

BANK OF GREECE

# MONETARY POLICY

INTERIM REPORT  
2005



OCTOBER 2005



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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. It examines the international economic environment and analyses economic developments in the euro area and Greece in the current year. The Report is summarised in Chapter I. Moreover, as in a few months five years will have been completed since Greece joined the euro area, Chapter II briefly discusses the considerable benefits that the adoption of the euro has meant for the country.

Chapter III describes the international economic environment in the current year, which has remained generally favourable. According to estimates, world economic activity and world trade keep increasing at high rates, although slower than in 2004. However, favourable economic prospects are threatened by considerable risks stemming from the sharp and prolonged increase in oil prices and the widening macro-economic imbalances in the world economy. In the euro area, the rate of GDP growth is estimated to slow down this year but is expected to accelerate in 2006. Euro area inflation stayed close to 2% in the first half of the current year, but rose to 2.3% in the third quarter. For 2005 as a whole, inflation is expected to exceed 2%, mainly due to the rise in oil prices. However, according to available forecasts, in 2006 it will fall again below 2%. The European Central Bank has kept its key interest rates unchanged since June 2003, taking into consideration prospects for price stability in the medium term and the slow growth of economic activity. Nevertheless, the ECB continues to be vigilant, as upside risks to inflation have increased. On 6 October 2005 the ECB Governing Council confirmed “the need

for *strong vigilance* in order to maintain inflation expectations in line with price stability in the medium to longer term”.

The subsequent chapters analyse developments in the Greek economy during the first nine months of 2005, as well as prospects for the year as a whole. Chapter IV examines developments in the money, credit and capital markets, while Chapter V analyses the course of inflation, economic activity, employment, fiscal aggregates and balance of payments. Inflation in Greece has risen this year, due to extraordinary factors (namely, the effects of the rise in oil prices in world markets and the increase in indirect taxes announced on 29 March 2005), while its differential vis-à-vis euro area inflation has widened. In contrast, core inflation is expected to fall slightly. GDP growth is estimated to decelerate less than what was anticipated and to stand around 3.5%, remaining well above average growth in the euro area and the EU. Employment shows an increase, mainly in services, while the rate of unemployment is declining, remaining nevertheless high. Developments in the fiscal aggregates show a reversal in the fiscal policy stance, which has become restrictive this year, thus contributing to the correction of fiscal imbalances, albeit not to the extent envisaged in the Stability and Growth Programme Update of March 2005. Finally, the current account deficit as a percentage of GDP is expected to widen in 2005, as the effect of the increase in oil prices, combined with the larger interest payments, more than offset the favourable effects of the moderate increase in imports of goods and services and the increase in receipts from shipping and tourism.

In the last Chapter (VI) the basic preconditions in order to improve the international competitive-

ness of the Greek economy, maintain high rates of GDP growth and increase employment are pointed out. These comprise restoring fiscal balance and achieving fiscal consolidation, ensuring price stability – *inter alia* by strengthening competition in the domestic product and factor markets and promoting wage increases that will be in line with the objective of ensuring price stability – and continuing to implement a policy of structural reforms aimed at considerably increasing productivity and production potential.

As regards the banking system, it is sound as a whole and its stability has been ensured. However, as mentioned in the last chapter, persistently strong credit expansion entails certain risks, especially in view of a likely increase in interest rates in the medium term and the effects on household income in case of an economic slow-

down. For this reason, it is again pointed out that banks should not loosen their credit standards under the pressure of competition, while households should carefully evaluate – based on realistic estimates about their income prospects and interest rate developments – their ability to service their total debt obligations without problems.

In order to provide more comprehensive information to the Greek Parliament and the Council of Ministers, the Report includes special presentations regarding the EU integrated guidelines for growth and jobs, the developments and prospects concerning international crude oil prices, the new labour market legislation, the reform of the Stability and Growth Pact, the recent structural reforms, as well as the responsibilities of the Bank of Greece as regards the supervision of the banking system.

Athens, October 2005

Nicholas C. Garganas  
Governor

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## I. Summary

So far this year the ECB has kept its key rates unchanged at the June 2003 levels. Thus, the minimum bid rate on the main refinancing operations has stood at 2%, the marginal lending facility rate at 3% and the deposit facility rate at 1%. In the first half of 2005, the ECB Governing Council's assessment was that, despite the short-term impact of high oil prices, there was no significant evidence of underlying inflationary pressures building up in the euro area over the medium term. In the second half of the year, it was considered that upward inflationary risks have increased, because the continuous rise in oil prices may lead to second-round effects stemming from wage- and price-setting behaviour and there is still more liquidity available in the euro area than needed to finance non-inflationary growth. Hence, the Governing Council has repeatedly emphasised the need for vigilance and recently (on 6 October) considered that its analysis confirmed "the need for *strong* vigilance in order to maintain inflation expectations in line with price stability over the medium to longer term".

The annual growth rate of M3, continuing an upward trend observed after the second quarter of 2004, accelerated to 7% in the second quarter of 2005 and 8.1% in August 2005, from 6.1% in the last quarter of 2004. Monetary dynamics have been driven by the historically low level of interest rates. The low opportunity cost of holding money fuelled demand for more liquid assets included in M1 and sustained the strong growth rate of M1. The acceleration of the growth rate of M3 is mirrored in continuing credit expansion to the private sector. The growth rate of loans to the private sector (which account for the bulk of total credit) sped up to 7.5% in the second quarter of 2005 and 8.4% in August 2005, from 6.9% in the last quarter of 2004. This development can be attributed to the low level of interest rates in the

euro area, as well as the more favourable financing conditions.

As the key rates of the ECB remained stable, interest rates in the single euro market showed little change. The three-month EURIBOR declined slightly to 2.13% in August 2005, from 2.17% in December 2004. Long-term government bond yields also dropped, reaching historical lows. Thus, between December 2004 and August 2005, the average monthly yield of ten-year euro area government bonds declined to 3.32% from 3.69%.

The annual growth rate of the *Greek* component of euro area M3<sup>1</sup> (excluding currency in circulation) slowed in the first eight months of the current year and stood at 6.7% in August (second quarter 2005: 8.5%, fourth quarter 2004: 9.2%). This development is associated, *inter alia*, with the transformation of certain money market funds into bond funds, the units of which are not included in M3. Thus, over the two months July-August 2005, the growth rate of M3 in Greece was for the first time since January 2004 lower than the corresponding euro area rate, which has been picking up since the second half of 2004.

The introduction of a single tax rate on deposit interest income and repo yields has affected the composition of M3. During the period under review, the annual rate of increase in deposits that, according to the ECB definition, are included in M3 picked up gradually and stood at 17.5% in August, compared with 12.6% in the fourth quarter of 2004. This development was a result of a considerable increase in time deposits, which became more attractive due to the reduction in their tax rate, as well as their relatively higher interest rate. By contrast, a substantial slowdown was observed in the annual growth rate of savings deposits (the major category of

overnight deposits), while the annual rate of decrease in holdings of repos and money market fund shares/units accelerated further.

Having recorded some fluctuations in the first eight months of the current year, the annual rate of increase in total financing of the economy by Monetary Financial Institutions (MFIs – i.e. banks and money market funds) established in Greece was 9.6% in August 2005, up from 8.6% in the last quarter of 2004. This reflected mainly developments in the rate of change in the financing of general government, which, however, remained negative throughout that period (August 2005: –0.8%, fourth quarter 2004: –5.6%). Moreover, credit expansion to enterprises and households decelerated (August 2005: 14.2%, fourth quarter 2004: 16.1%).

In more detail, the rate of increase in bank loans to enterprises slowed further in the first eight months of 2005 and stood at 6.6% in August (fourth quarter 2004: 8.6%), reflecting the deceleration in the growth of financing to all branches of economic activity except for shipping and the “other” branches. However, taking into account domestic corporate bond issues held by MFIs, as well as write-offs of interest claims in accordance with Law 3259/2004, the annual rate of increase in bank credit to enterprises remained unchanged (at 12.6% between the fourth quarter of 2004 and August 2005).

The annual growth rate of loans to households slowed down (August 2005: 24.7%, fourth quarter 2004: 28.0%), but is still relatively high; as a result, household indebtedness as a percentage of GDP reached 32.5% in August 2005 (euro area: 51.4%),

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<sup>1</sup> Chapter IV.1 explains why developments are discussed with respect not to Greek M3, but only to its components (excluding currency in circulation).

compared with 30.9% in December 2004 (euro area: 50.0%). Developments in total credit expansion to households are a combined result of an acceleration in the growth rate of housing loans (August 2005: 25.1%, fourth quarter 2004: 23.8%) and an appreciable decline in the growth rate of consumer loans (August 2005: 25.6%, fourth quarter 2004: 37.9%), which, however, was affected considerably by the first-ever securitisation of consumer loans in July 2005. Thus, taking into account the outstanding balance of securitised consumer and housing loans, the slowdown in the rate of increase in credit to households is considerably smaller (August 2005: 29.1%, last quarter of 2004: 30.0%).

With ECB key rates unchanged since June 2003, deposit interest rates in Greece showed only small changes in the first eight months of 2005, while trends in interest rates on bank loans are mixed. As regards deposits, both the average interest rate on new overnight deposits by households and the average interest rate on new deposits with an agreed maturity of up to one year declined slightly. Given that euro area interest rates on the above categories remained practically unchanged, the positive interest rate spread between Greece and the euro area narrowed slightly (in July 2005, the Greek interest rate on deposits with an agreed maturity of up to one year was 26 basis points higher than the comparable rate in the euro area).

Turning to bank loan rates, the average interest rate on the total of new housing loans fell by 19 basis points, while interest rates on loans to non-financial corporations showed mixed trends. As for corporate loans, the largest decline (of 27 basis points) was recorded in interest rates on corporate loans of more than €1 million with a floating rate or an initial rate fixation of up to one year. An almost similar decrease was shown by

the rates on consumer loans without a defined maturity, while the rate on consumer loans with an initial rate fixation of more than one and up to five years rose. During the first seven months of 2005, lending rates in Greece broadly continued to converge towards the euro area rates, except for consumer loans with an initial rate fixation of more than one and up to five years and corporate loans of up to €1 million with a floating rate or an initial rate fixation of up to one year, where the spread between Greece and the euro area widened slightly. Besides, the largest spreads are observed in consumer loans (notably loans without a defined maturity) and corporate loans without a defined maturity.

The margin between the weighted average interest rate on bank loans and the respective rate on deposits narrowed as the former rate dropped more than the latter. The decrease in the average interest rate on bank loans came as a result of a reduction in both the average rate on loans to households and the average rate on loans to non-financial corporations and was due to increased competition among banks.

Greek government bond yields, reflecting similar developments in the yields of comparable securities in the euro area, declined substantially during the January-September 2005 period, reaching historically low levels. Underlying this development were uncertainty about economic recovery in the euro area, increased liquidity in international capital markets and investors' concerns about the impact of the large increase in oil prices. Transactions in government securities in the Electronic Secondary Market for Securities (HDA), despite declining during the reviewed period, remained at high levels. In the primary market for Greek government securities, there was a decline in funds raised and a visible shift from short and medium maturities to longer maturities,

while Greek government securities remained very attractive to Greek and foreign investors.

Share prices in the Greek stock market rose considerably during the January-September 2005 period, under the influence of developments in euro area stock markets. Underlying this were an increase in the profits of Athens Exchange-listed companies, according to the data announced for the first quarter and the first half of 2005; their successful transition from the Greek to the international accounting standards; the settlement of the issue of bank employees' pension funds; and the further strengthening of the capital market regulatory framework. Stock exchange transactions and the funds raised through the stock market rose considerably during the reviewed period.

\* \* \*

The international economic environment remained generally favourable in the first half of 2005. The dampening effect of high and rising oil prices on world GDP was largely offset by the continued beneficial impact of accommodative macroeconomic policies, the improved financial position of businesses and easy financing conditions, as reflected in historically low real interest rates, while inflationary pressures remained broadly in check. World economic growth is expected to slow to 4.3% this year, from 5.1% in 2004, but will still remain above its long-term trend. The volume of world trade in goods and services is projected to increase by 7% in 2005. Moreover, inflation in the advanced economies is expected to pick up only slightly to 2.2% in 2005 (from 2.0% in 2004), despite the surge in oil prices and the notable increase, though significantly weaker than in 2004, in the prices of other raw materials. This generally favourable outlook is, however, subject to a number of risks stemming from the sharp and pro-

longed rise in oil prices and the widening macroeconomic imbalances.<sup>2</sup>

In *the euro area*, quarter-on-quarter GDP growth picked up in the first quarter of 2005, but then slowed in the second. Generally, domestic demand remained subdued in the first half of the year. Economic activity is expected to strengthen in the second half of 2005 and to gain more momentum in 2006. Private consumption is projected to be supported by such factors as the gradual increase in employment and the strengthening – next year – in real household income, provided that inflation decelerates. Business investment should benefit from the very favourable financing conditions and improved corporate profitability, combined with robust global demand.

Inflation in the euro area remained close to 2% throughout the first half of 2005. This relative stability came as a result of counteracting developments in individual components, with the low rates of increase in unprocessed food and, to a lesser extent, services offsetting the high rates of oil price increases. Inflation edged up to 2.2% in July and August, before rising further to 2.5% in September (according to Eurostat's flash estimates). Inflation rates are projected to persist near current levels throughout the rest of the year, mainly because of recent oil price developments. ECB staff macroeconomic projections suggest that average annual euro area inflation should range between 2.1% and 2.3% in 2005 and between 1.4% and 2.4% in 2006. This inflation outlook is based on the assumption that the large rise in oil prices will have no significant second-round effects.

In *Greece*, economic growth is projected to slow down in 2005, but less than expected earlier.

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<sup>2</sup> See Chapter III below.

Specifically, real GDP growth is expected to be around 3.5% in 2005, compared with 4.7% in 2004, continuing to exceed considerably the corresponding euro area and EU averages. In 2005, growth continues to be driven by domestic demand. The rate of increase in private consumption is expected to slow down, still remaining relatively high. While private – notably business – investment is expected to rise, *total* investment is projected to remain virtually unchanged in 2005, mainly reflecting drastic cuts in public investment. Furthermore, government consumption growth has decelerated. The contribution of the real external balance to GDP growth is estimated to turn out positive for the first time in many years. However, the current account deficit as a percentage of GDP is expected to widen in 2005, since the impact from the oil price hikes and higher interest payments (as a result of a continuing rise in Greek government debt held by non-residents) more than offset the favourable effect of lower imports and increased receipts from shipping and tourism.

The projected GDP growth rate of around 3.5% in 2005 is somewhat higher than earlier forecasts by the Bank of Greece (as well as other international organisations and analysts), which had not taken into account the NSSG's recent revision of the growth figure for 2004 from 4.2% to 4.7% and had also overestimated import volumes and underestimated tourist activity.

Inflation has risen in 2005 due to extraordinary factors, namely the impact of the world oil price rise and the increase in indirect taxes as from April 2005, and the inflation differential between Greece and the euro area has widened. Specifically, average annual HICP inflation is expected to reach 3.6%, from 3.0% in 2004. By contrast, core inflation (as measured by the HICP excluding energy and unprocessed food prices) is expected to fall slightly

(to 3.2% at average annual levels, from 3.4% in 2004). In this connection, it is estimated that the rate of unit labour cost growth is rising only slightly in the business sector, while in the whole economy it is slowing down considerably (mainly reflecting a lower than in 2004 increase in civil servants' wages). At the same time, demand-induced inflationary pressures in 2005 are weaker than in 2004. On the other hand, imported inflation is overall higher. Underlying this are the higher than in 2004 rise in world oil prices and the visibly weaker appreciation of the euro vis-à-vis the US dollar (on average in the first nine months of 2005).

These projections for inflation in 2005 represent a downward revision of the April 2005 forecast (in the Bank of Greece *Annual Report 2004*) for a CPI average annual increase of around 4%, despite a larger than expected rise in oil prices in the meantime. The difference is partly attributable to the fact that those forecasts were based, *inter alia*, on the technical assumption that the increase in indirect taxes would be fully passed on to consumers, while the inflation outturn suggests that firms have absorbed part of this increase. It also reflects the relative containment of the increase in public utility rates and the more effective market surveillance by the Ministry of Development and the Competition Commission.

\* \* \*

In a few months, five years will have been completed since Greece joined the euro area and adopted the euro. The benefits from EMU entry are important (see Chapter II). Characteristically, since 2001, inflation in Greece has stood at levels considerably lower than in the previous 15 years and real GDP growth has been substantially stronger than before. Joining the euro area has meant an increase in credibility, since the country has joined a monetary regime of low and sta-

ble inflation. The gain in credibility is confirmed by the drastic decline in the yield spread between the Greek government ten-year bond and the comparable German bond following the adoption of the euro.

However, the Greek economy continues to face serious challenges. This year has seen a stepping up of efforts to correct fiscal imbalances, which, however, remain exceptionally large. Moreover, despite the slowdown in wage increases, unit labour costs continue to rise at a considerably faster pace than in the euro area; as a result, inflation remains relatively high and the international competitiveness of the Greek economy continues to be eroded. At the same time, a number of measures have been implemented or decided upon recently to improve conditions in the product and labour markets, enhance efficiency in public utilities and encourage investment in an environment of increased transparency. These measures help address the structural problems of the Greek economy and are expected to affect productivity and employment favourably. However, the structural reform effort must continue in order to boost potential output growth and to ensure high rates of growth over the longer term. Actually, as pointed out in the past, sustainable strong GDP growth will require a transformation of the economy from one where growth is driven mainly by domestic demand – as has been the case in recent years – into one where supply responds more effectively to changing economic conditions and can successfully withstand the increasingly intense competition in world markets, so that the external sector becomes a key driver of growth.

Specifically regarding fiscal policy, its stance has reversed and has become restrictive in 2005, thus contributing to the correction of fiscal imbalances, albeit not at the pace envisaged by the revised Stability and Growth Programme Update (SGPU).

Moreover, fiscal adjustment does not sufficiently rely on measures that would ensure a structural and permanent improvement in the fiscal position. Fiscal adjustment efforts must continue in the coming years. In addition to a major reduction of the government deficit in 2005-2006, a permanent further improvement in the fiscal position is required, not only to achieve the targets set in the SGPU and fulfil the country's commitments under the Stability and Growth Pact, but also to reduce the public debt-to-GDP ratio to 60% by 2015, when – as a result of population ageing – government expenditure for pensions will start growing as a percentage of SGPU. The gradual reduction of public debt requires sizeable primary surpluses in the years ahead, to be achieved by limiting primary expenditure on a permanent basis and by increasing revenue. In addition to reducing the government deficit, it is also necessary to change the structure of both expenditure and revenue. This will secure sufficient resources for financing the necessary public investment in infrastructure and human capital and will allow a further cut in direct taxes. With policies along these lines, the reduction of deficits, essential for a permanent improvement of the fiscal position, will contribute to a decline in inflation and the achievement of price stability, and will help strengthen confidence and consolidate macroeconomic stability, all of which are prerequisites for maintaining high growth rates over the long run. At the same time, a timely reform of the social security system is also necessary, so that the serious actuarial deficits of this system can be dealt with. Progress in reducing unemployment and increasing the employment rate, especially of the women and the young, will further strengthen the sustainability of the social security system. The launch of a social dialogue on pension reform as well as the structural measures recently adopted constitute positive steps towards tackling a difficult problem that, if it remains unsolved, could have critical consequences on the economy's long-term prospects.

As mentioned earlier, the inflation differential between Greece and the euro area contributes to an erosion of the international competitiveness of the Greek economy. Given that fiscal policy is not enough to achieve an efficient decline in inflation – i.e. one that would not imply adverse short-term side-effects on activity and employment – the effort to reduce inflation should be accompanied by wage increases that are compatible with achieving price stability but do not lead to a decline in real incomes. To this end, as already proposed in previous Bank of Greece reports, the rises in *contractual* earnings should be compatible with a rate of increase in nominal *average actual* earnings that gradually converges towards the sum of the growth rate of productivity in Greece and the average inflation rate in the euro area (rather than in Greece), until the inflation differential between Greece and the euro area is effectively eliminated and price stability is achieved. At the same time, it is necessary to strengthen competition in the product markets, so that profit margins are at normal levels.

In order to assess – from the point of view of reducing inflation – the significance of the implementation of the above proposal which concerns the determination of increases in nominal average actual earnings, a number of econometric simulations were carried out (see Chapter VI). The main conclusion is that lower nominal wage increases help achieve lower inflation and higher GDP and employment growth, without leading to appreciably lower average real wage increases. Besides, the somewhat lower rise in average real wages is more than offset by the higher rise in employment. Similar favourable effects on key economic aggregates stem from measures to enhance competition which lead to a reduction of profit margins in cases where these are excessively big.

To sum up, restoring fiscal balance and achieving fiscal consolidation, ensuring price stability (*inter*

*alia*, by strengthening competition in the domestic product and factor markets and promoting wage increases which are in line with price stability) and continuing to implement a policy of structural reforms to raise productivity and production potential are the key conditions for improving the international competitiveness of the Greek economy, maintaining strong GDP growth and increasing employment in an environment where competition in the world market is becoming more intense.

\* \* \*

The Greek banking system as a whole is sound and its stability has been ensured. The capital adequacy ratios, the profitability and liquidity of Greek banks are very satisfactory. Certainly, the Bank of Greece monitors and evaluates carefully the risks arising from persistently strong credit expansion and has tightened banking supervision in recent years (especially after the lifting of restrictions on personal loans). Despite relatively low household indebtedness in Greece, the continuing strong credit expansion to households is a factor that could potentially amplify the impact of banks' credit risk, to the extent that such risk is incorrectly assessed by banks. Moreover, there are risks to the financial position of households, insofar as they underestimate the consequences of additional borrowing on their ability to service their total outstanding debt in the future without problems. The possibility of inadequate risk assessment by banks and/or consumers is higher in the event of (a) an economic slowdown, which would affect indebted households' disposable income; or (b) a potential rise of euro interest rates from their current historical lows. In the latter case, loan servicing costs would increase, since the majority of new consumer and housing loans have been agreed at floating rates or with an initial rate fixation of up to one year.

In this connection, the Bank of Greece has repeatedly pointed out that banks should not loosen their credit standards under the pressure of competition, while households should evaluate carefully – on the basis of realistic assumptions about their income prospects and interest rate developments – their ability to meet their total debt obligations. In particular, with respect to loans secured by residential property, the Bank of Greece has also recommended that banks should limit total lending to each borrower to a percentage of up to 75% of the market value of the real estate used as collateral and, in addition to the value of such collateral, take more account of borrowers' overall credit standing. These recommendations have become more timely: whereas until recently loans did not – as a rule – exceed 75% of the value of real estate used as collateral, banks now tend to finance borrowers in excess of the loan-to-value ratio of 75%.

It is a well-known fact that the single monetary policy has led to low nominal interest rates across the euro area. Low nominal interest rates, along with lower real interest rates relative to the euro area as a result of the positive inflation differential, have boosted credit expansion. Besides, both in Greece and in the euro area, banks operate in an open market environment with free competition. Credit expansion therefore can no longer be contained through administrative measures. The Bank of Greece, as mentioned above, monitors the dynamics of credit expansion and evaluates its

implications for inflation, the stability of the banking system and households' financial position. However, following Greece's entry into the euro area and the implementation in Greece of the single monetary policy, which is formulated by the European Central Bank taking into account monetary conditions in the euro area as a whole, the Bank of Greece has limited scope for containing credit expansion and can only influence it indirectly and marginally. Specifically, it cannot intervene in the determination of bank interest rates or impose credit restrictions.

Certainly, the Bank of Greece has an interest in the stability of the banking system and the protection of borrowers. Specifically, the Bank of Greece seeks to ensure the smooth operation of credit institutions through the coverage of credit risk with adequate funds, reserves and provisions. The measures taken in this direction can lead to an improvement in the structure of banks' loan portfolios, thereby contributing to the protection of customers from excessive borrowing. In the same vein, the Bank of Greece has established transparency rules for transactions. Finally, the Bank of Greece, in the context of its monitoring of household indebtedness, has decided to repeat the survey it conducted three years ago. The new survey should enable an assessment of developments in household indebtedness in the light of more recent data. The survey started in mid-September and its results will be discussed in the Bank's next report on monetary policy.

## II. Greece in the euro area: the first five years

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### 1. Introduction

In a few months, five years will have been completed since the adoption of the euro by Greece on 1 January 2001. Two years earlier, on 1 January 1999, the euro and the single monetary policy had been introduced in 11 countries of the European Union. Later, on 1 January 2002, euro banknotes and coins were launched with great success and have been used ever since by more than 300 million European citizens in their everyday transactions.

In the nearly seven years from the inception of the single monetary policy, the primary objective of the Eurosystem, which is the achievement of price stability (i.e. an average inflation rate in the euro area of below but close to 2%), was approached satisfactorily despite strong external shocks (e.g. the oil price hikes). Inflation dropped from 6.7% on average in the 1980s and 2.7% in the 1991-1998 period to 2.0% in the 1999-2005 period. The credibility of monetary policy is evidenced by the decline in long-term inflation expectations in the euro area to below 2%, i.e. to a level compatible with price stability. As a result of the establishment of monetary policy credibility, short-term and long-term interest rates (in both nominal and real terms<sup>1</sup>) have reached historical lows. Furthermore, the fulfilment of the Maastricht Treaty criteria required fiscal consolidation during the nominal convergence period; as a result, the general government deficit as a percentage of GDP in the euro area as a whole almost halved in the period after the adoption of the euro, in comparison with its average level in the preceding two decades.

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<sup>1</sup> The real or deflated interest rate is approximately equal to the difference between the nominal interest rate and the rate of inflation, where the nominal interest rate and inflation refer to the same period.

Monetary union has boosted intra-euro area trade, mainly owing to the elimination of exchange risk and currency conversion costs. The introduction of the euro has also furthered considerably financial integration. Money market integration has already been virtually completed in the euro area, while capital market integration is underway.

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## 2. Benefits from the single currency for Greece: lower inflation

By adopting the euro, Greece achieved a substantial drop in inflation. Lower inflation rates have boosted investment and growth. Of course, the improvement in macroeconomic aggregates had already been evident before Greece joined the Monetary Union, during the period of effort to satisfy the Maastricht Treaty criteria. During the 1990-1999 period, i.e. the decade of convergence towards stability, the average annual rate of increase in the Consumer Price Index (CPI), which had rocketed to 20.4% in 1990, dropped to 10.9% in 1994 and 2.6% (2.1% on the basis of the Harmonised Index) in 1999.

The anti-inflationary stance of monetary policy was gradually strengthened during the convergence decade and was also supported by a fiscal policy that helped – during most of that period – contain demand growth and price increases, as confirmed by the available revised data (on a national accounts basis), which reveal a substantial decline in the general government deficit-to-GDP ratio from the mid-1990s to 1999.

Furthermore, gradual consensus-building among the social partners, combined with remarkably higher investment and the ensuing rise in productivity from the mid-1990s, led to a steep decline in unit labour cost growth. At the same time,

firms' financing costs fell sharply owing to a decline in drachma interest rates (short-term drachma bank lending rate for enterprises: 1990: 27.5%, 2000: 12.3%).

The prospect of adopting the euro acted as a catalyst, triggering a process of general consolidation in the Greek economy, which has not been completed yet, but should be continued and stepped up.

The progressive containment of the depreciation of the drachma (in the period from 1990<sup>2</sup> to early 1998) and the successful participation of the drachma in the Exchange Rate Mechanism (16 March 1998 – end of 2000) were followed by the irrevocable fixing of the drachma's exchange rate against the euro and the adoption of the euro by Greece on 1 January 2001. For countries with a recent history of relatively high inflation rates, like Greece, one of the most important benefits of euro area membership is the adoption of the single monetary policy and the anchoring of inflation expectations at a very low level in comparison with the period of national monetary policies.

Specifically, during Greece's first five years in the Monetary Union, average annual HICP inflation has stood at 3.5%. Certainly, this rate is not compatible with the definition of price stability adopted by the Eurosystem; however, the maintenance of these levels for such a prolonged time period (almost five years in a row) is admittedly an achievement not seen in Greece in the last 30 years.

In no year during the 1973-1996 period was the inflation differential between Greece and the OECD countries (which was 8.3 percentage

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<sup>2</sup> This exchange rate policy was also implemented occasionally during the 1980s.

points on average in 1973-1996) as narrow as in the period after 2001, when it did not exceed one percentage point.<sup>3</sup> Relatively low inflation during the period after the adoption of the euro has been accompanied by less inflation volatility than in the previous 25 years.<sup>4</sup>

Greece now has a stable and strong currency, while in the past it suffered from foreign exchange crises and a series of devaluations of the drachma, which eroded Greek living standards.

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### 3. Potential further benefits from the single currency: elimination of the inflation differential between Greece and the euro area

The drop in inflation in Greece was combined with a narrowing of the inflation differential between Greece and the euro area. This differential was reduced considerably in the 1990s and in 2000, but was not eliminated. Greece's inflation rate remains persistently higher than the euro area average. Specifically, the difference between HICP inflation in Greece and the euro area annual average has stood at 1.3 percentage points on average since Greece joined the euro area, implying that the Greek economy has not yet reaped the full benefits from the Eurosystem's conduct of a single monetary policy in the euro area with the primary objective of price stability. As repeatedly pointed out by the Bank of Greece, the relatively large and persistent positive inflation differentials vis-à-vis the euro area, insofar as they are attributable to higher unit labour cost growth than in the euro area (reflecting, among other things, the social partners' wage-setting behaviour), an expansionary fiscal policy and inadequate market competition in Greece, must be reduced, because they lead to a continuous erosion of competitiveness. As a result, these differentials cause a worsening in the external balance (at constant prices),

which affects unfavourably output growth and employment.

The inflation differential between Greece and the euro area would have been reduced had proper structural reforms been implemented in recent years to increase sufficiently potential output and aggregate supply in the Greek economy. Given aggregate supply, the excess demand currently observed in the Greek economy and the ensuing inflation differential between Greece and the euro area would have been reduced if a tight fiscal policy had been implemented in Greece after the adoption of the euro. By contrast, despite high output growth, the general government deficit as a percentage of GDP widened considerably until 2004 and fiscal imbalances took on big dimensions again. During the 2000-2004 period, fiscal policy was generally expansionary, as shown by the downward trend of the cyclically adjusted general government primary surplus, which turned into a small deficit in 2004. In 2005, however, the stance of fiscal policy was reversed and became restrictive (see Chapter VI.2.1).

The inflation differential between Greece and the euro area also reflects structural weaknesses, such as higher downward price rigidity, inadequate competition in crucial domestic markets and, generally, the Greek economy's shortcomings when compared to the euro area in terms of goods, services and factors market efficiency.

As pointed out in previous Bank of Greece

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<sup>3</sup> The inflation differential was also small in the 1997-2000 period, when nominal convergence was well underway.

<sup>4</sup> The narrower fluctuation range results from a decline in the coefficient of variation of the inflation rate – i.e. the ratio of the “standard deviation” of inflation to its average value (x100%). The coefficient of variation, calculated for the inflation rate on a monthly basis during the January 2001-August 2005 period, is lower than for sub-periods of similar length during 1975-2000. Analysis of the deviation of the inflation rate from its linear trend leads to a similar conclusion.

reports, economies in a process of real convergence may justifiably have higher inflation than developed economies owing to the “Balassa-Samuelson effect”.<sup>5</sup> Furthermore, price convergence<sup>6</sup> between Greece and the other euro area Member States inevitably generates temporary inflation differentials between Greece and the euro area. However, the observed inflation differential between Greece and the euro area is much wider than would be justified by these effects, thus contributing to an erosion of international competitiveness.

