bank rates towards the lower interest rates in the euro area, borrowers have no incentive to obtain loans in foreign currencies, which may offer slightly lower interest rates but involve an exposure to foreign exchange risks.

The sectoral breakdown of bank credit to enterprises and households shows that in the period January-September 2002 credit expansion to all sectors decelerated, with the exception of industry and tourism, where it accelerated (see Table XVI and Table 11 of the Statistical Appendix).

In more detail, the annual growth rate of bank credit to industry²⁰ was 7.3% in September 2002, compared with 6.7% at the end of 2001. This development is connected to the course of interest rates on bank loans to enterprises, which continued to converge towards the corresponding average interest rates in the euro area during the

¹⁹ 44.6% of total credit expansion to enterprises and households during the first nine months of 2002 is attributable to the increase in housing loans. This share had been 28.2% in the corresponding 2001 period.

²⁰ Industry comprises manufacturing and mining.

period under review and now stand at historically low levels. It is also noted that industrial firms' fund-raising through the Athens Stock Exchange was extremely limited, because of the conditions prevailing in the Greek stock market (January-September 2002: €12 million, January-September 2001: €291 million).

A marked slowdown was recorded in credit expansion to trade, with its annual rate dropping to 11.1% in September 2002 from 25.5% at the end of 2001. By contrast, credit expansion to tourist enterprises accelerated (September 2002: 28.6%, December 2001: 19.7%). Finally, in the period under review a significant decline was observed in the outstanding balance of credit to agriculture and shipping. In particular, due to the settlement, in 2002, of loans granted to cattle-breeders and, more generally, because of the Agricultural Bank's efforts to proceed with a general restructuring of its portfolio, lending to the agricultural sector fell by €511 million or 13.7% in the period January-September 2002 and its 12-month rate of decline reached 15.9% in September 2002, from 4.1% at end-2001. Over the same period, loans to the shipping sector fell by €82 million or 2% and their 12-month rate of change stood at -2.9% in September 2002, compared with a positive change of 13.5% in December 2001.

Credit expansion to households remained at high levels, despite a minor slowdown. In particular, the 12-month growth rate of total lending to households came to 34.5% in September 2002, down from 40% in December 2001. This development is mainly the result of a marked decline in the annual growth rate of consumer loans (September 2002: 29.7%, December 2001: 42.5%), while housing loans proved more resistant (September 2002: 36.9%, December 2001: 38.9%) and accounted for 73.6% of credit expansion

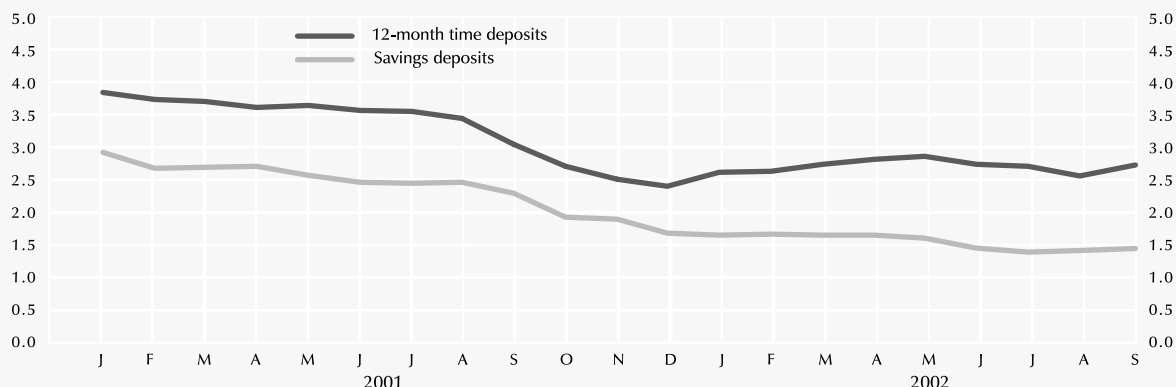
to households in the first nine months of 2002, compared with 65% in the corresponding period of 2001. The sustained growth of housing loans is connected to the relatively sharp rise in real estate prices (see Annex to Chapter IV), and most importantly to keen competition between banks and the resulting low interest rates on such loans. It should be noted in this respect that interest rates on housing loans declined in the January-September 2002 period (e.g. the average interest rate on fixed-rate housing loans with a maturity of over 5 years fell to 5% in September 2002 from 5.4% in December 2001). By contrast, long-term interest rates both in Greece and in the euro area up to July 2002 (and before their reduction in August and September) were significantly increased compared with December 2001.

The growth of consumer loans during the period under review accounts for 15.9% of the total increase in bank lending to enterprises and households, compared with 15.2% in the corresponding 2001 period. In terms of outstanding balances, consumer loans represented 11.2% of total bank lending to enterprises and households in September 2002, against 10.2% in September 2001. This may be considered as a rather small share when compared to the euro area's 17%. Nevertheless, the high growth rates of both consumer and housing loans suggest an upward trend in households' indebtedness and a need to monitor these aggregates closely.

In Greece, the outstanding balance of bank lending to households at the end of September 2002 was 20.6% of GDP, compared with a euro area average of 46.2% at end-June. Based on this comparison, the indebtedness of Greek households cannot be regarded as very high, even though it cannot be ruled out that some of them may have borrowed more than what would be appropriate based on their income and the value of their assets. In order

Chart 35

Bank deposit rates in Greece (January 2001 - September 2002)
(Percentages per annum, monthly averages)



Source: Bank of Greece.

to probe into this issue further, the Bank of Greece has lately assigned to a specialised private company the conduct of a survey that will cover a broad sample of households. The results of this research should be ready for announcement in early 2003. Apart from that, monitoring of household debt will be considerably facilitated once the Credit Bureau run by “Bank Information Systems – Teiresias SA” becomes fully operative. This undertaking is now in progress. For the time being, the system is being tested on a database comprising 20% of total bank customers in the sectors of personal loans and credit cards. Provided that legal issues relating to the protection of personal data are resolved, it is expected that the system will become fully operational by the beginning of 2003.

As far as individual categories of consumer loans are concerned, loans through credit cards continued to grow at a high rate (September 2002: 42.3%, December 2001: 62.7%), due to the strong competition between banks and the preference of both enterprises and consumers for this type of bank credit. Loans granted against supporting documents increased at a very low rate (September 2002: 3.4%, December 2001: 35.1%), while the growth rate of personal loans rose to a much higher level (September 2002: 33.1%,

December 2001: 22.4%). As a result of these developments, the composition of consumer loans has changed, with an increase in the share of both personal loans and loans through credit cards, which, despite their higher interest rates, offer retail customers easier access to bank credit. In September 2002, the breakdown of consumer loans was as follows (the corresponding December 2001 percentages are quoted in parentheses): loans through credit cards 49.3% (47.5%), loans against supporting documents 20.3% (24.9%), personal loans 30.4% (27.6%).

4. Bank interest rates

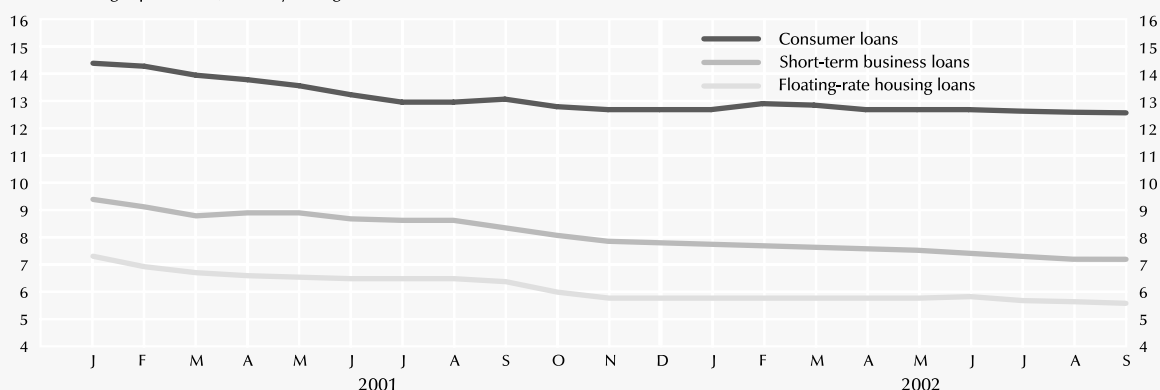
Deposit rates in Greece have followed a generally downward course so far, further converging towards the corresponding rates in the euro area. The average interest rates on overnight and savings deposits were reduced by 0.3 percentage point in the period January-September 2002 and stood at 0.9% and 1.4% respectively in September 2002. A further small decrease was recorded in repo yields.²¹ By contrast, the average interest rate

²¹ Yields on repos with a maturity of one month were 3.2% in September 2002, i.e. down from 3.4% in December 2001.

Chart 36

Bank lending rates in Greece (January 2001 - September 2002)

(Percentages per annum, monthly averages)



Source: Bank of Greece.

on deposits with an agreed maturity of up to one year increased slightly over the same period (by 0.3 percentage point) and came to 2.7% in September (see Chart 35). Given that interest rates in the euro area remained virtually the same in the period January-September 2002, their difference from the corresponding Greek rates has almost been eliminated, especially with respect to types of deposits which are more comparable, such as overnight deposits and deposits with an agreed maturity of up to twelve months. It should be noted that any minor differentials between interest rates across euro area countries are justified by differences in competitive conditions and in the functions of deposit accounts, and, in some cases, by the different tax treatment of deposit interest income.

During January-September 2002, downward trends were also recorded in Greek bank lending rates (see Chart 36), which converged further towards the generally lower interest rates of the euro area. Specifically, the average interest rate on short-term loans to enterprises decreased by 0.6 percentage point during that period and came to 7.2% in September. As a result, the spread between this rate and the corresponding euro area rate shrank to 1.1 percentage points, from 1.5

percentage points at the end of 2001 (see Table XVII and Chart 37). It should be noted, however, that some enterprises with a high credit-standing are financed at lower²² interest rates that are linked to EURIBOR interbank rates. The average interest rate on long-term loans to enterprises decreased slightly both in Greece and in the euro area. Thus, the relevant spread narrowed to 1.9 percentage points in September 2002, from 2 percentage points in December 2001.

Trends in consumer loan interest rates were rather mixed in the period under review. In particular, the interest rate applicable to loans through credit cards increased by 0.5 percentage point (September 2002: 15.9%, December 2001: 15.4%), while the interest rates on loans granted against supporting documents and on personal loans decreased by 0.4 percentage point in the same period and came to 10.5% and 11.2% on average, respectively, in September. The spread between interest rates on personal loans²³ in Greece

²² The share of this particular type of loan in total lending to enterprises is significant; however, detailed information on the related interest rates will only be available towards the end of 2002.

²³ The Greek interest rate on personal loans is the most comparable with the euro area interest rate on consumer loans, which is published in the *Monthly Bulletin* of the ECB.

Table XVII

Lending rates in the euro area and Greece

(Percentages per annum)

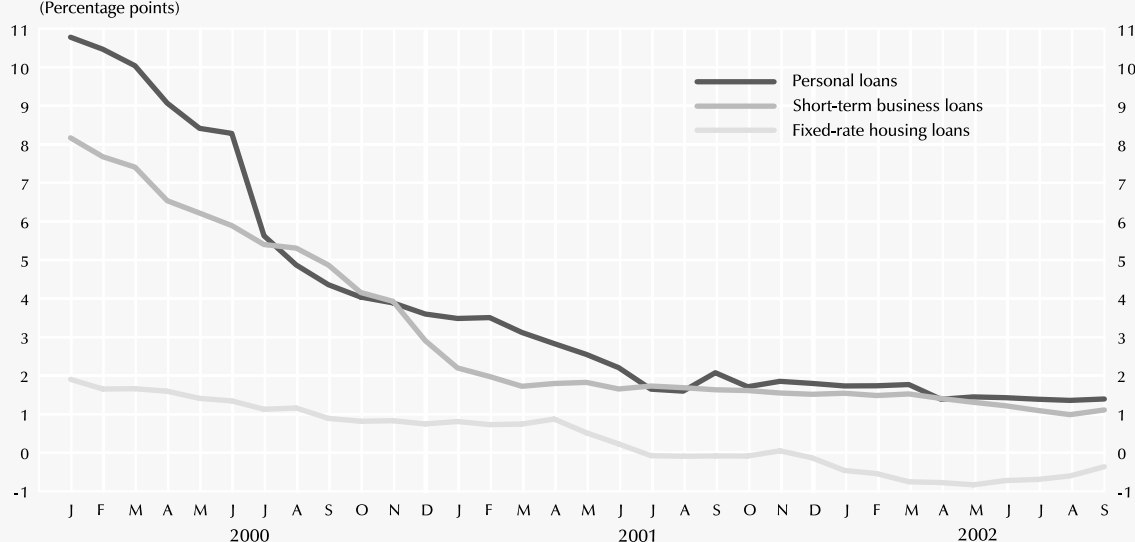
	December 2001	September 2002	Change Sept. 2002/Dec. 2001
Short-term business loans			
Weighted average interest rate in the euro area	6.26	6.09	-0.17
Maximum interest rate in the euro area	8.89	8.89	0.00
Minimum interest rate in the euro area	4.45	4.42	-0.03
Interest rate in Greece	7.79	7.20	-0.59
Fixed-rate housing loans			
Weighted average interest rate in the euro area	5.52	5.37	-0.15
Maximum interest rate in the euro area	6.29	6.04	-0.25
Minimum interest rate in the euro area	4.52	4.44	-0.08
Interest rate in Greece ¹	5.40	5.00	-0.40
Consumer loans (personal loans)			
Weighted average interest rate in the euro area	9.81	9.80	-0.01
Maximum interest rate in the euro area	11.62	11.20	-0.42
Minimum interest rate in the euro area	5.45	5.62	0.17
Interest rate in Greece	11.62	11.20	-0.42

¹ Average interest rate on loans with a maturity of over five years.

Sources: ECB and Bank of Greece.

Chart 37

Bank lending rate differentials between Greece and the euro area (January 2000 - September 2002)



Sources: Bank of Greece and ECB.

and on consumer loans in the euro area was reduced in September 2002 to 1.4 percentage point, from 1.8 percentage points in December 2001, as the interest rates in the euro area

remained on average almost unchanged during this nine-month period.

A decrease was also observed in interest rates on

housing loans. In particular, the interest rate on fixed-rate housing loans with a maturity of over 5 years was reduced by 0.4 percentage point to 5% in September, i.e. it was 0.4 percentage point lower than the corresponding euro area interest rate. The interest rate on floating-rate housing loans decreased less (September 2002: 5.6%, December 2001: 5.8%) over the same period.

The spread between the (weighted) average interest rate on lending and the corresponding deposit rate has been following a downward course in recent years. In particular, it narrowed by approximately 3 percentage points between December 1998 and September 2002. This narrowing is associated with the abolition or cuts of certain taxes and levies,²⁴ but also with the harmonisation (in the second half of 2000) of the minimum reserve ratio of the Bank of Greece with that of the euro area. These adjustments had a significant, direct or indirect, impact on the cost of money. To a large extent, however, the narrowing of the spread came as a result of keener competition between banks, particularly in loans to households. Moreover, the decrease in the spread is connected to the cutdown on banks' operational costs, which, as a percentage of their assets, fell to 2.4% in 2001 from 2.8% in 1997.

5. Capital markets

The bond market

In the period January-October 2002, transactions in the secondary market for Greek government bonds followed a significant upward course. Bond yields, having increased in the first quarter of the year, fell after mid-May 2002, keeping pace with government bond yields in the US and the euro area.

Bond yields increased from early October 2001 until the middle of March 2002, mainly reflecting the shift of investors, both in Greece and abroad, from bond markets to stock markets owing to expectations of economic recovery in the United States and the euro area (see Chart 38). Later, however, this shift was reversed and demand for bonds increased, leading to fluctuations in bond yields until mid-May 2002, without any visible trend, and to a subsequent decline between mid-May and early October 2002, followed by a slight recovery. These developments were initially driven by heightened uncertainty as to business profits and the impact on international stock markets from non-transparent accounting practices applied by some major US enterprises and later by the downward revision of forecasts for economic recovery in the United States and the euro area in 2002 and 2003.

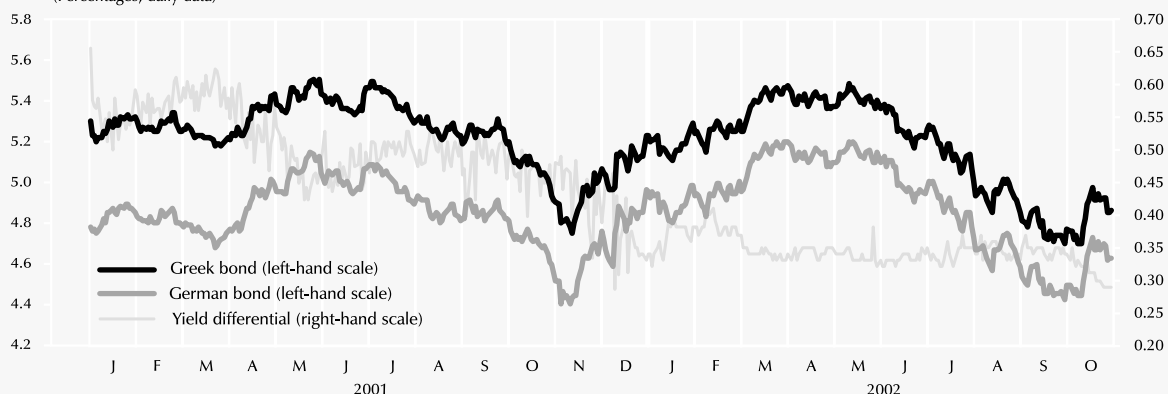
In more detail, the yield of the 10-year Greek government bond was 4.83% at end-October 2002, i.e. 45 basis points lower than at end-December 2001 (5.28%), having fluctuated widely during the period under review, between a trough of 4.62% (1 October) and a peak of 5.60% (15 May) (see Chart 38). The yield differential between the Greek 10-year bond and comparable German bonds fell to 29 basis points by end-October 2002, from 34 basis points at end-December 2001, having recorded limited fluctuations during the period under review.