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#### 4. The immediate cost of the euro cash changeover in Greece: a half percentage point rise in inflation in 2002

Although, as pointed out earlier, the adoption of the euro is associated with a substantial deceleration in inflation in Greece, it is often claimed that prices are high and that actually prices have been rising faster since the introduction of the euro banknotes and coins. However, the purchasing power of the net wages<sup>7</sup> of an average employee has risen by about 9% in the four years (2002-2005) following the euro cash changeover (see Chapter V.1, Table V.3). Admittedly, the pricing of goods and services in euro in connection with the launch of the euro banknotes and coins on 1 January 2002 led, especially during the first months of 2002, to an upward rounding of prices of certain consumer goods and services, while in several cases it served as a pretext for price hikes that were not justified by the rise in costs. This caused disaffection among consumers and gave rise to a perception of generalised substantial price increases. Actually, however, the impact on inflation was limited. According to estimates published in previous Bank of Greece reports, the aforementioned price increases caused a rise of 0.5 percentage point in annual inflation in 2002,

which was slightly higher than in the euro area.<sup>8</sup> According to Eurostat’s estimates, the impact for the euro area as a whole was 0.12-0.29 percentage point.<sup>9</sup>

Certainly, between April and October 2002, contrary to the immediately preceding period, consumers in Greece had an impression, as indirectly revealed by their inflation perceptions, that the inflation rate was higher than indicated by official HICP inflation.<sup>10</sup> The differences between consumers’ inflation perceptions and the actual inflation outcome are mainly attributable to the fact that consumers are disproportionately influenced by developments in the prices of certain services or goods with a high consumption frequency, which, however, tend to have a small value and, hence, a small share in overall consumption expenditure. In the case of Greece, consumers considered that such increases (e.g. in the price of coffee served in a café) represented a general phenomenon. However, consumers did not take adequate account of the fact that the prices of other

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<sup>5</sup> In countries (like Greece) in a process of real convergence, productivity growth in the internationally tradeable sectors rises, leading to strong wage growth, which tends to diffuse to the non-tradeable sectors; as a result, average inflation increases faster than in more developed economies. However, since price increases concern non-tradeable goods, competitiveness is not affected.

<sup>6</sup> As the adoption of the single currency has led to a further increase in intra-euro area trade and price transparency (and therefore price comparability across Member States), the prices of internationally tradeable goods, e.g. cars (leaving out indirect taxation differences), inevitably tend to become equal across Member States. Thus, after the beginning of price convergence, price increases are observed in countries with an initial lower price level.

<sup>7</sup> Net of social security contributions and income tax.

<sup>8</sup> The estimate for Greece was based on the breakdown of the national Consumer Price Index (CPI) for the first quarter of 2002. Specifically, more-than-usual or more-than-expected increases in the prices of certain goods and services in the January-March 2002 period were identified. The data for the following months did not lead to different estimates.

<sup>9</sup> See Eurostat, News Release 69/2003, 18 June 2003 (“Annex: Euro changeover effects”).

<sup>10</sup> Consumers’ perceptions are recorded in the monthly conjunctural survey conducted in all EU countries on behalf of the European Commission.

goods and services with a lower consumption frequency but a larger share in overall expenditure rose only slightly or remained stable or even fell. For example, in Greece, during 2002, the prices of many electrical and electronic appliances fell<sup>11</sup> and this largely persisted in the following years.

Speculative price increases had also been observed in the past, following drachma devaluations (e.g. upon the drachma's entry into the Exchange Rate Mechanism on 16 March 1998). Devaluations were associated with higher domestic price increases than would be justified by the rise in the drachma cost of imported inputs owing to the change in the drachma's exchange rate. As a result, profit margins widened. Underlying this phenomenon is inadequate competition in certain markets, notably those not exposed to international competition.

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#### 5. Further benefits from the single currency for Greece: much lower interest rates, resulting in stronger GDP growth

In Greece, convergence towards monetary stability was accompanied by faster output growth. In the run-up to euro area entry, financing costs (on a deflated basis) declined gradually but substantially.<sup>12</sup> This fact, as well as the consolidation of confidence and stability and the increase in credit availability, created the appropriate conditions for sustaining high growth rates over several years, which is a considerable improvement over the economic stagnation that prevailed in Greece during the 1980s and the early 1990s. Characteristically, in the 15 years up to 1994, average real GDP growth was below 1%, while in the last six years it has reached 4.3% (according to revised data).

After the adoption of the euro, interest rates on

government paper continued to fall and the average yield of ten-year government bonds dropped from 5.5% in December 2000 to 3.5% in August 2005. The enhancement of credibility following the adoption of the euro is also implied by the fact that the yield spread between ten-year Greek government bonds and comparable German bonds shrank from 85 basis points on average in 2000 to 20 basis points in August 2005. A crucial factor helping maintain low nominal interest rates in Greece – especially after the adoption of the euro – is the elimination of the exchange rate risk premium previously embedded in domestic interest rates to offset a possible depreciation of the drachma against European currencies.

In any case, the adoption of the euro, in addition to leading to lower nominal interest rates in countries with chronically high inflation, has also helped reduce public debt servicing costs; as a result, fiscal adjustment was facilitated or resources were released for other government expenditure. In the case of Greece, participation in the euro area (and, before that, the convergence effort) led to substantial savings as a result of reduced interest payments. These savings are calculated at 6.7% of GDP per year, assuming that, if Greece had *not* joined the euro area, the government's borrowing rate would have remained unchanged at the 1994 level (12.3% –

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<sup>11</sup> According to NSSG's CPI data, between December 2001 and December 2002 price declines were recorded in the following goods: telephony equipment (–4.1%), computers (–3.3%), photo and video cameras (–2.8%), air-conditioning and heating appliances (–2.5%), radio/tape recorders-televisions-videos (–1.9%), fridges-washing machines-electric cookers-ovens (–1.3%), video games (–0.8%) and records-tapes-diskettes (–0.6%), while the prices of lighting equipment-decoration articles remained virtually unchanged (–0.1%).

<sup>12</sup> Certainly, after 1992, interest rates (e.g. long-term government bond yields, money market and corporate loan rates) followed a downward path in the other euro area countries too. However, interest rate declines were much steeper in Greece; as a result, interest rate differentials between Greece and the other euro area countries (for government paper, money markets and corporate loans) narrowed, notably after the mid-1990s.

when nominal convergence had not yet gathered momentum).<sup>13</sup>

At the same time, during the last ten years and beyond, institutional changes in the banking system continued to be implemented. The public sector's privileged access to bank credit was abolished (as required under the Community legislation on the Second Stage of EMU) and monetary policy instruments and procedures were harmonised with the operational framework of the Eurosystem. These reforms, which were directly related to EMU and the adoption of the euro, gradually reduced substantially the obligation of monetary financial institutions to invest in government securities, grant loans to public enterprises and entities or hold minimum reserves with the Bank of Greece. Furthermore, capital account liberalisation, which was a requirement for the First Stage of EMU and a derogation from which had been approved for Greece, was completed. In addition, consumer credit was deregulated. Reforms in the domestic banking system led to the release of funds for private sector financing, while both the private and the public sector gained easier access to international markets. The substantial increase, from the mid-1990s, in the availability of credit, notably to households,<sup>14</sup> continued at an even faster pace after the adoption of the euro.

Liberalisation and enhanced competition in the banking sector certainly helped reduce bank lending rates. Specifically, between December 2000 and August 2005, the short-term lending rate in Greece (for credit lines to non-financial corporations) dropped further by around 3 percentage points, from 10.1% to 6.7%. The gradual convergence of nominal lending rates in Greece towards the corresponding rates in the euro area is continuing, but nominal lending rates (notably rates on consumer loans<sup>15</sup>) and nominal deposit

rates in Greece are still higher than the euro area average.

In addition to progress towards nominal convergence, from 1994 onwards Greece achieved stronger economic growth; indeed, annual GDP growth exceeded 3% in the last years of the convergence decade. After 2000, the growth rate accelerated further to around 4%, which is considerably higher than average growth in the euro area, as well as in Greece in the period from the aftermath of the second oil crisis (1979) to 1999.

This development was helped by gains in macroeconomic stability and confidence as a result of nominal convergence, as well as by the establishment of a stable monetary and exchange rate regime with the adoption of the euro and the single monetary policy by Greece. Specifically, these factors have contributed to a steep fall in domestic interest rates; an increase in credit availability from the domestic banking system, notably to households; Greek firms' access to a larger pool of savings through their participation in the large integrated capital market of the euro area; as well as a lengthening of the economic decision-making horizon due to the reduction of uncertainty following disinflation and the irrevocable fixing of the drachma's exchange rate. As a result, both private consumption and private

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**13** Additional annual interest payments are included in the public debt of the next year. Thus, the debt-to-GDP ratio would have been 147.4% on 1 January 2005 if the borrowing rate had remained at 12.3%.

**14** As approximated by the ratio of outstanding loans to households (end of year) to GDP at current prices. It should be noted that, despite its continued increase in recent years, especially after the adoption of the euro, this ratio (2000: 13.9%, 2004: 30.9%, August 2005: 32.5%) is still lower in Greece than in the euro area (2004: 50.0%, August 2005: 51.4%). The Bank of Greece monitors developments, notably in consumer credit, and has taken measures (including in the recent past) to limit any ensuing risks for both banks and borrowers (see Chapter VI.3 and Box VI.3).

**15** Floating-rate consumer loans or consumer loans with an initial rate fixation of up to one year carried an average rate of 8.45% in Greece, in comparison with 6.67% in the euro area in July 2005.

investment<sup>16</sup> grew strongly (at an average annual rate of 3.8% and 8.3% respectively in the 2001-2004 period). Private consumption was also affected favourably by the cumulative rise in the market value of households' assets in recent years, while residential investment was also supported by the rise in residential property prices. These developments are partly attributable to the monetary impulse from the adoption of the euro.<sup>17</sup>

However, despite the large increase in gross fixed capital formation and the rise in the labour force (owing to immigration), average potential output (i.e. production potential) growth in Greece after the adoption of the euro fell short of average aggregate demand growth. As already mentioned, this is deemed to reflect, among other things, slowness in implementing structural reforms.

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## 6. Further benefits from the single currency for Greece: narrowing of the balance of payments deficit through appropriate structural reforms

The adoption of the euro led to the elimination of currency conversion costs among Member States' former national currencies. It also eliminated exchange risk premiums and the uncertainty that used to prevail concerning exchange rate developments. This benefit is particularly important for Greece, where in the past high inflation had led to depreciation of the drachma vis-à-vis other currencies. For these reasons, euro area participation has affected financial transactions favourably, as stability – notably the elimination of exchange rate risk – fosters unimpeded capital inflows and outflows.<sup>18</sup> Moreover, one would reasonably expect the adoption of the euro to affect favourably Greece's intra-euro area trade. However, the overall current account deficit (including capital transfers, mainly transfers from the EU Structural

Funds, according to the previous method of balance of payments presentation) remained close to 6% of GDP on average in Greece in the 2000-2003 period. In 2004, the deficit (according to the same definition) declined appreciably to 4.8% of GDP, while in 2005 it is estimated to approach 6% of GDP (see Chapter V.5). However, while intra-euro-area exports of Greek goods as a percentage of the euro area countries' overall intra-euro-area imports declined considerably in the 1990s, since 1999 they have tended to stabilise, but at relatively low levels (according to Eurostat data).<sup>19</sup> Furthermore, according to NSSG data, Greek intra-euro-area exports as a percentage of total Greek exports of goods have increased in the 2001-2005 period (see also Chapter V.5, Table V.17).

The high current account deficit in recent years is not attributable to the adoption of the euro or to nominal convergence and the stabilisation of the drachma's exchange rate that preceded it, but – as far as economic policy is concerned – rather reflects directly the weak fiscal position of Greece and indirectly the inadequacy of past structural policies. In addition, underlying the widening of the current account deficit has been a loss of price competitiveness of Greek goods and services in the domestic and the world market owing to both

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**16** Private and public investment was boosted considerably by the inflow of resources from the Community Structural Funds. Underlying the expansion of overall domestic demand was also a considerable increase in government consumption, which reflects the loosening of fiscal policy discussed above. By contrast, the real external balance made a negative contribution to GDP growth over most of the period after the adoption of the euro.

**17** For the potential risks involved in strong credit expansion and the ensuing rise in consumer demand, see footnote 14 above, as well as Chapter VI.3.

**18** Indeed, after the adoption of the euro, despite the narrowing of government paper yield spreads between Greece and the other euro area countries, substantially higher net inflows have been recorded under overall financial investment (chiefly portfolio investment), mainly for the acquisition of Greek government bonds by non-resident investors. By contrast, foreign direct investment in fixed assets in Greece remains meagre and its increase is vital for the Greek economy's real convergence.

**19** Bank of Greece, *Monetary Policy – Interim Report 2004*, Chart VI.2, p. 129.

higher inflation in Greece and the appreciation of the euro over a large part of the period after the adoption of the single currency by Greece. As already mentioned in Section 3 of this chapter, persistent inflation differentials between Greece and its trading partners reflect – among other things – the wage-setting behaviour of the social partners.

The widening of the deficit, to the extent that it reflects lower competitiveness, has negative implications for growth and employment in the future. At the same time, the foreign debt build-up caused by persistent current account deficits cannot be disregarded, because there is a risk that excessive indebtedness may eventually have undesirable financial consequences. On the other hand, the adoption of the single currency by Greece has reduced substantially the importance of the current account deficit (and its financing) as a constraint on the conduct of economic policy. It should also be taken into account that, from the standpoint of the intertemporal allocation of resources, the widening of the current account deficit allows the Greek economy to finance increased investment in anticipation of high returns, which will allow the servicing of the external liabilities built up owing to the widening of the deficit.

It should be noted that the relatively high level of the current account deficit (as well as of unemployment) in Greece reflects, in addition to the failings of economic policy, the restructuring of the world economy, in conditions of fast technological progress and globalisation,<sup>20</sup> which have lowered product prices and costs and enhanced competition worldwide. The Greek economy would undoubtedly be better placed to address effectively these developments and, generally, the challenges entailed by euro area entry if – both during the convergence decade and after joining the euro area – more progress had been made in structural reforms aimed at increasing productiv-

ity, enhancing competitiveness and creating a business-friendly environment attractive to foreign direct investment.

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## 7. Any long-term costs from the adoption of the single currency by Greece are doubtful

The adoption of the euro does not imply that Greece has given up an independent monetary policy, because, in the final analysis, the Greek economy never had this possibility. Against the background of capital account liberalisation, the scope for conducting an independent monetary policy in a small open economy (like Greece) was very limited. Moreover, given the wide availability of infrastructure for fully automated instant cross-border fund transfers, fixed-exchange rate regimes are rather short-lived. Accordingly, the introduction of a single currency in Europe was dictated by the desire to safeguard the Single Market, namely the dense nexus of trade relations on our continent, on which Europe's prosperity depends.

As regards Greece, monetary policy was certainly conducted successfully in the run-up to the adoption of the euro, but after overcoming various difficulties.<sup>21</sup> One of the difficulties was associated

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**20** The last 15 years have been characterised by liberalisation of the goods, services and factors markets in industrial countries; fast technological progress, which boosted productivity growth considerably in some countries; reduction in the prices of tradeables owing to globalisation and the enormous rise in the supply of industrial products, especially by China and other emerging market and "transition" economies; as well as increased cross-border labour and business mobility. See BIS, *75th Annual Report*, Chapter II: The Global Economy, June 2005.

**21** In other times, however, the limited scope for conducting monetary policy in Greece was not always used to the economy's benefit. Hence, it is very important that Greece's euro area entry, and its earlier adherence to the framework of the Exchange Rate Mechanism and the fiscal discipline framework established by the Maastricht Treaty and the Stability and Growth Pact, encouraged economic policy "self-restraint" in Greece and promoted macro-economic discipline, with the assistance of Community procedures and through cooperation with our euro area partners. This has encouraged economic policy choices to be based on long-term criteria, i.e. to pursue long-term rather than short-term benefits, thus supporting real convergence and promoting social prosperity.

with the incidence of foreign exchange crises, which proved not to be solely associated with the economic instability of the 1980s. Specifically, in May 1994, as well as in the period from mid-1997 to early 1998, financial markets, notably the foreign exchange market, came under strong pressures. As a direct consequence of both crises, there were drastic interbank rate increases, which passed through to interest rates on lending to the private sector, at a risk of halting growth, as well as to the interest rates payable on government securities, thereby raising public debt servicing costs. Moreover, the acceleration of the drachma's depreciation around May 1994 and its devaluation in March 1998 hampered the disinflation process.

By entering the euro area, the Greek economy secured economic stability and credibility on a permanent basis. The markets consider the euro area as a region of economic stability and safety. This has helped minimise the impact of global monetary and exchange crises on euro area countries.

Of course, the primary objective of the Eurosystem's single monetary policy is price stability in the euro

area as a whole. Therefore, it is not possible to create tailor-made monetary conditions for each Member State. Hence, Greece can no longer offset the looseness of its fiscal policy by tightening monetary policy, as was the case during most of the convergence decade. By contrast, fiscal policy should become the main instrument for the conduct of stabilisation policy in Greece and, over the long term, should be assisted by policies to enhance market flexibility (see also Chapter VI.2).

With respect to Greece's loss, as a result of the adoption of the single currency, of the possibility of adjusting the exchange rate to compensate for erosion of competitiveness, experience has shown that in small open economies like Greece, especially in economies where labour markets do not operate effectively or imported raw materials and semi-finished products have a large share in the cost of finished products, devaluation is not an effective instrument for raising competitiveness and employment. Devaluation is soon offset by price and cost increases and, as a result, any improvement in competitiveness proves to be short-lived and the ultimate outcome is bound to be higher inflation.



### III. The international economic environment and economic developments and prospects in the euro area

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#### 1. The international economic environment<sup>1</sup>

##### 1.1 Overview

The international economic environment remained generally favourable in the first half of 2005. The dampening effect of high and rising oil prices on world GDP was to a large extent offset by the continued beneficial impact of accommodative macroeconomic policies, the improved financial position of businesses and easy financing conditions, as reflected in historically low real interest rates (see Charts III.1 and III.2), while inflationary pressures remained broadly in check. World economic growth is expected to slow to 4.3% this year, from 5.1% in 2004, but will still remain above its long-term trend.<sup>2</sup> The volume of world trade in goods and services is projected to increase by 7% in 2005, against a rise of 10.3% last year. Moreover, inflation in the advanced economies is expected to pick up only slightly to 2.2% from 2.0% in 2004, despite the surge in oil prices and the notable increase, though significantly weaker than in 2004, in the prices of other commodities.

This generally favourable outlook is, however, subject to a number of risks stemming from the sharp and prolonged rise in oil prices and the widening macroeconomic imbalances.

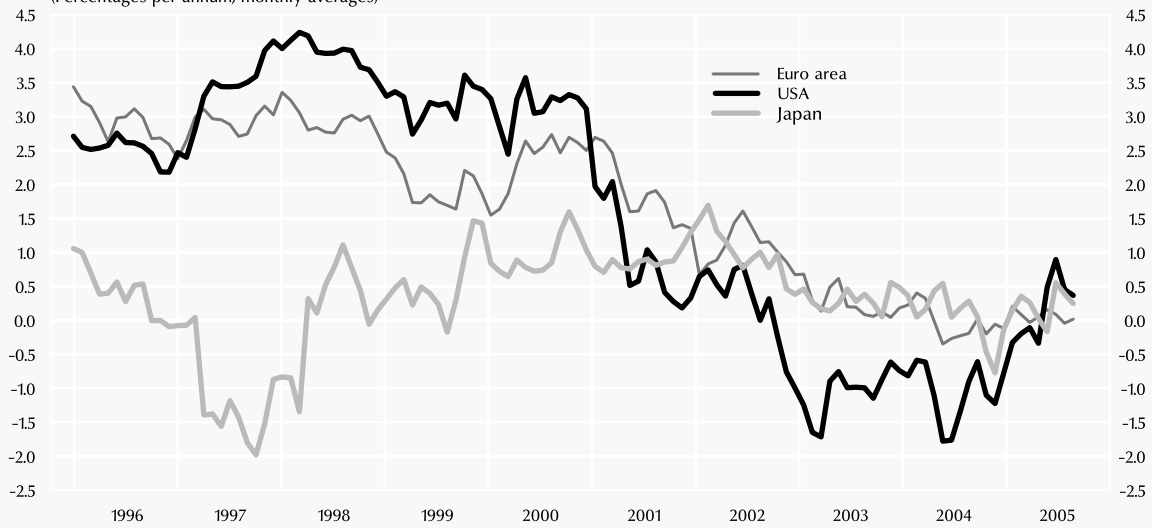
Among the major economies, growth in 2005 is expected to be comparatively stronger in the United States, China and the rest of the emerging market

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<sup>1</sup> The discussion that follows is based on macroeconomic developments until end-September 2005, on analyses and estimates by Bank of Greece staff and on forecasts and projections from international organisations. Where more recent data were unavailable, forecasts by the IMF (*World Economic Outlook*, September 2005) and the European Commission (*Spring 2005 Economic Forecasts*, April 2005) were used.

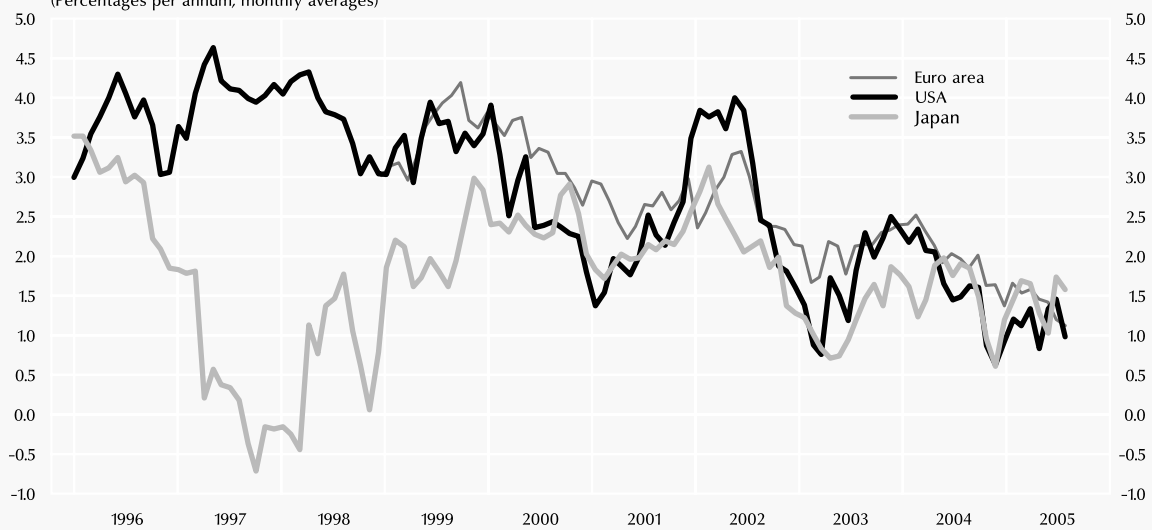
<sup>2</sup> The long-term trend was estimated for the period extending from 1970 to 2004 (the growth of world GDP is computed on the basis of purchasing power parities) – see IMF, *World Economic Outlook*, September 2005.

Chart III.1  
 Real short-term interest rates (January 1996 - August 2005)  
 (Percentages per annum, monthly averages)



Sources: Eurostat, and Bank of Greece calculations.

Chart III.2  
 Real long-term interest rates (January 1996 - July 2005)  
 (Percentages per annum, monthly averages)



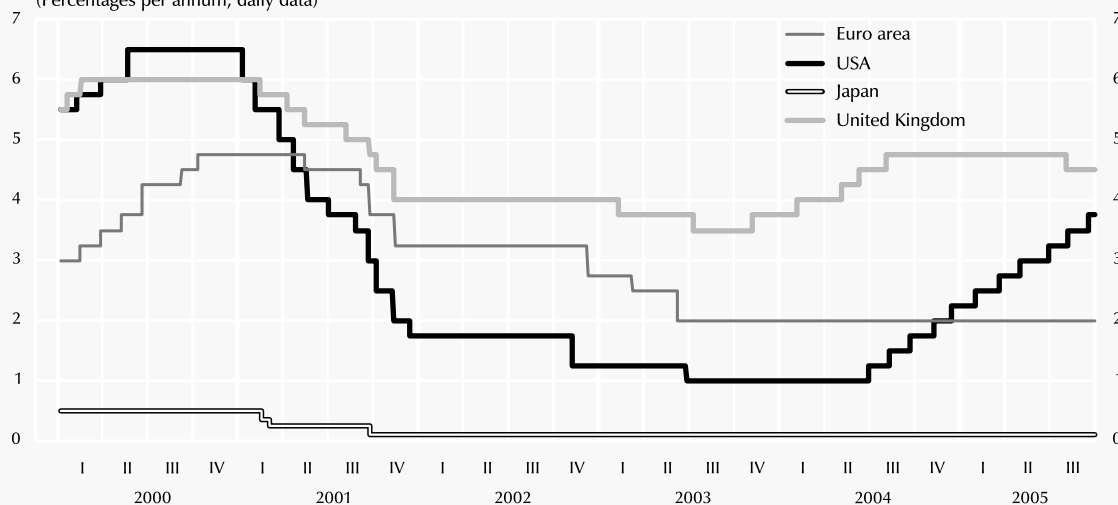
Sources: Eurostat, and Bank of Greece calculations.

and developing countries, but will continue to lag behind in the euro area and Japan. This gap in economic performance has caused the already large current account imbalances to widen. The current account deficit of the United States, in spite of the depreciation of the US dollar over the previous

three years, is expected to worsen to 6.1% of GDP. This deficit is mirrored in the respective surpluses of Japan, China and the other emerging Asian economies and of the oil-exporting countries.

Inflation and underlying inflationary pressures

Chart III.3  
 Central bank key rates (1 January 2000 – 30 September 2005)  
 (Percentages per annum, daily data)



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

remained generally subdued, as available evidence indicates that the rise in international oil prices (at least until August) has only had little effect on core inflation or inflation expectations. This phenomenon of broadly low inflation rates in advanced as well as in emerging and developing economies, despite the sharp rises in oil prices (and in the prices of non-oil commodities in 2004) is attributed to a series of factors.<sup>3</sup> First of all, many economies – especially the advanced ones – are now less oil-dependent than they were during past oil shocks. Second, the massive imports of competitive products from emerging economies, such as China and India, coupled with technological progress and the greater flexibility of product markets in the advanced economies, has intensified international competition in the goods and services markets. This increase in competition discourages firms from raising their prices, even in the presence of rising costs, while contributing on the other hand to productivity growth. Third, the enhanced credibility of central banks with regard to the achievement of price stability has anchored inflation expectations at low levels. Moreover, the

fact that in some advanced economies central banks have raised their key rates is seen as having mitigated inflationary pressures. Fourth, wage increases in the advanced economies have remained moderate, partly on account of greater labour market flexibility. The second-round effects on inflation from the oil price increases have therefore been very limited.

The expansionary monetary policies conducted by some of the advanced economies from 2001 to 2004 as a means of averting recession risks continued to have a lagged positive impact on GDP growth in 2005. However, both in the United Kingdom (from late 2003 to August 2004) and in the United States (from the second half of 2004 onwards), the central banks repeatedly raised their short-term interest rates in the face of incipient inflationary pressures. More specifically, the US Federal Reserve, after raising its key interest rate by 25 basis points five times in 2004 (from 1.0% to

<sup>3</sup> See, for instance, BIS, *75th Annual Report*, Chapter II: The Global Economy, June 2005.

2.25%), increased it an additional six times in 2005 to an ultimate 3.75% on 20 September 2005 (see Chart III.3). The Federal Reserve's Federal Open Market Committee (FOMC) expressed the view that its monetary policy remains accommodative and continues to provide ongoing support to economic activity (indeed, its increases in key interest rates did not translate into an analogous rise in long-term rates).<sup>4</sup> As a result, real estate prices continue to rise, while inflationary pressures have built up. The markets anticipate that the Federal Reserve will continue to raise its key interest rate. In the United Kingdom, the Bank of England raised its key short-term interest rate by 25 basis points five times between November 2003 and August 2004 (from 3.5% to 4.75%), before lowering it one year later (4 August 2005) to 4.5%. In Japan, where a sustainable recovery has yet to be achieved and deflation persists, the official discount rate has been kept unchanged since 2001 at the very low level of 0.1%.

The general government deficit in the G-7 countries as a whole is expected to decrease only slightly to 4.0% of GDP in 2005, from 4.1% in 2004. A slightly lower level relative to 2004 is also projected for the structural fiscal deficit of the G-7 as a percentage of potential output (2005: 3.6%, 2004: 3.7%). While the United States (owing to the significant – and unexpectedly large – growth in tax revenue<sup>5</sup>) and Japan reduced their fiscal deficits, fiscal imbalances grew in Italy and to a lesser extent in Germany and the United Kingdom.

More specifically, growth in the major economic regions is projected to stand at lower levels in 2005 than in 2004, on account of the hike in oil prices and increased exchange rate volatility of free-floating currencies. In the United States, GDP growth fell to 3.3% (in annualised terms) in the second quarter of 2005, from 3.8% in the first quarter. According to the IMF, GDP growth is pro-

jected to slow to 3.5% in 2005 from 4.2% in 2004, thus remaining slightly above potential. Growth continues to be driven by domestic demand, while the contribution of net exports to GDP growth was positive for the first time in six quarters (despite the depreciation of the US dollar in recent years). Consumer price inflation edged down to 2.9% in the second quarter, from 3.0% in the first, before rising to 3.6% in August. In Japan, GDP growth is expected to slacken to 2.0% in 2005, from 2.7% in 2004. Although a rise in real wages is expected to boost private consumption and high corporate profitability should support investment activity in the short run, deflation is not likely to disappear before 2006. In the United Kingdom, where fixed capital formation and public consumption have provided the main impetus to activity growth this year, the rate of increase in GDP is expected to weaken to 1.9% in 2005 from 3.2% in 2004. In China, last year's robust economic expansion of 9.5% is expected to edge down only slightly to 9.0% in 2005, mainly on account of a weakening in domestic demand. Yet, GDP growth rates of 9.4% and 9.5% were still recorded in the first and second quarters respectively. The administrative and monetary policy measures taken by the Chinese authorities in order to control investment expenditure appear to have had little impact on economic activity, even though gross fixed capital formation accounts for 45% of GDP. External demand remains strong, and the foreign exchange reform announced on 21 July (with a 2.05% revaluation of the renminbi against the US dollar and an explicit policy of managing the exchange rate with

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<sup>4</sup> The phenomenon of historically low long-term interest rates worldwide is discussed in Section 3.3 later in this chapter.

<sup>5</sup> According to the IMF (*World Economic Outlook*, September 2005), the strong increase in tax revenue during fiscal year 2004 allowed the United States to reduce its budget deficit by over one percentage point more than initially anticipated. The nominal and structural deficits of the United States are projected to reach 3.7% and 3.2% of GDP in 2005 respectively (revised downwards from 4.4% and 3.9% of GDP in April).

reference to a basket of currencies) has so far not had a significant effect.

This overall positive short-term outlook is, as mentioned previously, subject to a number of risks and uncertainties:

(a) The current high levels of oil prices and, more importantly, a possible further increase in prices could have a more severe impact on GDP and inflation (if, contrary to what has been the case so far, significant second-round effects appear through wage increases).<sup>6</sup> For the time being, oil prices are projected to remain high for quite an extended period.

(b) The worsening of current account imbalances entails the risk of an abrupt adjustment through exchange rates and monetary conditions, with adverse repercussions on the global economy.