Yield declines were also recorded in other maturities between end-December 2001 and end-October 2002, being most pronounced for 3-year bonds and relatively limited for 20-year bonds.

²⁴ It should be noted that the Special Tax on Banking Transactions was cut on 1 September 1997 to 3% from 4% and was eventually abolished on 1 January 2001. Moreover, on 1 April 2000 the levy of Law 128/75 was reduced to 0.6% from 1.2%.

Chart 38

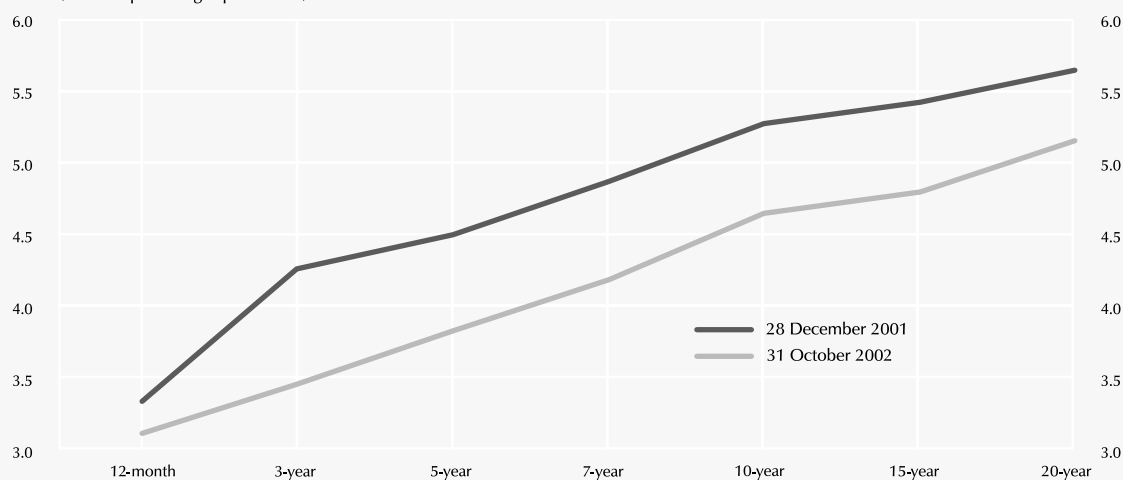
Yields on the 10-year Greek government bond and the comparable German bond
(2 January 2001 - 31 October 2002)
(Percentages, daily data)



Sources: Bank of Greece and Bloomberg.

Chart 39

Greek government paper yield curves
(Yields in percentages per annum)



Source: Bank of Greece.

Because of the aforementioned developments, the positive slope of the government paper yield curve flattened somewhat²⁵ for the maturities from 12 months up to 10 years (see Chart 39). In particular, the spread between the yields of the 10-year bond and the 12-month Treasury bill decreased from 195 basis points at end-December 2001 to 170 basis points at end-October 2002.

The average daily value of transactions conducted

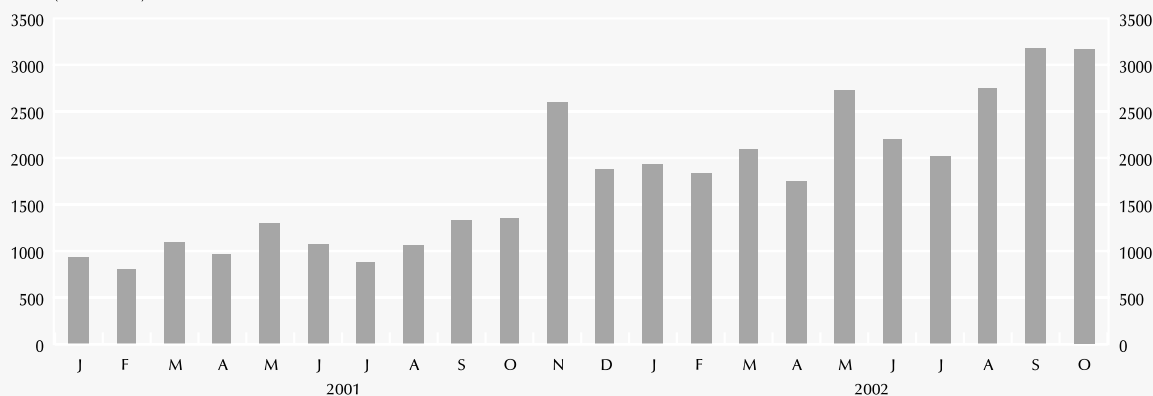
through the Electronic Secondary Securities Market (HDAT) increased to €2.3 billion in the period January-October 2002, from €1.3 billion in 2001 as a whole (see Chart 40), reflecting portfolio shifts to bond markets, which is a global phenomenon, but also, in the specific Greek context, the positive

²⁵ The similar downward shift of the euro area yield curve reflects, to a large extent, the restructuring of investors' portfolios, which involved the substitution of bonds for shares, as well as increased concerns about economic recovery.

Chart 40

Average daily value of transactions in the Electronic Secondary Securities Market (HDAT)
(January 2001 - October 2002)

(Million euro)



Source: Bank of Greece.

effects²⁶ of Greece's entry into the euro area and the upward revision of its credit rating in 2001.

During January-October 2002 the primary market for Greek government bonds was dominated by syndicated bond issues and, to a smaller extent, by new domestic bond issues and reopenings. The funds raised between January and October 2002 totalled €28.2 billion, compared with €23.1 billion in the corresponding 2001 period (see Table XVIII). Treasury bills accounted for 3.8% of total issues, compared with 4.1% in the corresponding 2001 period. In terms of maturity of new issues in the period under review, 3-year and 5-year bond issues accounted for €12.5 billion or 46% of total issuance, 7-year bonds €1.5 billion or 5.7% of total issuance, and the remainder regarded 10-year and 20-year bond issues. This points to a considerable shift, mainly from 7-year bonds to 3-year and 5-year bonds, in line with recent developments in the secondary market for government paper.

Stock market developments

During the 10 months from January to October 2002, the composite share price index of the

Athens Stock Exchange (ASE) followed a downward course, with some fluctuations (see Chart 41). The decline in share prices was steeper between early June and early October 2002, when international stock markets witnessed sharply falling and highly volatile share prices.²⁷ Subsequently, however, and up to the end of October 2002, share prices rebounded more sharply in the foreign stock markets than in the domestic market. Yet, over the 10-month period as a whole, share prices in the ASE were less volatile than share prices in the US and the euro area stock markets. These developments in foreign stock markets were driven, as already mentioned, by the shrinking of business profits in high technology sectors, especially telecommunications,²⁸ and less optimistic prospects for the global economy. Moreover, in the period under review, the Greek stock market was unfavourably affected by a drop in the prof-

²⁶ During the period January-September 2002, capital inflows for the purchase of Greek government bonds increased by 68% relative to the corresponding 2001 period.

²⁷ On 9 October 2002, the Dow Jones EURO STOXX index fell back to April 1997 levels.

²⁸ The drop in the share prices of these firms, especially in the United States but also in the euro area, reflects *inter alia* their high levels of indebtedness combined with the uncertainty as to returns on their investment in UMTS mobile telephony.

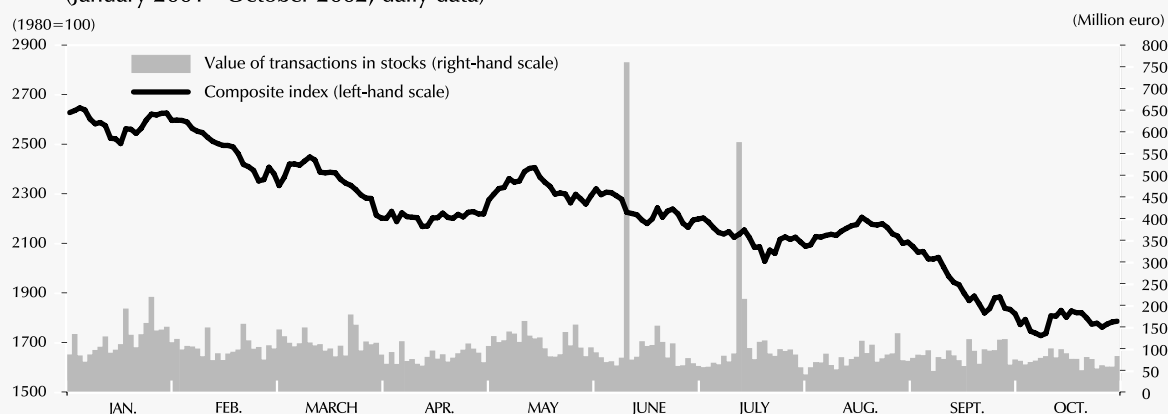
Table XVIII
Greek government paper issuance

Type of security	January - October			
	2001		2002	
	Million euro	Percentage of total	Million euro	Percentage of total
Treasury bills	945	4.1	1,086	3.8
Bonds ¹	22,191	95.9	27,142	96.2
3-year	–	–	5,136	18.9
5-year	5,270	23.7	7,351	27.1
7-year	5,103	23.0	1,541	5.7
10-year	7,470	33.7	7,265	26.8
15-year	607	2.7	–	–
20-year	3,741	16.9	5,849	21.5
Total	23,136	100.0	28,228	100.0

1 By initial maturity.
Source: Bank of Greece.

Chart 41

Athens Stock Exchange: composite share price index and value of transactions
(January 2001 - October 2002, daily data)



Source: Athens Stock Exchange.

itability of most listed firms during the first half of 2002.²⁹ The most pronounced decline in profitability was seen in banks and portfolio investment companies. Notwithstanding that, stock exchange transactions and fund-raising through the stock market stood at very low levels in the period January-October 2002, as compared with the corresponding 2001 period.

Specifically, between end-December 2001 and

end-October 2002, the ASE composite share price index fell by 31.1%. The index peaked at 2,646.4 points on 4 January 2002 and reached a trough (1,727.1 points) on 9 October 2002 (see Chart 41). The drop in the ASE composite share price index was slightly smaller than that of the Dow Jones EURO STOXX index for the euro area

²⁹ In the first half of 2002, the pre-tax earnings of all listed companies shrank by approximately 20%.

Table XIX
Fund-raising through the Athens Stock Exchange

Branches	January - October			
	Number of firms		Funds raised ¹ (million euro)	
	2001	2002*	2001	2002*
Listed firms	16	19	233.3	194.7
Firms listed for the first time	12	12	268.2	73.3
Total	28	31	501.5	268.0
– Banks	1	1	1.5	0.3
– Investment	2	0	12.9	–
– Holding	1	3	9.4	177.5
– Industrial	8	6	290.5	12.2
– Construction	6	0	125.6	–
– Commercial	5	4	28.2	22.0
– Telecommunications	0	2	–	8.0
– Information technology	2	10	17.0	18.4
– Health services	0	1	–	18.8
– Other	3	4	16.4	10.8

¹ Share capital increase through public subscription and private investment. Subscriptions to new capital are entered on the last day of the subscription period.

* Provisional data.

Sources: Athens Stock Exchange and Bank of Greece.

(–31.5%) and bigger than that of the US Standard and Poor's 500 index (–22.8%).

The average daily value of transactions came to €99 million in the period under review, down from €164 million in the corresponding 2001 period.³⁰ Total funds raised through capital increases were limited to €268 million in the 10-month period January-October 2002, compared with €502 million in the same 2001 period (see Chart XIX). These funds were raised by 31 companies (January-October 2001: 28 companies), of which 12 were newly-listed in the stock exchange and accounted for €73 million of the aforementioned amount (January-October 2001: €268 million).

As in 2001, the banking sub-index performed more unfavourably than the general index in the period under review. In particular, share prices, transactions and consequently the market capitalisation of banks with ASE-listed shares both

throughout 2001 and during the January-October 2002 period, fell faster than the respective figures of the stock market as a whole. This development came as a result of a further decline in Greek commercial banks' profitability in the first half of 2002, after the drop it had recorded in the two-year period 2000-2001. Specifically, pre-tax profits of Greek commercial banks with ASE-listed shares shrank by approximately 49% in the first half of 2002 relative to the corresponding 2001 period, compared with reductions of 13.4% and 24.3% for the whole of 2001 and 2000 respectively. The faster decline in commercial banks' profits in the first half of 2002 was due to considerably lower income from financial operations and commission fees. By contrast, net interest income increased at a higher rate than operational costs.³¹

³⁰ The average daily value of transactions fell sharply in October 2002 to €71 million.

³¹ The total assets of Greek commercial banks also increased slightly during the first half of 2002.

Table XX

Mutual funds: number and assets¹

(Asset value in million euro)

Type of mutual fund	December 2001		October 2002		Percentage change in asset value (Oct. 2002/Dec. 2001)	Percentage of total assets	
	Number	Asset value	Number	Asset value		December 2001	October 2002
1. Money-market type	43	9,693	41	9,009	-7.1	36.1	40.3
2. Bond-type	63	5,585	63	4,932	-11.7	20.8	22.1
3. Equity-type	130	5,506	123	3,910	-29.0	20.6	17.5
4. Balanced	36	6,041	35	4,502	-25.5	22.5	20.1
Total	272	26,825	262	22,353	-16.7	100.0	100.0

¹ End of period.

Source: Bank of Greece.

The mutual funds market

Activity in the mutual funds market recorded a further decline during January-October 2002. In more detail, the value of mutual funds' assets decreased by €4.5 billion or 16.7% and came to €22.4 billion at end-October 2002, from €26.8 billion at end-December 2001 (see Table XX). This development is attributed to the reduced number of mutual fund units in circulation and, to a lesser extent, to the drop in their prices. The total number of mutual funds fell to 262 (41 of the money-market type, 63 of the bond type, 123 of the equity type and 35 of the balanced type) at end-October 2002, from 272 (43 of the money-market type, 63 of the bond type, 130 of the equity type and 36 of the balanced type) at end-December 2001.

The drop in the value of mutual funds' total assets was broadly based (see Table XX), being broken down by individual mutual fund types as follows: mutual funds of the equity type: 29% (accounting for about 36% of the drop), the balanced-type: 26%, the bond-type: 12% and the money-market type: 7%.³² This drop in mutual funds' assets during the period under review is attributable to falling share prices in the Greek stock market, the

low yields on other investments held by mutual funds, and increased liquidation of fund units by investors seeking alternative investments. As far as the sub-categories of mutual funds are concerned, foreign equity funds, government bond funds and, to a lesser extent, international funds of the balanced type and the bond type have recorded an increase in sales.

Regarding the composition of mutual funds portfolios at end-October 2002, there was a shift away from ASE-listed shares and synthetic currency swaps towards foreign bonds, mostly floating-rate securities, reflecting both expectations for an increase in their prices and the limited supply of such securities in the domestic market. In particular, the share of foreign bond holdings by mutual funds rose to 15% at end-October 2002 from 8.5% at end-December 2001, while the share of foreign stock holdings remained stable and the share of repo and Greek government bond holdings also increased.

³² The decrease in units in circulation for these fund types was 8%, 25%, 15% and 6% respectively.

VI. Greece's economic outlook and policy orientations

1. Short-term prospects of the Greek economy

The overall performance of the Greek economy has been satisfactory in 2002, as shown by the foregoing analysis. GDP growth, in spite of the adverse external economic environment, remains essentially on a par with the previous six-year annual average. The growth of total employment and the continued decrease in the rate of unemployment are also encouraging. However, salaried employment growth is slowing and the unemployment rate is still amongst the highest in the EU. Furthermore, Greece's persistently high inflation and widening positive inflation differential vis-à-vis the euro area average have *inter alia* had a negative impact on the country's competitiveness and current account deficit. Finally, the debt-to-GDP ratio resumed its downward trend in 2002, after coming to a halt in 2000 and in 2001, but still remains high. As shown by the recent revision of fiscal aggregates, although the general government deficit as a percentage of GDP continued to decline over the last three years, the reduction has nonetheless been rather limited.

Based on the evolution of various indicators over the first ten months of 2002 and the outlook until the year-end, GDP growth remains high and is expected to come to 3.4%,¹ against 4.1% in 2001. This high –in comparison with the average EU performance– growth of economic activity in 2002 is a direct reflection of the rise in private consumer demand and in investment. It is also an indirect reflection of the stronger environment of macroeconomic stability, following euro area entry, the implementation of certain structural reforms, and the substantial drop in interest rates

¹ Average annual GDP growth during the six-year period of real convergence through 2001 was 3.5%.

during the last three years. However, the slowdown in foreign demand growth, especially from the euro area, and the loss, in 2002, of part of the competitiveness gains recorded in previous years (1998-2001) have adversely affected Greece's export performance. As a result and according to available data, exports of goods have decreased, while exports of travel and transport services have either declined or remained stagnant.² Meanwhile, imports of goods (except consumer goods) have also declined. The negative developments in the external economic environment are holding back private business investment, while the growth of manufacturing output and salaried employment has slowed markedly.

With regard to the *activity* outlook in major sectors of the economy over the next few months, it is worth noting that firms' own expectations, as recorded in the latest business surveys for the third quarter and October, indicate an overall positive picture, not totally void however of some negative aspects. More specifically:

- Manufacturing firms have clearly positive production, sales and external demand expectations for the next 3-4 months.
- Construction firms assess their current outlook as positive, stating that the number of months for which they have secured production is on the increase.
- Retail trade businesses consider their prospects to be positive over a 6-month horizon, in spite of a drop in optimism since the second quarter of 2002.
- Finally, other businesses in the services sector³ continue to have positive demand expectations. These expectations are, however, considerably lower than in the first two quarters of the year.

With regard to the employment outlook, employment expectations in the construction sector continue to be positive and have in fact improved, while in the retail trade sector they reverted from negative in the third quarter to strongly positive in October 2002. On the other hand though, employment expectations in the manufacturing and services sectors switched from positive in the first two quarters to negative in the third quarter and October.

Before making any first assessments of the short-term outlook for economic activity in Greece, one must also consider the forecasts or plausible assumptions about external economic environment developments and other facts related to present economic policy.

More specifically, according to the latest estimates and forecasts of the International Monetary Fund (referred to in Chapter II.1),⁴ world GDP growth will accelerate to 3.7% in 2003, from 2.8% in 2002. In the euro area, Greece's main trading partner, GDP growth is expected to amount to 0.7-0.8% in 2002, but then to accelerate to 1.8-2.0% in 2003, thus nearing the potential GDP growth rate (roughly 2.5%).⁵ It should be stressed that these forecasts contain a high degree of uncertainty, involving in particular the direction and extent of repercussions from (a) geopolitical tensions in the Middle East, (b) world stock market developments and (c) the evolution of the US economy.

² For details on the comparability issues that arose in 2002 with the cash changeover, on balance of payment data regarding travel services, and on information availability with regard to tourist arrivals and overnight stays, see Chapter IV.6.

³ The surveys do not include banks.

⁴ IMF, *World Economic Outlook*, September 2002.

⁵ The European Commission (*Economic Forecasts Autumn 2002*) anticipates a GDP increase of 0.8% in 2002 and 1.8% in 2003 (see Chapter III.1). The IMF, after projecting increases of 0.9% for 2002 and 2.3% for 2003 at end-September (op. cit.), revised its projections downwards at end-October to 0.7% for 2002 and 2.0% for 2003 (Public Information Notice 02/122, 29 October 2002). See also ECB, *Monthly Bulletin*, November 2002.

The factors associated with present economic policy appear at first glance to favour economic activity until end-2003. According to the government budget for 2003,⁶ the rate of increase in revenue from personal income tax is expected to slow down (as a result of announced measures to reduce the tax burden⁷), thus strengthening domestic demand. Meanwhile, the rise in Public Investment Budget (PIB) expenditure is expected to accelerate significantly. On the other hand, the increase in ordinary budget primary expenditure is forecast to slow down.⁸ This could contribute to fiscal stabilisation and, consequently, help enhance the climate of confidence. Finally, real interest rates remain at a historically low level.

Based on the above, it can first be concluded that Greek economic growth will pick up in 2003, provided that the forecasts for an improved external environment prove to be correct.⁹

The annual rate of inflation (as measured by the CPI) accelerated slightly in October to 3.7% (from 3.5% in September) and is forecast to remain at a similar level through November, mainly due to the relatively high annual rates of fuel price increases during these two months (as a result of the sharp price decreases registered during the corresponding months of 2001). However, the annual rate of inflation is expected to fall below 3.5% in December, considering that the prices of fresh fruit and vegetables should normally decrease considerably on an annual basis (that is, compared with the exceptionally high levels recorded in December 2001). The *average annual* rate of inflation for all of 2002 is therefore expected to amount to 3.6%, against 3.4% in 2001.

It is estimated that this small rise in average annual inflation in 2002 — as detailed in Chapter IV.2 — is in part attributable to extraordinary or exogenous factors, such as the rise in fuel prices over the year,

the high prices of fresh fruit and vegetables as a result of the harsh weather conditions in December 2001 and January 2002, and the upward price rounding and increases in prices that took place on the occasion or under the pretext of the cash changeover. There have, however, been other contributing factors, mainly the increase in profit margins in certain sectors of economic activity that particularly affect consumer prices. All in all, the adverse impact of these factors slightly outweighs the favourable impact from the evolution of import prices and the appreciation of the euro, and — to a lesser extent — from the decrease in telecommunication service prices, as competition in this sector intensified. The rate of increase in unit labour costs in the *whole economy* is expected to be higher in 2002 (3.5%, 2001: 2.8%), but it is estimated that it has not accelerated in the *business sector* (2.7% in 2002, compared with 3.2% in 2001). In any case, not only does the rate of increase in unit labour costs remain higher than the level consistent with the maintenance of price stability, but it is also higher than the euro area average (see Chapter IV.3, for relevant comparative data). Thus, unit labour cost growth continues to be one of the main reasons for Greece's persistently high rate of inflation, for its upward inflation deviation from the

⁶ See the Introductory Report on the 2003 Budget.

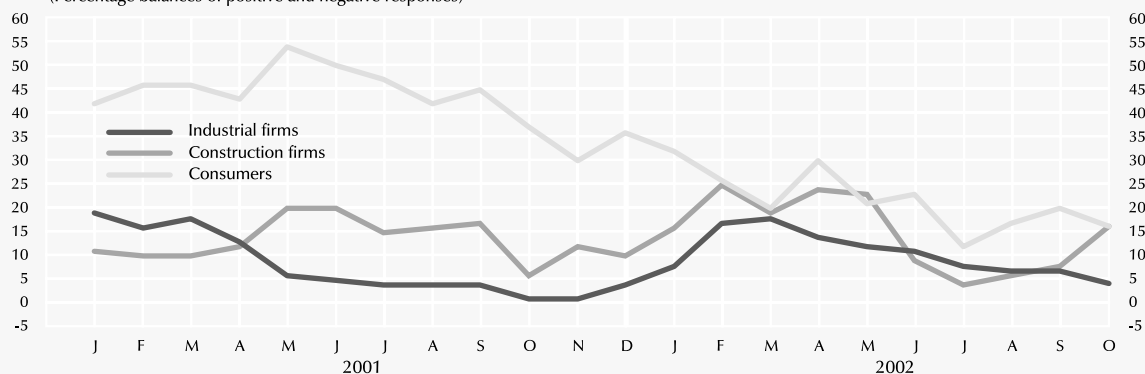
⁷ Revenue from personal income tax is expected to increase by 5.2% in 2003 (down from +7.9% in 2002), while nominal GDP is forecast to rise by 7.0% (+7.1% in 2002). Nevertheless, total net revenue in the ordinary budget is expected to increase by 5.1% (up from +3.9% in 2002).

⁸ According to the government budget, PIB total expenditure will increase by 12.9% in 2003 (compared with +0.7% in 2002), while PIB expenditure other than that related to equity injections to public utilities and other public enterprises will increase by 17.6% in 2003 (2002: +11.4%). PIB expenditure for equity injections to the above entities will decrease by 6.3% in 2003 (compared with a drop of 27.5% in 2002). Ordinary budget primary expenditure will rise by 6.0% in 2003 (2002: +8.4%).

⁹ The European Commission (*Economic Forecasts Autumn 2002*) forecasts an acceleration in GDP growth from 3.5% in 2002 to 3.9% in 2003, while the OECD (21 November 2002) anticipates an acceleration from 3.6% to 3.9%. The Greek Ministry of Economy and Finance, in its Introductory Report on the 2003 Budget, projects that GDP growth will remain stable at 3.8% (as in 2002). Finally, the IMF (*World Economic Outlook*, September 2002) anticipates a slowdown from 3.7% to 3.2%.

Chart 42

Inflationary expectations¹ of consumers and business firms (January 2001 - October 2002) (Percentage balances of positive and negative responses)



¹ Business firms' responses concern the prospect of price increases, in the next 3-4 months, for the products they produce. Consumers' responses concern the prospect of a faster increase in consumer prices over the next 12 months. Data for consumers are seasonally adjusted.

Sources: IOBE and European Commission, *European Economy, Supplement B*.

euro area average and, consequently, for the worsening of its economy's competitiveness.

The short-term outlook points to a decrease in inflation, based on the estimates and forecasts of firms and consumers. Indeed, according to the latest business surveys conducted by the Foundation for Economic and Industrial Research (IOBE) in the third quarter and in October 2002, manufacturing and construction firms, as well as firms in the services sector (apart from retail trade and

banks) anticipate that the prices of their goods or services will continue to increase in the next 3-4 months, albeit at a slower pace (when compared with corresponding forecasts in the first two quarters – see Chart 42). Consumer forecasts in the third quarter and October regarding inflation developments over the next twelve months (as recorded in a survey commissioned by the European Commission – see also Box 1) are equally encouraging (compared with the respective figures for the first two quarters).

BOX 1

Consumers' inflation perceptions and expectations

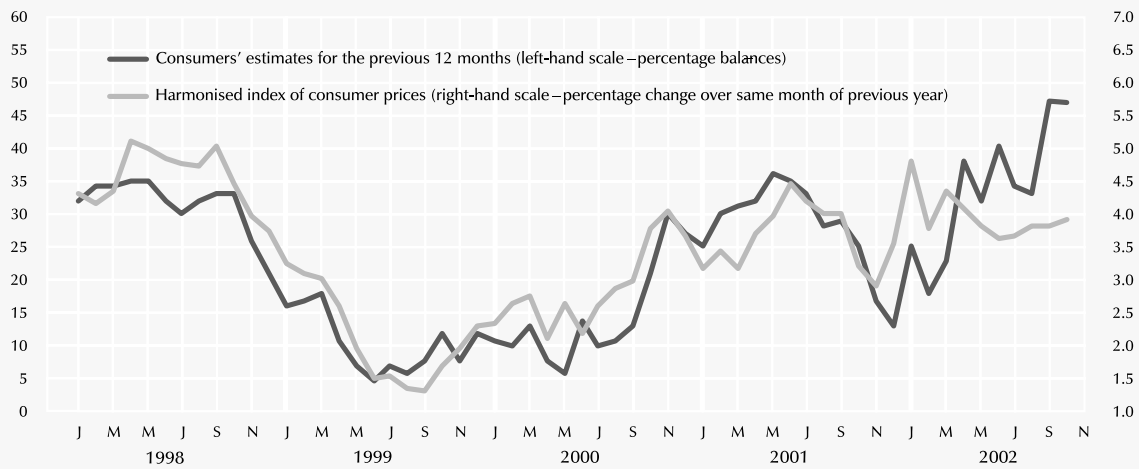
The monthly consumer survey conducted by the European Commission does not only record consumers' inflation expectations over the next twelve months, but also their perceptions of inflationary developments during the previous twelve-month period (see box chart). Two conclusions can be drawn:

– (a) From April through October 2002 (and in contrast to previous months), consumers in Greece – as implied by their perceptions – had the impression that inflation was in fact higher than that recorded by the HICP. These high levels of perceived inflation, also

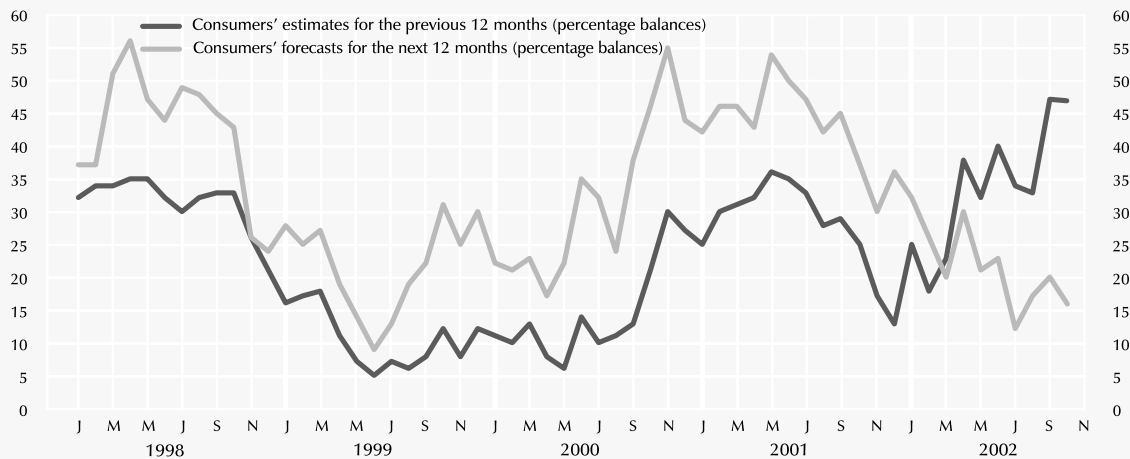
recorded in the euro area as a whole,¹ are mainly associated with the above-average price increases of certain services and goods that are frequently purchased by consumers, but, because of their small value, have a limited weight in the total consumption expenditure. These increases took place either on the occasion or under the pretext of the euro changeover. The gap between consumers' perceptions and actual inflation based on the HICP or the CPI is not due to index →

¹ See ECB, *Monthly Bulletin*, October 2002, Box 2.

Consumers' inflationary estimates (perceived inflation) and forecasts (January 1998 - October 2002)
 A. Harmonised index of consumer prices and consumers' inflationary estimates¹



B. Consumers' inflationary estimates and forecasts¹



¹ Consumers' responses concern inflation rate changes in the previous or the next 12 months. These responses provide qualitative information on the direction of these changes.

Source: European Commission, *Business and Consumer Survey Results*.

→ inaccuracies, but to the fact that consumers tend not to take sufficiently into account that the prices of other goods and services – that are purchased less frequently, but weigh more in total expenditure – have increased only slightly, remained unchanged or even decreased.

– (b) From April through October, consumers' perceptions of inflationary developments during the previous twelve months were steadily higher than their inflation expectations for the next twelve-month period. Meanwhile, perceptions increased, while expectations declined, suggesting that during the last six months consumers believe the rise in inflation to be temporary.

– (c) Finally, as evidenced by a comparison of consumers' expectations of inflationary developments over the next twelve months with the annual rate of HICP inflation actually recorded twelve months later, consumers have a very poor forecasting ability. This is not surprising, considering how difficult it is to accurately predict the inflationary impact of exogenous factors, such as fuel price developments or weather conditions. Comparing consumers' expectations with the current annual rate of inflation, however, reveals that these expectations are decisively influenced by current – or recent – developments.

The impact of the cash changeover on the annual rate of inflation (due to price rounding) is expected to wear off, mainly after the first quarter of 2003, thus helping inflation to decelerate in upcoming months. Furthermore, the government has announced¹⁰ its intention to contain public utility rate increases in 2003, mainly by keeping their operating expenses in check. Another significant development is that uncertainty about private sector wages and labour cost developments in 2003 has been reduced, since increases in contractual earnings have, in most cases, already been determined by the two-year collective labour agreements (2002-2003) signed in 2002. According to these agreements, the corrective pay increase to be granted as of 1 January 2003 will be small;¹¹ this will contribute to a slight deceleration in the average annual rate of increase in contractual earnings in the private sector in 2003. However, as the beneficial impact (roughly, half a percentage point) from the *non-wage* labour cost decreases (arising from the abolition as of 1 January 2002 of the stamp duties paid by firms) will have worn off by end-2002, the annual rate of increase in unit labour costs may *not* decelerate in the business sector in 2003. The central government wage bill (excluding pensions) is nevertheless expected, according to budget figures, to increase less in 2003 than in 2002 (that is, by 5.9% against 9.6%),¹² while a new pay-scale for civil servants will be introduced in January 2004.¹³ Finally, other recent measures¹⁴ are expected to contribute to the deceleration of inflation. These measures include: further familiarising consumers with the new scale of values in terms of the euro,¹⁵ increasing price transparency and consumer awareness, and intensifying controls for overcharging and speculative behaviour.

2. Economic policy challenges and orientations

Greece saw its rate of inflation decelerate impressively during the 1990s and the climate of monetary stability was decisively strengthened with the adoption of the euro and the implementation of the single monetary policy as of 1 January 2001. However, for reasons already discussed, not only has Greek inflation remained above the 3% level for the third consecutive year, but its positive differential from the euro area average has also widened in the last two years. Furthermore, single monetary policy is now formulated by the Eurosystem exclusively on the basis of economic conditions at the euro area level (and not in individual countries) and country-specific monetary and nominal exchange rate policies are no longer an option as a means of maintaining or strengthening competitiveness. Thus, fiscal policy, the wage bargaining behaviour of social partners, the pricing behaviour of firms, and the structural reforms play an even greater part in attaining and maintaining price stability and *in extenso* in safeguarding and improving competitiveness. In any event, priority must be given to the

10 Announcements of the Minister of Economy and Finance, 31 October 2002. A relevant circular was made public on 14 November 2002.

11 Based on projections for an average annual rate of inflation of 3.6% in 2002, the corrective increase for minimum wage earners will amount to 0.3%. However, the corrective increase for contractual earnings at a branch level, which increased slightly more in 2002 than minimum wages did, is expected to be smaller (only around 0.1%).

12 The central government expenditure for salaries and pensions will increase by 5.6% in 2003, compared with 8.7% in 2002.

13 As stated in a meeting of the Minister of Economy and Finance with the Confederation of Civil Servants (ADEDY) on 22 October 2002. The study for the new pay-scale should be completed by June 2003.

14 See relevant announcements of the Minister of Economy and Finance and of the Minister of Development, 18 September and 24 September 2002.

15 Efforts are being made to have price format displays changed, so that cents are displayed separately, while care has already been taken to increase the number of 5 and 10 euro banknotes in circulation. Further awareness campaigns about the value of the euro are also being conducted.

convergence of Greek inflation on the euro area average. Of course, as pointed out in Chapter IV.3, it is to be expected – and it is in fact acceptable – that an economy like Greece’s, which has a relatively high growth rate and is in a process of real economic convergence, should have somewhat higher inflation than other, more advanced economies, so long as this small inflation differential stems from the price developments of *non-tradeable* goods and services, which do not directly affect competitiveness, and not from the price developments of *tradeable* ones.