These considerations underline the need to reduce global and domestic imbalances with appropriate economic and monetary policies aimed at reducing the risks of an abrupt and disorderly adjustment.<sup>7</sup>

## *1.2 World trade and international prices of oil and other commodities*

The volume of world trade in goods and services is expected to increase by 7% in 2005; this rate will be higher than the last twenty-year average (6.2%), but lower than last year's rate of 10.3%. The trade volume in the emerging market and developing economies in 2005 is projected to grow at nearly double the rate recorded by the advanced economies.<sup>8</sup> The increasingly strong presence of China on the international trade scene (both imports and exports) and the rise in commodity prices against a background of strong global demand were factors which, according to the World Trade

Organisation, have helped the developing economies increase their share in world merchandise trade to 31% in 2004 – the highest level since 1950. This development could prove essential in the fight against global poverty, as international trade gradually becomes a more important source of revenue for developing nations.<sup>9</sup>

The prices of non-fuel commodities (in US dollars) soared to historically high levels in March, but then eased slightly, mainly on account of a fall in the prices of industrial raw materials, whereas food prices remained fairly stable. For 2005 as a whole, the prices of non-fuel commodities are projected to increase, though at a much slower pace than in 2004. The IMF projects an increase of 8.6% in US dollar terms (down from 18.5% in 2004) or 8% in euro terms (i.e. at roughly the 2004 rate of 7.8%), assuming an average annual exchange rate of 1.250 US dollars per euro for 2005.<sup>10</sup>

International oil prices have been rising almost continuously since 1999. The average price for three types of crude oil<sup>11</sup> increased by 190% in six years, from \$13.1 per barrel in 1998 to \$37.8 in

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<sup>6</sup> Analysis results suggest that same percentage increases in oil prices can have non-linear effects, depending on starting levels. For instance, a 100% increase in oil prices from \$20 to \$40 could have a significantly smaller impact (e.g. on real disposable income or profitability) than a 100% increase from \$40 to \$80 per barrel.

<sup>7</sup> The joint statements issued by the G-7 finance ministers after their meetings in London on 16 April 2005 and in Washington on 23 September 2005 stress the need for vigorous action to address global imbalances, primarily through fiscal consolidation in the United States, further structural reforms in Europe and Japan (including fiscal consolidation in the case of the latter) and greater exchange rate flexibility among the currencies of the major economies.

<sup>8</sup> The volume of exports from emerging market and developing economies increased by 10.4%, against 5% in the advanced economies. In addition, the volume of imports in the emerging market and developing economies is growing at 13.5%, against 5.4% in the advanced economies.

<sup>9</sup> See the World Trade Organisation's press release of 14 April 2005 ([http://www.wto.org/english/news\\_e/pres05\\_e/pr401\\_e.htm](http://www.wto.org/english/news_e/pres05_e/pr401_e.htm)).

<sup>10</sup> Based on the technical assumption that the exchange rate during the next months will remain unchanged at its level from 17 to 30 September 2005 (1.2104). See also Chapter V.1.

<sup>11</sup> UK Brent, Dubai Fateh and West Texas Intermediate.

2004. In euro terms, the increase was somewhat more moderate, but nonetheless very substantial (154%). Even stronger increases were recorded in 2005, with prices climbing to record levels in March and reaching new highs in the months from June to September. International oil prices rose to \$50.8 per barrel in the second quarter, while the additional disruptions to aggregate supply in the United States by hurricanes Katrina and Rita caused international oil prices to soar to close to \$65 per barrel in September. The market sentiment is that international oil prices will remain high for quite some time. Indeed, oil prices are affected on the one hand by strong global demand, which is

expected to pick up in the second half of 2005, and on the other hand by production capacity constraints (see Box III.1). The tightness of world supply reflects the insufficiency of the existing refining infrastructure and the natural disasters mentioned previously. According to the IMF figures for 2005 (September 2005), the average annual price of UK Brent, Dubai Fateh and West Texas International should increase by another 43.6% to \$54.2 per barrel, while an additional increase to \$61.7 is projected for 2006. (According to other estimates based on more recent data, the average annual price of UK Brent will increase by 49% to \$57 per barrel – see Chapter V.1).

### BOX III.1

#### The international price of crude oil: recent developments and prospects

The continuous increase in crude oil prices on the world market over the past four years intensified in 2005 and has become the primary factor of uncertainty surrounding world GDP and inflation projections.

##### 1. Global demand as the main cause behind the oil price increase

The continuous rise in oil prices since January 2002 is quite different from the two oil crises of the 1970s. For while the latter had been triggered by a sharp drop in supply, the present crisis is the result of a higher than expected increase in global demand, notably from the United States and China (see Section 3 below). In fact, the growth of the global demand for oil increased more than expected, from 0.4% in both 2001 and 2002 to 2.0% in 2003 and to 3.7% in 2004.

According to the latest projections of the International Energy Agency (IEA),<sup>1</sup> the global demand for crude oil will remain strong in 2005 and 2006. Its rate of increase, however, after reaching a record high in 2004, will slow in 2005 and 2006 to levels closer to its long-term trend (1.6% in 2005 and 2.1% in 2006, compared with 3.7% in 2004). It should be noted that these projected rates of oil demand growth have been

revised slightly downwards since July, probably reflecting the recent oil price hike and the price elasticity of global demand for oil (even though this elasticity is low, at least in the short term).

This projected slowdown in the global demand for oil in 2005-06 is mainly attributed to the expected slackening in the rate of growth of world economic activity relative to 2004, when it exceeded its long-term trend.

##### 2. World oil supply

###### 2.1 Stylised facts

At the end of 2004, the world's proved oil reserves<sup>2</sup> amounted to 1,188 billion barrels. Three quarters of these reserves are found in the OPEC region<sup>3</sup> and →

<sup>1</sup> International Energy Agency, *Oil Monthly Report*, 9 September 2005.

<sup>2</sup> *Proved oil reserves* are defined as the volumes of crude oil which, according to geological and engineering studies, are believed to be recoverable, with reasonable certainty (90% probability) under present economic and operating conditions.

<sup>3</sup> The OPEC Member States are: Saudi Arabia, Iran, Iraq, United Arab Emirates, Kuwait, Qatar, Nigeria, Libya, Algeria, Venezuela and Indonesia.

→ 10% in the Commonwealth of Independent States (CIS), whereas only 7% are in the OECD countries, which are considered “politically secure”. In greater detail, 62% of reserves are found in the Middle East and more than one third of these belong to Saudi Arabia (Saudi Arabia, with 22%, has the largest share of the world’s oil reserves). Assuming constant production rates, the world’s proved oil reserves would last 41 years.<sup>4</sup>

The policies of the OPEC, acting as a cartel, have had a significant impact on the world oil market, even though it accounts for 41% of global oil production. Non-OECD and non-OPEC countries together produce 34%, led by the CIS region (with Russia accounting for one third of this share and slightly more than Saudi Arabia). The OECD countries, and first among them the United States, produce the remaining 25%.

## 2.2 Recent developments in the global oil supply

The growth in global crude oil supply is projected to slow to 1.7% in 2005, from the very high levels of 4.3% in 2004 and 3.6% in 2003.

OPEC increased its members’ production quotas<sup>5</sup> (except Iraq’s) a number of times from June 2004 onwards, raising its production ceiling to 28 million barrels per day at end-September 2005, from 23.5 million in the second quarter of 2004. However, OPEC’s limited spare capacity seems to preclude any further increase in oil production. According to the IEA, the OPEC-10’s daily oil production of 27.77 million barrels accounted for 95% of its sustainable production capacity (estimated at 29.16 million barrels per day in August 2005).<sup>6</sup> At their meeting of 20 September 2005, the OPEC Member States decided to use their full production capacity in the last quarter of 2005 (thus raising production by 2 million barrels per day), even though many of them are already producing at or close to full capacity.<sup>7</sup>

According to the latest IEA projections (Sept. 2005), the average daily oil production by non-OPEC countries is only expected to pick up in the last quarter of 2005, rising to 51.6 million barrels from 50.2-50.4 million barrels in the first three quarters of the year and 50.1 mil-

lion barrels in 2004. Projections released one month earlier had initially anticipated production levels to be higher, in both the third and the fourth quarters (50.6 and 51.8 million barrels respectively). However, the damage caused by hurricanes Katrina and Rita at end-August and September 2005 forced the US to respectively reduce oil production (pumping) and interrupt refinery operations in the Gulf of Mexico.<sup>8</sup> According to first estimates, it is expected that 90% of the region’s oil production will have been restored by end-2005. Hurricanes of such magnitude and other weather disasters are likely to recur in upcoming years (partly – according to certain analysts – on account of global warming), therefore adding a new factor of uncertainty to aggregate, non-OPEC, oil production.

The operation of refineries for the production of oil products is another significant parameter, since, even if there is a sufficiency in oil supply, there may be a shortage in supply of the by-products owing to decreases in refinery operations.<sup>9</sup> In July 2005, the refineries operated at 90% of their production capacity, i.e. the highest level in the last 25 years. It should be noted that oil refining increased by 7% from 2000 to 2004 owing to an increase in demand, while the production capacity of refineries increased by about 3% during the same period. →

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4 The real lifespan of the world’s oil reserves is likely to be *longer*, because of such factors as: the discovery of new reserves, technological progress and the increase in oil prices which could make oil extraction profitable in areas where this has so far not been the case.

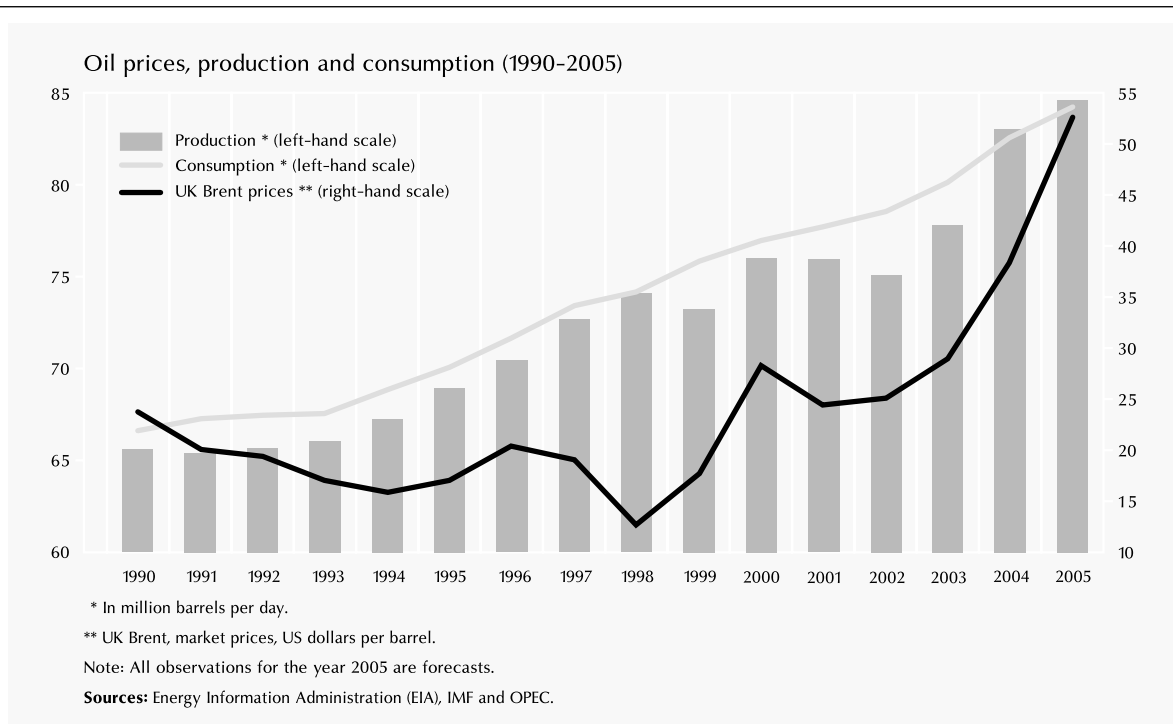
5 OPEC, as a cartel, sets specific production ceilings for each of its members.

6 The production capacity of the OPEC-11 (including Iraq) amounts to 31.66 million barrels per day. With oil production in the OPEC-11 estimated at 29.67 million barrels per day, 93.7% of the OPEC production capacity is in use.

7 Saudi Arabia is the only OPEC member with a significant spare capacity (of about 1 million barrels per day).

8 29% of the total oil production of the United States and 47% of its total refining capacity are located in the Gulf of Mexico.

9 In the past few years, investments were mainly centred on existing refineries, rather than on adding new refinery plants, owing to the need to meet environmental regulations on the operation of refineries. In addition, the oil produced in the Middle East is of poorer quality (heavier and with a higher sulphur content) than the Brent type oil of the North Sea. As a result, an increase in the production of the OPEC countries does not entail a concurrent increase in oil products, owing to the shortage of plants for the refining of this type of oil.



### → 3. Price developments

#### 3.1 Historical overview (1970-2000)

During the oil crises of 1973 and 1979, oil prices had been driven up by supply-side factors. The average world price of crude oil per barrel<sup>10</sup> increased fourfold during the first oil crisis and tripled during the second one, climbing temporarily to \$40. In the following years, prices dropped. From 1983 to the end of the 1990s, the world price of crude oil averaged \$22 per barrel, falling to a two-decade low in December 1998 (\$10 per barrel) as a result of the Asian crisis. Since then, the average price of crude oil has more than tripled.

#### 3.2 Heightened uncertainty on the oil market during the past three years

The price of Brent crude<sup>11</sup> increased from \$20/€22 per barrel in January 2002 to \$45/€34 in January 2005 and has since surged to \$66/€52. From 2003 to 2004, the annual price increase was 33% in dollar terms and 20% in euro terms (owing to the appreciation of the euro versus the US dollar by around 10% during that two-year period). In August 2005, the price of Brent crude was

67.5% higher than the 2004 average in US dollars and 69.3% in euro terms (since the euro weakened against the US dollar by 1.1% during the first eight months of the year).<sup>12</sup> Even though the spot price of crude oil has been spiralling steadily upwards since 2002, its real price – according to certain estimates<sup>13</sup> – remains lower (\$51 per barrel in 2004 prices) than the record high level of 1979 (\$82 per barrel in 2004 prices). →

**10** Statistical series compiled by the International Monetary Fund (IMF) that gives the average spot price of three different types of crude oil: West Texas Intermediate (WTI), Brent and Dubai Fateh, equally weighted.

**11** The price of UK Brent crude oil is routinely monitored (amongst others by the ECB) because of its closeness to the average prices of other oil types. The market price of WTI is usually higher than that of Brent crude, whereas the price of Arab Light is usually lower.

**12** During the three and a half years from January 2002 to August 2005, the increase in oil prices was quite sharp, 230% in US dollars, compared with previous oil crises. More specifically, the price increase of Brent crude was 265% in the course of the 8 months of the first oil crisis (1973-74), 193% in the 14 months of the second oil crisis, and 111% in the 4 months of the Gulf War. It should be stressed that the above rates of change differ depending on the time periods used for calculations. In any event, the current oil market situation differs from previous oil crises in that the rise in the price of crude oil has lasted longer and, yet, has been lower in percentage terms.

**13** Prices have been deflated by the US CPI. The use of other deflators would probably have led to different results.

→ 3.3 Estimates and projections from the markets, international organisations and financial agencies

The oil market remains sensitive to both unpredictable supply- and demand-side changes and to the speculative behaviour of participants in “futures” markets (institutional investors, mainly hedge funds, as well as other “players”). Based on the current prices of crude oil futures contracts,<sup>14</sup> the barrel price of oil is projected to remain above the \$60 level until the end of 2008. The fact that the short-term projections of international organisations and investment banks are more conservative than market expectations is somewhat to be expected at a time of soaring prices. However, it also reflects the fact that market expectations, as expressed by futures contracts, are largely determined by the estimates of futures markets participants, who act more on the basis of short-term speculative criteria and much less on the basis of oil market (supply and demand) fundamentals.<sup>15</sup> The Energy Information Administration (EIA) of the United States (Sept. 2005) estimates that the price of West Texas Intermediate (WTI) will rise to \$59 per barrel in 2005 (annual increase of 42%) and \$63 in 2006 (annual increase of 8%). Consensus Economics (Sept. 2005) estimates that the price of WTI will reach \$63 per barrel in December 2005, before falling to \$57 by September 2006. The International Monetary Fund (Sept. 2005)<sup>16</sup> estimates that oil prices will increase to \$62 per barrel in 2006 (from \$54 in 2005), while the ECB (Sept. 2005)<sup>17</sup> projects that oil prices will rise to \$63 per barrel in 2006 (from \$55 in 2005). A few months earlier (June 2005), the OECD (June 2005)<sup>18</sup> had forecast that the price of Brent crude would fall to \$49 per barrel in 2006 (from \$50 in 2005). Long-term projections place the average annual world price of crude oil (i.e. the acquisition cost of crude for a US-based refinery) – at \$28 in 2015 and \$30 in 2025 at constant prices of 2003.<sup>19</sup>

3.4 Two different views about the planet’s energy future

Opinions diverge about the planet’s energy prospects. According to one view, “proved” oil reserves are gradually being exhausted (see above). Since the necessary

investment costs and price uncertainty are major deterrents to the expansion of the extraction and refining capacity, the market will remain tight and sensitive to short-term disruptions, on account for instance of adverse weather conditions. The upward spiralling of oil prices will therefore continue. According to a second view, two factors – new technologies and increasing returns on investments because of currently high oil prices – make it more likely that new reserves will be discovered and that the quantities of oil extracted from existing ones will increase.<sup>20</sup> As a result, supply would increase more than demand and prices would drop, while the expected life of world reserves would be extended. The IEA estimates that the remaining oil reserves can cover needs for 70 years, provided that annual consumption levels between 2003 and 2030 do not increase excessively.

4. Conclusions

The price of crude oil has been spiralling upwards since 2002, owing to the strong and, to a large extent, unexpected increase in world demand, and also because of market uneasiness about the future sufficiency of oil supplies.

Considering that demand is projected to remain high, spare crude oil production capacity, which is already marginal, is expected to shrink further. Similarly, the refinery/processing stages are characterised by: (i) high refinery utilisation rates, owing to the shortage of refining plants, (ii) the inability to process lower grade →

<sup>14</sup> Based on 21 September 2005 closing prices (according to daily rates quoted by Bloomberg).

<sup>15</sup> A typical example was recently provided by the excessive increase in crude oil prices, relative to the actual damage incurred, after hurricanes Katrina and Rita struck the Gulf of Mexico in August and September 2005 (according to certain analysts, world production in the year 2005 will only decrease by 0.3% as a result of the damage caused to the US energy infrastructure, and almost all necessary repairs will have been completed by the year-end).

<sup>16</sup> IMF, *World Economic Outlook*, September 2005.

<sup>17</sup> ECB staff macroeconomic projections for the euro area, September 2005.

<sup>18</sup> OECD, *Economic Outlook*, June 2005 (import prices, cif).

<sup>19</sup> EIA, *Annual Energy Outlook*, 2005.

<sup>20</sup> According to a recent study by the Institute Cambridge Energy Research Associates (“Worldwide liquids capacity outlook to 2010”, June 2005), production from 2004 to 2010 will increase by 16 million barrels per day, assuming a price of \$25-30 per barrel.

→ crudes fully and efficiently, and (iii) a further small reduction in capacity, owing to the recent hurricanes in the Gulf of Mexico (August-September 2005).

The fact that proved reserves could in the long run be exhausted, coupled with the decrease in spare capacity, has made the markets more sensitive to extraordinary events (extreme weather conditions, geopolitical instability, etc.) and has encouraged speculative activity. Uncertainty in the crude oil markets, as expressed by oil price volatility, has increased significantly.<sup>21</sup>

The increase in crude oil prices (which to some extent causes a price increase for other fuels, such as natural gas) has the following consequences on the energy market: (i) oil demand growth slackens, especially in the long term, as other energy sources are used in substitution for oil and energy consumption habits change, (ii) energy use becomes more efficient (i.e. energy consumption per unit of product output decreases<sup>22</sup>), and (iii) the oil supply eventually increases, as oil companies, motivated by greater profits, make new investments to improve their oil extraction and refinery infrastructure.<sup>23</sup>

Considering that the oil market has been subject to a lot of uncertainty and speculation, it is difficult to predict how oil prices will actually evolve. It seems plausible however that oil prices will continue to rise so long as the world economy continues to grow at the anticipated high rates. A drop in prices cannot be totally ruled out to the extent that the current situation reflects a speculative bubble. A mixed scenario seems likely for the next two years, with oil prices initially rising further and then decreasing to around the 2005 average, as demand growth loses momentum and supply conditions improve.

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**21** Crude oil price volatility during the first eight months of 2005 was 2.8 higher than in 2004.

**22** This does not necessarily apply to countries like China and India that have made a tremendous growth leap, which implies structural changes in their productive set-up.

**23** The low price of oil at the end of the 1990s was one reason why new exploration projects were put off and why funds for oil extraction projects were cut. In contrast, as shown by recent studies, the high price of oil during the past two years has already sparked a lot of investment activity in oil extraction and refining projects. According to IEA estimates, \$3 billion in investments will be required over the next 25 years if oil production is to meet demand. 70% of these investments will have to be oriented towards discovering new reserves and increasing the extraction rates of existing reserves.

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## 2. Macroeconomic developments and prospects in the euro area<sup>12</sup>

The quarter-on-quarter growth of real GDP in the euro area picked up in the first quarter of 2005, but then slowed in the second. According to the IMF (September 2005), annual GDP growth is expected to average 1.2% in 2005, down from 2.0% in 2004, while inflation should remain at last year's level (2.1%). The general government deficit of the euro area as a whole is expected to widen slightly to 3.0% of GDP in 2005, after decreasing marginally in 2004. Similar figures are given in the recent ECB staff macroeconomic projections (see sub-sections 2.1 and 2.2 immediately below).<sup>13</sup>

These forecasts and projections are all subject to

significant risks and uncertainties that stem mainly from high oil prices and the impact from potentially abrupt adjustments of global macroeconomic imbalances and exchange rates.

### 2.1 Inflation

Inflation, as measured by the HICP, remained close to 2% throughout the first half of 2005. This overall stability came as the result of counteracting developments in individual components, with the low rates of increase in unprocessed food and,

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**12** The analysis in this section has taken into account developments up to end-September 2005, forecasts available from international organisations, such as the projections of the IMF (*World Economic Outlook*, September 2005), the ECB staff macroeconomic projections for the euro area (European Central Bank, *Monthly Bulletin*, September 2005) and the European Commission's *Spring 2005 Economic Forecasts* (April 2005).

**13** See ECB, *Monthly Bulletin*, September 2005.

to a lesser extent, services offsetting the high rates of oil price increases.

Inflation edged up to 2.2% in July and remained at that level through August, before rising further to 2.5% in September (according to Eurostat's flash estimates). Inflation rates are projected to persist at near current levels throughout the rest of the year, mainly because of recent oil price developments. ECB staff macroeconomic projections suggest that average annual euro area inflation should range between 2.1% and 2.3% in 2005 and between 1.4% and 2.4% in 2006.<sup>14</sup> This inflation outlook is based on the assumption that the large rise in oil prices will have no significant second-round effects. More specifically, wage moderation and low labour cost growth, which have characterised the euro area labour market over the past few years, are expected to continue against the background of high unemployment in most of the euro area countries – particularly the larger ones – and rather significant spare capacity. Average nominal earnings in the euro area increased by roughly 2% in 2004 and should increase at a similar rate in 2005.

## 2.2 Economic activity

Euro area real GDP growth moderated in the second half of 2004, partly because of the dampening effect of the oil price surge on private consumption and investment. This year, the quarter-on-quarter increase in real GDP picked up to 0.4% in the first quarter, from 0.2% in the fourth quarter of 2004, but then lost momentum, dropping to 0.3% in the second quarter according to Eurostat's flash estimate. Domestic demand remained subdued in the first half of 2005, although there were some signs of improvement in the second quarter, as investment and inventory growth accelerated slightly over the previous quarter.

Economic activity in the euro area is expected to strengthen in the second half of 2005 and to gain more momentum in 2006. The available survey results indicate that confidence across the manufacturing, services and construction sectors improved in the third quarter, while, according to the latest forecast of the European Commission (31 August 2005) based on short-term indicators, quarter-on-quarter GDP growth will range between 0.2% and 0.6% in the third quarter and between 0.4% and 0.8% in the fourth quarter of 2005. According to the IMF, annual GDP growth is projected to reach 1.2% this year and 1.8% in 2006. This assessment is broadly consistent with the ECB staff macroeconomic projections that euro area GDP growth will range between 1.0% and 1.6% in 2005 and between 1.3% and 2.3% in 2006. This outlook is based on the assumption that global economic and trade growth, though weaker than in 2004, will remain fairly robust in the next two years (see sub-sections 1.1 and 1.2 above) and that domestic demand will gradually strengthen.

More specifically, private consumption is projected by the ECB staff to increase by 1.1%-1.5% this year and by 0.7%-1.9% in 2006 (the IMF projects increases of 1.2% in 2005 and 1.4% in 2006), supported by such factors as the gradual increase in employment and the strengthening – next year – in real household income provided that inflation decelerates. The uncertainty caused by oil price increases and volatility should on the other hand have a dampening effect. Investment growth is expected to reach 0.4%-2.0% this year and to accelerate to 1.3%-4.5% in 2006 (the IMF forecasts investment growth rates of 1.5% for 2005 and 3.0% for 2006). Business investment in particular should benefit from the very favourable financing

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<sup>14</sup> IMF forecasts place annual average inflation in the euro area at 2.1% in 2005 and 1.8% in 2006.

conditions and improved corporate profitability, combined with robust global demand. The outlook for the global economy remains optimistic, with the rate of world GDP growth, though lower than in 2004, projected to remain above its long-term trend. The volume of world trade outside the euro area should, as mentioned previously, continue to grow at a robust pace, while external demand for euro area exports is expected to remain strong.

### *2.3 Labour market*

Euro area labour market developments have been marked in recent years by sluggish employment growth, consistent with the moderate rise in economic activity in a number of euro area countries.

The slow pace of improvement in labour market conditions is expected to continue in 2005, but should accelerate slightly in the course of 2006. Employment in the euro area increased at an annual rate of 0.7% (provisional data) in the first half of 2005. The anticipated gradual pick-up in economic activity in the euro area in the second half of the year should stimulate employment growth, which according to the IMF is expected to reach 1.0% in 2005 and 1.1% in 2006. The rate of unemployment fell to 8.6% in August 2005 from 8.9% one year earlier, and is expected to drop slightly further in 2006.

### *2.4 Fiscal developments*

The budgetary position of the euro area as a whole is expected to deteriorate in 2005, after having improved slightly in 2004. According to the IMF, the euro area general government deficit-to-GDP ratio is projected to stand at 3.0% this year (the latest Eurostat estimates<sup>15</sup> place the deficit at 2.7% of GDP in 2004 and 3.0% in 2003).

The fiscal policy stance this year should be broadly

neutral, with the cyclically adjusted fiscal deficit in the euro area as a whole projected by the IMF to edge up to 2.3% of GDP, from 2.2% in 2004. The gross public debt-to-GDP ratio is expected to rise to 72.3% in 2005 (the latest Eurostat estimates place the 2004 debt ratio at 70.8%).

The fiscal developments and outlook for the euro area in 2005 reflect a deterioration in the budgetary position of most member countries. Furthermore, according to the IMF, some of the euro area countries for which the Excessive Deficit Procedure has been initiated and which are therefore committed to reducing their excessive deficits will either fail to reduce the deficit as much as required (for instance, France) or will even see their deficit increase (e.g. Germany). In general, as indicated by IMF forecasts and by the fiscal data for 2004 recently released by Eurostat in the context of the Excessive Deficit Procedure, only Greece, Spain, the Netherlands and France are expected to improve their fiscal balances in 2005.

Among noteworthy developments during the last six months, on 7 June 2005 the ECOFIN Council, acting on a recommendation from the European Commission, decided to abrogate the excessive deficit procedure initiated against the Netherlands, noting that the Dutch deficit had been reduced to 2.4% of GDP in 2004 from 3.2% in 2003 and that budget forecasts indicated a further decrease in the deficit in 2005 and 2006.

On 7 and 22 June, the European Commission adopted reports under Article 104(3) of the Treaty on the public finances of Italy and Portugal respectively. In the case of Italy, the report found that the general government deficit had been

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<sup>15</sup> Eurostat news release 120/2005, 26 September 2005.

above, albeit slightly, 3% of GDP in 2003 and 2004, and was projected – according to Commission forecasts – to worsen to 3.6% in 2005 and 4.6% in 2006. Furthermore, Italy's debt-to-GDP ratio had decreased only modestly and at 106-107% was far from than the reference value of 60%. With regard to Portugal, the report took into account the country's updated Stability Programme, which projected the general government deficit to reach 6.2% of GDP in 2005 and to remain above the reference value of 3% over the next two years. According to the same source, the general government debt is expected to worsen to 66.5% of GDP in 2005 from 61.9% in 2004 and to remain above the reference value of 60%. In these two reports, which constitute the first stage of the Excessive Deficit Procedure, the Commission concluded that Italy and Portugal had both failed to fulfil the Treaty requirements concerning the deficit and debt criteria.

On 28 July 2005 the ECOFIN Council decided that an excessive government deficit existed in Italy and recommended that action be taken for its correction by end-2007. Similarly, on 19 September the Council decided that there was an excessive deficit in Portugal and recommended that the Portuguese authorities correct this situation by end-2008. In addition, the Council invited the authorities of both countries to move decisively towards the medium term position of government finances close to balance or in surplus, by taking measures to reduce the cyclically adjusted deficit, net of one-offs and other temporary measures, by at least 0.5% of GDP per year. The Council also recommended that both countries reduce their general government debt ratio, so as to ensure that it approaches the reference value of 60% at a satisfactory pace.<sup>16</sup>

At the institutional level, on 22-23 March 2005 the European Council endorsed the report of the

extraordinary ECOFIN meeting of 20 March 2005 that had proposed a number of amendments to the Stability and Growth Pact in order to improve its implementation (see Box VI.1). These amendments, which were finalised after consultation with the European Parliament and the ECB, were published in the form of Council Regulations in the *Official Journal* of the EU.

At the same summit, the European Council decided that the "Broad Economic Policy Guidelines" would as from 2005 be combined with "Employment Guidelines", so as to make up a set of *Integrated Guidelines for Growth and Jobs*. These Integrated Guidelines will make up the context in which the national economic policies of the EU Member States must move, as specified in their respective stability or convergence programmes. Meanwhile, the Member States have been asked to prepare and submit by the end of autumn 2005 National Reform Programmes for the implementation of the Lisbon strategy. These programmes will then be evaluated in the context of multilateral surveillance by the Council (see Appendix to the present chapter).

### 2.5 *The exchange rate of the euro and the Exchange Rate Mechanism II*

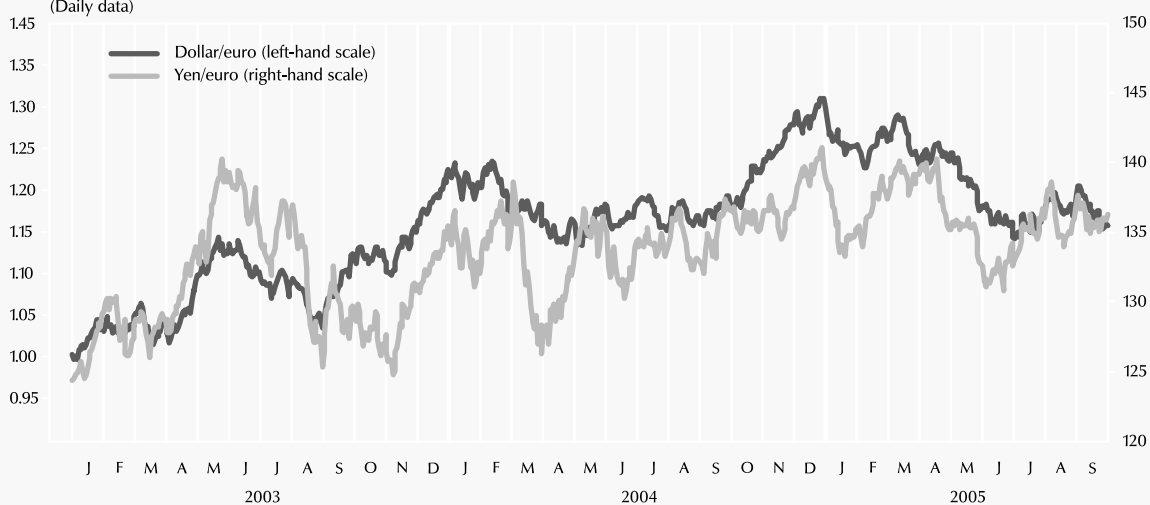
In December 2004, the euro exchange rate reached its highest level since 1999, but then

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<sup>16</sup> The Council's decisions to abrogate the Excessive Deficit Procedure against the Netherlands and to initiate it against Italy and Portugal bring the number of EU countries that are currently subject to the Excessive Deficit Procedure to eleven (Germany, France, Greece, Italy, Portugal, the Czech Republic, Cyprus, Hungary, Malta, Poland and Slovakia). Furthermore, on 21 September, the European Commission adopted a report under Article 104(3) of the Treaty on the budgetary situation of the United Kingdom (which is not part of the euro area). The report concluded that the UK general government deficit ratio had exceeded the 3% of GDP reference value in financial years 2003/2004 and 2004/2005, though remaining close to it (3.2%). The Commission will wait for the opinion of the ECOFIN Council before deciding whether the UK deficit is excessive and whether recommendations need to be issued.

Chart III.4

Exchange rate of the euro against the US dollar and the Japanese yen  
(January 2003 – September 2005)  
(Daily data)



Sources: ECB and Bank of Greece.

exhibited a downward trend. The broad index of the nominal effective exchange rate<sup>17</sup> rose by 12.4% in 2003 and 4.1% in 2004 (in average annual terms). However, in August 2005 it was 2.1% below its 2004 average and 5.0% below its level of December 2004.

The real effective exchange rate index of the euro (based on the CPI) moved in close parallel to the nominal index. After rising by 11.8% in 2003 and 3.7% in 2004, in August 2005 it fell 5.3% below its peak of December 2004. These developments during the first eight months of 2005 helped the euro area improve its price competitiveness. However, the depreciation of the euro against the US dollar during that same period, combined with the surge in oil prices in US dollar terms, caused energy costs in the euro area to rise significantly, wiping out part of the gains from the appreciation of the euro during the past three years.

Stronger fluctuations were seen in the bilateral exchange rate of the euro vis-à-vis the US dollar. The continued weakening of the US dollar against

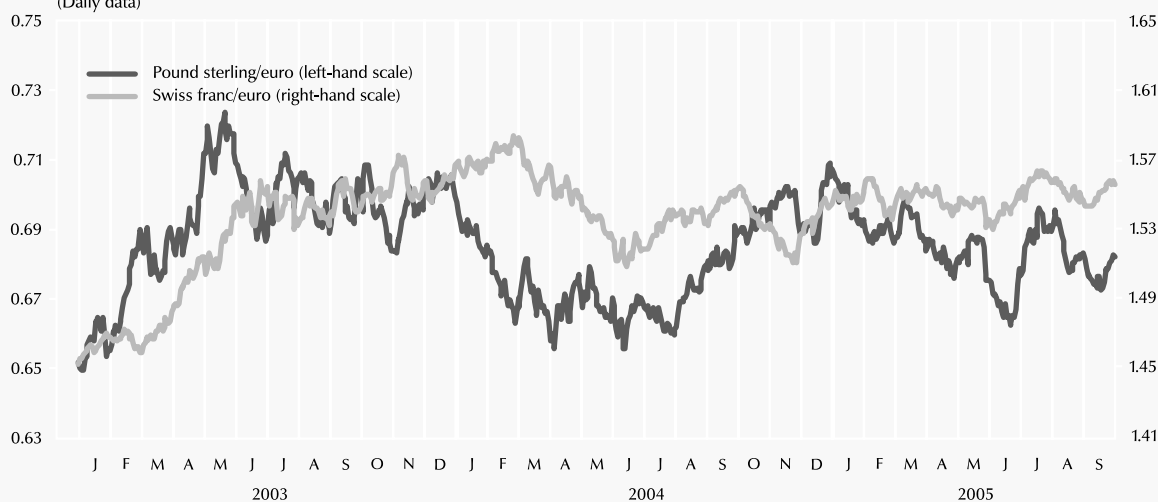
the euro during the three previous years, with the euro reaching an unprecedented high (\$1.3408) in December 2004, was reversed in the first half of 2005. The gradual confirmation that the gulf between the euro area's growth rate and that of the United States is steady if not widening, combined with widening interest rate differentials and other factors, such as the rejection of the European Constitution in the French and Dutch referenda, caused the euro exchange rate to mark a limited but clear fall against the US dollar from the second quarter onwards. In September 2005, the exchange rate, which had averaged \$1.2439 in 2004, fell to \$1.2256 per euro.

The Japanese yen depreciated slightly further against the euro in the first four months of this year. It then gained back some ground before falling to below its 2004 average in September 2005 (136.06 yen to the euro, compared with

<sup>17</sup> Weighted average of the bilateral exchange rates of the euro against the currencies of 42 of the euro area's trading partners. Weights reflect the share of each partner country in euro area trade.

Chart III.5

Exchange rate of the euro against the pound sterling and the Swiss franc  
(January 2003 – September 2005)  
(Daily data)



Sources: ECB and Bank of Greece.

134.44 in 2004). The pound sterling/euro exchange rate also fell below the average for 2004 in the first five months of the year, but then recovered some of its losses, rising to 0.6776 pound per euro in September from 0.6786 in 2004 (see Chart III.5). As far as other currencies are concerned, a major development was the decision of the Chinese authorities in July to revalue the renminbi against the US dollar by 2.05% and to peg it to a basket of currencies. More recently, on 23 September, the People's Bank of China announced the doubling of the renminbi's daily trading band against currencies other than the US dollar to  $\pm 3\%$ .

On 29 April 2005, the Cyprus pound, the Latvian lats and the Maltese lira joined the Exchange Rate Mechanism II (ERM II), in preparation for their future entry into monetary union.<sup>18</sup> It should be noted that the currencies of three other Member States (i.e. the Estonian kroon, the Lithuanian litas and the Slovenian tolar) have been part of ERM-II since June 2004, while the Danish krone has been a member since ERM II began operating on 1 January 1999.

### 3. Monetary developments and policy in the euro area

#### 3.1 The monetary policy of the ECB

The key ECB interest rates remained unchanged in 2005. For more than two years now,<sup>19</sup> the minimum bid rate on the main refinancing operations has stood at 2%, the marginal lending facility rate at 3% and the deposit facility rate at 1% (see Chart III.6 and Table III.1). The ECB Governing Council's assessment was that in the first half of 2005, despite the short-term impact of high oil prices, there was no significant evidence of underlying inflationary pressures building up in the euro area (see sub-sections 2.1 and 2.2 for more details). However, in the second half of the year, inflation is expected to remain at its current levels of above 2%. The Governing Council has repeatedly emphasised the

<sup>18</sup> The central rates of the three new entrants were set as follows: one euro equals 0.585274 Cyprus pound, 0.702804 Latvian lats and 0.429300 Maltese lira.

<sup>19</sup> Since the last cut of ECB rates on 6 June 2003.

Table III.1

## Changes in key ECB interest rates

(Percentages per annum)

Date of interest rate change <sup>1</sup>	Deposit facility	Main refinancing operations	Marginal lending facility
6 December 2002	1.75	2.75	3.75
7 March 2003	1.50	2.50	3.50
6 June 2003	1.00	2.00	3.00

<sup>1</sup> For the deposit and marginal lending facilities, effective dates of interest rate changes (one day following the relevant ECB decision); for the main refinancing operations, interest rate changes are effective from the first operation following the date indicated.

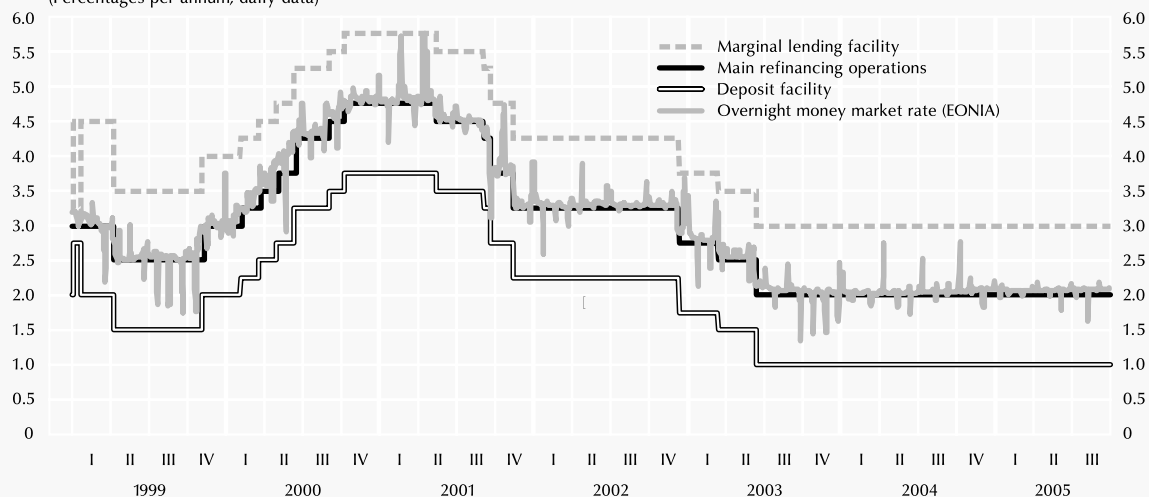
Source: ECB.

Chart III.6

## ECB interest rates and the overnight money market rate (EONIA)

(January 1999 - September 2005)

(Percentages per annum, daily data)



Source: ECB.

need for vigilance with regard to upward inflationary risks to price stability. These risks relate mainly to oil price developments and their potential second-round effects stemming from wage and price-setting behaviour, as well as to possible increases in indirect taxes and administered prices. Moreover, against the backdrop of strong credit expansion to the private sector, supported by historically low interest rates, there is still more liquidity available in the euro area than needed to finance non-inflationary growth. On 6 October 2005, the Governing Council considered that its analysis confirmed “the

need for strong vigilance in order to maintain inflation expectations in line with price stability” over the medium to longer term.

### 3.2 The evolution of M3 and its counterparts

The annual growth rate of M3, continuing an upward trend observed since mid-2004, accelerated to 6.6% in the first quarter of 2005 and 7.0% in the second quarter (August: 8.1%), from 6.1% in the last quarter of 2004 (see Chart III.7 and Table III.2). Monetary dynamics have been driven by the

Table III.2

## Main components of M3 in the euro area

(Annual percentage changes,<sup>1</sup> derived from data adjusted for seasonal and calendar effects, quarterly averages<sup>2</sup>)

	2004	2005		
	Q4	Q1	Q2	August
<b>M1</b>	<b>9.3</b>	<b>9.6</b>	<b>9.8</b>	<b>11.5</b>
Currency in circulation, M0	19.1	18.0	17.3	15.6
Overnight deposits	7.7	8.2	8.5	10.8
<b>Other short-term deposits (=M2-M1)</b>	<b>3.5</b>	<b>4.5</b>	<b>5.0</b>	<b>5.3</b>
Deposits with an agreed maturity of up to two years	-2.4	0.5	2.6	4.2
Deposits redeemable at notice of up to three months	7.4	7.1	6.6	5.9
<b>M2</b>	<b>6.4</b>	<b>7.1</b>	<b>7.5</b>	<b>8.5</b>
<b>Marketable instruments (=M3-M2)</b>	<b>3.9</b>	<b>3.9</b>	<b>4.3</b>	<b>5.5</b>
Repurchase agreements	3.0	4.2	4.9	10.9
Money market fund shares/units	4.3	3.2	2.9	2.4
Money market paper and debt securities issued with a maturity of up to two years	3.3	7.5	11.1	12.1
<b>M3</b>	<b>6.1</b>	<b>6.6</b>	<b>7.0</b>	<b>8.1</b>

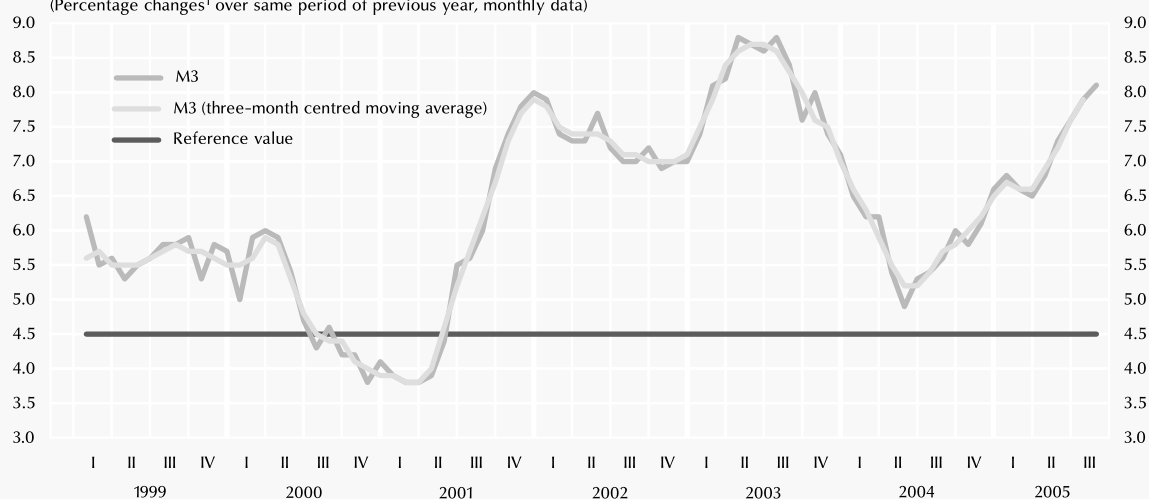
1 Annual rates of change in the corresponding index, which is compiled on the basis of outstanding stocks for December 2001 and cumulative monthly flows, adjusted for exchange rate variations, reclassifications etc.

2 The quarterly average is derived from monthly averages (which are calculated as arithmetic means of two successive end-of-month figures) and is not the three-month average of end-of-month annual growth rates (see the "Technical Notes" in the *ECB Monthly Bulletin*).

Source: ECB.

Chart III.7

## M3 in the euro area (January 1999 - August 2005)

(Percentage changes<sup>1</sup> over same period of previous year, monthly data)

1 Adjusted for seasonal and calendar effects.

Source: ECB.

historically low level of interest rates. The resulting low opportunity cost of holding money<sup>20</sup> fuelled demand for more liquid assets included in M1 and, coupled with increased demand for euro bank-

<sup>20</sup> The opportunity cost of holding money is computed by the ECB as the difference between the three-month EURIBOR and the weighted average of the remunerations of M3 components (own rate of return of M3).

Table III.3

## Main counterparts of M3 in the euro area

(Annual percentage changes,<sup>1</sup> derived from data adjusted for seasonal and calendar effects, quarterly averages<sup>2</sup>)

	2004	2005		
	Q4	Q1	Q2	August
<b>Longer-term financial liabilities of MFIs</b>	<b>7.9</b>	<b>8.4</b>	<b>8.6</b>	<b>9.2</b>
Deposits with an agreed maturity of over two years	7.8	8.7	8.6	8.3
Deposits redeemable at notice of over three months	-1.8	-0.1	1.3	-0.9
Debt securities issued with a maturity of over two years	10.3	10.5	10.7	11.4
Capital and reserves	4.6	5.1	5.5	7.3
<b>Credit to euro area residents</b>	<b>6.0</b>	<b>6.4</b>	<b>6.5</b>	<b>6.9</b>
<b>Credit to general government</b>	<b>3.7</b>	<b>3.4</b>	<b>2.1</b>	<b>1.0</b>
– Debt securities other than shares	5.5	5.6	3.8	2.3
– Loans	0.6	-0.4	-0.9	-1.1
<b>Credit to other euro area residents</b>	<b>6.7</b>	<b>7.3</b>	<b>7.7</b>	<b>8.5</b>
– Debt securities other than shares	6.8	9.6	11.4	11.5
– Shares and other equity	4.4	5.5	7.6	8.1
– Loans	6.9	7.3	7.5	8.4

1 Annual rates of change in the corresponding index, which is compiled on the basis of outstanding stocks for December 2001 and cumulative monthly flows, adjusted for exchange rate variations, reclassifications etc.

2 The quarterly average is derived from monthly averages (which are calculated as arithmetic means of two successive end-of-month figures) and is not the three-month average of end-of-month annual growth rates (see the "Technical Notes" in the *ECB Monthly Bulletin*).

Source: ECB.

notes by both euro area residents and non-residents,<sup>21</sup> sustained the strong growth rate of M1 (2004: fourth quarter: 9.3%, 2005: first quarter: 9.6%, second quarter: 9.8%, August: 11.5%). On the other hand, the normalisation of portfolio allocation behaviour continues, with a shift towards longer-term financial assets not included in M3, thus dampening somewhat the growth of M3. This development is also reflected in the acceleration of the growth rate of MFI longer-term liabilities (2004: fourth quarter: 7.9%, 2005: first quarter: 8.4%, second quarter: 8.6%, August: 9.2%).

The acceleration of the growth rate of M3 is mirrored in increased credit expansion to the private sector. Specifically, the growth rate of loans to the private sector (which account for the bulk of total credit) sped up to 7.3% in the first quarter of 2005, 7.5% in the second quarter and 8.4% in August, from 6.9% in the last quarter of 2004 (see Table III.3). This development can be largely attributed to the low level of interest rates in the

euro area, as well as the more favourable financing conditions in general. According to the results of the July 2005 Eurosystem "Bank lending survey",<sup>22</sup> in the second quarter of 2005 credit standards for loans to enterprises eased further, while for loans to households a slowdown in the relaxation of credit standards or even, in some cases, a tightening was reported. However, respondent banks expect a further easing of credit standards for loans to both enterprises and households for the next quarter (Q3 2005). This can be attributed to increased competition among credit institutions, as well as to banks' perception of lower risks to the economic outlook, and confirms a general improvement in financing conditions. The higher growth rate of loans to the private sector stemmed chiefly from loans to households (August 2005: 8.6%, December 2004: 7.9%), par-

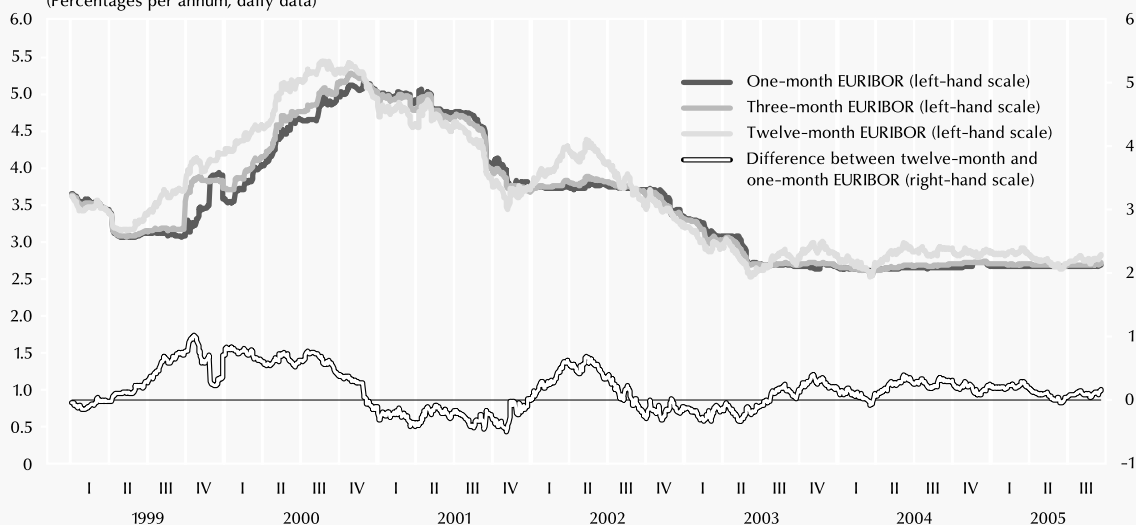
<sup>21</sup> Especially by the new Member States.

<sup>22</sup> See the ECB's website, [www.ecb.int](http://www.ecb.int), and ECB, *Monthly Bulletin*, August 2005, Box 1.

Chart III.8

## Short-term interest rates in the euro area (January 1999 - September 2005)

(Percentages per annum, daily data)



Source: ECB.

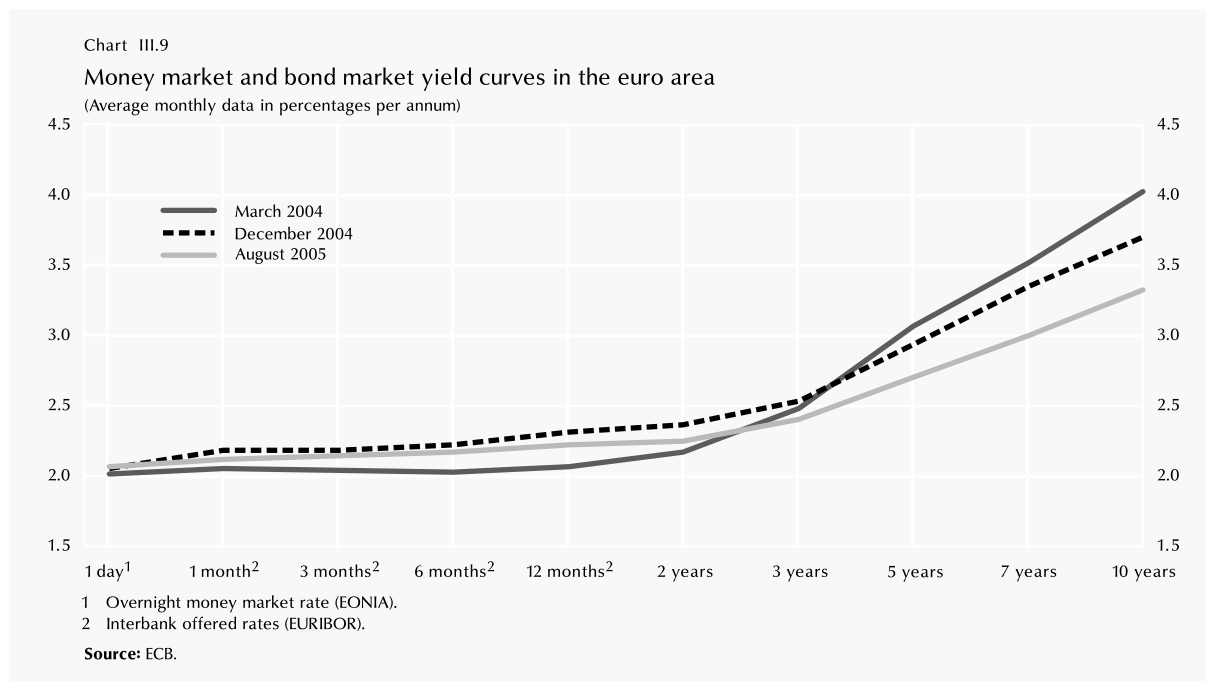
ticularly housing loans, the demand for which is affected by strong house price dynamics in some euro area countries. The annual growth rate of bank loans to non-financial corporations accelerated in the period under review (August 2005: 6.7%, December 2004: 5.4%), while the annual growth rate of the outstanding amount of debt securities issued by non-financial corporations increased to 4.5% in the second quarter of 2005, from 3% in the last quarter of 2004.

The annual rate of credit expansion to general government decelerated further to 3.4% in the first quarter of 2005, 2.1% in the second quarter and 1% in August, from 3.7% in the last quarter of 2004, owing to the negative rate of change in the outstanding balance of loans to general government (-0.4% in the first quarter, -0.9% in the second quarter and -1.1% in August 2005, see Table III.3). The annual growth rate of the outstanding balance of debt securities issued by general government in the euro area countries also declined and stood at 4.9% in the second quarter of 2005, from 5.3% in the last quarter of 2004.

### 3.3 Money market interest rates, bank rates and long-term government bond yields

Interest rates in the single euro area money market remained at low levels in the first nine months of 2005 (see Chart III.8), with small overall changes, reflecting stable ECB key interest rates, which, as mentioned above, have remained unchanged since June 2003. In particular, the euro overnight index average (EONIA) moved close to 2%, i.e. the ECB minimum bid rate on the main refinancing operations (see Chart III.6). The one-month, three-month and six-month EURIBOR remained almost unchanged, while the 12-month EURIBOR declined in the first half of the year but recovered later on. The slope of the money market yield curve<sup>23</sup> declined marginally in August 2005 compared with December 2004 (see Chart III.9). After June, expectations about short-term interest rates were revised upwards, although market participants do not anticipate

<sup>23</sup> Measured as the difference between the twelve-month and one-month EURIBOR.



any increase in these interest rates before the second half of 2006. Money market uncertainty, as measured by the implied volatility of the three-month EURIBOR,<sup>24</sup> was at historically low levels in August 2005.

In the first seven months of 2005, MFI short-term interest rates<sup>25</sup> recorded little change, mostly downward, compared with December 2004. Long-term deposit and lending rates<sup>26</sup> dropped in most categories compared with December 2004, adjusting (with some lag) to the historically low levels of long-term bond yields. Overall, the decline in bank lending rates, especially for longer maturities, contributed to maintaining favourable financing conditions for non-financial corporations and households in the course of 2005.

The downward path of long-term interest rates, which had begun in mid-2004, continued in the first nine months of 2005 (with the exception of a rise recorded in July) both in the euro area and in the United States, while uncertainty in bond markets<sup>27</sup> remained subdued. Thus, between Decem-

ber 2004 and August 2005 the average monthly yield of the euro area ten-year government bond declined to 3.32% from 3.69% (it rose to 4.26% from 4.23% in the United States) (see Chart III.10). This development occurred despite a new monetary policy tightening cycle in the United States<sup>28</sup> and is in contrast with past experiences of rises in central bank rates being accompanied by higher long-term government bond yields. This downward trend of long-term interest rates can be attributed to a number of macroeconomic or other factors.

<sup>24</sup> This volatility is extracted from the prices of options on three-month EURIBOR futures. These prices incorporate market expectations about the future level of the three-month EURIBOR, which are also affected by expectations about the path of inflation.

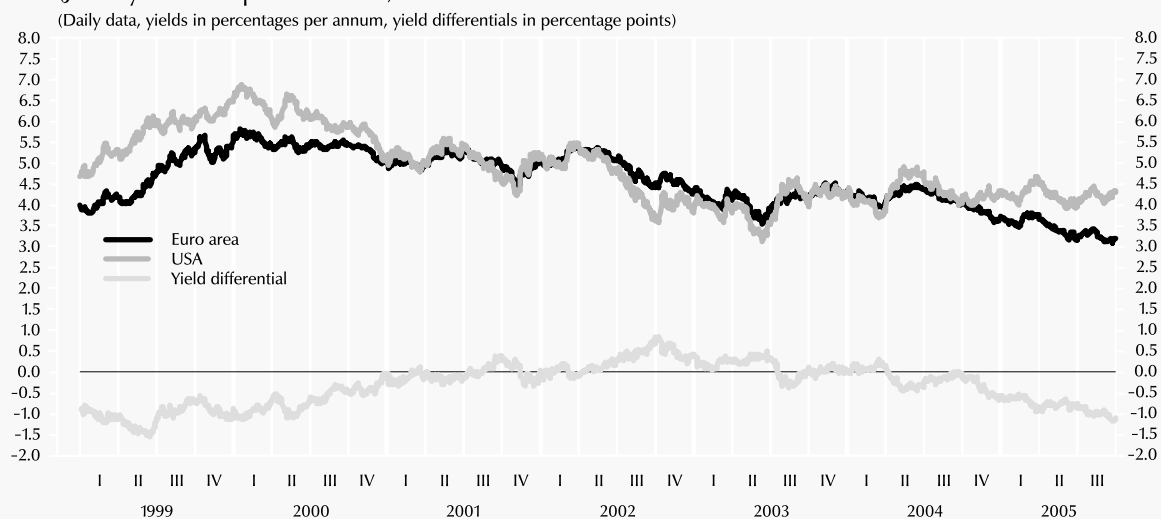
<sup>25</sup> Applicable e.g. to overnight deposits, deposits redeemable at a period of notice of up to 3 years or with an agreed maturity of up to one year and loans with a fixed interest rate for one year.

<sup>26</sup> Applicable e.g. to deposits with an agreed maturity of over two years and loans with a fixed interest rate for over five years.

<sup>27</sup> Uncertainty is measured by implied bond market volatility, a series derived from futures data. Volatility in the euro area government bond market is calculated on the basis of implied volatility of the prices of options on ten-year German Bund futures, which is compiled by Bloomberg and monitored by the ECB.

<sup>28</sup> The Federal Reserve has raised its key interest rate by a cumulative 275 basis points since June 2004.

Chart III.10  
Ten-year bond yields in the euro area and the United States  
(January 1999 - September 2005)



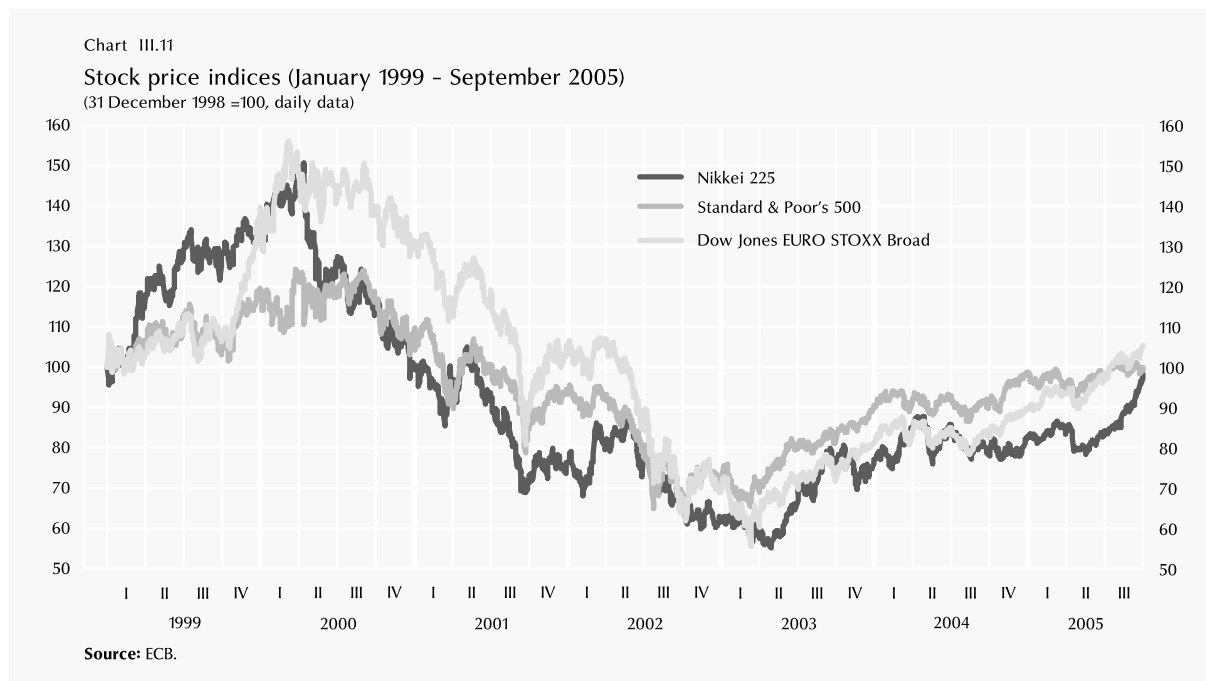
Starting with macroeconomic factors, long-term bond yields reflect market expectations about the outlook for economic activity and inflation. Therefore, their recent path could be interpreted as a sign of weak economic prospects for the euro area and the United States. However, this interpretation would not be in line with recent macroeconomic data that evidence positive growth prospects, mainly for the United States and, to a lesser extent, for the euro area. These data contributed to a widening of the ten-year bond yield spread between the United States and the euro area in the first eight months of the year (to 94 basis points in August 2005, from 54 basis points in December 2004), as euro area bond yields dropped more than US bond yields over the same period. The decline in long-term bond yields may also be partly attributed to low inflation expectations, despite the rise in oil prices.