As mentioned above, private sector wage increases have already been largely determined until end-2003 in the collective two-year branch and occupational labour agreements signed in 2002. However, in branches where agreements have not yet been signed for 2003, as well as at a company level, the social partners must be aware that their share of responsibility in maintaining and improving the competitiveness of the Greek economy has increased, now that exchange rate policy is no longer conducted at the national level and considering that increased competitiveness is in turn a prerequisite for maintaining and further increasing present levels of employment. Therefore, during wage negotiations, the social partners must take into consideration that wage purchasing power has risen steadily in recent years,¹⁶ take into account productivity developments in Greece as well as wage developments in other euro area countries, and aim for agreements that will help eliminate the positive differential of Greece’s inflation rate from the euro area average. The pricing policy of firms must also work in the same direction. It is of utmost importance that the inflation differential as regards Greek *tradeable* goods and services (primarily exportables, potential import substitutes, and tourist services) vis-à-vis the corresponding rates of Greece’s trading partners and competitors be eliminated.

These remarks obviously also hold, *mutatis mutandis*, for civil servant wage demands and the central government’s wage policy, which should signal the desirable general direction of overall wage developments in the rest of the economy – both through initial announcements and the actual implementation in the course of the year. It should be pointed out that, although increases in civil servant earnings do not directly affect production costs, they lead to increases in the government deficit and in the tax burden on households and firms. Therefore, they ultimately affect both inflation and competitiveness. Evidently, the central government’s wage policy should focus not only on macroeconomic goals but also on increasing the efficiency of public administration, by linking wages to performance and output and by making sure that competitive wage levels will help attract highly qualified human resources.

With regard to fiscal policy, there has been an overall improvement in the general government balance in recent years, although progress has

¹⁶ The purchasing power of average pre-tax earnings in the whole economy, as well as of the net income of an average wage-earner have increased continuously since 1994 (see Bank of Greece, *Annual Report 1999*, Athens, 2000, Box IV.3, as well as Table IV, Chapter IV hereof). In view of a study (“Low-wage workers and the ‘working poor’”, 17 September 2002) conducted by the Institute of Labour (INE) of the Greek General Confederation of Labour (GSEE) – Confederation of Civil Servants (ADEDY) and the European Industrial Relations Observatory (EIRO), it should be pointed out that this finding holds for minimum wages as well. Specifically, in 2001, real minimum wages remained stable (or registered a very small real decrease, if their nominal increase is deflated – as in the study – by the HICP and not the national CPI). This was the result of the two-year National General Collective Labour Agreement (2000-2001) and must be weighed against the fact – which the social partners took into consideration during negotiations – that in the year 2000 take-home pay of minimum wage workers had in fact increased 8% beyond what was provided for in the *National General Collective Labour Agreement*. This was the result of a provision (Article 14 of Law 2837/2000) that the State would assume workers’ social security contributions towards their main pension (equal to 6.67% of gross minimum earnings). Thus, the stability (or small decrease) of the purchasing power of minimum wages in 2001 followed a real-term increase of roughly 9% in *net* earnings in 2000 (1% from the real-term increase in *gross* earnings and 8% from the decrease in workers’ social security contributions).

been slower than during the period of nominal convergence leading up to Greece's euro area entry. As shown by the recent revisions of basic fiscal aggregates, the deficit reduction amounts to 0.8% of GDP over the 2000-2002 period, instead of the initially forecast 2.3%. The same applies to the general government primary surplus as a percentage of GDP, which, though substantial (5.2% in 2000, 5.1% in 2001 and 4.4% in 2002), was nonetheless smaller than initially estimated.¹⁷ Moreover, the debt-to-GDP ratio resumed its downward trend in 2002, after coming to a halt in 2000 and in 2001, but still remains high (105.3% in 2002). Precisely because of the key role that fiscal policy plays in maintaining price stability, the Bank of Greece believes that efforts should be intensified to complete fiscal consolidation and achieve greater primary surpluses. This would:

- (a) support and strengthen the climate of macroeconomic stability and address inflationary pressures more effectively,
- (b) speed up the reduction of the general government debt, one of the highest in the euro area, so that it can be lowered within a reasonable time span to the 60% level stipulated in the Treaty on European Union,
- (c) widen the margins for fiscal fine-tuning for the purpose of facing up to external shocks and conducting an anti-cyclical fiscal policy,
- (d) help finance public expenditure on social security, which is expected to rise in the medium and long term, owing to the ageing of the population (see also Box 2).

The higher primary surpluses needed to safeguard fiscal stability and speed up fiscal consolidation, but which are also prerequisites of price stability,

should mainly be achieved by containing the increase in primary public expenditure, completing the tax reform (by widening the tax base and attaining greater efficiency in curbing tax evasion) and carrying out government plans to change the system for evaluating, setting priorities for, and controlling the efficiency of, primary public expenditure.¹⁸ Furthermore, the acceleration of the privatisation process should increase government revenue and reduce outlays for subsidies.¹⁹ In addition, the government's effort to improve the efficiency of, and further modernise, public enterprises should help these enterprises contain operating costs and unit labour costs and, consequently, keep their price increases in check.²⁰ Of particular importance, meanwhile, is the completion of the social security system reform, examined in detail in Box 2.

One of the main conclusions that can be drawn from the examination of this reform is that significant steps have been made in the right direction in the last few years, especially with the recently passed law. However, it is still necessary (i) to further enhance the social security system's ability to meet its obligations with its own resources (i.e. employer and employee contributions, and

¹⁷ Initial forecasts were for 6.1%, 6.3% and 5.9% respectively.

¹⁸ Some elements of the tax reform have been incorporated in Law 2992/2002 ("Measures to strengthen the capital market and to promote entrepreneurship") and in the draft law submitted to Parliament in early November ("Simplifications of, and improvements to, income and capital taxation"). Furthermore, as stated in the Introductory Report on the Budget (chapter 4.2), the Ministry of Economy and Finance intends to develop a new system for drawing up and implementing the budget. This task has been assigned to a working group assisted by the UK Ministry of Finance. A relevant draft law should be submitted to Parliament in the near future.

¹⁹ Privatisation revenue amounted to €2,479 million in the first three quarters of 2002 for the government budget, the Public Portfolio Management Company (DEKA SA) and the agencies of the broader public sector. Meanwhile, Law 3049/2002 ("Privatisation of public enterprises") was passed to speed up the implementation of the privatisation programme.

²⁰ A relevant, detailed circular of the Ministry of Economy and Finance, addressed to the managements of public enterprises, was made public on 14 November 2002.

income from its assets), (ii) to secure the necessary funds for the participation of the State – as provided for by law – in the financing of pension expenditure (more so, in view of the increased financing needs associated with the ageing of the population) and, (iii) to secure resources for the tripartite funding of the social security system with the smallest possible burden to production and employment. This will require: further changes in the internal parameters of the social security system and efforts to reduce contribution evasion, a further development of the system's funded-scheme characteristics, and satisfactory macroeconomic performance in terms of faster growth and higher employment rates.

The previous conclusion also underlines the importance of structural reforms aimed at promoting healthy competition and increasing the flexibility of the labour, product and capital markets, as well as at improving the efficiency of public administration, with a view, *inter alia*, to attracting foreign direct investment.²¹ Structural reforms

and foreign investment strengthen the economy's resilience to external shocks and, more generally, improve competitiveness and ensure higher productivity, employment and GDP growth rates. This can help reduce unemployment and speed up real convergence, i.e. the convergence of real incomes and of the standard of living towards the EU average.

The structural weaknesses of the Greek economy that need to be addressed by the structural reform policy are reflected in the level of the public debt and current account deficit ratios to GDP, and in the high rate of unemployment. In addition, productivity levels are below the EU average (see Box 2). These weaknesses are also reflected in:

²¹ Based on the "Inward Foreign Direct Investment Performance Index" compiled by the United Nations Conference on Trade and Development (UNCTAD) and published in the *World Investment Report 2002*, Greece's share in inward foreign direct investment worldwide from 1998 to 2000 was just 1/10th of its share in world GDP. Based on this performance criterion, Greece ranked 125th of a total of 140 countries and last of the 28 countries that are either EU members or accession candidates.

BOX 2

Social security reform

Greece's social security system has been facing serious difficulties since the mid 1980s. The State settled the liquidity problems of various social security funds directly, and thereafter enacted significant legislation (Laws 1902/1990 and 2084/1992) to enhance the viability of the social security system. However, some of these arrangements only applied to new labour market entrants (i.e. those who first entered the labour force on 1 January 1993 or later), thus creating two very distinct categories of insured persons, with different pension entitlements. Additional steps towards social security system reform were taken in the following years: the Pensioners' Social Solidarity Supplement (EKAS) was introduced in 1996, while in 1998 the operating framework of the Farmers' Insurance Fund (OGA) was

radically transformed. Social security coverage and contribution payment was extended to a large number of economic migrants. In 1999, all of the funds for the self-employed were merged into a single fund, and in 2001 the administrative modernisation of the Social Insurance Fund (IKA) was launched (Law 2972/2001). The enactment of *Law 3029/2002 ("Reform of the social security system")* in early July 2002 was another decisive step in the right direction.

The objective of this new law was to further improve the social security system and ensure its financial soundness. This goal is served through the regular financing of the system from the government budget on an annual basis, organisational changes, parametric →

→ reforms and other measures. The law specifically provides for:

– (a) Payment of central government outstanding dues to the Social Security Fund (IKA), totalling €3,185 million.¹

– (b) The abolition of the State's contribution (10% of workers' earnings) previously in effect under the tripartite financing scheme introduced by Law 2084/1992, and its replacement, for the 2003-2032 period, by an annual payment from the ordinary budget to IKA averaging 1% of GDP. These annual payments should allow IKA to build up its reserves, since they *more than meet* the Fund's needs until 2015. These reserves could thus serve to finance the Fund's *increasing* needs from 2020 onwards.

– (c) Parametric changes, such as: (i) the *reduction* in the replacement rate (for main pensions) from 80% to 70% for "older" labour market entrants (first insured before 1 January 1993), coupled with its increase from 60% to 70% for new labour market entrants (first insured from 1 January 1993 onwards), thus equalising the replacement rate at 70% for all, (ii) calculation of pension levels on the basis of the average monthly salary during the 5 best of the last 10 years of remunerated employment (and not on the basis of the last pre-retirement salary), (iii) the gradual raise in the retirement age until 2007 (already provided for in Law 2084/1992).

– (d) the incorporation, by January 2008, of most private sector main pension funds into a single fund, known as the Social Insurance Fund – Employees' Single Insurance Fund (IKA-ETAM), and the gradual harmonisation of their respective provisions by 2017.

– (e) a new framework concerning funds' asset utilisation.

These provisions should indeed strengthen the financial soundness of IKA-ETAM considerably by 2032.

The new law retains the *pay-as-you-go* nature of the Greek pension system's first pillar, i.e. main pensions. The law's provisions outline the changes in the system's organisational structure and quantify the State's contribution to its funding.²

However, *there is still much to be done* on certain key issues, which, as widely accepted, need to be handled correctly to help cope with the population ageing problem. These issues involve developing the second and, more importantly, the third pillar of the social security system. Second-pillar pensions, which depend on the employment relationship, are *exclusively employee- and employer-funded* (and not funded by society as a whole). The third pillar consists of individual savings options with insurance companies, e.g. customised insurance plans or *funded* individual pension accounts. These options are covered today by legislation on insurance companies and are affected by tax provisions on savings. *A major advantage of the new law is that it sets up an institutional framework for the second pillar. On the contrary, though, it does not include the necessary specific provisions and incentives for the development of the third pillar.* With regard to the second pillar, the new law provides for:

– first (Article 6), the separation of existing supplementary funds³ from main pension funds, and, in order to avoid overfragmentation, the unification of similar (at branch level) supplementary pension funds or their incorporation into the Employees' Single Supplementary Insurance Fund (ETEAM) that will supplant IKA-TEAM.⁴ →

¹ These dues are to be paid up in three annual instalments, the first of which already took place in June 2002 with the granting to IKA of Greek government bonds of a value of €1,454 million. Confirmed IKA liabilities towards the Greek State totalling €4.7 billion were also written off in the same arrangement.

² Under Law 2084/1992, the State's contribution was calculated as a *percentage of workers' earnings* and therefore increased or decreased in line with employee and employer contributions. The new approach (under Law 2084/1992) is considered financially sounder, in the sense that it enables the building-up of reserves and the offsetting of possible decreases in employee and employer contributions during specific periods or years. See the report recently submitted to the European Commission by the Ministry of Economy and Finance and the Ministry of Labour and Social Security (*The Greek Report on Pension Strategy*, Athens, September 2002). The entire report is available on the website http://europa.eu.int/commercial/employment_social/soc-prot/pensions/el_pensionreport_el.pdf.

³ Because of their characteristics, Greece's existing supplementary funds are considered an intermediate category between the first and the second pillar. See *The Greek Report on Pension Strategy*, op. cit., Annex II, p.7.

⁴ As declared by the relevant Ministers on 14 November 2002, a presidential decree on supplementary fund unifications, provided for in Article 6, para. 17, of the said law, will be issued in 2003.

→ — second (Article 7), the establishment, on a voluntary basis, of occupational funds (by branch or business firm) that will operate exclusively on a funded basis and observe strictly the contribution/benefit relationship. The operation of these funds will be controlled by the newly established (Article 9) National Actuarial Authority. It should be stressed that, in an exclusively pay-as-you-go system, the expenditure for today's pensioners is covered by the contributions of the currently employed (and, in the same line, tomorrow's pensions expenditure will be covered by tomorrow workers' contributions). On the contrary, in a funded system, each generation of workers contributes part of the expenditure for its own pensions through savings. These savings must be invested in the real sector of the economy in order to ensure their relatively high yield.⁵

Developing the second and third pillars will take time, but this and other measures are deemed essential to the support of the social security system.⁶ Indeed, given the impending — according to all estimates — population ageing problem, financing pension expenditure through a fully pay-as-you-go scheme would require parametric changes, both *unfeasible and undesirable (unacceptable)* from an economic and social standpoint (such as a sharp increase in social security contributions or a sharp reduction in the replacement rate or a sharp increase in the minimum retirement age). Alternatively, the expenditure could be financed by “bypassing” the system and supplementing existing resources through heavy borrowing. This, however, would also be *undesirable*, because of the disastrous repercussions it would have on fiscal and overall macroeconomic stability. In addition, according to certain estimates, the improvement in key demographic and macroeconomic aggregates could strengthen the financing of pension expenditure through the system's “own funds” (see below), but this strengthening would *not be sufficient* enough to address the problem in full. Finally, the changeover to a fully-funded scheme would obviously be both *unfeasible*, as the time horizon is too short to accumulate the funds needed to finance the total annual pension expenditure, and *inadvisable*, since the system's entire dependence on capital market developments would not ensure adequate risk diversification.

By contrast, it is estimated that developing pillars with

funded-scheme characteristics and hence *creating a mixed system* could help cover pension expenditure, particularly if combined with *acceptable* parametric — and organisational — changes. This would preclude the need for an increase in compulsory contributions (especially for first pillar pensions) and possibly even allow their reduction. This is precisely why the development of funded-scheme characteristics is seen as a way to reduce the current labour and product market distortions caused by the high level of contributions paid under a pay-as-you-go system, and to avert further distortions in the future, if contribution increases were to become unavoidable. Furthermore, the reduction in market distortions could speed up economic growth and therefore help resolve the social security issue through this channel as well, as detailed below. Apart from developing the third pillar, efforts should also be intensified to go beyond the current provisions of Law 3029/2002 and merge the still too numerous social security funds even further. Finally, considering that the provisions of the new law do not apply to all categories of insured persons, social security reform needs to be extended so that it applies to all workers.

Before going into details about the pension system's macroeconomic parameters, let us examine the results of long-term trend projections for *total* and *state* expenditure for pensions (as a percentage of GDP). According to initial government projections (April 2001),⁷ state expenditure for pensions⁸ should increase from →

⁵ Axel Börsch-Supan and Platon Tinios, “The Greek Pension System: Strategic Framework for Reform” (Units VI-VII) in R. Bryant, N. Garganas and G. Tavlas (editors) *Greece's Economic Performance and Prospects*, Bank of Greece and the Brookings Institution, Athens, 2001.

⁶ See Börsch-Supan and Tinios, *op. cit.*, for a detailed presentation of the arguments discussed below.

⁷ These projections were drawn from the report submitted by the Greek government to the EU Economic Policy Committee in April 2001 (“Country Fiche on Pension Projections – Greece”), as well as from a report commissioned at roughly the same time by the Greek government to a team of British experts (Ministry of Labour and Social Security, *Actuarial Report on the Greek social security system – Report of the Government Actuary Department UK*, 19 April 2001). See also: European Commission, Economic Policy Committee, *Budgetary Challenges Posed by Ageing Populations*, EPC/ECFIN/655/01, Brussels, 24 October 2001.

⁸ This item has two components: (a) with regard to the retirement system for *non-civil servants*, the difference between expenditure (for pension payments and operating expenses) and revenue (from employee and employer contributions, and yields on assets), and (b) the difference between civil servant pension expenditure and the revenue from civil servant contributions.

→ 4.8% in 2000 to 16.8% of GDP in 2050, with total pension expenditure increasing over the same period from 12.6%⁹ to 24.8% of GDP. According to the latest government projections,¹⁰ the increase in state expenditure for pensions has been revised downwards to 15.5% of GDP in 2050, with total pension expenditure also increasing less (to 22.6% of GDP in 2050). These projections were revised downward to reflect: (a) the more favourable demographic data recently obtained from the 2001 census,¹¹ (b) estimates and assumptions of a faster decrease in rural population (and thus of a larger shift of insured individuals from OGA to IKA-ETAM), (c) assumptions of a faster reduction in unemployment, (d) more conservative assumptions with regard to pension annual increases,¹² and (e) the parametric changes already provided for in Law 3029/2002. It should be noted that these new data affect the outcome in more than one way. For instance, the presence of immigrant workers or the migration of rural populations to urban centers means that *current* IKA-ETAM revenues will increase, but so will its *future expenditure*. The important thing is that these more favourable demographic indications have widened the so-called “window of opportunity” by 5 years to 2015, i.e. the period of time during which the system’s financing needs remain relatively low and reserves can be more easily accumulated to meet increasing needs from 2020 onwards. In the meantime, however, *the need for structural interventions has not been eliminated*, so long as the same data point to increased pension expenditure in the future.