In addition, some other factors have been identified, which, under the current situation of increased liquidity in international capital markets, have boosted demand for long-term government bonds, leading

to higher prices and lower yields. One of these factors relates to heavy investment in long-term bonds by pension funds and insurance companies, which, in the face of worsening demographics and of reforms in the fields of insurance and accounting, are making efforts to match the maturity of their assets to that of their long-term liabilities. Moreover, mass purchases of US government bonds by Asian central banks have probably exerted a downward effect on the yields of these bonds, which is however difficult to quantify. Finally, speculative moves, such as the so-called “carry trades”, involving borrowing at low interest rates and investing in bonds, may have accelerated the decline in long-term bond yields; however, such practices should be eliminated, as profit opportunities are gradually being eliminated.

### 3.4 Stock market developments

In September 2005, share prices in euro area stock markets were overall higher than in December 2004, but having recorded some fluctuations (see Chart III.11). In particular, the broad Dow



Jones EURO STOXX index rose by 17.7% between end-December 2004 and end-September 2005. This development can be attributed to: (i) high corporate profits; (ii) the depreciation of the euro, which improves expectations for business profits; (iii) low real interest rates, which entail an increase in the present value of anticipated future profits, thus supporting the prices of shares; and (iv) the strong rise in the stock prices of the energy sector, which was the best performer in that period. These factors offset the downward revision of market expectations about the euro area economic activity. Uncertainty in the euro area stock markets remained low (compared with the average of the last few years) up to and including August.<sup>29</sup>

In the United States, the Standard & Poor's 500 index changed little overall (+1.4%) between end-December 2004 and end-September 2005, but was quite volatile during that period. In Japan, the Nikkei 225 index rose by 18.2% over the same period.

In 2005, the downward path of yield spreads between government and corporate bonds,<sup>30</sup> which had started in late 2002, recorded a temporary reversal. Between April and May 2005, corporate bond spreads in the euro area more than doubled, but then declined to levels slightly higher than those seen in early 2005. This strong rise in bond spreads is linked to increased credit risk of two major issuers (General Motors and ISS), but it may also represent a correction of the very low level that these spreads had reached as a result of the increased risk appetite on the part of investors against the backdrop of low interest rates.

<sup>29</sup> Stock market uncertainty is measured by an index compiled by Bloomberg following a similar approach to the one described in footnote 27 for bond market uncertainty.

<sup>30</sup> This difference is due to the increased credit risk entailed by a corporate bond compared with a government bond with the same coupon and maturity. For more details, see ECB, *Monthly Bulletin*, June 2005, Box 3, and ECB, *Monthly Bulletin*, January 2005, Box 2.

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## Appendix to Chapter III

### EU's integrated guidelines for growth and jobs

Article 99 of the Treaty on European Union states that "Member States shall regard their economic policies as a matter of common concern and shall coordinate them". The Broad Economic Policy Guidelines (BEPGs) are the main instrument for coordinating economic policies; they are elaborated by the Economic and Financial Committee in cooperation with the Economic Policy Committee and adopted by the European Council on recommendation by the ECOFIN Council. The BEPGs cover a period of three years and are updated annually. Efforts have been made in the last few years to simplify the BEPGs and make them more focused on the crucial problems faced by the EU. The European Council of March 2005 decided that, as of this year, the BEPGs will be merged with Employment Guidelines to form a set of *Integrated Guidelines for Growth and Jobs*.

The *Integrated Guidelines* will serve as a basis for national economic policies, as reflected in Member States' respective Stability (or Convergence) Programmes. Moreover, by autumn 2005 the governments of the Member States will have to prepare and submit National Reform Programmes,<sup>1</sup> which will then be reviewed by the Council in the context of the Council's multilateral surveillance process. Emphasis is thus placed on the "national ownership" of reforms, i.e. allowing Member States to make choices and set priorities geared to their own needs and specific situation, always in keeping with the *Integrated Guidelines*. In addition, the European Commission will present the "Community Lisbon Programme", covering all action to be undertaken at Community level.

In 2005, discussions on the *Integrated Guidelines* 2005-2008 followed the European Council's decision of March 2005 to relaunch the "Lisbon Strategy" in order

to make up for the delays identified during its mid-term review. An important element that influenced these discussions is Europe's protracted slow growth performance at a time when external competition from emerging economies is becoming more and more intense and the consequences of population ageing for pension systems will soon become evident.

The *Integrated Guidelines* adopted by the European Council on 16-17 June 2005 set two main priorities: enhancing Europe's potential for job creation and accelerating productivity growth. Emphasis is also given to the need for sound macroeconomic policies that will foster market confidence in the stability of the European economy and lay the foundations for dealing with the future demographic problem. Special reference is made to the latest conclusions of the ECOFIN Council on "Improving the Implementation of the Stability and Growth Pact", adopted by the European Council in March 2005, as well as to the need for all Member States to achieve a fiscal position close to balance or in surplus.

The *Broad Economic Policy Guidelines* consist of two parts, referring to macroeconomic and microeconomic policies respectively. Regarding macroeconomic policy, Member States are called upon to take the following points into consideration:

– To secure *economic stability*, which is essential to sustainable growth. To this end, the strict implementation of the Stability and Growth Pact is necessary. Member States that are already subject to the Excessive

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<sup>1</sup> In Greece, the draft "National Reform Programme for Growth and Jobs 2005-2008" was prepared by an *ad hoc* committee and was published (for consultation) on 14 September, elaborated in Parliament on 4 October and is scheduled to be submitted to the European Commission on 15 October. As underlined by the Minister of Economy and Finance on 18 July 2005 in his speech addressed to the above-mentioned *ad hoc* Committee, "the ambitious effort to implement the reforms requires the active involvement of all Greek citizens", and therefore "social partners are taking active part in the formulation of the Greek Reform Programme and the final outcome will be subject to the approval of Parliament".

Deficit Procedure should take effective measures to reduce their deficit rapidly, while all Member States should avoid pro-cyclical fiscal policies. Moreover, Member States posting high current account deficits should correct them by implementing structural reforms to boost competitiveness and, if necessary, reduce their fiscal deficits.

– To safeguard *public finance sustainability*: economic policies should aim at reducing government debt, reforming social security systems and increasing the participation of the population in the labour force.

– To promote an efficient allocation of resources: both *public expenditure* and *tax policies* should put the emphasis on *enhancing growth*, without jeopardising the goals of *economic stability and sustainability*. Expenditure rules may be useful in order to facilitate the control of public expenditure and redirect expenditure towards growth-enhancing categories such as Research and Development (R&D), and infrastructure.

– To ensure that *wage developments contribute to macroeconomic stability and growth*. Increases in nominal wages and labour costs must be consistent with price stability and the trend in productivity over the medium term, taking into account differences across skills and local labour market conditions. Vigilance is needed to prevent inflationary side effects caused by the recent upward path of the price of oil.

– To promote greater coherence between macroeconomic and structural policies; *structural reforms* in labour and product markets and in the tax system are necessary in order to reinforce incentives to work and produce.

– Specifically *euro area countries* should contribute to a dynamic and well-functioning EMU. The loss of the ability to conduct autonomous monetary and exchange rate policies calls for greater commitment to the aforesaid objectives. Sound policies are necessary for boost-

ing consumer and investor confidence. The international role of the euro area should also be reinforced by coordinating the policies of its members.

The proposed *microeconomic and structural reforms* fall into two broad categories. The following objectives are identified. First, in the field of knowledge and innovation:

– To increase and improve investment in R&D (particularly by the private sector) from 2% to 3% of EU's GDP by 2010 and enhance its effectiveness. Special emphasis is given to the strengthening of research institutes and universities.

– To facilitate innovation, *inter alia*, by improving access to finance and the uptake of information and communication technologies (ICT).

– To contribute to a strong industrial base, mainly by promoting private-public partnerships and cooperation between small and medium-sized enterprises.

– To encourage the sustainable use of resources and strengthen the synergies between environmental protection and growth, focusing on saving energy, internalisation of environmental costs and implementing the Kyoto Protocol.

Second, the following objectives are identified with a view to making Europe a more attractive place to invest and work:

– To extend and deepen the Internal Market, by stricter and better enforcement of internal market legislation and EU public procurement rules and promoting a single market for services, in particular financial services;

– To ensure open and competitive markets, by removing regulatory barriers, enforcing competition legislation and reducing State aid;

– To create a more attractive business environment by reducing administrative burdens and improving the quality of regulation;

– To promote a more entrepreneurial culture and create a supporting environment for small and medium-sized enterprises.

– To expand and improve European infrastructure and complete agreed priority on cross-border projects.

The *Employment Guidelines 2005-2008*, included in the Integrated Guidelines for Growth and Jobs, set three key priorities for Member States:

- to attract and retain more people in employment and modernise social protection systems;

- to improve adaptability of workers and enterprises and the flexibility of labour markets, and

- to increase investment in human capital through better education and skills.

Objectives to be pursued by governments in the context of these priorities include the following:

- to implement employment policies aimed at achieving full employment, improving quality and productivity at work, and strengthening social and territorial cohesion;

- to promote a lifecycle approach to work;

- to ensure inclusive labour markets for job-seekers and disadvantaged people;

- to improve matching of labour market needs;

- to ensure employment-friendly wage and other labour cost developments;

- to promote flexibility combined with employment security and reduce labour market segmentation;

- to expand and improve investment in human capital, and

- to adapt education and training systems in response to new competence requirements.



## IV. Monetary and credit developments, bond market and stock exchange developments in Greece

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### 1. Monetary developments and bank deposit rates in Greece

#### 1.1 Monetary developments

The annual growth rate of the Greek component of euro area M3<sup>1</sup> (excluding currency in circulation) slowed in the first eight months of the current year and stood at 6.7% in August (second quarter 2005: 8.5%, fourth quarter 2004: 9.2%). This development is largely associated with shifts out of M3 into longer-term assets and, to a lesser degree, to a change in investment policy by certain money market funds that moved to become bond-type mutual funds. Thus, over the two months July-August 2005, the growth rate of M3 (excluding currency in circulation) in Greece was for the first time since early 2004 lower than the corresponding euro area rate, which has been strengthening since the second half of 2004 (see Chapter III.3.2).

Moreover, the change in tax rates<sup>2</sup> on deposit interest income and repo yields since the beginning of 2005 has been affecting developments in M3 components. Thus, there was a shift from repos into deposits – mainly deposits with an agreed maturity of up to two years – which led to a much stronger growth rate of the latter and an accelerated annual rate of decrease in repo hold-

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

<sup>2</sup> As mentioned in *Monetary Policy 2004-2005* (February 2005) and *Annual Report 2004* (April 2005), the tax rate on interest from deposits was reduced from 15% to 10% effective from January 2005, while that on repo yields was raised from 7% to 10%. Thus, a single tax rate was established for deposit interest income and repo yields alike.

**Table IV.1**  
**Greek contribution to the key monetary aggregates of the euro area**  
*(Not seasonally adjusted data)*

	Outstanding balances on 31.08.05 (million euro)	Annual percentage changes <sup>1</sup>											
		2001		2002		2003		2004		2005		August <sup>3</sup>	
		Q4 <sup>2</sup>	Q4 <sup>2</sup>	Q4 <sup>2</sup>	Q4 <sup>2</sup>	Q4 <sup>2</sup>	Q3 <sup>2</sup>	Q4 <sup>2</sup>	Q1 <sup>2</sup>	Q2 <sup>2</sup>	Q1 <sup>2</sup>	Q2 <sup>2</sup>	Q2 <sup>2</sup>
1. Overnight deposits	93,470	11.1	8.9	6.8	15.5	16.8	14.5	11.8	10.1	11.8	11.8	10.1	
1.1 Sight deposits and current account deposits	21,169	5.3	5.7	17.7	11.8	19.1	17.2	18.4	19.6	18.4	18.4	19.6	
1.2 Savings deposits	72,301	12.5	9.8	4.1	16.5	16.1	13.7	9.9	7.5	9.9	9.9	7.5	
2. Time deposits with an agreed maturity of up to 2 years	44,980	-9.3	10.1	29.3	5.1	5.3	21.2	31.7	36.5	21.2	31.7	36.5	
3. Deposits redeemable at notice of up to 3 months <sup>4</sup>	3,612	19.7	8.1	1.5	3.9	2.8	-1.5	30.1	75.8	-1.5	30.1	75.8	
<b>4. Total deposits (1+2+3)</b>	<b>142,062</b>	<b>5.1</b>	<b>9.3</b>	<b>12.2</b>	<b>11.8</b>	<b>12.6</b>	<b>15.3</b>	<b>16.8</b>	<b>17.5</b>	<b>15.3</b>	<b>16.8</b>	<b>17.5</b>	
5. Repurchase agreements (repos)	3,350	38.3	-19.0	-47.7	-23.8	-12.6	-46.3	-57.2	-65.2	-46.3	-57.2	-65.2	
6. Money market fund units	10,107	-38.4	-3.7	68.0	0.1	-1.9	-4.1	-19.6	-36.0	-4.1	-19.6	-36.0	
7. Bank bonds with a maturity of up to 2 years <sup>5</sup>	290	...	...	...	...	...	...	...	...	...	...	...	
<b>8. M3 excluding currency in circulation (4+5+6+7)</b>	<b>155,809</b>	<b>4.6</b>	<b>2.2</b>	<b>6.4</b>	<b>7.4</b>	<b>9.2</b>	<b>9.1</b>	<b>8.5</b>	<b>6.7</b>	<b>9.1</b>	<b>8.5</b>	<b>6.7</b>	

1 Annual rates of change in the corresponding index, which is compiled on the basis of outstanding stocks for December 2001 and cumulative monthly flows, adjusted for exchange rate variations, reclassifications etc.

2 The quarterly average is derived from monthly averages (which are calculated as arithmetic means of two successive end-of-month figures) and is not the three-month average of end-of-month annual growth rates (see the "Technical Notes" in the ECB Monthly Bulletin).

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

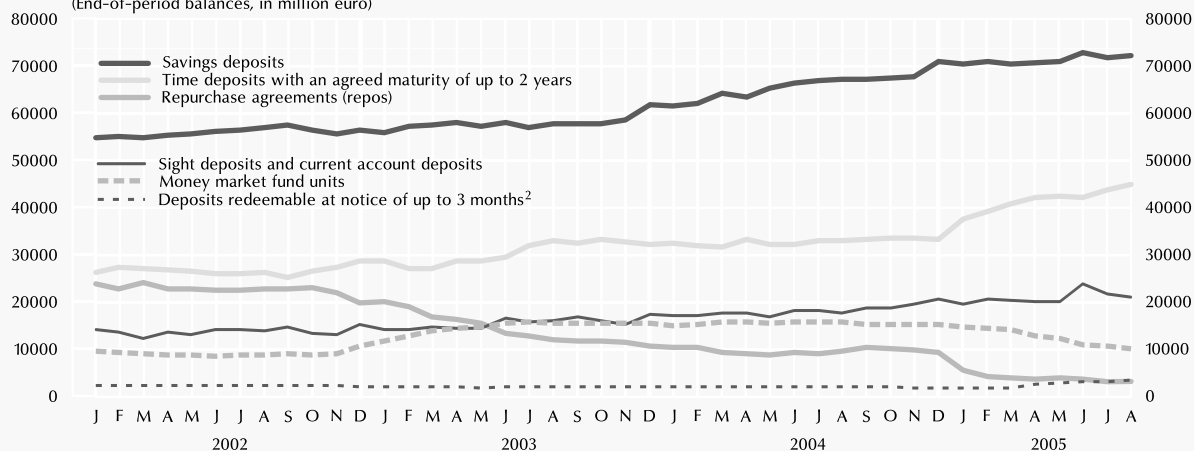
4 Including savings deposits in currencies other than the euro.

5 Rates of change are not shown because, owing to the low calculation base, they are very high.

Sources: Bank of Greece and ECB.

Chart IV.1

Deposits, repurchase agreements and money market fund units in Greece<sup>1</sup> (January 2002 - August 2005)  
(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 and therefore constitute the Greek contribution to the corresponding euro area aggregates.

2 Including savings deposits in currencies other than the euro.

Source: Bank of Greece.

ings. Holdings of money market fund shares/units also continued to decline, partly due –as mentioned above– to the conversion of some such funds into bond-type mutual funds.

In more detail, the annual rate of increase in deposits that according to the ECB definition are included in M3 picked up in the first eight months of the current year and stood at 17.5% in August as against 12.6% in the fourth quarter of 2004 (see Table IV.1). As already mentioned above, this development was a result of a considerable increase in time deposits –the growth rate of which accelerated gradually to 36.5% in August 2005 (second quarter 2005: 31.7%, fourth quarter 2004: 5.3%)– which became more attractive due to their relatively higher interest rate (see further below) and lower tax rate. In contrast, a significant weakening was observed in savings deposits (the major category of overnight deposits<sup>3</sup>), with their annual rate of increase falling to 7.5% in August 2005 (second quarter 2005: 9.9%, fourth quarter 2004: 16.1%).

Among the other main components of M3, hold-

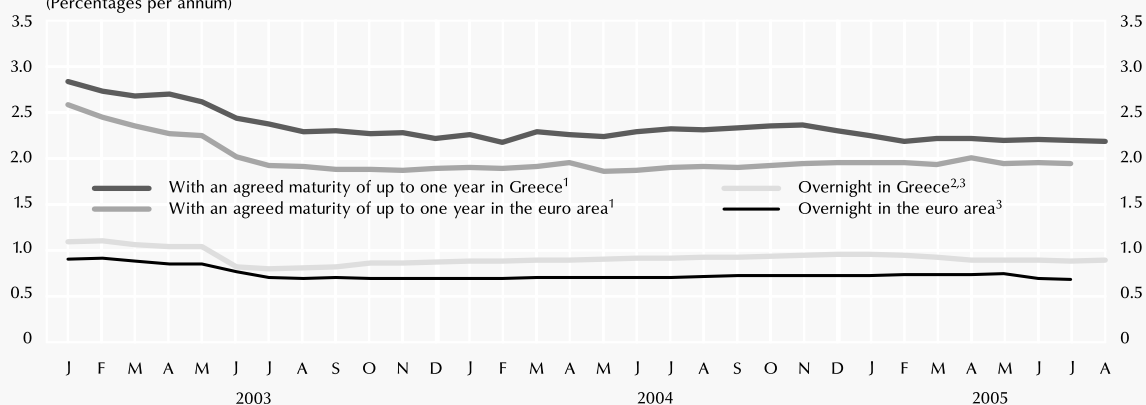
ings of repos (following the aforementioned increase of the applicable tax rate) declined further in the first eight months of the current year (see Chart IV.1) and their rate of change gradually fell to –65.2% in August 2005 (second quarter 2005: –57.2%, fourth quarter 2004: –12.6%). Indicatively, the outstanding amount of such holdings shrank to €3.3 billion in August 2005 from €28.5 billion in mid-2001, when repo yields were tax free. Finally, holdings of money market fund shares/units decreased further during the period under review and their rate of decline accelerated to 36.0% in August 2005 (second quarter 2005: –19.6%, fourth quarter 2004: –1.9%). The main factors contributing to this development, aside from the conversion of some money market funds into bond funds noted above, were the lower bond yields during the

<sup>3</sup> It should be recalled that, as of 2003, savings deposits are included in overnight deposits along with sight deposits and current account deposits. Savings deposits (as already mentioned in previous Annual Reports and Monetary Policy reports) are broadly similar to current account deposits, since they are redeemable on demand (without penalty) and enable depositors to effect payments to third parties.

Chart IV.2

Bank interest rates on new deposits from households in Greece and in the euro area  
(January 2003 – August 2005)

(Percentages per annum)



1 Monthly average rate.

2 The interest rate on savings deposits is used, as these deposits represent the bulk of overnight deposits and their interest rate is almost the same as the overnight rate.

3 End-of-month rate.

Sources: Bank of Greece and ECB.

period under review (as bonds constitute a considerable share of money market funds' portfolios) and the ongoing normalisation of portfolio allocation behaviour (following the decline in uncertainty in stock markets).

### 1.2 Deposit interest rates

With ECB key rates unchanged since June 2003, deposit interest rates showed only small changes in the first eight months of 2005. Specifically, the average interest rate on new overnight deposits by households – the bulk (91%) of which involves savings deposits – decreased marginally by 7 basis points (August 2005: 0.89%, December 2004: 0.96%, see Chart IV.2). In the same period, a slightly larger decrease (of 11 basis points) was recorded in the average interest rate on new deposits with an agreed maturity of up to one year, which stood at 2.19% in August. It should be noted that, following the introduction of a single tax rate, the (after tax) interest rate differential between time deposits and savings deposits widened. However, the interest rate on repos

remained roughly unchanged in the first eight months of 2005 (August 2005: 1.98%, December 2004: 2.01%).

Given that euro area interest rates on the above categories remained practically unchanged in the first seven months of 2005,<sup>4</sup> while the corresponding Greek rates declined somewhat, the differential between the two – despite remaining positive – narrowed somewhat. In July 2005, Greek interest rates on households' new overnight deposits and deposits with an agreed maturity of up to one year were 20 and 26 basis points, respectively, higher than the comparable rates in the euro area (see Table IV.2). The interest rate on new repos in Greece in the first seven months of 2005 remained very close to the corresponding euro area average (July 2005: 2.00%, December 2004: 2.02%), a fact that reflects the high degree of integration of this market and the homogeneity of the products offered.

<sup>4</sup> At the time of printing of this Report, data on euro area bank interest rates for August 2005 were not available.

Table IV.2

## Bank interest rates on new deposits in the euro area and in Greece

(Percentages per annum)

<b>A. Deposits</b>			
	December 2004	July 2005	Change July 2005/Dec. 2004
<b>Overnight from households<sup>1</sup></b>			
Weighted average interest rate in the euro area	0.73	0.68	-0.05
Maximum interest rate	1.17	1.17	0.00
Minimum interest rate	0.12	0.14	0.02
Interest rate in Greece	0.96	0.88	-0.08
<b>With an agreed maturity of up to one year, from households<sup>2</sup></b>			
Weighted average interest rate in the euro area	1.95	1.94	-0.01
Maximum interest rate	2.35	2.37	0.02
Minimum interest rate	1.49	1.51	0.02
Interest rate in Greece	2.30	2.20	-0.10

1 End-of-month rate.

2 Monthly average rate.

Sources: ECB and euro area NCBs.

## 2. The financing of the economy

Having recorded some fluctuations in the first eight months of the current year, the annual rate of increase in total financing of the economy by Monetary Financial Institutions (MFIs) was 9.6% in August, up from 8.6% in the last quarter of 2004 (see Table IV.3). This reflected mainly developments in the rate of change in MFI financing of general government,<sup>5</sup> which – despite some fluctuations – remained negative throughout that period (August 2005: -0.8%, fourth quarter 2004: -5.6%). At a time when domestic MFIs have been reducing their holdings of Greek Government securities in favour of higher-yielding assets, central government net borrowing requirements (January-August 2005: €11,223 million, January-August 2004: €10,018 million) have been more than covered by capital inflows from abroad for the purchase of such securities. Moreover, in August 2005, credit expansion to enterprises and households decelerated compared with the last quarter of 2004 (August 2005: 14.2%, fourth quarter 2004: 16.1%).

### 2.1 Bank lending to enterprises and households

The annual rate of increase in bank loans to enterprises slowed further in the first eight months of 2005 and stood at 6.6% in August (fourth quarter 2004: 8.6%). However, as discussed in earlier Bank of Greece reports,<sup>6</sup> this rate is affected by corporate bond issues, which are used by enterprises to substitute for, or supplement, bank loans.<sup>7</sup> Corporate bond issuance activity continued in the first eight months of 2005,<sup>8</sup> bringing the amount of MFI holdings of domestic corporate bonds as a percentage of total bank loans to domestic enterprises to 11.6% in August 2005 from 8.9% in December 2004 (December 2003: 4.3%, see Chart IV.3). Credit expansion to enterprises has

<sup>5</sup> The financing of general government by domestic MFIs comprises loans granted thereto, as well as the total of government paper held by the central bank, credit institutions and money market funds.

<sup>6</sup> See e.g. Bank of Greece, *Monetary Policy 2004-2005*, Appendix to Chapter IV (February 2005).

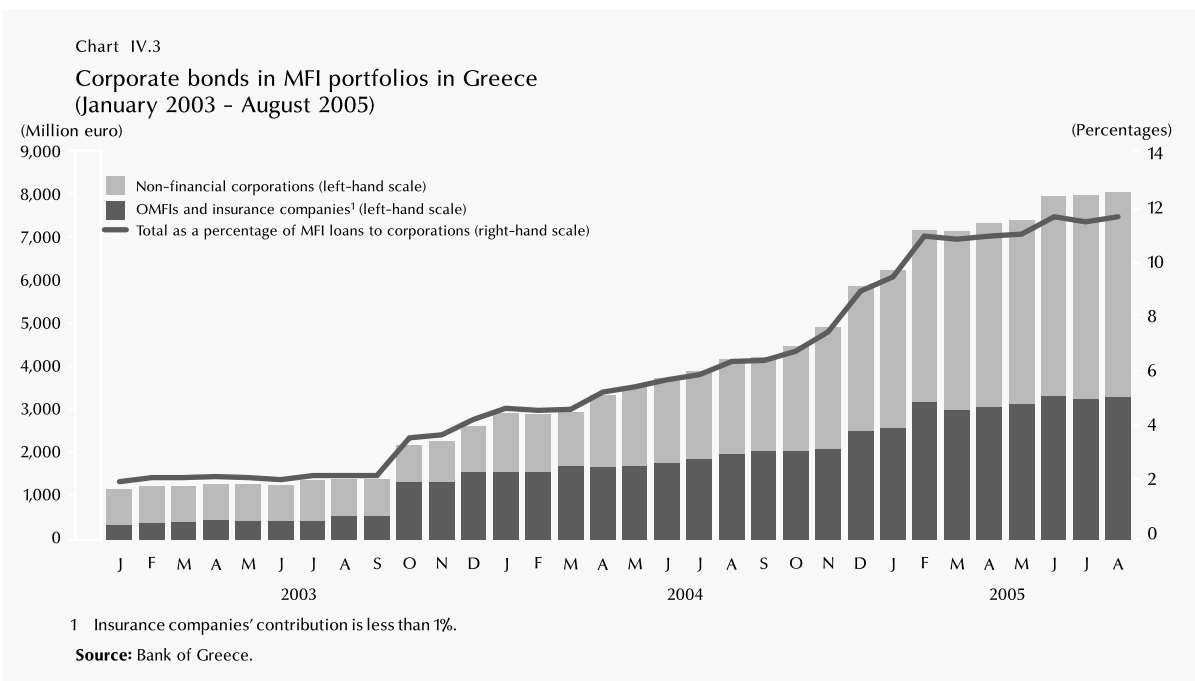
<sup>7</sup> The majority of such bonds remain in the portfolios of credit institutions.

<sup>8</sup> The increased use of corporate bond issues as a source of financing is to some extent associated with the exemption of such securities from the Law 128/1975 contribution.

**Table IV.3**  
**Total credit expansion in Greece**  
*(Annual percentage changes)*

	2001	2002	2003	2004		2005		
	Q4 <sup>1</sup>	Q4 <sup>1</sup>	Q4 <sup>1</sup>	Q4 <sup>1</sup>	December <sup>2</sup>	Q1 <sup>1</sup>	Q2 <sup>1</sup>	August <sup>2</sup>
1. Total credit expansion <sup>3,4</sup>	8.9	7.1	3.2	8.6	7.7	8.3	8.3	9.6
2. Credit expansion to general government	-2.4	-5.2	-15.9	-5.6	-8.0	-5.2	-5.7	-0.8
3. Credit expansion to enterprises and households <sup>3,4</sup>	23.2	18.3	17.1	16.1	15.8	15.0	14.7	14.2
3.1. Credit expansion to enterprises <sup>3</sup>	16.7	11.4	11.0	8.6	7.5	6.0	5.6	6.6
3.2. Credit expansion to households <sup>3</sup>	40.0	33.1	28.2	28.0	28.5	28.4	27.9	24.7
3.2.1 Housing loans	36.7	35.4	27.1	23.8	24.8	25.3	25.7	25.1
3.2.2 Consumer loans	44.3	27.4	24.8	37.9	37.4	35.6	33.7	25.6 <sup>5</sup>

- 1 The quarterly average is derived from monthly averages (which are calculated as arithmetic means of two successive end-of-month figures) and is not the three-month average of end-of-month annual growth rates (see the "Technical Notes" in the *ECB Monthly Bulletin*).
  - 2 Annual rate of change at the end of the month.
  - 3 Excluding corporate bonds held in MFI portfolios and the write-off of interest claims. See pp. 61-62 for the growth rates that an inclusion of these items would entail.
  - 4 Excluding securitisation of housing and consumer loans. See p. 65 for the growth rates that an inclusion of these items would entail.
  - 5 The slowdown of the consumer loan growth rate in August reflects the securitisation of loans (€952 million) effected in July 2005.
- Source:** Bank of Greece.



also dampened on account of the write-offs of interest claims in accordance with recent legislation.<sup>9</sup> Taking account of this effect, the annual rate of increase in total bank credit to enterprises

(loans and bonds) remained unchanged between the fourth quarter of 2004 and August 2005, at

<sup>9</sup> Law 3259/2004 on the settlement of outstanding tax cases.

12.6%, a level that implies relatively ample financing conditions (nominal GDP growth in 2005 was estimated in the Draft State Budget for 2006 – on 3 October 2005 – at 7.7%).

The average monthly volume of new loans to non-financial corporations<sup>10</sup> in the first eight months of 2005 remained at practically the same level as in the corresponding period of the previous year,<sup>11</sup> confirming that these enterprises have not faced any financing constraints. More than 90% of such new lending business represents loans with a floating rate or initial rate fixation of up to one year, while the majority (over 60%) involves large amounts (of more than €1 million).

In the first eight months of 2005, credit expansion exhibited a decline across most branches of economic activity, with the notable exception of shipping and, less so, of “other” branches (see Table IV.4).

In more detail, lending to agriculture was particularly affected by the write-offs of interest receivables, as the relevant legislation (Law 3259/2004) includes special provisions for this sector. Thus, the annual rate of change in the outstanding amount of loans to agriculture became negative from March onwards (August 2005: -7.5%, fourth quarter 2004: 7.8%). Nevertheless, taking into account the accumulated write-offs of receivables under the above law (totalling about €554 million until August 2005), the annual rate of change in loans to agriculture remains positive (August 2005: 8.9%), albeit slightly lower than at the end of the previous year (fourth quarter 2004: 9.6%).

For much of the period under review, the annual rate of change in loans to industry was negative. However, a strengthening has been noted since the beginning of the second quarter, leading to a

reversal to a positive rate in August (0.6%), which is nevertheless lower than that of the fourth quarter of 2004 (1.1%). The low or even negative rate of increase in bank loans to industrial firms is associated with the strong corporate bond issuance activity by these firms, as they make extensive use of this alternative source of finance.<sup>12</sup> Still, to some degree, it also reflects worsening industrial confidence during that period, and reduced industrial investment initiatives.<sup>13</sup>

Credit expansion to trade remained strong during the first eight months of 2005 (August 2005: 10.9%), despite an evident decelerating trend compared with the fourth quarter of 2004 (12.7%).