As already mentioned, the viability of the social security system also depends on a number of *macroeconomic aggregates* (e.g. the economic growth rate, employment and unemployment levels and developments, productivity growth, etc.). In turn, though, the structure and parameters of the social security system affect the behaviour of insured persons and, by extension, significant macroeconomic variables, such as savings, labour supply, the labour force participation rate, etc. These interactions are much stronger in the *pay-as-you-go* social security systems of the public sector. Particularly important are the interactions between the social security system and the labour market, the evolution of public finances and the rate of economic growth.

With regard to *public finances*, any country that has both a low public debt and budget surpluses will be able to cover the financing needs of its social security system with greater ease. The ability to ensure these necessary funds depends primarily on the internal parameters of the social security system, but also – insofar as the State’s participation in social security financing is necessary – on the overall state of public finances. By extension, the general government fiscal balance also depends on social security system developments. Thus, securing the funds for the State’s participation in social security financing (as provided for, for example, in the recent law) depends on the country’s fiscal situation and *must, in addition, be compatible with the maintenance of fiscal stability*.

With regard to the *labour market*, employment and unemployment developments significantly affect the prospects of the Greek social security system. The *employment rate* – i.e. the number of employed persons as a percentage of working age population – was 55.6% in Greece in 2001, compared with an EU average of 63.9%. According to European Commission estimates,¹³ raising the average retirement age by one year in a number of EU countries¹⁴ would reduce the expected increase in pension expenditure (until 2050) by roughly one fifth. In the case of Greece, this amounts to 2% of GDP, based on the recent estimates of a total pension expenditure increase of 10% of GDP until →

⁹ Greece does not differ from the rest of the EU as far as the starting point is concerned. According to Eurostat data, total pension expenditure as a percentage of GDP in Greece was on a par with the EU average (12.7%) in 1999.

¹⁰ See *The Greek Report on Pension Strategy*, op. cit., Annex III, Tables 7 and 8.

¹¹ The 2001 Census recorded 420,000 persons more than the Eurostat estimates. This reflects the inflow of economic migrants and of individuals of Greek descent, primarily from the former USSR, who have now settled permanently in Greece.

¹² In the recent *Report*, the assumption that pensions would be adjusted annually by one percentage point more than the rate of inflation was abandoned in favour of the assumption that pension purchasing power would be fully protected.

¹³ European Commission, Economic Policy Committee, *Reform Challenges Facing Pension Systems: The Impact of Certain Parametric Reforms on Pension Expenditure*, EPC/ECFIN/237/02 rev. 2, Brussels, 17 June 2002, p. III.

¹⁴ The relevant calculations did not include Greece, but nonetheless provide a basis for comparison.

→ 2050.¹⁵ It should be noted that in March 2002 the Barcelona European Council called on the Member States to strive for a progressive increase of about 5 years in the effective average retirement age in the EU by 2010. As stated in the recent *Greek Report on Pension Strategy*, the achievement of such an objective cannot simply be decreed, but must be attained through employment and labour market interventions that will increase the percentage of those above 55 years of age in the labour force. Such an objective could be achieved mainly through measures that allow for greater flexibility in working arrangements (e.g. reduced working hours and part-time employment) and by developing employment in the social sector.¹⁶

A substantial acceleration in the *growth rate of economic activity*, especially if combined with an *increase in productivity*, could significantly improve the prospects of the social security system. The need to increase Greek productivity is pressing, considering that Greece still lags behind the EU average.¹⁷ According to a simple indicative estimate, even if *annual* productivity growth in Greece were to steadily overshoot the average EU rate by one percentage point, *per capita* income¹⁸ in Greece would not converge on the EU average before 2039. Therefore, if the favourable macroeconomic and demographic assumptions of the “Lisbon scenario” prove to be correct,¹⁹ the increase in pension expenditure between 2000 and 2050 could, according to certain estimates, be reduced by 4% of GDP.²⁰

The foregoing analysis confirms that, apart from the

State’s participation in the funding of the social security system, provided for in the recent law, securing the additional funds needed to cover pension expenditure will require a combination of (a) further parametric and organisational changes in the social security system, and the development of its funded-scheme characteristics, and (b) an appropriate macroeconomic policy, which will favour economic growth and promote increased employment.

¹⁵ From 12.6% in 2000 to 22.6% in 2050, as mentioned previously.

¹⁶ See *The Greek Report on Pension Strategy*, op. cit., pp. 26-7.

¹⁷ According to Eurostat estimates (15 November 2002), productivity per worked hour in Greece amounted to 83.5% of the EU average in 2001 (compared with 62.0% in 1993). Productivity per employed person in Greece is estimated at 83.5% of the EU average for 2002 (compared with 83.5% in 2001, and 74.1% in 1993). The discrepancy between the two indicators can be explained by the fact that the percentage of part-time employment is much higher in the EU (on average) than in Greece. The average number of working hours per employed person is therefore smaller in the EU than in Greece.

¹⁸ According to Eurostat (15 November 2002), Greece’s *per capita* GDP (measured in terms of PPS – purchasing power standards) is estimated at 69.6% of the EU average for 2002 (compared with 68.0% in 2001, and 64.1% in 1993).

¹⁹ The “Lisbon scenario” is based on the economic growth and employment targets set by the Lisbon European Council in March 2000 and, *inter alia*, anticipates a decrease in unemployment across Europe (including Greece) to roughly 4% by 2045, as well as a faster rise in productivity.

²⁰ See (a) European Commission, Economic Policy Committee, *Budgetary Challenges Posed by Ageing Populations*, op. cit., (b) IMF, *Greece – Selected Issue: an Overview of Pension Reform*, March 2002. It should be noted that these estimates were made before the new law was passed, and therefore did not take into account the recently introduced parametric changes.

- Greece’s relatively low competitiveness, especially when measured by qualitative indices and not only by relative price indices (see Chapter IV.6),
- the fact that Greece still lags behind its EU partners in terms of almost all of the “structural indicators” monitored by the European Commission,²²
- Greece’s relatively low “Inward Foreign Direct Investment Potential Index”, as compiled by UNCTAD.²³

²² These indicators are monitored in order to evaluate the progress of the Member States towards the EU development objectives set by the Lisbon European Council in spring 2000. Apart from the Eurostat “structural indicators” used to monitor the EU Member States on a “quantitative” basis, a new and interesting survey by the World Economic Forum (*Lisbon Review 2002-2003: an assessment of policies and reforms in Europe*) evaluates EU Member States on a “qualitative” basis, according to the degree to which they have met the Lisbon objectives. Greece ranks last, behind Italy, in all eight of the monitored sectors, while Finland ranks first.

²³ This index, elaborated by UNCTAD like the previously mentioned “Inward Foreign Direct Investment Performance Index”, is based on the *evaluation of structural factors* that affect foreign direct investment inflows, and ranges between 0 and 1. The index for Greece rose from 0.301 on average in 1988-1990 to 0.414 in 1998-2000. Of the 140 countries monitored with this index, Greece ranked 40th during the 1988-1990 period but then improved its position to 35th in 1998-2000. Of the 28 countries that are either EU Member States or accession candidates, Greece improved its position from 21st to 18th over the same periods.

Apart from the structural reforms related to fiscal consolidation and public sector modernisation previously discussed, significant structural policy measures regarding product, labour and capital markets were also taken during the last two years. These measures include: the deregulation of the fixed telephony market (as of 2001),²⁴ the opening up of the electricity market (also as of 2001),²⁵ the deregulation of domestic sea transport (as of 1 November 2002),²⁶ as well as the passing of laws on the provision of incentives to construction firms,²⁷ the simplification of procedures for starting new companies,²⁸ the strengthening of the capital market and the promotion of entrepreneurship,²⁹ corporate governance,³⁰ the promotion of employment,³¹ employment of immigrants,³² the restructuring of the Manpower Employment Agency (OAED) and the terms of operation of Temporary Employment Agencies.³³ Parliament is also discussing a draft law on the creation of a “Guarantee Fund Facility Scheme for Small and Very Small Enterprises” (TEMPME), which is meant to facilitate these enterprises’ access to the banking system.³⁴

It is difficult to fully estimate and evaluate the specific impact that these structural measures have had, particularly on inflation and productivity. Offhand, however, it can be noted that:

- The benefits from telecommunication market deregulation – in terms of rates, in terms of the range and the quality of services provided, but also in terms of job creation – are evident. The same can also be said to a certain extent for domestic air transport, although the serious difficulties faced by Olympic Airways have yet to be resolved.
- So far, however, the opening of the electricity market has not led to the effective operation of competition (or to a drop in prices), as sub-

stantial investment and time are necessary before the new units can be set up, and because some institutional barriers still remain.³⁵ Meanwhile, the opening of the natural gas market is still pending, but should be completed by end-2005.³⁶

- For market deregulation to guarantee a level playing field for enterprises and for it to be efficient in terms of social wellbeing, the effective

24 Law 2867/2000. The deregulation of the telecommunications sector was essentially completed with this measure and with the reduction of the State’s participation in the share capital of the Hellenic Telecommunications Organisation (OTE) to less than 50%. (According to Article 26 of Law 2843/2000, the State maintains at least one third of the share capital of OTE, while, according to Article 29 of Law 2937/2001, the Board of Directors of the Organisation will henceforth be elected in accordance with corporate law, i.e. legislation on sociétés anonymes, and the statutes of the Organisation).

25 Law 2773/1999.

26 Law 2932/2001.

27 Law 2940/2001.

28 Law 2941/2001.

29 Law 2992/2002 provides for the introduction of international accounting standards. It also provides for tax incentives to firms that either merge or increase employment. In addition, three draft laws were made public in early November concerning (a) accounting standardisation and accounting controls, (b) the establishment and supervision of stock exchanges, and (c) the issue of corporate bond loans and the securitisation of claims and of claims on real estate.

30 Law 3016/2002 (article 27) comprises “measures to combat poverty” (financial aid to the long-term unemployed, to poor households in mountainous regions and to low-income families with school-age children).

31 Law 2874/2000 (December).

32 Law 2910/2001, as amended by Law 3013/2002.

33 Law 2956/2001. Also, two presidential decrees will soon be issued, one amending existing legislation on fixed-term labour contracts (in line with Directive 99/70/EC) and the second on the safeguarding of employees’ rights in the event of transfer of an undertaking (in line with Directive 98/50/EC).

34 TEMPME will offer small and very small enterprises part of the guarantees they need for bank loans. The supervision of this system has been assigned to the Bank of Greece.

35 Some problems have been identified by the Regulatory Authority for Energy (see Bank of Greece, *Annual Report 2001*, April 2002, Box III.5) and by the OECD (*Economic Surveys – Greece*, July 2002). The government is drafting a law that will modify the existing operating framework of the electricity market.

36 There have already been significant foreign capital inflows for natural gas urban distribution projects (following international tenders). Meanwhile, as announced in another international call-for-tender, the government plans to sell 35% of the share capital of Greece’s Public Gas Corporation (DEPA) to a strategic partner, who will also participate in the company’s governance.

operation of the Regulatory Authorities that have been set up, as well as of the Competition Committee, must be supported and reinforced.

– The measures taken to increase Greek labour market flexibility, which can also help boost employment and curb inflation, are in the right direction. However, it is difficult to evaluate their full effect since they were first implemented only a short time ago and because of the insufficiency of data.³⁷ In any case, according to a recent survey, only a small –but not negligible– share of the private enterprises which actually hired personnel during the first year of implementation of Law 2874/2000 attribute this fact to the arrangements of the said law, whereas the percentage is considerably higher amongst larger enterprises.³⁸ In any case, the provisions of this law with regard to the duration of employment have been the subject of much criticism by employers' associations; the Confederation of Greek Industries (SEB), for instance, believes that these provisions will lead to a rise in labour costs. In any event, in order to further increase labour market flexibility, additional measures have to be taken to reduce *non-wage* labour costs and to encourage part-time employment in both the public and the private sectors. The wider recourse to temporary employment (regulated by Law 2956/2001) could also be facilitated, so long as the conditions of this type of employment are effectively supervised.³⁹ Moreover, it has been stated that some of the significant malfunctioning and delays that were observed during the restructuring of OAED (based on the same law), in particular in the crucial sector of personalised assistance to job seekers, will be corrected.⁴⁰

– The non-EU foreign workers' legalisation

process (the second such process since 1998), which was recently launched with Law 2910/2001, is advancing, but is still hampered by significant bureaucratic obstacles,⁴¹ in spite of the improvements brought about by Law 3013/2002. As the inclusion of foreign workers will have an overall positive effect on the functioning of the labour market, on the revenues of social security funds and, in general, on key economic indicators (including inflation), a decisive course of action needs to be taken to promote (i) the coordination of public agencies responsible for the smooth integration of for-

37 For instance, data are insufficient on the results of the re-arrangement of working time provided for under Law 2874/2000 and on the incentives to take up work introduced by Law 2837/2000 (reduction in low-wage workers' social security contributions) and Law 2874/2000 (financial incentives for the unemployed to seek part-time employment).

38 This survey was conducted by the Institute of Labour (INE) of the Greek General Confederation of Labour (GSEE) – the Confederation of Civil Servants (ADEDY) (in cooperation with the Metron Analysis company) on a sample of 2,016 private firms in June/July 2002; see "Employment and labour relations in Greece", INE Notebooks (in Greek), October 2002. According to this survey, some 6% of the firms that engaged new staff (during the twelve months prior to the survey) were directly influenced in the direction of new job creation by the new regulations of Law 2874/2000 on reducing employers' social security contributions for low-wage personnel, increasing the cost of overtime, and abolishing "overtime at the discretion of the employer". These recruitments accounted for 12% of all recruitment by the surveyed companies.

39 Supervision is necessary to ensure the equal treatment of both the temporarily and the regularly employed, but also to ensure that there is a level playing field both for enterprises that resort to temporary employment and those that do not. The Ministry of Labour is currently drafting a law concerning the supervision of the operation of Private Labour Counselling Offices (governed by Law 2639/1998, as amended by Law 2874/2000) and Temporary Employment Agencies (Press Release, 7 October 2002).

40 As stated by the Ministry of Labour, the subsidiary of the Manpower Employment Agency "Human Resources Support Services S.A." (whose establishment was provided for in Law 2956/2001) will soon be dissolved, because of the ambiguity of its status and because of the task fragmentation that would have ensued between OAED and the said subsidiary with regard to the establishment of Employment Promotion Centres. This task will be taken up by a self-contained unit of OAED (according to legislation that is in course of preparation).

41 Candidates for legalisation who apply for work and residence permits cannot have their applications processed by one sole public agency and in most instances have to go through time-consuming procedures with numerous agencies (e.g. the Social Insurance Fund-IKA, the Manpower Employment Agency, the prefecture, regional government, municipality, the tax office, police authorities, public hospitals, etc.).

eign workers into the labour market and (ii) the broader use of the existing potential⁴² to set up special support programmes for foreigners (Greek language courses, technical and vocational training).

With regard to the banking system, deregulation was gradually introduced in the 1990s and, since then, has essentially been completed. Very few restrictions remain in effect, and those that do mainly involve consumer credit.⁴³ For the financial market to operate efficiently, equal terms of competition in the specific market (including the freedom of market entry) must, *inter alia*, be ensured, while depositor and debtor interests must be safeguarded. Apart from the structural adjustments to the institutional operating framework governing credit and other financial institutions that were introduced by the Bank of Greece over the previous three years,⁴⁴ it is worth noting that 2002 saw:

- The setting of terms regarding the establishment and operation of finance companies (non-credit institutions), whose primary business is to provide credit to natural persons for personal/consumer needs.⁴⁵
- The lifting of the obligation on banks to hold the unused balances of their funds earmarked for small-scale manufacturing in a special account with the Bank of Greece.⁴⁶
- The completion and codification of provisions in effect regarding the transparency of terms and procedures of transactions between credit institutions and their customers.⁴⁷ These provisions reflect the increasingly competitive environment in which credit institutions operate and the globalisation of markets for bank products and services.

The deregulation of the banking system and euro

area entry have caused interest rates to drop to historically low levels, and credit expansion to the private sector, especially households, to remain high in spite of its recent slowdown (see also Chapter V). Apart from their possible adverse effects on inflation, these developments must also be assessed for their possible impact on the financial position of banks. In the context of its supervisory functions and in view of its interest in maintaining financial stability, the Bank of Greece has imposed strict capital adequacy and provisioning rules on commercial banks.⁴⁸ The Bank of Greece is also looking into the implications of the level and the distribution of household indebtedness and has commissioned a wide-ranging survey of households (see also Chapter V.3). This survey will help establish how household indebtedness from consumer and housing loans is distributed and whether the level of indebtedness of certain categories of households⁴⁹ is so high that it could pose a risk not

⁴² Based on the Operational Programme “Employment and Vocational Training”, the “Community Initiative EQUAL” and Guideline 7 of the National Action Plan for Employment 2002.

⁴³ It should be recalled that consumer loans against documents for the purchase of goods and/or services are granted up to a ceiling of €25,000 per person from each separate credit institution, while the amount granted cannot exceed 65% of the purchase value stated in the document. Personal loans (without documents) from one or more credit institutions can be granted up to a combined ceiling of €3,000 per person.

⁴⁴ See Bank of Greece, *Annual Report 2001*, Athens 2002, Chapter X.

⁴⁵ Bank of Greece Governor’s Act 2485/31 January 2002.