A remarkable acceleration was observed from March 2005 onwards in credit expansion to shipping (August 2005: 25.8%, fourth quarter 2004: 3.0%). However, as noted in previous reports, given that the largest part of loans to enterprises of this branch is US dollar-denominated, their outstanding balance in euro terms is affected by developments in the USD/euro exchange rate.<sup>14</sup> Thus, not taking into account foreign exchange valuation effects, the acceleration is smaller although still significant (August 2005: 25.4%, fourth quarter 2004: 9.7%). Developments in the financing of shipping firms are associated with an ongoing process of renewal of the Greek-owned fleet, which, in combination with the increase in

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**10** New loans only comprise loans of specific amounts and with a defined maturity, excluding lending through credit lines or overdrafts from current accounts, which represents one third of total loans to non-financial corporations.

**11** January-August 2005: €2,583 million, January-August 2004: €2,621 million.

**12** A significant proportion (August 2005: 25%) of corporate bond issues held by MFIs has been issued by industrial firms.

**13** According to the IOBE industrial investment survey conducted in the first half of 2005, private industrial firms expected that their investment expenditure in nominal terms would fall in 2005 by 8.4% compared with 2004.

**14** Between end-December 2004 and end-August 2005 the euro depreciated by 10.4% vis-à-vis the US dollar.

**Table IV.4**  
Breakdown of credit to enterprises and households in Greece

	Outstanding balances on 31.08.05 (million euro)	Annual percentage changes											
		2001		2002		2003		2004		2005		August <sup>2</sup>	
		Q4 <sup>1</sup>	Q4 <sup>1</sup>	Q4 <sup>1</sup>	Q4 <sup>1</sup>	Q4 <sup>1</sup>	Q4 <sup>1</sup>	Q4 <sup>1</sup>	December <sup>2</sup>	Q1 <sup>1</sup>	Q2 <sup>1</sup>	Q1 <sup>1</sup>	Q2 <sup>1</sup>
<b>A. Enterprises<sup>3</sup></b>	<b>69,212</b>	<b>16.7</b>	<b>11.4</b>	<b>11.0</b>	<b>8.6</b>	<b>7.5</b>	<b>6.0</b>	<b>5.6</b>	<b>6.6</b>				
1. Agriculture	3,123	-2.6	-14.0	3.3	7.8	5.4	4.1	-4.3	-7.5				
2. Industry <sup>4</sup>	15,838	10.2	11.5	10.4	1.1	-1.2	-1.9	0.1	0.6				
3. Trade	20,028	20.3	7.8	4.0	12.7	14.0	12.8	12.3	10.9				
4. Tourism	4,101	14.2	33.7	24.4	17.6	15.8	15.1	13.2	7.0				
5. Shipping	5,749	7.8	5.5	2.3	3.0	4.1	6.9	21.0	25.8				
6. Non-monetary financial institutions	1,842	141.8	72.5	-3.2	9.5	-2.7	-21.4	-41.2	-37.7				
7. Other loans	18,522	24.6	14.3	26.5	11.7	11.0	9.8	8.6	12.9				
<b>B. Households<sup>5</sup></b>	<b>58,576</b>	<b>40.0</b>	<b>33.1</b>	<b>28.2</b>	<b>28.0</b>	<b>28.5</b>	<b>28.4</b>	<b>27.9</b>	<b>24.7</b>				
1. Housing loans	37,850	36.7	35.4	27.1	23.8	24.8	25.3	25.7	25.1				
2. Consumer loans	19,245	44.3	27.4	24.8	37.9	37.4	35.6	33.7	25.6 <sup>6</sup>				
– Credit cards	7,262	62.1	37.1	27.8	23.4	23.2	22.0	19.9	1.8 <sup>6</sup>				
– Other consumer <sup>7</sup> loans	11,983	31.8	19.2	21.8	53.1	51.7	48.9	46.4	46.2				
3. Other loans	1,481	165.5	62.6	135.7	18.8	15.9	22.0	13.4	6.9				
<b>Total</b>	<b>127,788</b>	<b>23.2</b>	<b>18.3</b>	<b>17.1</b>	<b>16.1</b>	<b>15.8</b>	<b>15.0</b>	<b>14.7</b>	<b>14.2</b>				

1 The quarterly average is derived from monthly averages (which are calculated as arithmetic means of two successive end-of-month figures) and is not the three-month average of end-of-month annual growth rates (see the "Technical Notes" in the ECB Monthly Bulletin).

2 Annual rate of change at the end of the month.

3 Excluding corporate bonds held in MFI portfolios and the write-off of interest claims. See pp. 61-62 for the growth rates that an inclusion of these items would entail.

4 Comprising manufacturing and mining/quarrying.

5 Excluding securitisation of housing and consumer loans. See p. 65 for the growth rates that an inclusion of these items would entail.

6 The slowdown of the consumer loan growth rate in August reflects the securitisation of loans (€952 million) effected in July 2005.

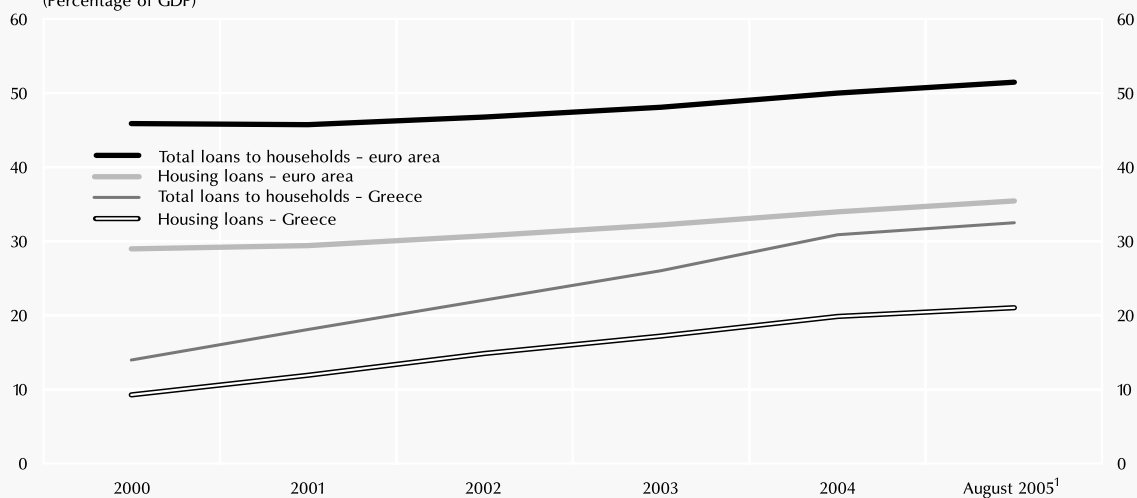
7 Including personal loans and loans against supporting documents.

Source: Bank of Greece.

Chart IV.4

## Bank loans to households

(Percentage of GDP)

<sup>1</sup> Estimates for the 2005 GDP.

Sources: Bank of Greece and ECB for outstanding loans, Greek Ministry of Economy and Finance and Eurostat for GDP.

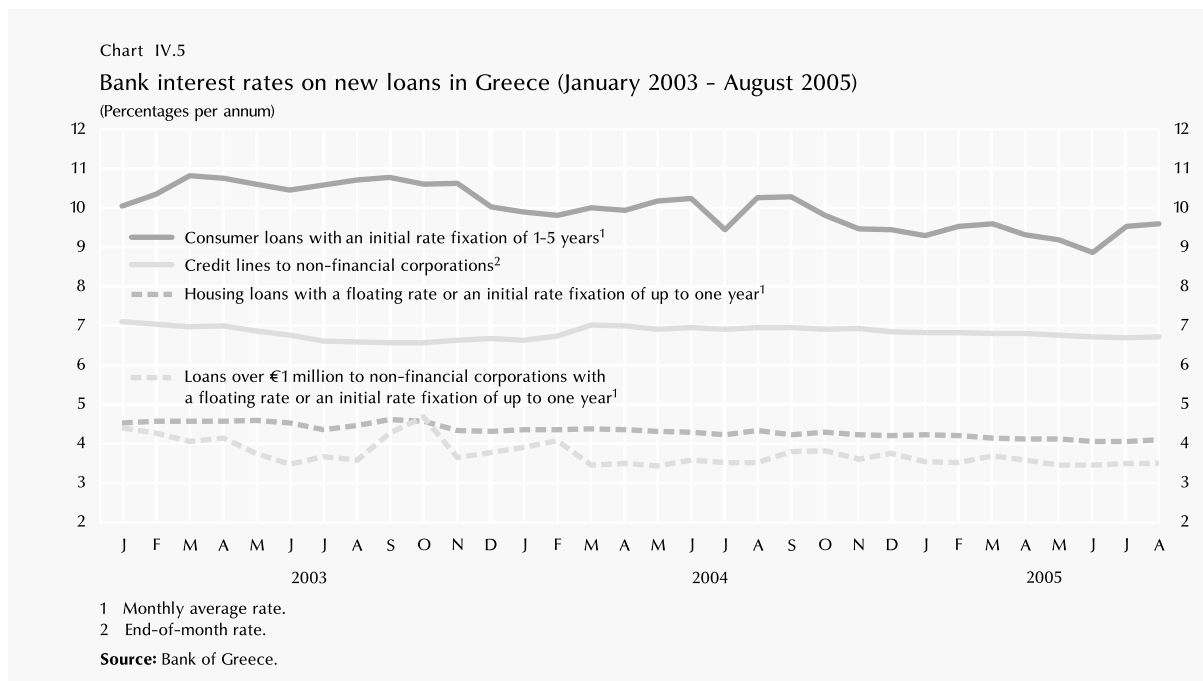
the prices of ships, leads to higher borrowing requirements.

Credit expansion to households appears to have weakened considerably between end-2004 and end-August 2005 (August 2005: 24.7%, fourth quarter 2004: 28.0%). However, this development was largely due to the new securitisation of housing loans in June, as well as the first ever securitisation of consumer loans in July. Thus, taking securitised loans into account, the rate of increase in credit to households remains relatively high (August 2005: 29.1%), albeit slightly lower than in the last quarter of 2004 (30.0%). The persistently strong credit expansion to households has led to an increase in total household indebtedness as a percentage of GDP, which stood at 32.5% in August 2005 (December 2004: 30.9%, December 2003: 26.1%, see Chart IV.4), gradually bridging the gap with the respective euro area average (August 2005: 51.4%, December 2004: 50.0%, December 2003: 48.1%).

Specifically, housing credit growth showed an

upward trend in the first eight months of 2005 (August 2005: 25.1%, fourth quarter 2004: 23.8%). Indeed, taking securitised loans into account, the annual rate of increase in the outstanding amount of housing loans turns out even higher (August 2005: 28.8%, fourth quarter 2004: 26.8%). The dynamics of housing loans in the period under review are to some extent associated with the impending application (as of 1 January 2006) of VAT on new residential buildings and the announced adjustment of real estate objective prices (i.e. the prices on which tax on real estate transactions is calculated), as expectations about the impact of these new measures seem to induce households to expedite the purchase of houses.

In the first eight months of 2005, the average monthly level of new housing loans was 56% higher than in the same period of the previous year, confirming the particularly strong dynamics of housing credit. At the same time, the share of loans with a floating rate or initial rate fixation of up to one year in total loans increased further



(January-August 2005: 88%, 2004: 83%, 2003: 71%). Moreover, owing to the high rate of increase in housing loans, their outstanding amount as a percentage of GDP rose to 21.0% in August 2005 (December 2004: 19.8%, December 2003: 17.2%), compared with 35.5% in the euro area (December 2004: 34.0%, December 2003: 32.2%).

The annual rate of increase in consumer loans slowed substantially in the first eight months of 2005 (August 2005: 25.6%, fourth quarter 2004: 37.9%). However, the considerable weakening observed since July is to some extent attributable to the securitisation of consumer loans through credit cards amounting to €952 million, which, as mentioned above, took place for the first time that month. Including the outstanding amount of securitised loans, the rate of increase in consumer loans comes to 31.8% in August 2005, i.e. a considerably smaller deceleration. In general, the downward trend of consumer credit growth was a result of developments both in loans through credit cards and in other consumer loans. There-

fore, as the latter increased at a higher rate than the former, the share of loans through credit cards in total consumer loans in the portfolios of MFIs decreased further (August 2005: 38%, December 2004: 45%, December 2003: 50%), a fact associated with the relatively higher interest rate applied on this particular category of loans.

## 2.2 Bank loan interest rates

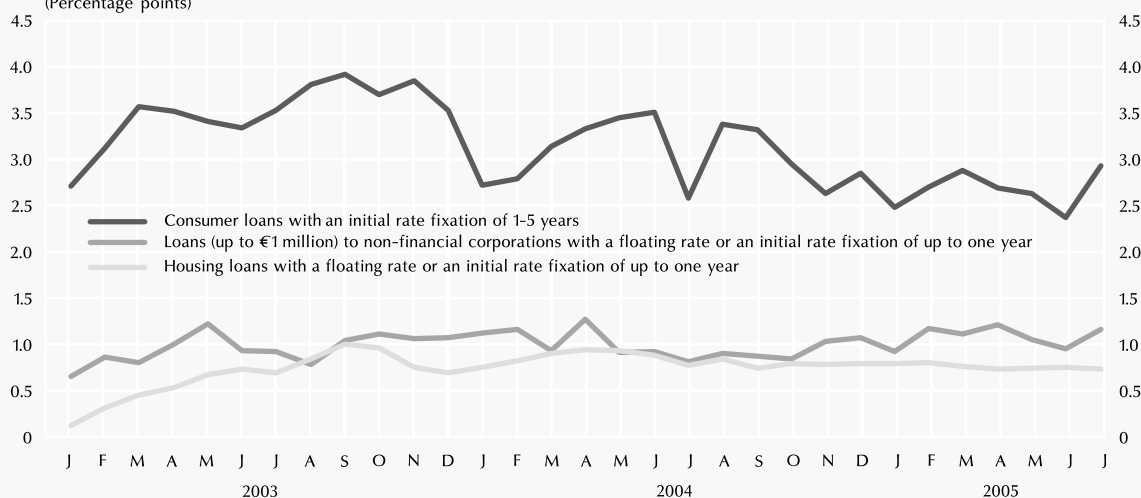
In the first eight months of 2005, the rates on new housing loans were reduced,<sup>15</sup> while those on new loans to non-financial corporations and on new consumer loans exhibited mixed trends (see Chart IV.5). Specifically, the rate on consumer loans without a defined maturity (which represent about 54% of the outstanding amount of consumer loans) declined by 25 basis points between January and August 2005 and stood at 13.16% at

<sup>15</sup> As noted in previous reports, the level of bank lending rates, aside from the cost of raising the relevant funds, is also affected by other factors, such as the collateral offered by borrowers, the magnitude of the risks assumed by credit institutions and the maturity of the loan.

Chart IV.6

Bank interest rates on new loans: differentials between Greece and the euro area  
(January 2003 – July 2005)

(Percentage points)



Sources: Bank of Greece and ECB.

the end of that period. As the corresponding euro area rate increased slightly in the first seven months of 2005,<sup>16</sup> the differential with the Greek rate narrowed to 3.62 percentage points in July 2005, from 3.88 percentage points in December 2004. This relatively wide differential reflects the high level of Greek interest rates on loans through credit cards (August 2005: 13.82%, December 2004: 14.29%), which form the highest proportion of the category of consumer loans without a defined maturity.<sup>17</sup> The rate on new consumer loans with an initial rate fixation of more than one and up to five years (which represent 48% of consumer loans with a defined maturity) fluctuated in the first eight months of 2005 and stood in August at 9.60%, i.e. 15 basis points higher than in December 2004.<sup>18</sup> The differential between this rate and the corresponding euro area one widened slightly in the first seven months of 2005, to 2.93 percentage points in July from 2.85 percentage points in December 2004 (see Chart IV.6). This differential remains wide, reflecting to some extent the relatively high uncertainty faced by banks in Greece as regards doubtful loans and

relevant recovery rates. The magnitude of credit risks cannot be adequately assessed, as the deregulation of consumer credit is quite recent and the available data cover only a short period of time.

The weighted average interest rate on the total of new housing loans followed a downward path from February 2005 and stood in August at 4.18%, i.e. 19 basis points lower than in December 2004. The rate on new housing loans with a floating rate or initial rate fixation of up to one year (which make up around 88% of all housing loans) also fell in the same period, but by less, and stood at 4.11% in August (December 2004: 4.21%). As the fall in the euro area rate on the

<sup>16</sup> See footnote 4 above.

<sup>17</sup> Among all consumer loans, the interest rate on open account loans (which represent approximately 33% of the total outstanding amount of consumer loans without a defined maturity) recorded the steepest increase (57 basis points) in the first eight months of 2005 (August 2005: 12.22%).

<sup>18</sup> The interest rate on the other, equally important category of consumer loans, i.e. those with a floating interest rate or initial rate fixation of up to one year, which account for 33% of all consumer loans with a defined maturity, decreased by 10 basis points in the same period.

Table IV.5

## Bank interest rates on new loans in the euro area and in Greece

(Percentages per annum)

<b>A. Loans with a floating rate or an initial rate fixation of up to one year<sup>1</sup></b>			
	December 2004	July 2005	Change July 2005/Dec. 2004
<b>A.1. Loans up to €1 million to non-financial corporations</b>			
Weighted average interest rate in the euro area	3.97	3.85	-0.12
Maximum interest rate	5.52	5.63	0.11
Minimum interest rate	3.48	3.32	-0.16
Interest rate in Greece	5.04	5.01	-0.03
<b>A.2. Loans of more than €1 million to non-financial corporations</b>			
Weighted average interest rate in the euro area	3.05	2.96	-0.09
Maximum interest rate	4.09	4.17	0.08
Minimum interest rate	2.67	2.71	0.04
Interest rate in Greece	3.77	3.50	-0.27
<b>A.3. Housing loans</b>			
Weighted average interest rate in the euro area	3.43	3.33	-0.10
Maximum interest rate	4.37	4.15	-0.22
Minimum interest rate	3.10	2.88	-0.22
Interest rate in Greece	4.21	4.06	-0.15
<b>A.4. Consumer loans</b>			
Weighted average interest rate in the euro area	6.73	6.67	-0.06
Maximum interest rate	11.00	10.48	-0.52
Minimum interest rate	4.73	3.83	-0.9
Interest rate in Greece	8.58	8.45	-1.13
<b>B. Loans with an initial rate fixation of 1-5 years<sup>1</sup></b>			
<b>Consumer loans</b>			
Weighted average interest rate in the euro area	6.60	6.61	0.01
Maximum interest rate	10.59	9.54	-1.05
Minimum interest rate	4.25	4.24	-0.01
Interest rate in Greece	9.45	9.54	0.09

<sup>1</sup> Monthly average rate.

Sources: ECB and euro area NCBS.

same category of housing loans was smaller in the first seven months of 2005, the differential between the Greek and the respective euro area rate narrowed slightly to 73 basis points in July, from 78 basis points in December 2004 (see Table IV.5). As already noted,<sup>19</sup> the differentials between Greek and euro area interest rates on housing loans are also linked with the longer time required in Greece for the liquidation of real estate collateral, as well as with the uncertainty surrounding the measurement of the cost of doubtful loans.

As for interest rates on loans to non-financial corporations, the interest rate on loans without a defined maturity (which account for nearly 34% of the total balance of corporate loans) dropped by 13 basis points in the first eight months of the current year (August 2005: 6.84%).<sup>20</sup> The differ-

<sup>19</sup> See Bank of Greece, *Annual Report 2004*, Chapter VI, p. 187, April 2005.

<sup>20</sup> The most important subcategory of such loans are those extended through credit lines, the interest rate on which decreased by approximately the same percentage. The other subcategory of corporate loans without a defined maturity comprises sight account overdrafts.

ential between this and the respective euro area rate remained practically unchanged at 1.70 percentage points in the first seven months of 2005. This relatively wide differential reflects the fact that the above loan category is not homogeneous across the euro area as regards the collateral and/or other contractual terms on which these loans are extended.<sup>21</sup> It should also be noted that there are other euro area countries with higher interest rates than Greece. In the first eight months of 2005, interest rates on corporate loans with a floating rate or an initial rate fixation of up to one year showed a slight increase of 8 basis points for loans of up to €1 million, while they fell by 27 basis points for loans of more than €1 million and in August 2005 they stood at 5.12% and 3.50%, respectively. The differential between the Greek rate on corporate loans of up to €1 million and the comparable euro area rate widened slightly in July 2005 compared with December 2004 (July 2005: 1.16 percentage points, December 2004: 1.07 percentage points). In contrast, the differential between the Greek and the euro area interest rates on corporate loans of more than €1 million narrowed to 54 basis points in July 2005, from 72 basis points in December 2004. The spread between the interest rate on loans to smaller-size enterprises and that on loans to larger corporations widened in the first eight months of 2005, to 1.62 percentage points from 1.27 percentage points in December 2004 and was wider than the respective euro area average, which remained unchanged at 91 basis points in the course of 2005. This wider interest rate spread reflects to some extent the higher share of SMEs in the total number of enterprises in Greece compared with the euro area, as banks usually apply stricter credit standards in the case of smaller-size enterprises, on which they have less information.

The margin between the (weighted) average inter-

est rate on total bank loans and the respective rate on deposits fell by 10 basis points in the period from January to August 2005 (August 2005: 4.75 percentage points, December 2004: 4.85 percentage points), mainly a consequence of a decline in the average rate on loans (August 2005: 5.89%, December 2004: 6.03%), while the rate on deposits decreased less (August 2005: 1.14%, December 2004: 1.18%). This decrease in the average interest rate on bank loans came as a result of the reduction in both the average rate on loans to households (August 2005: 6.85%, December 2004: 7.04%) and the average rate on loans to non-financial corporations (August 2005: 4.99%, December 2004: 5.15%). The narrowing of the margin between lending and deposit rates was largely due to increased competition among banks in the field of both loans to enterprises and loans to households.

Additional information on the evolution of bank interest rates is provided by developments in the average interest rates applicable on loan outstanding amounts. The average rate on the outstanding amounts of euro-denominated loans (and not only new lending business), which affects the operating income of banks, increased slightly in the first eight months of the current year. In the same period, the average interest rate on consumer loans with an initial maturity of more than one and up to five years and of more than five years increased considerably, while a drop was recorded in the interest rate of the largest category of consumer loans (with an initial maturity of up to one year) and that of the most important category of housing loans (with an initial maturity of more than five years). The average interest rates on both short-term loans to

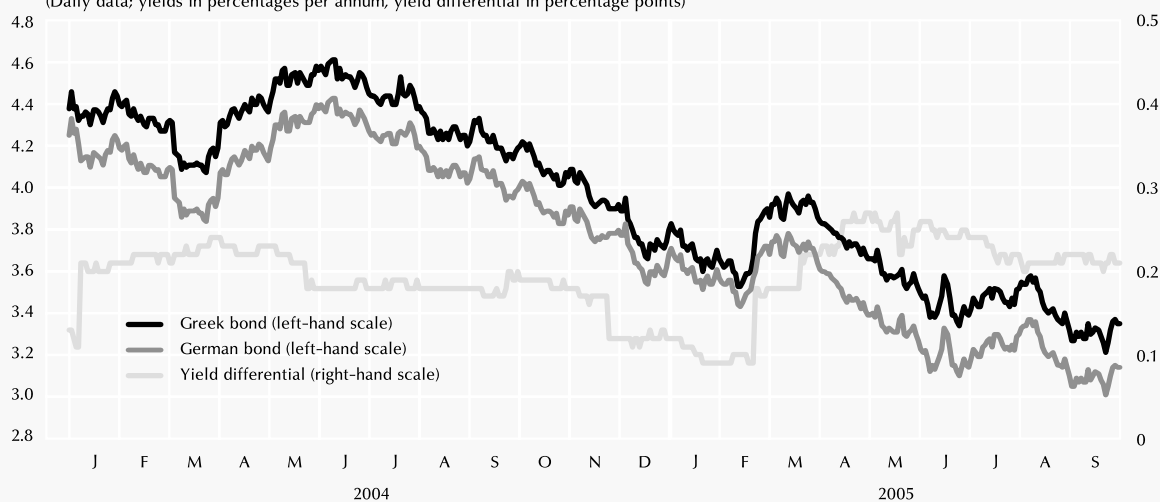
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<sup>21</sup> In some euro area countries such as France and the Netherlands these loans are fully secured, hence they have a relatively lower interest rate.

Chart IV.7

Yields on the 10-year Greek and German government bonds  
(January 2004 – September 2005)

(Daily data; yields in percentages per annum, yield differential in percentage points)



Source: Bank of Greece.

non-financial corporations (the major category of corporate loans) and long-term loans also decreased, while, by contrast, the rate on medium-term corporate loans remained unchanged.

### 3. Capital markets

#### 3.1 The bond market

Greek government bond yields, reflecting similar developments in the yields of comparable securities in the euro area, declined substantially during the January-September 2005 period, reaching historically low levels. Transactions in these securities in the Electronic Secondary Market for Securities (HDAT), although slightly reduced compared with the corresponding period in 2004, remained at high levels.

In more detail, Greek government bond yields in the secondary market showed a sharp downward trend from mid-2004 through to end-September 2005, interrupted only by a temporary recovery

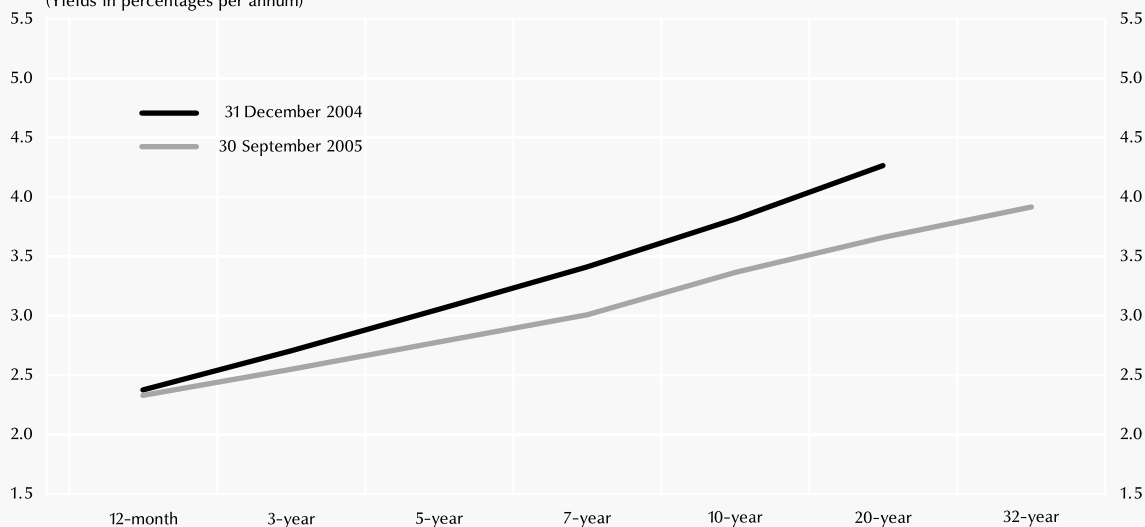
between mid-February and end-March 2005 and again in July<sup>22</sup> (see Chart IV.7). Underlying this development and the international drop in bond yields were the weak prospects for economic recovery in the euro area, increased liquidity in international capital markets and the upward course of oil prices.<sup>23</sup>

During the first nine months of 2005, the yield on the Greek ten-year government bond fell by 45 basis points to 3.35%, fluctuating between a peak of 3.97% (10 March) and a trough of 3.21% (22 September). The yield differential between the Greek ten-year bond and the comparable German bond was 21 basis points at end-September 2005, up from 12 basis points at end-December 2004 (see Chart IV.7). The widening of the yield differential reflects the issuance, in mid-February, of a new Greek reference bond

<sup>22</sup> This recovery seems to reflect optimistic assessments on the outlook of mainly the US economy and, in July, of the euro area economy as well.

<sup>23</sup> See Chapter III.3.3 for more details on the declining path of bond yields both in the euro area and in the United States.

Chart IV.8  
Greek government paper yield curves  
(Yields in percentages per annum)



Source: Bank of Greece.

maturing 6.5 months later than the corresponding German bond.<sup>24,25</sup>

In addition to the ten-year bond, Greek government bond yields declined substantially for all other maturities during the period under review, with the most marked reductions being at the longer end of the maturity spectrum (32-year and 20-year bonds).<sup>26</sup> As a result, the yield curve shifted downwards (see Chart IV.8) and flattened further in the section corresponding to maturities of 12 months to 10 years, as evidenced by the yield spread between the 10-year bond and the 12-month Treasury bill, which fell by 41 basis points in the period under examination.

The average daily value of transactions in HDAT fell to €2.9 billion during the first nine months of 2005, from €3.6 billion in the corresponding 2004 period (see Chart IV.9).<sup>27,28</sup> The bulk of transactions (about 59%) concerned 10-year bonds. The bid-ask spread stood at 7.7 basis points in September 2005, compared with 6.1 basis points in December 2004.<sup>29</sup>

In the primary market for Greek government securities, the total amount of funds raised during January-August 2005 was €31.7 billion,<sup>30</sup> i.e. 15% less than in the corresponding period of 2004 (see Table IV.6). Primary market activity predomi-

<sup>24</sup> The revised Greek government deficit and debt figures released by Eurostat on 18 March are estimated to have had a small and temporary effect on the widening of the yield differential between the 10-year Greek government bond and the corresponding German bond.

<sup>25</sup> During April and May 2005, the corresponding Italian-German and Portuguese-German yield differentials also increased significantly, but declined somewhat thereafter.

<sup>26</sup> The yield on the 32-year bond fell by 63 basis points between its launch in HDAT (3 March 2005) and end-September. For more details on this bond, see footnote 31 below.

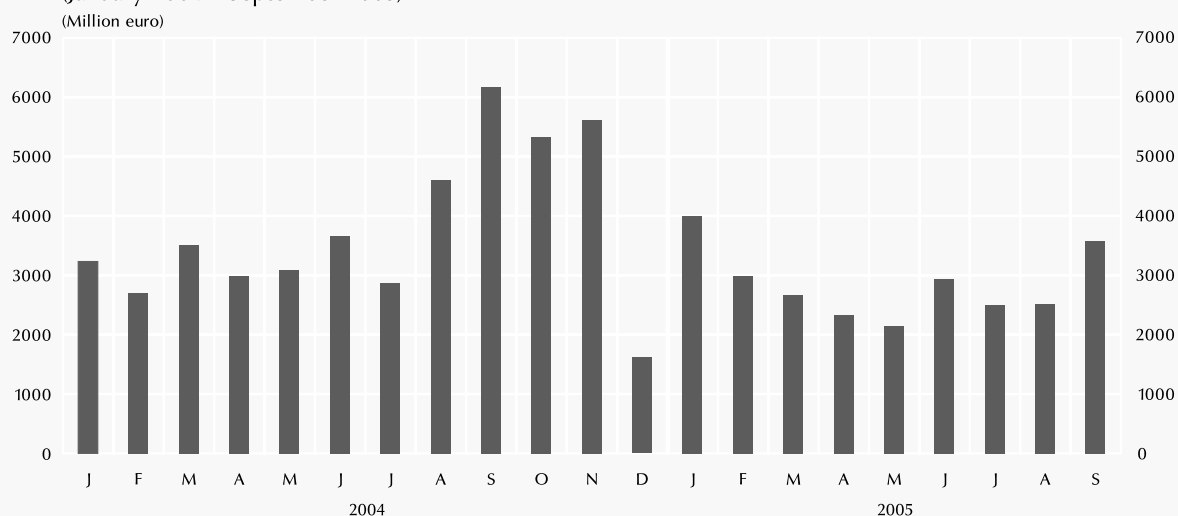
<sup>27</sup> Moreover, the average daily value of transactions (between banks and their customers in the OTC market and in HDAT) through the Book-Entry Securities System of the Bank of Greece was €26.7 billion in the first nine months of 2005, compared with €26.9 billion in the corresponding period in 2004.