⁴⁶ Bank of Greece Governor’s Act 2500/29 May 2002. As the “Earmarked Funds” for the financing of small-scale manufacturing date back to 1966, their operating framework no longer corresponds to new credit market conditions. The decision to abolish “Earmarked Funds” (which came into effect on 28 June 2002) took into account the scheduled establishment of the “Guarantee Fund Facility Scheme for Small and Very Small Enterprises” (TEMPME) which –as mentioned previously– has already been the subject of a draft law submitted to parliament for discussion.

⁴⁷ Bank of Greece Governor’s Act 2501/31 October 2002.

⁴⁸ Law 2937/2001 provides the Bank of Greece with greater discretion to set capital requirements at the *individual* credit institution level (in lieu of the *general* provisions in effect until recently). The risk management flexibility of credit institutions is thus expected to be increased.

⁴⁹ As mentioned in Chapter V.3, comparing the ratio of households’ borrowing to GDP or disposable income with the corresponding ratio for other countries and the euro area as a whole reveals that the level of households’ total indebtedness is *not* high.

only to banks, but also to the future course of households' disposable income and consumption. The Bank will weigh the results of this investigation and, in due time and taking overall conditions into account, will decide when to lift the few remaining restrictions on consumer credit. It will also determine whether commercial banks need to increase their provisions for bad loans.

From the previous analysis, one can easily see how imperative the faster implementation of nec-

essary structural and institutional reforms has become for the Greek economy to acquire greater flexibility and dynamism in the new environment it functions in and for real convergence towards our European partners to advance. Considering that social wellbeing will in the medium term – in the enlarged European Union that will become a reality in a few years – depend on the successful completion of these reforms, every conceivable effort must be made to ensure the widest possible consensus on their advancement.

Monetary policy measures of the Eurosystem

3 January 2002

– The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 3.25%, 4.25% and 2.25% respectively.

– The Governing Council also decides on an allotment amount of €20 billion per operation for the longer-term refinancing operations to be conducted in 2002. This amount takes into consideration the expected liquidity needs of the euro area banking system in 2002 and the desire of the Eurosystem to continue to provide the bulk of refinancing of the financial sector through its main refinancing operations. The Governing Council of the ECB may adjust the allotment amount in the course of the year in the event of unexpected developments in liquidity needs.

7 February, 7 March, 4 April 2002

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 3.25%, 4.25% and 2.25% respectively.

23 April 2002

Effective from 24 June 2002, the Governing Council of the ECB approves a new regulation on the application of minimum reserves. According to the new Regulation, electronic money institutions will be subject to minimum reserve requirements. The Regulation further introduces the automatic exemption of institutions from minimum reserve requirements in the event that their license has been withdrawn or renounced, as well as in the event that they are subject to winding-up proceedings. Finally, the formula concerning the calculation of the remuneration of holdings of required reserves is adjusted.

2 May, 6 June 2002

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 3.25%, 4.25% and 2.25% respectively.

2 July 2002

Effective from 7 July 2002, within the framework of a relevant Guideline of the ECB, the Bank of Greece amends and complements some of the provisions by which the monetary policy instruments and procedures applied after its admission into the Eurosystem were laid down. These changes reflect the needs for adjustment created by developments in the conduct of the single monetary policy.

4 July 2002

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending

facility and the deposit facility will remain unchanged at 3.25%, 4.25% and 2.25% respectively.

10 July 2002

The Governing Council of the ECB decides to reduce from €20 billion to €15 billion the allotment amount for each of the longer-term refinancing operations to be conducted in the second half of 2002. The new amount takes into consideration the expected liquidity needs of the euro area banking system in the second half of 2002 and the desire of the Eurosystem to continue to provide the bulk of refinancing for the financial sector through its main refinancing operations.

**1 August, 12 September, 10 October,
7 November 2002**

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 3.25%, 4.25% and 2.25% respectively.

Glossary

Collateral: assets pledged as a guarantee for the repayment of short-term loans which credit institutions receive from central banks, as well as assets sold by credit institutions to central banks as part of repurchase agreements.

Community Support Framework (CSF): it is drafted by the Commission of the European Communities (European Commission) in cooperation with the EU Member State concerned and it is approved by the Commission. It includes the development strategy of the country, the action lines and the financing sources (community funding, national public expenditure, private funding).

Deposit facility: a standing facility of the Eurosystem, which counterparties may use to make overnight deposits at a national central bank and which are remunerated at a pre-specified interest rate.

Deposits redeemable at notice: savings deposits for which the holder must respect a fixed period of notice before withdrawing the funds. In some cases there is the possibility of withdrawing a certain fixed amount in a specified period or of earlier withdrawal subject to the payment of penalty. Deposits redeemable at a period of notice of up to three months are included in M2 (and hence in M3), while those with a longer period of notice are part of the (non-monetary) longer-term financial liabilities of the Monetary Financial Institution (MFI) sector.

Effective (nominal/real) exchange rates (EERs): nominal effective exchange rates consist of a geometric weighted average of various bilateral exchange rates. Real effective exchange rates are nominal effective exchange rates deflated by a weighted average of foreign, relative to domestic, prices or costs. They are thus measures of price and cost competitiveness.

EURIBOR (euro interbank offered rate): the rate at which a prime bank is willing to lend funds in euro to another prime bank. The EURIBOR is computed daily for interbank deposits with a maturity of one to three weeks and one to 12 months as the average of the daily offer rates of a representative panel of prime banks, rounded to three decimal places.

Euro area: the area encompassing those Member States in which the euro has been adopted as the single currency in accordance with the Treaty and in which a single monetary policy is conducted under the responsibility of the Governing Council of the ECB. The euro area currently comprises Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal and Spain.

European Central Bank (ECB): the ECB lies at the centre of the European System of Central Banks (ESCB) and the Eurosystem and has legal personality under Community law. It ensures that the tasks conferred upon the Eurosystem and the ESCB are implemented either by its own activities or through the national central banks, pursuant to the Statute of the ESCB and of the ECB.

European System of Central Banks (ESCB): is composed of the ECB and the national central banks of all 15 Member States, i.e. it includes, in addition to the members of the Eurosystem, the national central banks of the Member States which have not yet adopted the euro. The ESCB is governed by the Governing Council and the Executive Board of the ECB, and, as a third decision-making body of the ECB, by the General Council.

Eurosystem: comprises the ECB and the national central banks of the Member States which have adopted the euro. There are currently 12 national central banks in the Eurosystem. The Eurosystem is governed by the Governing Council and the Executive Board of the ECB.

Executive Board: one of the decision-making bodies of the ECB. It comprises the President and the Vice-President of the ECB and four other members appointed by common accord by the Heads of State or Government of the Member States which have adopted the euro.

General Council: one of the decision-making bodies of the ECB. It comprises the President and the Vice-President of the ECB and the governors of all 15 EU national central banks.

General government: as defined in the European System of Accounts 1995 (ESA 95), it consists of central, state and local government, and social security funds.

Governing Council: the supreme decision-making body of the ECB. It comprises all the members of the Executive Board of the ECB and the governors of the national central banks of the Member States which have adopted the euro.

Harmonised Index of Consumer Prices (HICP): the measure of prices used by the Governing Council for the purpose of assessing price stability. The HICP was developed by the European Commission (Eurostat) in close liaison with the national statistical institutes and the European Monetary Institute (EMI), and later the ECB, in order to fulfil the Treaty requirement for a consumer price index constructed on a comparable basis, taking into account differences in national definitions.

Key ECB interest rates: the interest rates which reflect the stance of the monetary policy of the ECB. At present, the key ECB interest rates are the minimum bid rate on the main refinancing operations, the interest rate on the marginal lending facility and the interest rate on the deposit facility. Prior to the decision to conduct the main refinancing operations as variable-rate tenders, the rate on fixed-rate tenders had played the role of “key rate”. This role is currently performed by the minimum bid rate on the main refinancing operations of the ECB.

Main refinancing operation: a regular open market operation executed by the Eurosystem in the form of a reverse transaction. Main refinancing operations are conducted through weekly standard tenders and normally have a maturity of two weeks.

Marginal lending facility: a standing facility of the Eurosystem, which counterparties may use to receive overnight credit from a national central bank at a pre-specified interest rate against eligible assets.

Monetary aggregates: currency in circulation plus outstanding amounts of certain liabilities of monetary financial institutions and central government that have a high degree of “moneyness” (or liquidity in a broad sense). The narrow monetary aggregate M1 has been defined by the Eurosystem as: currency in circulation plus euro area residents’ (other than central government) holdings of overnight deposits with euro area money-issuing institutions. The “intermediate” monetary aggregate M2 comprises M1 plus deposits with agreed maturity of up to two years and deposits redeemable at notice of up to three months. The broad monetary aggregate M3 includes M2 plus repurchase agreements, money market fund shares/units, money market paper and debt securities with a maturity of up to two years. The Governing Council has announced a reference value for the growth of M3.

Reserve base: the sum of the balance sheet items (in particular: liabilities) which constitute the basis for calculating the reserve requirement on a credit institution.

Reverse transaction: an operation whereby the central bank buys or sells assets under a repurchase agreement or conducts credit operations against collateral.

Standing facility: a central bank facility available to counterparties on their own initiative. The Eurosystem offers two overnight standing facilities: the marginal lending facility and the deposit facility.

TARGET System (Trans-European Automated Real-time Gross settlement Express Transfer system): a decentralised system consisting of 15 national RTGS (Real-Time Gross Settlement) systems (one in each of the 15 EU Member States) and the ECB payment mechanism. These are interconnected by common procedures (Interlinking Mechanism) to allow cross-border express transfers throughout the EU to move from one system to another.

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Table 1
Consumer price index: general index and basic sub-indices

Period	General index		Goods		Services		CPI excluding fresh fruit/ vegetables and fuel		CPI excluding food and fuel	
	(1999=100)	Percentage change over previous year	(1999=100)	Percentage change over previous year	(1999=100)	Percentage change over previous year	(1999=100)	Percentage change over previous year	(1999=100)	Percentage change over previous year
1999	99.7	2.6	100.0	1.7	99.3	4.1	99.5	2.9	99.3	3.0
2000	102.9	3.2	103.4	3.4	102.1	2.8	101.4	2.0	101.3	2.0
2001	106.4	3.4	106.7	3.2	105.9	3.7	105.3	3.8	105.0	3.7
2001 I	104.5	3.3	104.4	2.9	104.5	3.9	103.4	3.8	103.0	3.8
II	107.0	3.7	108.0	3.7	105.6	3.7	105.4	3.8	105.2	3.6
III	105.9	3.8	105.9	3.9	106.0	3.6	105.0	4.0	104.6	3.9
IV	108.0	2.7	108.5	2.2	107.3	3.6	107.3	3.6	107.1	3.4
2002 I	108.6	4.0	108.6	4.0	108.6	3.9	106.9	3.3	106.5	3.4
II	110.8	3.5	111.2	3.0	110.2	4.4	109.4	3.9	109.3	3.9
III	109.6	3.5	108.8	2.7	110.9	4.6	108.8	3.7	108.4	3.6
2000 Jan.	100.4	2.6	99.9	2.4	101.1	3.0	99.5	2.0	99.1	1.9
Feb.	100.2	2.9	100.1	3.0	100.3	2.8	98.7	1.7	98.1	1.5
March ..	102.7	3.1	104.2	3.6	100.3	2.5	100.8	1.6	100.6	1.4
Apr.	103.2	2.6	104.2	2.9	101.7	2.1	101.4	1.4	101.4	1.2
May	103.5	2.9	104.4	2.8	102.0	3.1	101.6	1.9	101.6	1.7
June ...	103.1	2.5	104.0	2.5	101.7	2.6	101.7	1.5	101.6	1.5
July	101.3	2.7	100.8	3.0	101.9	2.4	100.1	1.2	99.7	1.3
Aug. ...	101.4	3.0	100.8	3.2	102.2	2.7	100.3	1.4	99.9	1.5
Sept. ...	103.5	3.1	103.9	3.3	102.9	2.9	102.5	2.1	102.4	2.3
Oct.	104.7	4.0	105.8	4.8	103.0	3.0	103.1	2.7	103.1	2.8
Nov. ...	105.2	4.2	106.6	5.1	103.1	3.0	103.3	2.8	103.3	2.9
Dec. ...	105.5	3.9	106.1	4.1	104.6	3.7	104.2	3.4	104.2	3.4
2001 Jan.	103.8	3.4	103.2	3.3	104.9	3.7	103.1	3.6	102.7	3.7
Feb.	103.7	3.5	103.4	3.3	104.2	4.0	102.5	3.9	101.9	3.9
March ..	105.8	3.0	106.7	2.3	104.4	4.1	104.7	3.9	104.4	3.7
Apr.	106.8	3.5	107.4	3.1	105.8	4.1	105.4	3.9	105.1	3.7
May	107.2	3.6	108.4	3.8	105.4	3.3	105.2	3.5	105.0	3.3
June ...	107.1	3.9	108.2	4.0	105.5	3.7	105.6	3.8	105.4	3.8
July	105.2	3.9	104.8	4.0	105.8	3.9	104.2	4.1	103.8	4.1
Aug. ...	105.3	3.8	104.8	4.0	105.9	3.6	104.4	4.0	103.8	3.9
Sept. ...	107.3	3.6	107.9	3.8	106.3	3.3	106.4	3.8	106.1	3.6
Oct.	107.6	2.8	108.1	2.2	106.8	3.7	106.9	3.7	106.7	3.5
Nov. ...	107.7	2.4	108.1	1.4	107.1	3.9	107.2	3.8	107.0	3.6
Dec. ...	108.7	3.0	109.2	2.9	108.0	3.3	107.7	3.3	107.5	3.1
2002 Jan.	108.4	4.4	108.5	5.2	108.4	3.3	106.5	3.3	106.0	3.2
Feb.	107.3	3.4	106.7	3.1	108.3	3.9	105.7	3.1	105.2	3.2
March ..	110.0	4.0	110.7	3.8	109.0	4.4	108.4	3.6	108.3	3.7
Apr.	110.9	3.8	111.7	4.0	109.6	3.6	109.0	3.4	108.8	3.5
May	110.8	3.4	111.1	2.4	110.5	4.9	109.7	4.2	109.5	4.3
June ...	110.6	3.3	110.9	2.5	110.3	4.5	109.7	3.9	109.5	3.8
July	108.7	3.3	107.6	2.7	110.5	4.4	108.1	3.7	107.4	3.5
Aug. ...	109.0	3.5	107.9	2.9	110.7	4.5	108.2	3.6	107.6	3.6
Sept. ...	111.0	3.5	110.8	2.7	111.5	4.8	110.3	3.7	110.1	3.8
Oct.	111.6	3.7	111.6	3.2	111.7	4.6	110.7	3.5	110.6	3.6

Source: Calculations based on NSSG data.

Table 2
Wholesale price index: general index and basic sub-indices

Period	General index		Domestic primary products ¹		Domestic industrial products ¹		Exported products		Imported products	
	(1995=100)	Percentage change over previous year	(1995=100)	Percentage change over previous year	(1995=100)	Percentage change over previous year	(1995=100)	Percentage change over previous year	(1995=100)	Percentage change over previous year
1999	116.4	1.8	124.6	2.2	119.0	2.8	114.0	0.5	111.3	0.6
2000	124.0	6.6	126.5	1.5	125.2	5.2	128.1	12.3	118.5	6.4
2001	126.8	2.3	139.2	10.0	128.7	2.7	128.9	0.7	120.7	1.9
2001 I	125.0	3.1	129.3	-2.0	127.0	3.8	127.5	3.7	120.1	4.0
II	127.7	3.6	143.3	8.8	129.1	4.0	130.6	3.4	120.9	2.8
III	127.1	2.2	136.1	12.2	129.4	2.9	129.5	0.0	121.1	1.8
IV	127.4	0.2	148.0	22.2	129.1	0.3	128.0	-4.0	120.9	-0.8
2002 I	130.3	4.3	174.1	34.7	130.3	2.6	130.5	2.4	120.8	0.6
II	129.9	1.7	153.1	6.9	131.9	2.2	132.3	1.2	121.2	0.2
III	129.1	1.6	142.6	4.8	132.5	2.4	131.2	1.3	121.4	0.2
2000 Jan.	120.1	4.7	133.3	-1.9	121.6	4.3	120.1	9.9	114.4	4.1
Feb.	121.2	5.5	130.5	-5.1	122.3	4.7	123.4	12.6	115.6	5.6
March ..	122.3	6.3	132.1	-0.6	123.2	5.1	125.5	12.9	116.3	6.0
Apr.	122.8	5.8	136.2	1.8	123.5	4.5	124.7	10.7	117.2	6.0
May	123.6	6.4	134.9	1.4	124.1	4.9	126.8	12.5	117.8	6.4
June ...	123.3	6.7	123.9	4.7	124.6	5.0	127.6	12.6	117.8	6.3
July	123.0	6.4	116.9	9.0	125.1	4.5	127.1	10.9	118.0	6.1
Aug. ...	123.9	7.0	123.8	16.2	125.3	4.6	128.2	11.2	118.7	6.3
Sept. ...	126.0	7.7	123.1	6.3	127.1	5.6	133.3	14.8	120.1	6.8
Oct.	127.4	8.1	117.5	-5.5	128.8	7.0	135.2	15.9	122.1	8.4
Nov. ...	127.5	7.9	119.5	-1.6	128.9	6.6	134.7	14.5	122.2	8.1
Dec. ...	126.7	6.2	126.2	-1.8	128.5	5.9	130.3	9.3	121.3	6.7
2001 Jan.	124.0	3.2	125.6	-5.8	126.3	3.8	126.4	5.3	119.7	4.6
Feb.	125.1	3.2	130.1	-0.3	127.3	4.1	127.5	3.3	120.1	3.9
March ..	125.8	2.8	132.3	0.2	127.6	3.6	128.8	2.6	120.4	3.5
Apr.	127.0	3.4	139.7	2.6	128.7	4.2	129.9	4.2	120.7	3.0
May	127.9	3.5	145.0	7.4	129.3	4.2	130.7	3.1	120.9	2.7
June ...	128.1	4.0	145.2	17.1	129.2	3.6	131.4	3.0	121.1	2.8
July	127.1	3.4	136.9	17.1	129.2	3.3	129.8	2.1	121.1	2.6
Aug. ...	126.5	2.1	132.1	6.7	129.3	3.1	128.7	0.4	121.0	1.9
Sept. ...	127.6	1.3	139.2	13.1	129.9	2.2	130.1	-2.4	121.1	0.9
Oct.	126.9	-0.4	138.0	17.4	129.2	0.3	128.2	-5.2	121.2	-0.7
Nov. ...	126.8	-0.5	140.9	17.9	129.0	0.1	127.8	-5.1	120.9	-1.1
Dec. ...	128.7	1.5	165.1	30.8	129.2	0.5	128.1	-1.7	120.7	-0.5
2002 Jan.	130.4	5.1	181.4	44.4	129.7	2.7	129.4	2.4	120.7	0.8
Feb.	129.6	3.6	168.5	29.5	129.8	2.0	129.9	1.9	120.7	0.5
March ..	131.1	4.2	172.6	30.5	131.4	3.0	132.3	2.8	121.0	0.5
Apr.	131.7	3.7	172.2	23.3	132.1	2.7	133.5	2.8	121.2	0.4
May	129.5	1.2	147.0	1.4	132.0	2.1	132.2	1.2	121.2	0.2
June ...	128.5	0.3	140.2	-3.4	131.5	1.8	131.0	-0.3	121.1	0.0
July	128.2	0.8	136.0	-0.7	132.1	2.3	130.4	0.5	121.0	-0.1
Aug. ...	129.2	2.1	144.3	9.2	132.5	2.5	130.8	1.6	121.5	0.4
Sept. ...	130.0	1.9	147.5	6.0	133.1	2.5	132.3	1.7	121.6	0.4

¹ For home consumption.

Source: Calculations based on NSSG data.

Table 3

Gross value added at basic prices and gross domestic product at market prices

	Million euro	Annual percentage changes (at constant prices of year 1995)					
		1995	1997	1998	1999	2000	2001
1.1 Primary sector (agriculture)	7,277	0.4	2.3	6.8	-5.4	-3.0	...
1.2 Secondary sector	16,550	-1.3	7.2	2.9	4.5	5.5	...
1.2.a Mining and quarrying	476	-3.5	13.0	-0.6	8.4	0.2	...
1.2.b Manufacturing	9,572	-3.7	5.3	-0.1	3.6	3.8	...
1.2.c Electricity - natural gas - water supply	1,751	2.8	6.8	13.1	5.6	2.8	...
1.2.d Construction	4,751	2.5	10.6	5.2	5.3	10.0	...
1.3 Tertiary sector	50,031	5.1	3.1	3.0	5.6	4.9	...
1.3.a Trade	10,018	5.0	3.6	3.3	8.6	7.9	...
1.3.b Hotels - restaurants	4,821	14.5	3.7	0.4	-2.5	7.4	...
1.3.c Transport - communications	4,978	8.4	4.1	11.9	22.7	9.0	...
1.3.d Financial intermediaries	3,112	4.3	11.5	6.8	1.6	3.3	...
1.3.e Real estate management and other activities	12,577	3.0	2.5	2.0	6.5	3.6	...
1.3.f Public administration - security	5,308	-0.9	-0.6	1.1	-2.7	-0.3	...
1.3.g Education	3,298	3.7	-0.7	1.7	2.6	-1.0	...
1.3.h Health	3,855	7.8	1.2	-2.9	0.6	3.4	...
1.3.i Miscellaneous services	2,064	2.5	6.5	5.2	2.0	5.0	...
1.4 Gross value added	73,858	3.3	3.9	3.3	4.3	4.4	...
1.5 Imputed bank services	2,175	3.3	16.5	2.6	11.1	12.8	...
1.6 Gross value added at basic prices	71,682	3.3	3.6	3.3	4.1	4.1	...
2.1 Private consumption	58,405	2.7	3.5	2.9	2.7	3.2	3.0
2.2 Public consumption	12,250	3.0	1.7	1.4	2.3	0.5	1.5
2.3 Gross fixed capital formation	14,867	6.8	10.6	6.2	8.0	5.9	7.7
2.3.a.a By investor: General government	2,538	12.3	8.3	5.4	8.8	5.1	0.5
2.3.a.b Other sectors	12,330	5.8	11.0	6.4	7.9	6.1	9.1
2.3.b.a By type: Construction	9,422	7.1	9.2	6.1	2.8	7.2	8.7
2.3.b.b Equipment	4,679	5.2	16.5	3.5	17.6	3.7	6.8
2.3.b.c Other investment	766	16.2	-14.0	32.8	-0.2	8.6	2.0
2.4 Change in stocks and statistical discrepancy (as a percentage of GDP)	252	0.3	0.3	-0.3	0.0	0.1	0.0
2.5 Domestic final demand	85,774	3.5	4.6	2.8	4.0	3.5	3.8
2.6 Exports of goods and services	14,087	20.0	5.3	8.0	19.7	-1.3	1.4
2.6.a Exports of goods	8,344	2.1	2.7	-4.2	11.3	-4.6	0.5
2.6.b Exports of services	5,743	44.3	7.7	19.2	25.9	0.8	2.0
2.7 Final demand	99,861	5.8	4.7	3.6	6.6	2.6	3.3
2.8 Imports of goods and services	19,934	14.2	9.2	3.8	14.5	-1.9	1.9
2.8.a Imports of goods	18,084	6.4	9.4	-4.8	14.8	-2.7	1.7
2.8.b Imports of services	1,849	96.4	8.5	53.4	13.1	1.3	2.5
2.9 GDP at market prices	79,927	3.6	3.4	3.6	4.2	4.1	3.8

Sources: NSSG/National Accounts, September 2002: final data for 1997-1999 and provisional estimates for 2000-2001, Ministry of Economy and Finance, November 2002: provisional estimates for 2002.

Table 4
Balance of payments
(Million euro)

	January – September			September		
	2000	2001	2002*	2000	2001	2002*
I CURRENT ACCOUNT BALANCE (I.A+I.B+I.C+I.D)	-5,249.6	-4,965.4	-5,371.5	-641.2	-581.2	-565.1
I.A TRADE BALANCE (I.A.1-I.A.2)	-16,267.4	-16,103.2	-16,642.9	-2,015.6	-1,829.6	-1,979.5
NON-OIL TRADE BALANCE	-14,197.0	-13,779.7	-14,171.2	-1,642.8	-1,560.3	-1,716.8
OIL TRADE BALANCE	-2,070.4	-2,323.5	-2,471.7	-372.8	-269.4	-262.7
I.A.1 Exports of goods	7,919.5	8,714.3	7,645.5	950.1	864.6	807.4
Fuel	1,744.1	1,344.7	845.6	223.8	65.6	83.8
Other goods	6,175.3	7,369.7	6,799.9	726.3	799.0	723.6
I.A.2 Imports of goods	24,186.9	24,817.5	24,288.4	2,965.7	2,694.2	2,787.0
Fuel	3,814.5	3,668.1	3,317.3	596.6	335.0	346.5
Other goods	20,372.4	21,149.4	20,971.1	2,369.1	2,359.3	2,440.5
I.B SERVICES BALANCE (I.B.1-I.B.2)	6,786.1	7,313.9	8,415.5	1,198.3	1,093.9	1,247.4
I.B.1 Receipts	15,717.1	17,043.0	17,025.2	2,276.6	2,161.5	2,182.7
Travel	7,967.5	8,472.2	8,943.6	1,178.6	1,233.6	1,346.0
Transport	6,088.0	6,917.2	6,343.8	894.7	772.9	652.1
Other services	1,661.6	1,653.6	1,737.8	203.4	155.0	184.6
I.B.2 Payments	8,931.0	9,729.1	8,609.7	1,078.4	1,067.6	935.3
Travel	3,724.2	3,511.6	2,778.5	470.8	416.5	330.0
Transport	3,081.9	4,031.6	3,767.5	382.4	404.7	399.0
Other services	2,124.9	2,186.0	2,063.7	225.2	246.3	206.3
I.C INCOME BALANCE (I.C.1-I.C.2)	-759.9	-1,502.8	-1,587.1	-32.7	-116.5	-150.8
I.C.1 Receipts	2,222.7	1,626.9	1,237.1	235.3	160.1	128.4
Wages, salaries	460.2	450.3	404.9	63.1	43.7	40.0
Interest, dividends, profits	1,762.6	1,176.7	832.2	172.3	116.3	88.5
I.C.2 Payments	2,982.6	3,129.7	2,824.2	268.0	276.6	279.2
Wages, salaries	201.4	210.6	188.1	20.4	21.5	17.1
Interest, dividends, profits	2,781.3	2,919.2	2,636.0	247.6	255.2	262.1
I.D CURRENT TRANSFERS BALANCE (I.D.1-I.D.2)	4,991.7	5,326.6	4,443.1	208.9	271.1	317.8
I.D.1 Receipts	6,724.8	7,004.9	6,309.8	320.2	461.0	498.9
General government (mainly transfers from the EU) ¹	4,630.5	4,718.5	4,540.3	87.3	235.7	272.4
Other sectors (emigrants' remittances etc.)	2,094.3	2,286.4	1,769.6	232.9	225.3	226.5
I.D.2 Payments	1,733.1	1,678.3	1,866.8	111.3	189.9	181.0
General government (mainly payments to the EU) ¹	1,162.0	1,078.8	1,307.1	52.4	115.5	129.8
Other sectors	571.1	599.5	559.6	58.9	74.4	51.2
II FINANCIAL ACCOUNT BALANCE (II.A+II.B+II.C+II.D)	6,777.0	3,534.4	6,139.2	1,173.2	416.9	654.0
II.A DIRECT INVESTMENT²	-1,235.3	1,006.8	-425.1	297.0	307.0	-60.0
By residents abroad	-2,083.5	-533.0	-398.3	-6.2	-32.6	-28.7
By non-residents in Greece	848.2	1,539.8	-26.8	303.2	339.6	-31.3
II.B PORTFOLIO INVESTMENT²	7,738.5	8,252.1	9,736.1	879.0	131.7	1,395.9
Assets	-541.7	410.0	-1,147.3	10.2	278.3	826.2
Liabilities	8,280.3	7,842.1	10,883.4	868.9	-146.6	569.7
II.C OTHER INVESTMENT²	-3,970.8	-11,475.5	-1,304.8	-501.3	-344.7	-404.9
Assets	120.9	-4,329.5	-6,860.9	-682.5	-589.5	-108.0
Liabilities	-4,091.7	-7,146.0	5,556.0	181.2	244.8	-296.9
(General government loans)	(241.8)	(-2,376.5)	(-2,686.1)	(31.6)	(-35.3)	(-163.0)
II.D CHANGE IN RESERVE ASSETS³	4,244.6	5,751.0	-1,867.0	498.5	323.0	-277.0
III ERRORS AND OMISSIONS	-1,527.4	1,431.0	-767.7	-532.0	164.2	-88.9
RESERVE ASSETS				16,953.3	7,457.0 ⁴	8,898.0 ⁴

1 As from September 2002, net transfers from the EU are no longer recorded; instead, general government receipts and payments (mainly from and to the EU) are recorded separately. Back data were revised accordingly in order to be comparable.

2 (+) net inflow, (-) net outflow.

3 (+) decrease, (-) increase.

4 Since Greece entered the euro area in January 2001, reserve assets, as defined by the European Central Bank, include only monetary gold, the "reserve position" at the IMF, "Special Drawing Rights", and Bank of Greece's claims in foreign currency on residents of non-euro area countries. Conversely, reserve assets do not include claims in euro on residents of non-euro area countries, claims in foreign currency and in euro on residents of euro area countries, and the Bank of Greece participation in the capital and the reserve assets of the ECB.

* Provisional data.

Source: Bank of Greece.

Table 5
Monetary aggregates in the euro area¹
(Outstanding balances in billion euro, not seasonally adjusted)

End of period	Currency in circulation (1)	Overnight deposits (2)	M1 (3)=(1)+(2)	Deposits with agreed maturity up to two years (4)	Deposits redeemable at notice up to three months (5)	M2 (6)=(3)+(4)+(5)	Repurchase agreements (7)	Money market fund shares/units (8)	Money market paper and debt securities issued up to two years (9)	M3 ² (10)=(6)+(7)+(8)+(9)
2000	348.4	1,728.8	2,077.1	991.8	1,221.1	4,290.1	174.9	300.0	135.7	4,900.7
2001	239.7	1,968.2	2,207.9	1,088.8	1,367.9	4,664.6	218.5	402.0	145.9	5,430.9
2001 Jan. ³	336.1	1,692.8	2,028.8	1,036.1	1,275.1	4,340.0	211.4	327.9	139.0	5,018.3
Feb.	335.0	1,692.9	2,028.0	1,049.0	1,269.7	4,346.7	213.2	336.0	145.5	5,041.3
March	336.3	1,703.2	2,039.5	1,065.9	1,269.8	4,375.1	222.6	346.1	139.3	5,083.1
Apr.	336.2	1,735.9	2,072.1	1,067.8	1,273.4	4,413.3	221.4	354.1	140.0	5,128.7
May	332.9	1,759.2	2,092.1	1,069.0	1,273.2	4,434.3	233.8	363.0	135.0	5,166.1
June	333.0	1,798.4	2,131.4	1,066.2	1,283.0	4,480.6	221.5	360.5	145.2	5,207.8
July	328.0	1,780.3	2,108.3	1,073.2	1,287.2	4,468.7	223.4	369.6	140.4	5,202.1
Aug.	319.2	1,747.5	2,066.7	1,088.8	1,292.9	4,448.4	230.8	380.7	142.5	5,202.4
Sept.	309.6	1,815.1	2,124.7	1,070.9	1,299.7	4,495.3	225.7	384.7	147.6	5,253.4
Oct.	295.5	1,816.1	2,111.6	1,074.7	1,311.6	4,497.9	235.1	395.9	149.5	5,278.4
Nov.	279.7	1,864.6	2,144.3	1,077.6	1,326.4	4,548.2	225.9	404.5	152.2	5,330.8
Dec.	239.7	1,968.2	2,207.9	1,088.8	1,367.9	4,664.6	218.5	402.0	145.9	5,430.9
2002 Jan.	246.5	1,921.9	2,168.4	1,081.0	1,390.4	4,639.8	216.2	420.8	141.8	5,418.7
Feb.	240.3	1,917.2	2,157.5	1,076.7	1,394.5	4,628.8	221.1	431.6	138.7	5,420.3
March	254.3	1,914.3	2,168.6	1,088.5	1,397.9	4,655.0	229.6	435.9	137.2	5,457.8
Apr.	261.7	1,945.7	2,207.4	1,092.4	1,391.9	4,691.7	228.1	442.2	134.7	5,496.7
May	273.9	1,945.6	2,219.5	1,100.4	1,394.0	4,713.9	234.8	447.3	144.0	5,540.0
June	285.8	1,992.3	2,278.2	1,075.3	1,400.0	4,753.6	229.6	443.7	133.0	5,559.9
July	296.8	1,959.7	2,256.5	1,083.7	1,403.0	4,743.1	228.8	455.5	125.6	5,553.1
Aug.	301.2	1,927.3	2,228.4	1,096.9	1,408.9	4,734.2	236.5	468.7	126.5	5,566.0
Sept.*	306.7	1,984.5	2,291.3	1,073.9	1,411.8	4,776.9	242.4	466.6	132.1	5,618.1

1 Monetary aggregates comprise monetary liabilities of MFIs and central government (Post Office, Treasury) vis-à-vis non-MFI euro area residents excluding central government.
2 M3 and its components exclude holdings by non-residents of the euro area of money market fund shares/units, money market paper and debt securities up to 2 years.
3 Data for the euro area until the end of 2000 concern the Euro-11. As from 1 January 2001, they concern the Euro-12.
* Provisional data.
Source: ECB.

Table 6

The Greek contribution to the monetary aggregates of the euro area¹*(Outstanding balances in billion euro, not seasonally adjusted)*

End of period	Currency in circulation ²	Overnight deposits	M1	Savings deposits and deposits redeemable at notice up to three months	Deposits with agreed maturity up to two years	M2	Repurchase agreements	Money market fund shares/units	Debt securities of up to two years	M3
	(1)	(2)	(3)=(1)+(2)	(4)	(5)	(6)=(3)+(4)+(5)	(7)	(8)	(9)	(10)=(6)+(7)+(8)+(9)
2000	7.7	13.3	21.1	49.9	28.9	99.8	18.5	15.4	0.2	133.9
2001	7.2	16.1	23.2	57.2	29.4	109.8	24.2	9.7	0.1	143.8
2001 Jan.	6.7	12.5	19.2	49.0	28.1	96.3	21.0	14.7	0.2	132.2
Feb.	6.5	12.4	18.9	49.1	27.4	95.3	22.6	13.7	0.2	131.8
March	6.6	11.6	18.2	49.1	27.5	94.7	24.2	12.9	0.2	132.0
Apr.	6.9	12.4	19.2	50.0	27.3	96.5	25.2	12.4	0.2	134.2
May	6.9	11.8	18.7	50.1	27.1	95.9	26.1	11.8	0.2	134.0
June	7.4	12.4	19.8	51.2	26.5	97.5	27.3	11.2	0.2	136.1
July	7.5	12.5	20.0	51.5	26.1	97.6	28.6	11.2	0.2	137.5
Aug.	7.3	12.3	19.6	52.2	25.8	97.6	28.5	10.9	0.2	137.1
Sept.	7.2	12.2	19.4	52.7	24.0	96.1	29.3	10.5	0.2	136.0
Oct.	6.8	12.4	19.3	52.9	24.8	96.9	28.7	9.6	0.2	135.4
Nov.	6.7	13.2	19.9	53.7	26.3	99.9	26.8	9.4	0.1	136.2
Dec.	7.2	16.1	23.2	57.2	29.4	109.8	24.2	9.7	0.1	143.8
2002 Jan.	5.5	14.3	19.8	57.2	26.5	103.5	23.9	9.8	0.1	137.3
Feb.	5.2	13.8	19.0	57.5	27.4	103.9	23.0	9.4	0.1	136.4
March	5.4	12.5	17.9	57.3	27.2	102.5	24.2	9.3	0.1	136.1
Apr.	5.5	13.7	19.2	58.0	26.9	104.2	22.9	8.9	0.0	136.0
May	5.9	13.3	19.2	58.2	26.6	103.9	22.8	8.9	0.0	135.7
June	6.2	14.2	20.4	58.7	26.0	105.1	22.6	8.7	0.0	136.3
July	6.4	14.3	20.7	58.8	26.0	105.6	22.5	8.9	0.0	137.0
Aug.	6.4	14.1	20.6	59.5	26.3	106.3	22.8	8.9	0.1	138.1
Sept.	6.6	14.7	21.3	59.9	25.4	106.7	22.9	9.1	0.1	138.8

1 The Greek contribution begins upon Greece's entry into the euro area (1 January 2001). For statistical reasons, however, the data on monetary aggregates were extended to cover previous years as well.