<sup>28</sup> According to available balance of payments statistics, net financial inflows for investment in Greek government bonds by non-residents amounted to €16.7 billion during January-July 2005, compared with €12.1 billion in the corresponding 2004 period.

<sup>29</sup> The widening of the bid-ask spread is connected with the higher volume of transactions in 10-year bonds and bonds with longer maturities, in particular with the launch of the 32-year bond in HDAT in March.

<sup>30</sup> It should be noted that during January-August 2005 redemptions of Greek government securities reached €22.4 billion, compared with €20.2 billion in the corresponding period in 2004.

Chart IV.9

Average daily value of transactions in the Electronic Secondary Market for Securities (HDAI)  
(January 2004 - September 2005)

Source: Bank of Greece.

Table IV.6

## Greek government paper issuance

Type of security	January - August			
	2004		2005	
	Million euro	Percentage of total	Million euro	Percentage of total
<i>Treasury bills</i>	1,674	4.5	1,658	5.2
<i>Bonds<sup>1</sup></i>	35,767	95.5	30,089	94.8
1-year	7,183	20.1	—	—
3-year	6,432	18.0	4,859	16.1
5-year	10,102	28.2	7,343	24.4
7-year	96	0.3	—	—
10-year	9,456	26.5	7,151	23.8
12-year	—	—	3,499	11.6
20-year	242	0.7	—	—
23-year	2,256	6.2	2,213	7.4
32-year	—	—	5,024	16.7
<b>Total</b>	<b>37,441</b>	<b>100.0</b>	<b>31,748</b>	<b>100.0</b>

1 By initial maturity as regards the reopening of past issues.

Source: Ministry of Economy and Finance.

nantly took the form of syndicated issues<sup>31</sup> and, to a lesser extent, auctioned issues.<sup>32</sup> Moreover, the Greek government re-opened past issues of 3-year, 5-year and 10-year bonds using auction procedures and one past issue of the 23-year bond using syndication.<sup>33</sup> In more detail, €12.2 billion (41% of the total value of bond issues) concerned

<sup>31</sup> These issues include the first Greek 32-year bond, which became available at the beginning of March. The amount of the 32-year bond issue (€5 billion) was covered almost twice and the largest share of the issue was absorbed by foreign institutional investors. This bond has an interest-bearing coupon of 4.50% and its maturity date is the 20th September 2037.

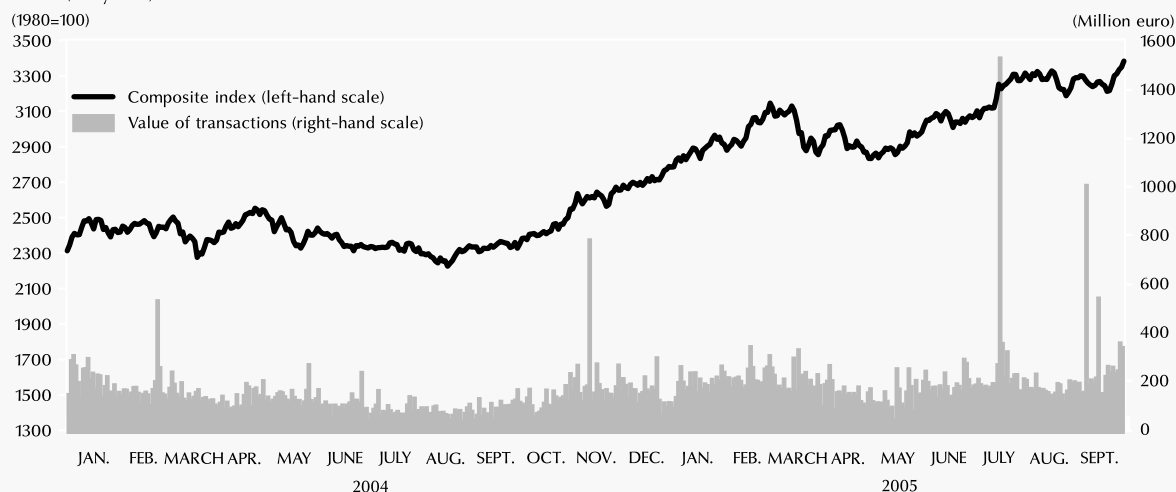
<sup>32</sup> Furthermore, the new 12-year bond was issued by private placement.

<sup>33</sup> This concerned the syndicated 23-year bond linked to the Harmonised Index of Consumer Prices (excluding tobacco) of the euro area, with a coupon of 2.90%.

Chart IV.10

Athens Exchange: composite share price index and value of transactions  
(January 2004 - September 2005)

(Daily data)



Source: Athens Exchange.

3-year and 5-year bonds and €17.9 billion (59% of total bond issues) concerned 10-, 12-, 23- and 32-year bonds. Table IV.6 shows a marked shift from short and medium maturities (up to 5 years) to longer maturities (10 years and over), leading to an increase in the weighted average maturity of the securities issued in the period under review.<sup>34</sup> This development is consistent with the effort of the Greek government to take advantage of the historically low long-term interest rates and also its policy of prolonging the average maturity of public debt. Finally, Treasury bill issues remained low during January-August 2005, accounting for about 5% of total issues.

Over the period under review, Greek government securities remained very attractive to foreign, mainly institutional, investors and demand has outstripped supply in the case of syndicated new issues of 5-year, 10-year and 32-year bonds, as well as in auctioned issues.

### 3.2 Stock market developments

The upward course of the composite share price index of the Athens Exchange (Athex) which started in late August 2004 continued in the first nine months of 2005 (see Chart IV.10), under the influence of developments in euro area stock markets.<sup>35</sup>

The rise in share prices was more pronounced during the first two months of 2005, owing to the improved profitability of Athex-listed firms in 2004 and to expectations of further improvement in 2005, while ample liquidity conditions prevailing at the global level was another contributing factor. In March and April, the stock market experienced a downturn, and by the end of April the composite share price index had reversed to near its end-2004 level.<sup>36</sup> However, in early May the Athex index

<sup>34</sup> The weighted average maturity of these securities in the first half of 2005 was 11.96 years, up from 6.85 years in 2004.

<sup>35</sup> For more details on stock market developments in the euro area see Chapter III.3.4.

<sup>36</sup> This development can be attributed to heightened investor uncertainty, during these two months, regarding the arrangement of issues related with the pension fund of bank employees.

re-embarked on a steep upward course, which continued through to September, supported by financial data releases of Athex-listed companies for the first quarter and the first half of 2005. These financial statements pointed to higher corporate profitability<sup>37</sup> and firms' successful adjustment to the International Accounting Standards (IAS). Furthermore, the settlement of the issue of bank employees' pension funds, the announcement of strategic alliances and co-operations mainly in the financial and telecommunications sectors, as well as the expected structural changes in listed public enterprises are estimated to have had a favourable effect on the stock market. At the same time, more rigorous supervision on the part of the Hellenic Capital Market Commission has bolstered investor confidence,<sup>38</sup> while the Athex Board of Directors, in its attempt to boost the liquidity and competitiveness of the Greek stock market, adopted the amended Athens Exchange Regulation which will come into effect in December 2005.<sup>39</sup>

Between end-December 2004 and end-September 2005, the Athex composite share price index rose by 21.4%,<sup>40</sup> reaching a peak of 3,381.96 points on 30 September and a trough of 2,813.33 points on 5 January. The composite index thus outperformed the Nikkei 225 index in Japan (18.2%), the Dow Jones EURO STOXX broad index in the euro area (17.7%) and the Standard & Poor's 500 index in the United States (1.4%).<sup>41</sup> Among the individual domestic market indices, at end-September the largest gains (27.2%) were recorded by the medium capitalisation companies' index FTSE/ASE MID 40, followed by the large capitalisation index FTSE/ASE 20 (21.3%). This signals a shift of investor interest from large to medium capitalisation companies, reversing the trend seen in 2004 and in the first half of 2005, when the FTSE/ASE 20 index had recorded the best performance. The index of small capitalisation companies FTSE/ASE SMALL CAP 80 showed a less significant increase (10.4%).

It should also be noted that the Athex composite share price index exhibited low correlation with the Dow Jones EURO STOXX broad index during the period under review. Specifically, the correlation coefficient of the two indices was 0.34, compared with 0.50 in 2004. By contrast, the correlation of major stock market indices in the EU (FTSE 100, DAX and CAC 40) with the Dow Jones EURO STOXX broad index was high (over 0.85). The volatility<sup>42</sup> of the Athex composite index from November 2004 through to September 2005 was higher than that of the Dow Jones EURO STOXX broad index, although both volatilities were below their five-year averages.

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<sup>37</sup> Pre-tax earnings of companies with Athex-listed shares rose by 9.2% (by 16.1% on a consolidated basis) in the first half of 2005 compared with the corresponding period of 2004. This development stemmed largely from the strong rise in the profitability of the financial sector.

<sup>38</sup> In this context, Law 3340/2005 against insider trading and market manipulation was passed (and came into effect as from 11 July). This was followed by Law 3371/2005 on capital market issues which laid down provisions regarding the minimum disclosure obligations for issuers whose securities were admitted to trading on regulated markets, the independence of the Hellenic Capital Market Commission, the reform of the institutional framework for portfolio investment sociétés anonymes, the introduction of a new operational framework for firms involved with the reception and transmission of orders, the winding-up of brokerage firms, as well as provisions on the supplementary funds of such firms. Finally, a draft law was brought to Parliament in September, on the prospectus to be published when securities are offered to the public or admitted to trading. This draft law implements the EC prospectus Directive (2003/71/EC), revises requirements for the drafting, approval and distribution of the prospectus, and, *inter alia*, provides for the mutual recognition of prospectuses within the EU. The aim is to ensure investor protection by establishing the responsibility (as far as the prospectus is concerned) not only of the company-issuer, but also of its Board members and any underwriters of the securities issue (see also Box VI.2).

<sup>39</sup> According to the new Regulation of the Athens Exchange, the existing markets are abolished and listed shares are classified into three categories (Large Capitalisation, Medium and Small Capitalisation, Special Stock Exchange Characteristics), on the basis of capitalisation, dispersion, marketability, trading price levels and financial structures of the corresponding companies. At the same time, there will be changes in the trading hours and in the trading procedures for these three categories of shares.

<sup>40</sup> The average level of the Athex composite share price index during that period was 28% higher compared with the corresponding 2004 period.

<sup>41</sup> It should be noted however that in euro terms the change in the Nikkei 225 index and the Standard and Poor's 500 index was 21.5% and 14.3% respectively.

<sup>42</sup> Volatility has been estimated by applying an econometric model (GARCH) to the daily yields of each of the two indices for the period from 1 January 2000 to 30 September 2005.

**Table IV.7**  
**Fund-raising through the Athens Exchange**  
*(Million euro)*

Business sectors	Number of firms				Funds raised <sup>1</sup>			
			January - September				January - September	
	2003	2004	2004	2005*	2003	2004	2004	2005*
Listed companies	35	33	30	9	317.0	397.2	379.9	1,616.1
Newly listed companies	13	10	10	5	61.0	79.5	79.5	59.6
<b>Total</b>	<b>48</b>	<b>43</b>	<b>40</b>	<b>14</b>	<b>378.0</b>	<b>476.6</b>	<b>459.4</b>	<b>1,675.7</b>
– Banks	4	4	4	2	105.8	185.2	185.2	1,349.0
– Investment	2	1	1	1	3.0	13.2	13.2	83.2
– Insurance	2	1	1	2	35.0	3.0	3.0	122.0
– Holding	1	2	1	0	0.3	11.8	0.2	–
– Industrial	17	12	12	3	80.4	102.5	96.8	50.9
– Construction	1	2	2	0	7.5	41.0	41.0	–
– Commercial	5	5	7	3	36.3	37.7	37.7	29.8
– Telecommunications	3	2	2	0	3.0	10.0	10.0	–
– Real estate management	0	0	0	1	–	–	–	26.4
– Information technology	12	9	8	2	38.6	24.3	24.4	14.4
– Other	1	2	2	0	8.1	47.9	47.9	–

<sup>1</sup> Share capital increases through public offerings and private placements. Subscriptions to the share capital increase are entered on the last day of the public offering period.

\* Provisional data.

Sources: Athens Exchange and Bank of Greece.

The average daily value of transactions reached €205.9 million during January to September 2005, rising by 54% relative to the same period last year. The bulk of transactions (about 75%) related to shares included in the large capitalisation index FTSE/ASE 20. The participation of foreign investors in Athex transactions was very high throughout the period under review.<sup>43</sup>

The total amount of funds raised from the stock market increased in the first nine months of 2005 compared with the corresponding period of the previous year,<sup>44</sup> from €459.4 million to €1,675.7 million,<sup>45</sup> and involved 14 companies (January-September 2004: 40 companies), of which 5 were newly listed and raised €59.6 million (January-September 2004: 10 companies, €79.5 million, see Table IV.7).

The value of transactions in bank shares and the

market capitalisation of the banking sector<sup>46</sup> grew more strongly than for the market as a whole, whereas the banking sub-index gained 19.8% in the period under review. The banking sector's profitability was positive in the first half of 2005. In particular, pre-tax profits of commercial banks and

<sup>43</sup> According to data from the Central Depository of Securities, at the end of August 2005 foreign investors (60% of whom are located in EU countries and 19% in the United States) accounted for 37.4% of the Athex market capitalisation, compared with 36% at end-2004. Similarly, foreign institutional investors accounted for 25.6% from 24% at the end of 2004. For stocks included in the FTSE ASE 20 index, the corresponding percentage of foreign investors was relatively higher (44.1%) and that of foreign institutional investors was 32.2%.

<sup>44</sup> This increase stemmed almost exclusively from the funds raised by two banks, in June (€1,248.9 million) and in August (€100 million). If we were to exclude the banking sector, fund-raising would be much smaller (from €274 million in 2004 to €327 million). Fund-raising by non-financial corporations fell substantially (53%).

<sup>45</sup> Another €2,100 million were raised in the period under review through secondary offerings.

<sup>46</sup> At end-September 2005 the banking sector accounted for 36% of total stock market capitalisation.

banking groups<sup>47</sup> with Athex-listed shares rose by 41% and 42.6% respectively over the same period of 2004.<sup>48</sup> This development was mainly associated with a rise in revenue as well as a small decrease in operating costs. In more detail, the net interest income of banks (groups) rose by 14.3% (17.2%)<sup>49</sup> and fee income by 7.3% (6.9%) – these two categories account for about 92% (88%) of total revenue. Operating costs declined a little, by 1.5% (0.4%), owing to the implementation of personnel voluntary retirement plans and, more generally, to banks' policy of cutting down on their

overall expenditure. As a result of these developments, the efficiency ratio<sup>50</sup> improved significantly to 54.6% (55.7%) in the first half of 2005 from 61.5% (62.2%) in the first half of 2004.

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**47** The ten largest Greek commercial banks (banking groups).

**48** The financial statements of banks (groups) for the period under review were compiled in accordance with International Financial Reporting Standards; thus financial results for the first half of 2005 are not comparable with end-2004 results.

**49** The net interest margin was 2.9% (3.1%) compared with 2.7% (2.9%) in the corresponding 2004 period.

**50** Ratio of operating costs to operating revenue.

## V. Macroeconomic developments and prospects in Greece

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### 1. Inflation: developments, determinants and prospects

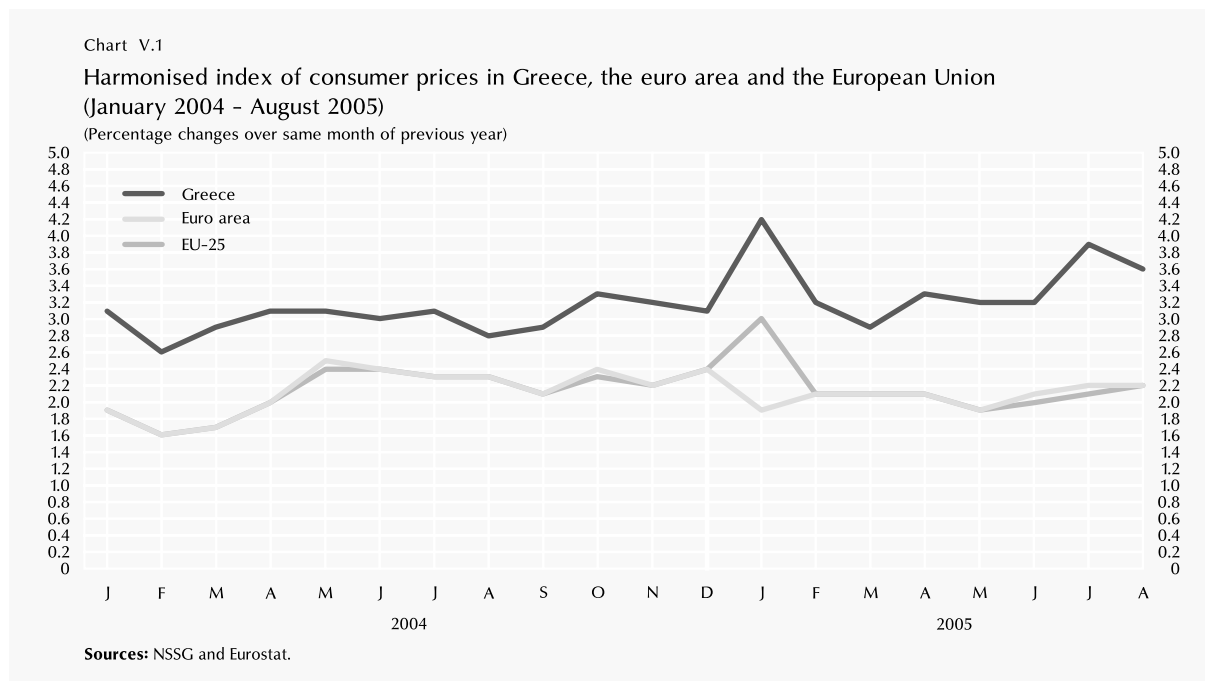
#### 1.1 Summary of developments

The annual inflation rate in Greece based on the Harmonised Index of Consumer Prices (HICP – see Chart V.1) is estimated to have reached 3.7% in the third quarter of the current year, compared with 3.2% in the fourth quarter of 2004. This acceleration chiefly reflects extraordinary or special factors: crude oil prices rose more in 2005 than in 2004 and indirect taxation increased from April onwards. In total, the average annual rate of inflation in Greece in the first eight months of 2005 showed a limited increase, reaching 3.4% (compared with 3.0% in the corresponding period of 2004). Contributory factors to this development included the increase in the rate of inflation by about one percentage point in January due to the shorter duration of winter sales this year.<sup>1</sup> For 2005 as a whole, it is estimated that average inflation based on the HICP will turn out at 3.6% (compared with 3.0% in 2004). By contrast, core inflation, as measured on the basis of the HICP excluding the prices of energy and unprocessed food, is estimated at 3.1% in the third quarter of the current year, compared with 3.2% in the fourth quarter of 2004. In the first eight months of the year, core inflation rose at an average annual rate of 3.3%, i.e. almost as much as in the corresponding period of 2004 (3.5% – see Chart V.2).<sup>2</sup> For the year as a whole, average core inflation is expected to be slightly lower than in 2004 (3.2% compared with 3.4%).

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<sup>1</sup> 1-28 February this year, 15 January-28 February in 2004.

<sup>2</sup> On the basis of the Consumer Price Index (CPI), the average annual inflation rate reached 3.5% in the first eight months of 2005 (from 2.8% in the corresponding period of 2004). Core inflation, as measured in this case by the average rate of change in the CPI excluding the prices of fuel and fresh fruit and vegetables, stood at 3.1% (compared with 3.4% in the corresponding period of 2004 – see Chart V.3). Note that core inflation rose sharply in January due to the shorter winter sales period.



As average annual inflation in the euro area remained stable at 2.1% and core inflation fell to 1.5% in the first eight months of the year (from 2.1% in the corresponding period of 2004), the headline inflation differential between Greece and the euro area as a whole increased to 1.4 percentage points (from 0.9 percentage point) and the core inflation differential increased to 1.8 percentage points (from 1.4 percentage points).<sup>3</sup>

The increase in inflation (based on the HICP) is smaller than forecast by the Bank of Greece (see Section 1.2 of this chapter), while core inflation is declining slightly in the current year. This is principally a reflection of the fact that the increase in the rates of VAT and Special Consumption Taxes (SCT) on alcoholic beverages and certain categories of cigarettes included in the package of measures introduced on 29 March was to a large extent absorbed by business firms and was not passed on fully to consumer prices. In fact, if this limited direct inflationary impact of the increase in indirect taxation is deducted, a clear drop in core inflation is evident. In addition, the significant fall

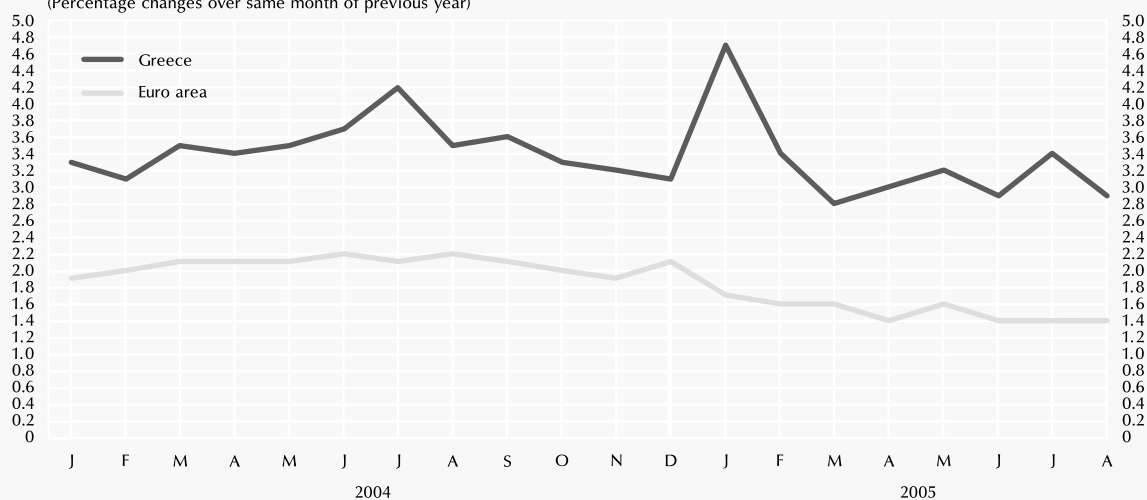
in the prices of fresh fruit and vegetables observed last year has continued at almost the same rate this year. Also, it is estimated that the rate of increase in unit labour costs is picking up only slightly in the business sector, while in the whole economy it is slowing down significantly (chiefly a reflection of the fact that pay rises for civil servants this year were lower than in 2004). Finally, it is estimated that inflationary pressures on the demand side in 2005 are lower than in 2004.

<sup>3</sup> If the prices of the individual groups of goods and services included in the core inflation “basket” are examined, it can be seen that in the first eight months of 2005 (compared with the corresponding period of 2004) the positive inflation differential narrowed for processed food (to 0.6 percentage point from 1.7 percentage points), while it widened for industrial goods excluding food and energy (to 3.0 percentage points, from 1.3 percentage points) and remained unchanged for services (1.3 percentage points). As far as the two groups of goods which are not included in the core inflation “basket” are concerned, the positive inflation differential widened for energy prices (to 4.0 percentage points, from 1.6 percentage points), while a significant negative differential remained with regard to changes in unprocessed food prices (–3.2 percentage points, compared with –3.9 percentage points, i.e. these prices fell more in Greece than in the euro area). See Tables V.1 and V.2 and Chart V.4.

Chart V.2

Core inflation in Greece and the euro area on the basis of the HICP excluding energy and unprocessed food (January 2004 – August 2005)

(Percentage changes over same month of previous year)

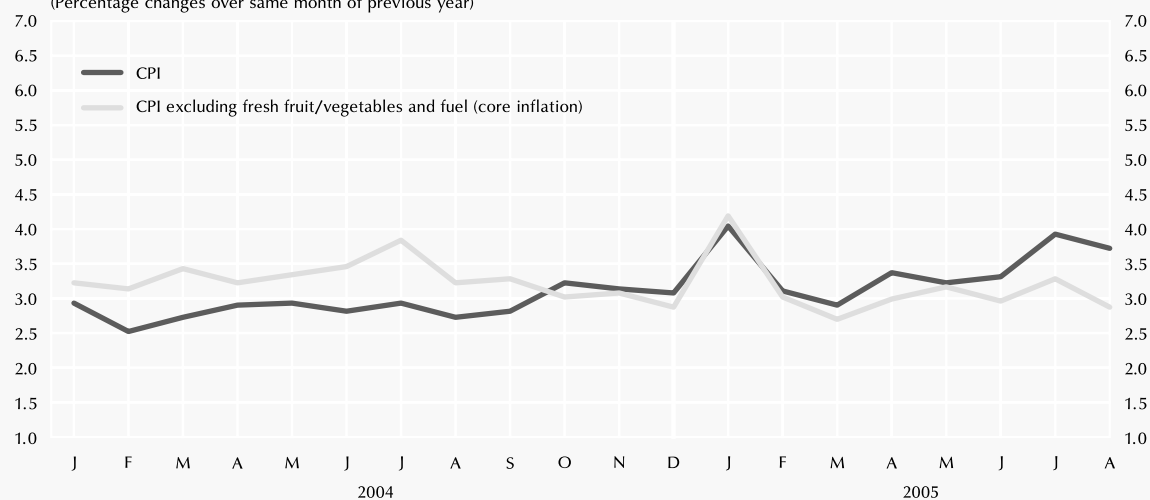


Sources: NSSG and Eurostat.

Chart V.3

Consumer price index and core inflation in Greece (January 2004 – August 2005)

(Percentage changes over same month of previous year)



Source: Calculations based on NSSG data.

On the other hand, overall imported inflation is higher. The factors underlying this are the greater increase in oil prices observed this year on the world market in comparison with 2004 – the inflationary impact of this price increase is, nonetheless, mitigated to some degree by the

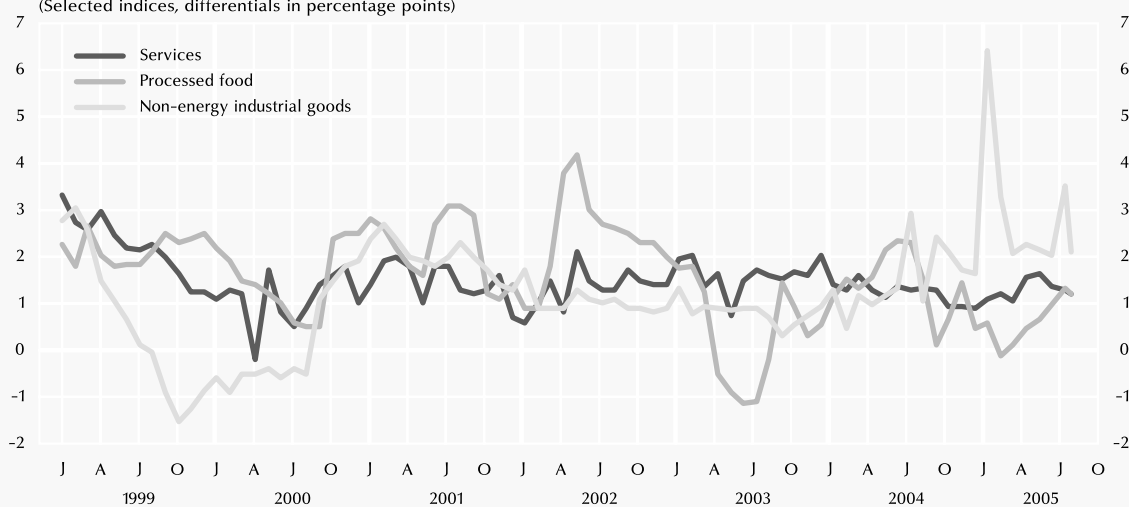
slowdown in the rate of increase in the international prices of other raw materials – and the noticeably lower appreciation of the euro against the US dollar (in average year-on-year terms for the first eight months of 2005).

Chart V.4

## Annual inflation differentials between Greece and the euro area

(January 1999 - August 2005)

(Selected indices, differentials in percentage points)



Source: Calculations based on Eurostat and ECB data.

Table V.1

## Harmonised index of consumer prices: Greece and the EU (2003-2005)

(Annual percentage changes)

Country	2003 (year average)	2004 (year average)	Aug. 2004	Aug. 2005
Austria	1.3	2.0	2.2	1.9
Belgium	1.5	2.9	2.0	2.9
Cyprus	4.0	1.9	2.8	1.5
Czech Republic	-0.1	2.6	3.2	1.4
Denmark	2.0	0.9	0.9	2.3
Estonia	1.4	3.0	3.9	4.2
Finland	1.3	0.1	0.3	1.0
France	2.2	2.3	2.5	2.0
Germany	1.0	1.8	2.1	1.9
Greece	3.4	3.0	2.8	3.6
Hungary	4.7	6.8	7.2	3.5
Ireland	4.0	2.3	2.5	2.1
Italy	2.8	2.3	2.4	2.2
Latvia	2.9	6.2	7.8	6.3
Lithuania	-1.1	1.1	2.2	2.3
Luxembourg	2.5	3.2	3.6	4.3
Malta	1.9	2.7	2.5	2.5
Netherlands	2.2	1.4	1.2	1.6
Poland	0.7	3.6	4.9	1.8
Portugal	3.3	2.5	2.4	2.5
Slovakia	8.5	7.4	7.0	2.1
Slovenia	5.7	3.6	3.7	1.8
Spain	3.1	3.1	3.3	3.3
Sweden	2.3	1.0	1.2	1.0
United Kingdom	1.4	1.3	1.3	2.4
EU-15	2.0	2.0	2.1	2.3
EU-25	1.9	2.1	2.3	2.2
Euro area	2.1	2.1	2.3	2.2

Source: Eurostat.

Table V.2

## Contribution to the inflation differential between Greece and the euro area (2002-2005)

(Percentage points)

	2002	2003	2004	2005 (Jan.-Aug.)
<b>Differential of average annual rates of HICP change</b>	<b>1.6</b>	<b>1.3</b>	<b>0.9</b>	<b>1.4</b>
Contribution to the inflation differential stemming from the difference in the average annual rates of change in:				
Core inflation	1.2	0.9	1.2	1.5
<i>Services prices</i>	0.5	0.6	0.5	0.5
<i>Processed food prices</i>	0.4	0.0	0.2	0.1
<i>Non-energy industrial goods prices</i>	0.3	0.3	0.5	0.9
Unprocessed food prices	0.4	0.4	-0.4	-0.3
Energy prices	0.0	0.0	0.1	0.2

Source: Calculations based on Eurostat and ECB data.

## 1.2 Determinants of inflation in 2005

As already noted, the acceleration of the average annual rate of increase in the HICP and the CPI during the first eight months of 2005 (in comparison with the corresponding period last year) was due to exogenous factors to start with. Specifically, the dollar price of Brent crude oil rose at a far higher annual rate than in the corresponding period last year.<sup>4</sup> However, as the appreciation of the euro against the dollar was on average lower during this same period,<sup>5</sup> the acceleration of the increase in the euro price of oil was even greater (47.8%, from 11.2% in the corresponding period of 2004).<sup>6</sup> Thus, in the domestic market, retail fuel prices included in the CPI rose at an average annual rate of 17.6% in the first eight months of the year (compared with just 4.3% in the corresponding period of 2004, see Charts V.5 and V.6).<sup>7</sup> It should be recalled that, as pointed out in a previous Bank of Greece report,<sup>8</sup> domestic fuel prices for consumers change less than international crude oil prices, chiefly because a large part of the retail price of fuel in Greece is accounted for by “Special Consumption Taxes”, which are

fixed and based on unit of volume and so do not change in line with the price of the product. It is estimated that, during the winter period, a 10% increase in the euro price of crude oil leads directly to (a) an increase of just 3.8% in the retail price of fuels (petrol and heating oil) for consumers and (b) an increase of just 0.19% in the general CPI.