2 As from January 2002, currency in circulation is calculated on the basis of Greece's subscription key to the ECB capital, excluding 8% of the banknotes issued, which correspond to the ECB. As a result, published data on monetary aggregates (M1, M2 and M3) may not fully reflect the actual Greek contribution to these aggregates in the euro area, as currency in circulation in Greece is affected by the flows of euro banknotes and coins in the euro area, as well as by holdings thereof by non-euro area residents.

Source: Bank of Greece.

Table 7

Deposits of domestic firms and households with Other MFIs,¹ by currency and type*(Outstanding balances in million euro, not seasonally adjusted)*

End of period	Total deposits	Breakdown by currency		Breakdown by type		
		Deposits in euro ²	Deposits in other currencies	Sight deposits	Savings deposits	Time deposits ³
2000	90,737.8	73,720.2	17,017.6	11,007.0	50,917.8	28,813.0
2001	101,809.5	79,566.0	22,243.5	13,385.2	58,323.1	30,101.1
2001 Jan.	88,672.8	71,364.1	17,308.7	10,004.0	50,097.1	28,571.6
Feb.	88,128.8	71,100.2	17,028.6	10,019.8	50,121.5	27,987.5
March	87,506.4	69,835.1	17,671.3	9,376.2	50,163.9	27,966.3
Apr.	89,005.3	72,383.4	16,621.9	10,149.5	50,991.1	27,864.7
May	88,126.9	71,588.8	16,538.1	9,522.3	51,161.0	27,443.6
June	89,219.5	73,009.8	16,209.7	10,132.4	52,280.3	26,806.8
July	89,196.9	73,484.2	15,712.7	10,146.2	52,527.7	26,523.0
Aug.	89,264.4	73,797.9	15,466.5	9,826.6	53,222.9	26,215.0
Sept.	88,095.4	72,815.9	15,279.6	9,849.7	53,729.9	24,515.9
Oct.	89,382.6	74,146.8	15,235.8	10,125.1	53,972.1	25,285.4
Nov.	92,567.2	73,956.4	18,610.7	10,928.3	54,790.3	26,848.6
Dec.	101,809.5	79,566.0	22,243.5	13,385.2	58,323.1	30,101.1
2002 Jan.	97,542.0	78,693.6	18,848.4	11,839.1	58,355.2	27,347.7
Feb.	98,302.4	79,029.9	19,272.4	11,356.7	58,674.4	28,271.3
March	96,741.8	77,970.2	18,771.6	10,267.5	58,309.6	28,164.7
Apr.	98,685.7	80,274.3	18,411.5	11,584.4	58,979.2	28,122.2
May	97,779.9	79,934.6	17,845.3	10,795.2	59,174.0	27,810.7
June	98,751.5	81,549.4	17,202.1	11,758.3	59,654.1	27,339.2
July	99,132.9	81,816.4	17,316.4	11,888.0	59,768.1	27,476.8
Aug.	99,924.1	82,255.7	17,668.4	11,656.2	60,475.4	27,792.5
Sept.	101,076.4	84,497.2	16,579.2	12,328.6	61,820.2	26,927.6

1 Other Monetary Financial Institutions (Other MFIs) comprise credit institutions other than the Bank of Greece and money market funds.

2 Including (until 31 December 2001) deposits in drachmas and the other euro legacy currencies.

3 Including blocked deposits.

Source: Bank of Greece.

Table 8
ECB and Bank of Greece interest rates
(Percentages per annum)

1. ECB interest rates				2. Bank of Greece interest rates				
With effect from ¹	Deposit facility	Main refinancing operations ³	Marginal lending facility	With effect from	Overnight deposit facility – first tier ⁴	Overnight deposit facility – second tier ⁴	14-day intervention rate	Lombard rate
1999 1 Jan.	2.00	3.00	4.50	1999 14 Jan.	11.50	9.75	12.00	13.50
4 Jan. ²	2.75	3.00	3.25	21 Oct.	11.00	9.75	11.50	13.00
22 Jan.	2.00	3.00	4.50	16 Dec.	10.25	9.25	10.75	12.25
9 Apr.	1.50	2.50	3.50	27 Dec.	10.25	9.00	10.75	11.50
5 Nov.	2.00	3.00	4.00					
2000 4 Feb.	2.25	3.25	4.25	2000 27 Jan.	9.50	8.50	9.75	11.00
17 March	2.50	3.50	4.50	9 March	8.75	8.00	9.25	10.25
28 Apr.	2.75	3.75	4.75	20 Apr.	8.00	7.50	8.75	9.50
9 June	3.25	4.25	5.25	29 June	7.25	-	8.25	9.00
28 June ³	3.25	4.25	5.25	6 Sept.	6.50	-	7.50	8.25
1 Sept.	3.50	4.50	5.50	15 Nov.	6.00	-	7.00	7.75
6 Oct.	3.75	4.75	5.75	29 Nov.	5.50	-	6.50	7.25
				13 Dec.	4.75	-	5.75	6.50
				27 Dec.	3.75	-	4.75	5.75
2001 11 May	3.50	4.50	5.50					
31 Aug.	3.25	4.25	5.25					
18 Sept.	2.75	3.75	4.75					
9 Nov.	2.25	3.25	4.25					

1 The date refers to the deposit and marginal lending facilities. For main refinancing operations, unless otherwise indicated, changes in the rate are effective from the first operation following the date indicated. The change on 18 September 2001 was effective on that same day.

2 On 22 December 1998 the ECB announced that, as an exception measure between 4 and 21 January 1999, a narrow corridor of 50 basis points would be applied between the interest rates for the marginal lending facility and the deposit facility, aimed at facilitating the transition to the new regime by market participants.

3 Until 21 June 2000: fixed rate tenders, from 28 June 2000: minimum bid rate in variable rate tenders.

4 On 29 June 2000 the second tier of the deposit facility was abolished; the interest rate thereafter applies to the unified deposit acceptance account.

Sources: ECB and Bank of Greece.

Table 9
Money market interest rates
(Percentages per annum, period averages)

Period	Overnight deposits ¹	1-month deposits ²	3-month deposits ²	6-month deposits ²	9-month deposits ²	12-month deposits ²
2000	8.24	8.28	7.89	7.32	6.90	6.55
2001	4.39	4.33	4.26	4.16	4.10	4.09
2001 Jan.	4.75	4.81	4.77	4.68	4.60	4.58
Feb.	4.99	4.80	4.76	4.67	4.61	4.59
March	4.78	4.78	4.71	4.58	4.49	4.47
Apr.	5.06	4.79	4.69	4.57	4.50	4.49
May	4.65	4.67	4.64	4.57	4.53	4.53
June	4.54	4.53	4.45	4.35	4.33	4.31
July	4.51	4.52	4.47	4.39	4.33	4.31
Aug.	4.49	4.46	4.35	4.22	4.14	4.11
Sept.	3.99	4.05	3.98	3.88	3.80	3.77
Oct.	3.97	3.72	3.60	3.46	3.39	3.37
Nov.	3.51	3.43	3.39	3.26	3.20	3.20
Dec.	3.34	3.42	3.34	3.26	3.25	3.30
2002 Jan.	3.29	3.35	3.34	3.34	3.39	3.48
Feb.	3.28	3.34	3.36	3.40	3.48	3.59
March	3.26	3.35	3.39	3.50	3.65	3.82
Apr.	3.32	3.34	3.41	3.54	3.70	3.86
May	3.31	3.37	3.46	3.62	3.80	3.95
June	3.35	3.38	3.46	3.59	3.73	3.87
July	3.30	3.36	3.41	3.48	3.54	3.64
Aug.	3.29	3.33	3.35	3.38	3.40	3.44
Sept.	3.32	3.32	3.31	3.27	3.23	3.24
Oct.	3.30	3.31	3.26	3.17	3.12	3.13

1 Until December 2000: interbank overnight rate in Greece. As from January 2001: euro overnight index average (EONIA).

2 Until December 2000: interbank rates (ATHIBOR). As from January 2001: euro interbank offered rates (EURIBOR).

Sources: Bank of Greece and Bloomberg.

Table 10
Greek government paper yields
(Percentages per annum, period averages)

Period	Yield on one-year Treasury bills	Government bond yield					
		3-year	5-year	7-year	10-year	15-year	20-year
2000	6.22	5.99	5.98	6.05	6.10	6.26	6.35
2001	4.08	4.28	4.58	4.82	5.30	5.51	5.76
2001 Jan.	4.57	4.66	4.91	5.03	5.35	5.61	5.81
Feb.	4.59	4.66	4.90	5.04	5.35	5.56	5.78
March	4.47	4.50	4.73	4.94	5.28	5.49	5.71
Apr.	4.48	4.53	4.79	4.89	5.39	5.55	5.77
May	4.52	4.59	4.89	5.01	5.54	5.70	5.92
June	4.31	4.40	4.73	4.88	5.48	5.66	5.91
July	4.31	4.39	4.75	4.89	5.52	5.71	5.94
Aug.	4.11	4.17	4.52	4.68	5.33	5.56	5.82
Sept.	3.77	3.78	4.27	4.47	5.31	5.55	5.88
Oct.	3.37	3.40	3.97	4.20	5.07	5.30	5.64
Nov.	3.20	4.12	4.14	5.07	4.90	5.10	5.36
Dec.	3.30	4.15	4.37	4.73	5.13	5.28	5.52
2002 Jan.	3.48	4.27	4.51	4.95	5.24	5.36	5.55
Feb.	3.59	4.37	4.73	5.07	5.31	5.41	5.60
March	3.81	4.58	5.00	5.27	5.51	5.58	5.78
Apr.	3.86	4.59	4.99	5.27	5.51	5.60	5.84
May	3.98	4.63	5.00	5.27	5.52	5.60	5.86
June	3.87	4.46	4.81	5.09	5.36	5.47	5.71
July	3.65	4.23	4.59	4.90	5.21	5.33	5.57
Aug.	3.44	3.90	4.29	4.60	4.95	5.07	5.34
Sept.	3.24	3.59	3.98	4.33	4.73	4.86	5.18
Oct.	3.13	3.52	3.95	4.34	4.79	4.94	5.32

Source: Bank of Greece.

Table 11

Bank loans to domestic firms and households by currency and branch of economic activity¹*(Balances in million euro)*

End of period	Total	In euro ²	In foreign currency	Branches of economic activity						
				Agriculture	Industry ³	Trade	Housing	Tourism	Consumer credit	Other
2000	59,330.0	42,553.8	16,776.2	3,884.9	11,823.7	12,374.2	11,271.9	1,814.3	5,511.3	12,649.7
2001	74,027.4	66,722.6	7,304.8	3,724.2	12,614.9	15,524.3	15,652.2	2,171.3	7,852.0	16,488.5
2001 Jan.	59,938.1	51,062.9	8,875.2	3,809.7	11,617.1	12,370.5	11,542.8	1,851.0	5,601.0	13,146.0
Feb.	60,758.1	52,131.0	8,627.1	3,723.9	11,813.8	12,374.8	11,775.0	1,894.5	5,715.7	13,460.4
March	62,687.0	54,138.2	8,548.8	3,869.2	11,972.1	12,731.5	12,067.4	1,946.9	5,973.5	14,126.4
Apr.	63,300.2	54,967.1	8,333.1	3,957.4	11,802.2	12,716.1	12,327.2	1,998.4	6,109.2	14,389.7
May	65,437.2	56,478.3	8,958.9	3,838.0	12,184.5	13,619.7	12,752.8	2,042.1	6,322.2	14,677.9
June	67,191.8	58,451.6	8,740.2	3,802.5	12,493.1	14,110.5	13,053.2	2,066.5	6,577.4	15,088.6
July	67,876.5	59,419.2	8,457.3	3,807.4	12,712.7	14,014.7	13,531.7	2,055.5	6,727.6	15,026.9
Aug.	68,345.9	60,214.8	8,131.1	3,767.4	12,630.0	14,031.4	13,859.7	2,040.1	6,887.2	15,130.1
Sept.	69,886.2	61,843.1	8,043.1	3,821.8	12,843.6	14,456.8	14,250.8	1,990.0	7,117.5	15,405.7
Oct.	70,591.5	62,887.0	7,704.5	3,735.5	12,718.4	14,510.7	14,695.7	1,992.2	7,379.6	15,559.4
Nov.	72,434.1	64,675.3	7,758.8	3,666.9	12,733.1	14,755.9	15,187.6	2,007.1	7,535.4	16,548.1
Dec.	74,027.4	66,722.6	7,304.8	3,724.2	12,614.9	15,524.3	15,652.2	2,171.3	7,852.0	16,488.5
2002 Jan.	73,982.0	66,648.1	7,333.9	3,230.0	12,435.1	15,174.6	16,024.7	2,236.0	7,783.7	17,097.9
Feb.	75,202.2	67,723.9	7,478.3	3,030.3	12,724.5	15,846.7	16,417.5	2,267.5	7,944.7	16,971.0
March	76,235.3	69,080.0	7,155.3	3,139.4	13,168.1	15,788.0	16,891.9	2,316.4	8,129.8	16,801.7
Apr.	76,958.0	69,886.9	7,071.1	3,196.1	12,801.1	15,939.4	17,362.1	2,341.0	8,301.2	17,017.1
May	78,009.6	71,192.8	6,816.8	3,193.0	12,912.6	16,064.7	17,721.8	2,372.2	8,508.3	17,237.0
June	79,960.9	73,475.3	6,485.6	3,167.7	13,360.0	16,516.2	18,194.3	2,414.5	8,678.1	17,630.1
July	81,233.9	74,622.8	6,611.1	3,167.7	13,720.8	16,570.9	18,759.9	2,411.6	8,868.0	17,735.0
Aug.	82,041.4	75,311.8	6,729.6	3,191.4	13,625.4	16,580.6	19,304.9	2,399.3	8,997.7	17,942.1
Sept.	82,662.6	75,930.7	6,731.9	3,212.8	13,785.6	16,059.8	19,503.8	2,560.0	9,228.1	18,312.5

1 Revised data.

2 Including only loans in drachmas until 31 December 2000

3 Including mining and small-scale manufacturing.

Source: Bank of Greece.

Table 12
Bank deposit and lending rates in Greece
(Percentages per annum, period averages)

Period	Deposit rates			Lending rates			
	Sight deposits	Savings deposits	12-month time deposits	To firms		To households	
				Short-term	Long-term	Consumer ¹	Housing ²
2000	2.73	5.71	6.14	12.33	11.52	17.00	9.76
2001	1.45	2.40	3.32	8.58	8.66	13.35	6.45
2001 Jan.	1.66	2.93	3.84	9.40	9.12	14.37	7.31
Feb.	1.62	2.69	3.74	9.10	9.31	14.25	6.89
March	1.60	2.70	3.71	8.78	8.99	13.93	6.70
Apr.	1.69	2.71	3.62	8.88	9.08	13.80	6.60
May	1.54	2.57	3.64	8.87	8.98	13.53	6.55
June	1.52	2.47	3.57	8.65	8.69	13.25	6.49
July	1.42	2.46	3.55	8.64	8.61	12.97	6.50
Aug.	1.51	2.47	3.45	8.59	8.74	12.94	6.48
Sept.	1.31	2.30	3.05	8.35	8.38	13.07	6.38
Oct.	1.09	1.93	2.71	8.08	8.33	12.76	6.00
Nov.	1.28	1.90	2.51	7.87	8.00	12.68	5.77
Dec.	1.20	1.69	2.41	7.79	7.65	12.65	5.78
2002 Jan.	0.90	1.66	2.62	7.74	7.36	12.70	5.77
Feb.	0.79	1.68	2.63	7.66	7.81	12.89	5.77
March	0.83	1.66	2.74	7.63	7.60	12.82	5.76
Apr.	0.83	1.66	2.82	7.59	7.69	12.66	5.77
May	0.79	1.62	2.87	7.52	7.78	12.69	5.74
June	0.75	1.46	2.75	7.40	7.58	12.67	5.80
July	0.72	1.41	2.72	7.29	7.41	12.61	5.68
Aug.	0.90	1.41	2.57	7.17	7.49	12.54	5.64
Sept.*	0.85	1.44	2.72	7.20	7.49	12.57	5.59

1 Average rate on all categories of consumer loans.

2 Average rate on variable-rate housing loans with a maturity of over 5 years.

* Provisional data.

Source: Bank of Greece.