<sup>4</sup> The Brent crude oil dollar price rose at an average annual rate of 52.8% in the first eight months of 2005 (compared with 22.8% in the corresponding period in 2004). See ECB, *Monthly Bulletin*, Euro area statistics, Tables 5.1.2. and 8.2.

<sup>5</sup> 3.4%, from 10.4% on the basis of the eight-month data.

<sup>6</sup> Price rises for other raw materials slowed down considerably, as these prices increased at an average annual rate of 7.7% in dollar terms in the first eight months of 2005 (or 4.2% in euro terms), while in the whole of 2004 they had increased by 21.8% in dollar terms or 10.8% in euro terms (see ECB, *Monthly Bulletin*, Euro area statistics, Tables 5.1.2 and 8.2). For 2005 as a whole, recent macroeconomic projections by ECB staff are based on the assumption that these prices (in dollars) will increase by 6.4% (ECB, *Monthly Bulletin*, September 2005). Also, in a recent report by the IMF (*World Economic Outlook*, September 2005) it is assumed that these prices in dollar terms (measured using a different indicator) will increase by 8.6% in 2005, compared with 18.5% in 2004.

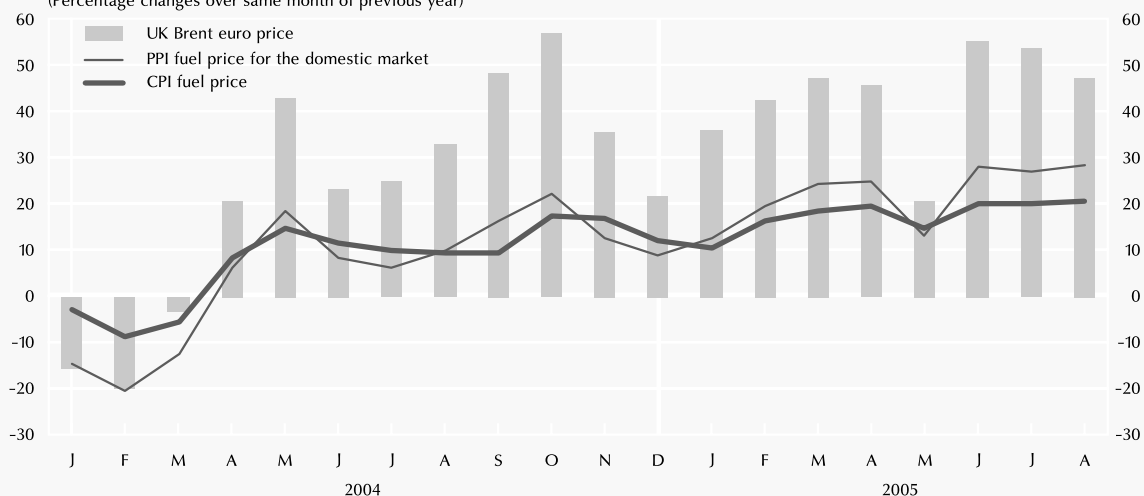
<sup>7</sup> At the wholesale level, the prices of fuels included in the Industrial Producer Price Index for the domestic market rose at an average annual rate of 22.3% in the first eight months of 2005 (compared with a fall of 0.8% in the corresponding period in 2004).

<sup>8</sup> *Monetary Policy 2004-2005*, February 2005, Box III.1, pp. 48-50.

Chart V.5

Evolution of CPI/PPI fuel prices and of the euro price of Brent crude oil  
(January 2004 - August 2005)

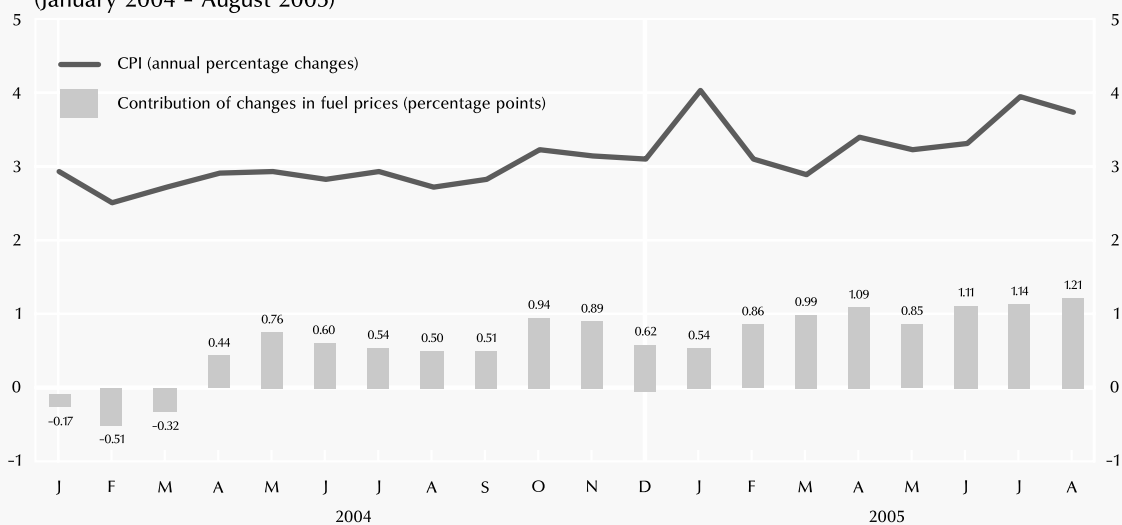
(Percentage changes over same month of previous year)



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

Chart V.6

Inflationary contribution of changes in fuel prices  
(January 2004 - August 2005)

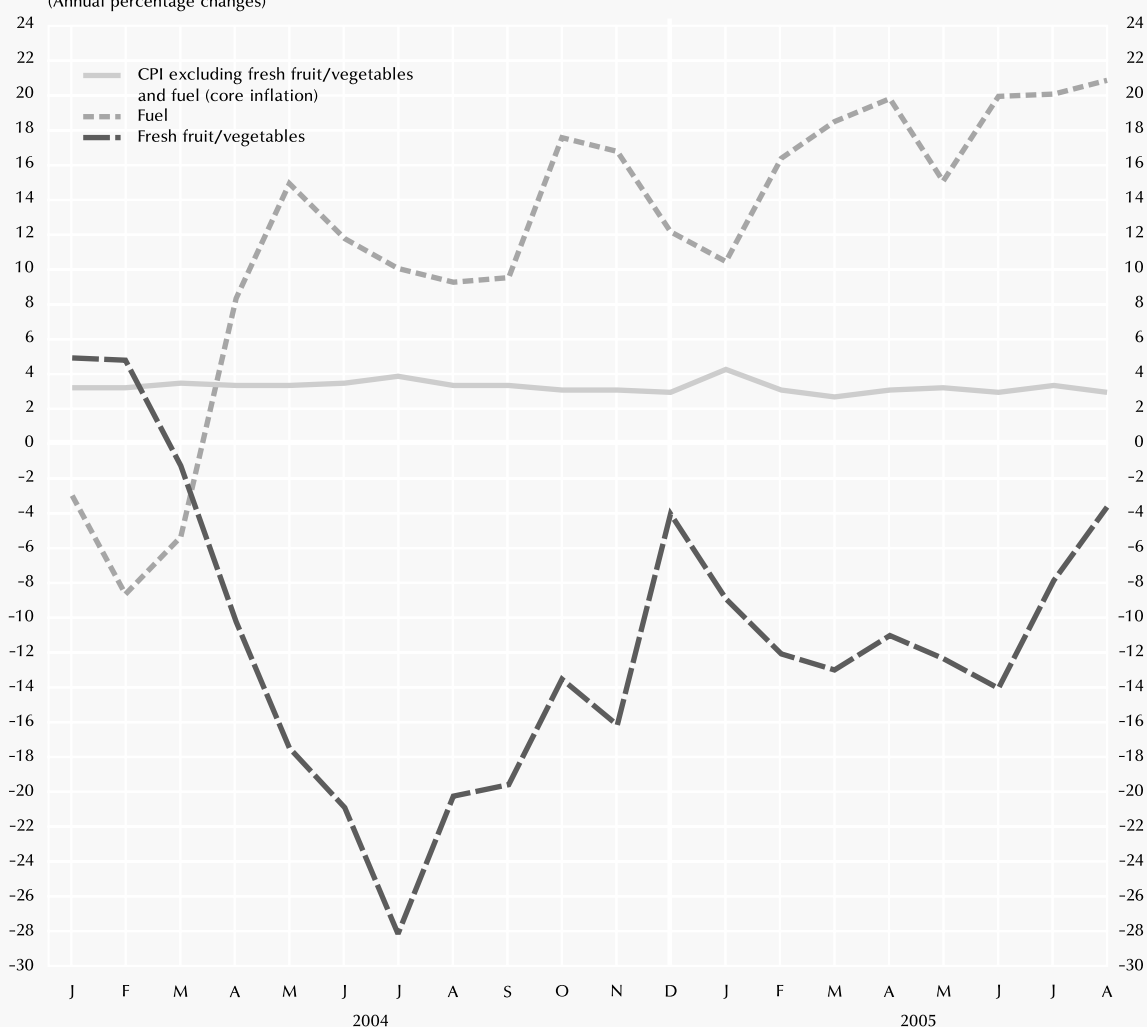


Source: Calculations based on NSSG data.

Based on certain technical assumptions concerning the price of oil and exchange rates for the remainder of the year,<sup>9</sup> it has been calculated that: (a) the average euro exchange rate against the dollar will rise by 0.6%, compared with an increase of 10.0% in 2004, and (b) the average annual price of

<sup>9</sup> It is assumed that during the last quarter of the year the exchange rate of the euro against other currencies will remain at the level reached during the period 17-30 September 2005 (e.g. 1 euro = 1.2104 dollars). Thus, the average annual exchange rate of the euro against the dollar will stand at 1.250, i.e. it will be 0.6% higher than in 2004. For Brent oil prices, it is assumed that they will fluctuate around \$65 per barrel during the last months of the year.

Chart V.7  
Core inflation, prices of fresh fruit/vegetables and fuel prices  
(January 2004 - August 2005)  
(Annual percentage changes)



Source: Calculations based on NSSG data.

oil per barrel in euro will increase by approximately 48% (compared with an increase of 21.5% in 2004) and will be on average about €45.5.<sup>10</sup> For the whole of 2005 the appreciation of the euro against other currencies (weighted<sup>11</sup> average) will be just 0.2%.

These exogenous inflationary effects were partly offset by the fall in the prices of fresh fruit and vegetables. These prices fell at an average annual rate of 10.7% in the first eight months of the year, i.e. almost as much as they had fallen in the cor-

responding period of 2004 (-11.3%, see Chart V.7). (Note that the big fall in the prices of fresh fruit and vegetables in the two-year period 2004-2005 was preceded by a large increase of 13.8% in 2002 and 10.7% in 2003.)

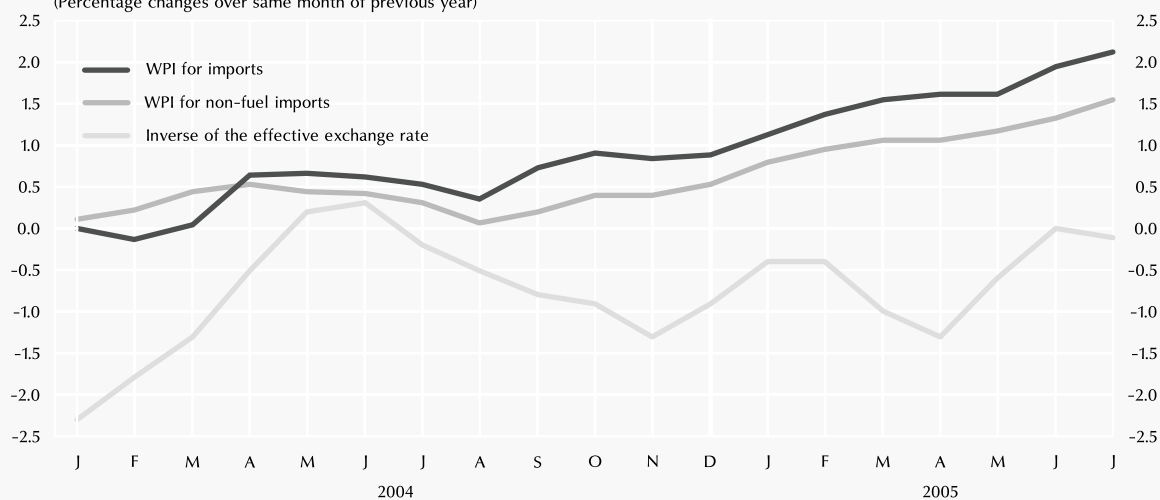
<sup>10</sup> The average annual price of oil in dollars per barrel will increase by 49% (compared with an increase of 33.6% in 2004), to reach an average level of \$57. The recent macroeconomic projections by ECB staff were made on the assumption that this price will reach \$55.3 per barrel, see ECB, *Monthly Bulletin*, September 2005. In a recent report by the IMF (see footnote 6 above) it is assumed that the average annual price will reach \$54.2 per barrel.

<sup>11</sup> On the basis of Greece's external trade.

Chart V.8

Wholesale import price index and the inverse of the effective exchange rate of the euro, weighted on the basis of Greece's external trade (January 2004 - July 2005)

(Percentage changes over same month of previous year)



Sources: NSSG and Bank of Greece.

The virtual stability of core inflation<sup>12</sup> – or, more precisely, its slight fall – reflects the fact that the acceleration in the rate of price increases for certain groups of goods and services was fully offset by the slowdown in the rate of increase for other groups.<sup>13</sup>

In addition, prices of goods included in core inflation were pushed up – albeit to a limited degree – by the increase in indirect taxation, which is estimated – on the basis of data for August – to have contributed just 0.63 percentage point to the annual inflation rate in that month (3.7% based on the CPI).<sup>14</sup> Given that indirect taxation increases came into force gradually after 1 April, their impact on average annual inflation in 2005 will be even smaller (in the order of 0.4 percentage point). Last April, the Bank of Greece had estimated that the impact would be greater and would help bring the average inflation rate to 4% this year.<sup>15</sup> This estimate was, however, based on the technical assumption that the increase in indirect taxation would be passed on fully to prices, though it was pointed out that the final outcome would depend on the extent

to which the increase would be “absorbed” by businesses, in combination with demand conditions. Ultimately, as already reported, businesses did indeed absorb a significant part of the increase in indirect taxation, a fact which is chiefly associated with the slowdown observed in the increase in retail sales volume (see Section 2 of this chap-

<sup>12</sup> This development in core inflation must be considered in conjunction with the decline in inflationary pressures at the level of industrial producer prices for the domestic market. These prices (excluding energy) actually increased at an average annual rate of 2.4% in the first eight months of the year (compared with 4.8% in the corresponding period of 2004 – see Table 3 of the Statistical Appendix).

<sup>13</sup> For example, it should be noted that – based on eight-month data – there was an acceleration in the rate of increase in the prices of clothing and footwear (5.3% from 4.2%), consumer durables (2.2% from 0.6%), transport services (4.6% from 2.0%) and hospital care (4.0% from 1.5%). In addition, the fall in telephone service prices slowed (–1.4% from –3.9%). By contrast, the rate of increase in food prices excluding fresh fruit and vegetables decelerated (2.3% from 3.7%), as did that for hotels-café-restaurants (3.3% from 4.5%).

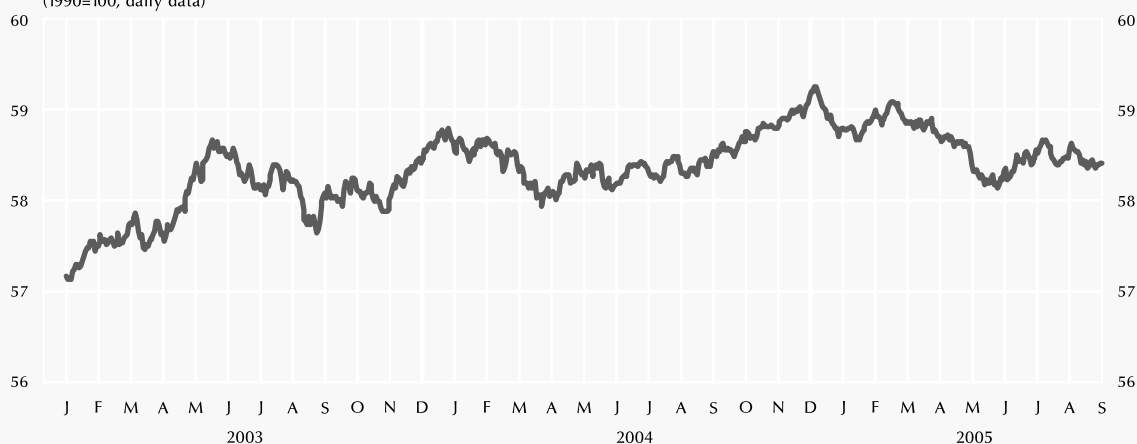
<sup>14</sup> The effect that the increase in Special Consumption Taxes (SCT) payable on alcoholic beverages and certain categories of cigarettes had on inflation was almost negligible (less than 0.1 percentage point). The detailed CPI data show that the increase in VAT rates chiefly affected the prices of food, services provided by hotels-café-restaurants, clothing and footwear, and consumer durables.

<sup>15</sup> Bank of Greece, *Annual Report 2004*, April 2005, p. 146.

Chart V.9

Effective exchange rate index, weighted on the basis of Greece's external trade  
(January 2003 - September 2005)

(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 are among its most important trading partners) is carried out in euro.

**Source:** Bank of Greece.

ter). Moreover, inflation is lower than expected for two further reasons: the relatively restrained pricing policy pursued by public utilities and the closer market surveillance by the Ministry of Development and the Competition Commission.

The average annual rate of increase in the wholesale prices of imported final goods (excluding crude oil and other raw materials) accelerated – although it remains low – to 1.6% in the first seven months of 2005 (from 0.3% in the corresponding period of 2004 – see Chart V.8).<sup>16</sup> This increase partly reflects the slower appreciation (weighted<sup>17</sup> average) of the euro against other currencies (at an annual average rate of 0.5% in the first eight months of 2005, compared with 0.8% in the corresponding period of 2004 – see Chart V.9), which had an inflationary effect on the prices (in euro terms) of imports from non-euro area countries. On the other hand, the rate of increase in prices of imports from euro area countries slowed (as indirectly indicated by the decline in core inflation in the euro area). This contributed to a relatively low total increase in the prices of

imported final goods (1.6% as noted above) and – in any event – lower than domestic inflation.

As repeatedly pointed out in previous Bank of Greece reports, persistently high core inflation is attributable on the one hand to macroeconomic factors (associated with demand and production costs) and, on the other hand, to inadequate competitive conditions in certain markets (which do not operate efficiently). Depending on the particular case, excess demand, price inelasticity of demand (for some articles), collusion among certain enterprises and the fact that a number of companies take advantage of their dominant market position all lead to greater price increases than those justified by developments in cost factors.

The annual rate of increase in unit labour costs in the business sector,<sup>18</sup> which has a more direct

<sup>16</sup> The corresponding rates of price increases for imported goods excluding fuels are 1.1% and 0.4%.

<sup>17</sup> The weighting is based on Greece's external trade.

<sup>18</sup> The business sector includes public and private enterprises and banks.

Table V.3

## Employees' earnings, productivity and labour costs (2000-2005)

(Annual percentage changes)

	2000	2001	2002	2003	2004	2005 (estimate)
<b>Average gross earnings (nominal):</b>						
– whole economy	6.0	4.7	6.6	5.6	7.3	5.5
– central government <sup>1</sup>	7.1	5.5	7.3	5.9	9.9	5.9
– public enterprises	12.9	7.0	10.6	10.9	9.9	7.4
– banks	6.8 <sup>4</sup>	6.4	2.9 <sup>6</sup>	3.1 <sup>6</sup>	8.0	3.3 <sup>6</sup>
– non-bank private sector	5.0	5.3	6.5	5.8	5.8	5.6
Minimum earnings	4.2	3.5	5.4	5.1	4.8	4.9
<b>Net<sup>2</sup> income of an employee with average earnings</b>						
(nominal)	8.0 <sup>5</sup>	3.4	6.3 <sup>7</sup>	6.3 <sup>9</sup>	5.4	4.6
(real)	4.7 <sup>5</sup>	0.0	2.6 <sup>7</sup>	2.7 <sup>9</sup>	2.4	0.9
<b>Total compensation of employees (including employers' social security and other contributions)</b>	<b>8.9</b>	<b>8.3</b>	<b>9.1<sup>8</sup></b>	<b>8.3<sup>9</sup></b>	<b>9.0</b>	<b>6.3</b>
<b>Compensation per employee</b>	<b>5.8</b>	<b>4.8</b>	<b>5.9<sup>8</sup></b>	<b>5.5<sup>9</sup></b>	<b>7.6</b>	<b>5.2</b>
<b>GDP<sup>10</sup></b>	<b>4.5</b>	<b>4.6</b>	<b>3.8</b>	<b>4.6</b>	<b>4.7</b>	<b>3.5</b>
Output per person-hour in manufacturing	2.0	-0.6	0.6	1.2	1.2	1.0
<b>Unit labour costs:<sup>11</sup></b>						
– whole economy	4.2	3.5	5.7 <sup>8</sup>	3.6 <sup>9</sup>	4.0	2.7
– business sector <sup>3</sup>	4.4	4.4	4.5 <sup>8</sup>	4.0 <sup>9</sup>	2.7	2.9
– manufacturing	3.4	6.1	5.3 <sup>8</sup>	4.7 <sup>9</sup>	4.5	4.6

1 Compensation per employee.

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

3 It comprises private and public enterprises and banks.

4 Excluding one 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 tax refunds (in January 2000) to wage earners (other than civil servants); also including the reduction (as from 1 September 2000) in social security contributions of minimum wage earners.

6 The relatively low rate of increase in average earnings of bank employees reflects mainly changes in the composition of personnel.

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

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

9 Including the increase (of 0.1% of gross earnings) in both employees' and employers' contribution to the Workers' Fund.

10 Revised NSSG estimates for the years 2000-2004 (September 2005). Bank of Greece estimates for 2005.

11 Revised GDP estimates are taken into account.

**Sources:** NSSG (GDP 2000-2004), Bank of Greece estimates and forecasts (for GDP in 2005 and for the other annual aggregates in 2000-2005).

effect on price levels, is estimated to have accelerated slightly and to stand at a relatively high level – 2.9% this year, from 2.7% in 2004.<sup>19</sup> In the whole economy, unit labour costs are estimated to be increasing this year by 2.7% (compared with 4.0% in 2004),<sup>20</sup> reflecting the fact that the increase in average pre-tax earnings in the whole economy is slowing to 5.4%, from 7.3% in 2004 (chiefly due to the slower increase in average earnings of central government employees – see Table V.3<sup>21</sup>), i.e. more rapidly than the slowdown in the increase in productivity (GDP per employee), which is expected to reach 2.5% this year, from 3.4% in 2004. Despite these developments, the rate of increase in unit labour costs in Greece remains noticeably higher than the corresponding rate in the euro area (1.7% in the first

**19** The reduction in overtime costs provided for by the recent Law 3385/2005 will further limit the increase in unit labour costs in the business sector, but it is not possible to estimate the figure accurately at this stage (see Box V.1, Section 3 of this chapter).

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

**21** Compensation per employee, which includes employers' (social security and others) contributions to social security organisations along with central government outlays for pensions, is expected to increase this year by 5.2%, against 7.6% in 2004).

quarter of 2005 and –as expected– slightly above 1% for the year as a whole) and continues to exceed the level which is consistent with price stability, i.e. inflation below but close to 2%.<sup>22</sup> The fact that unit labour cost growth in the whole economy is slowing down, whereas unit labour cost growth in the business sector is picking up slightly, reflects the substantial slowdown in the growth of average earnings of central government employees, while in the private sector average earnings increased at almost the same rate in 2004 and 2005.

More specifically, in central government, if account is taken of the 2005 Budget forecasts, Law 3336/2005 on incomes policy, the evolution of personnel outlays (excluding pensions) in the first eight months of 2005 and the estimated change in employment, it is calculated that the average annual increase in regular salaries will reach 3.2% and –if account is also taken of other allowances and seniority benefits– compensation per central government employee will rise by 5.9%, compared with 9.9% in 2004.<sup>23</sup>

The evolution of unit labour costs in the business sector reflects the estimated development of average earnings in the non-bank private sector, public utilities and banks, which has in the main been determined by the two-year collective labour agreements signed in 2004 (See Table V.3).

According to available data concerning the first six months of 2005 (summary financial statements published so far by companies listed on the Athens Exchange and by unlisted companies), profit margins for *non-financial corporations* are falling (sales rose, while both gross profits and net pre-tax profits declined or rose by a very small amount). This development is in line with the restrained pricing policy of businesses in connection with the increase in indirect taxation.

Nevertheless, the data are not necessarily indicative of the overall situation and cannot be used to draw reliable conclusions concerning profits. However, according to a sample survey carried out by the Federation of Greek Industries and ICAP in March and April, *industrial* firms forecast for 2005 an increase of 6.3% in sales in 2005, 6.8% in gross profits and 16.8% in pre-tax profits.<sup>24</sup>

More generally, as far as inflationary pressures on the demand side are concerned, the available short-term indicators of private consumption imply that the rate of increase in private consumption remains high but is decelerating (retail sales volume, new passenger car registrations, retail trade business expectations – see Section 2 of this Chapter for a more detailed examination). In addition, according to available estimates (see Chart V.10),<sup>25</sup> the Greek economy's "output

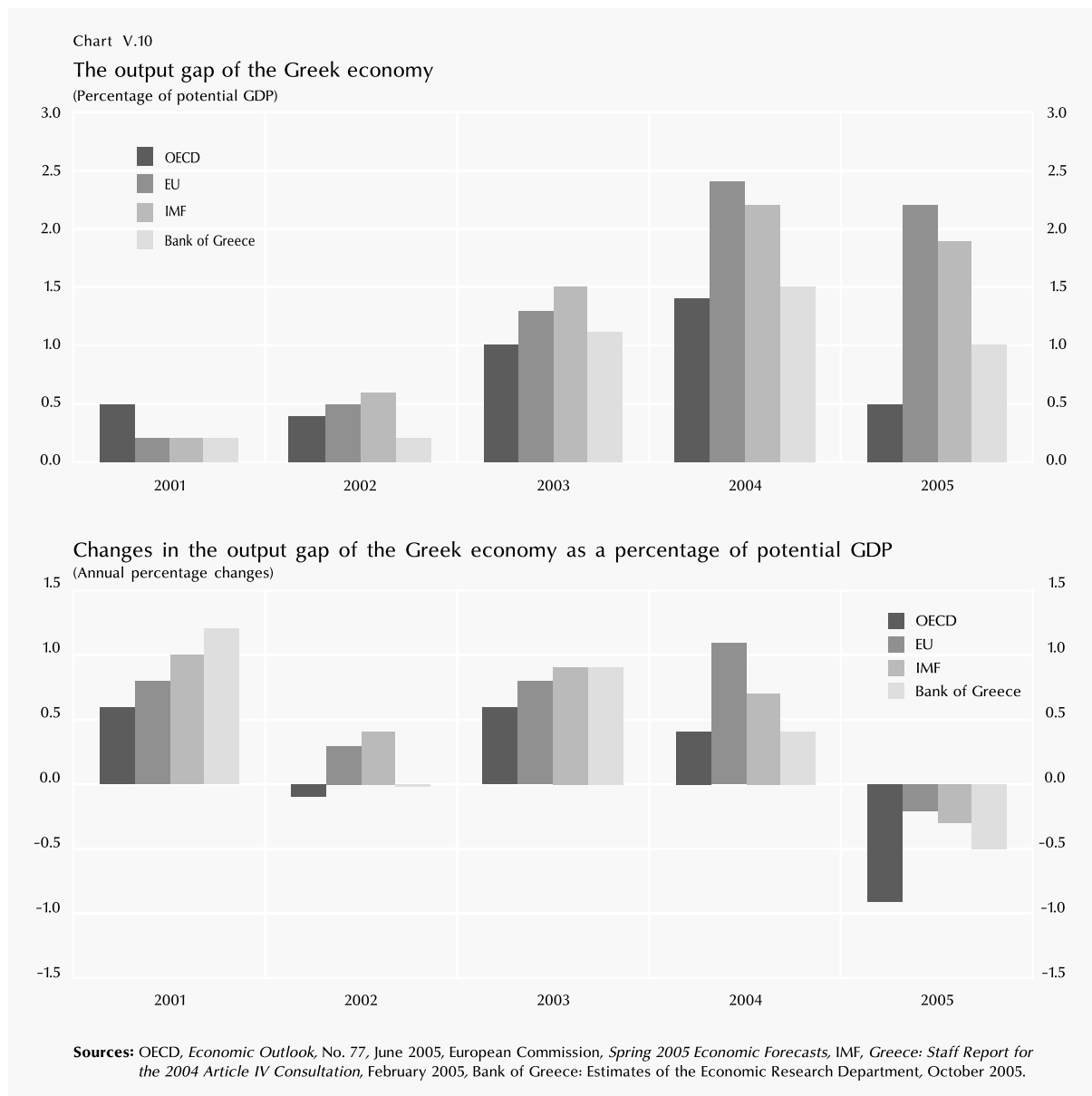
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**22** Obviously, the evolution of unit labour costs in the business sector is not simply an "autonomous" cost factor. It also reflects the impact of changes in demand, as excess demand affects businesses' wage policies and workers' bargaining power.

**23** According to estimates in the Draft State Budget for 2006 (3 October 2005), the total increase in compensation per civil servant excluding pensions will reach 6.9% (compared with 11.2% in 2004), or 6% including pensions (compared with 12.1% in 2004). The number of civil servants will probably increase by 0.9%. (According to Ministry of Economy and Finance data, the wage bill for civil servants grew at an average annual rate of 4.0% in the first eight months of the year.) The significant slowdown in the rate of increase in compensation per civil servant in 2005 reflects both the fact that the 2004 increase was high due to special factors and the fact that increases in 2005 are more restrained, in an effort to reduce the public deficit. The special factors in 2004 included the introduction of new salary scales in accordance with Law 3205/2003, the retroactive payment (pursuant to court decisions) of family allowances for the years 2001-2002 to both spouses when they are both civil servants, the wages paid for additional or overtime employment during the parliamentary elections and the elections for the European Parliament and the payment of a special bonus to certain categories of personnel involved with security during the Olympic Games.

**24** Federation of Greek Industries – ICAP, *Greek Manufacturing: estimates for 2004 and prospects for 2005*, June 2005. The survey involved a sample group of 300 companies (263 of which responded).

**25** Older estimates of the IMF (*Greece: Staff Report for the 2004 Article IV Consultation*, February 2005), the European Commission (*Spring 2005 Economic Forecasts*, April 2005) and the OECD (*Economic Outlook*, 24 May 2005) and more recent estimates of the Bank of Greece.



gap”,<sup>26</sup> while remaining positive in recent years (i.e. the level of current output exceeds that of “potential” output), narrowed this year.<sup>27</sup> However, excess demand continues to contribute to the persistently high inflation.

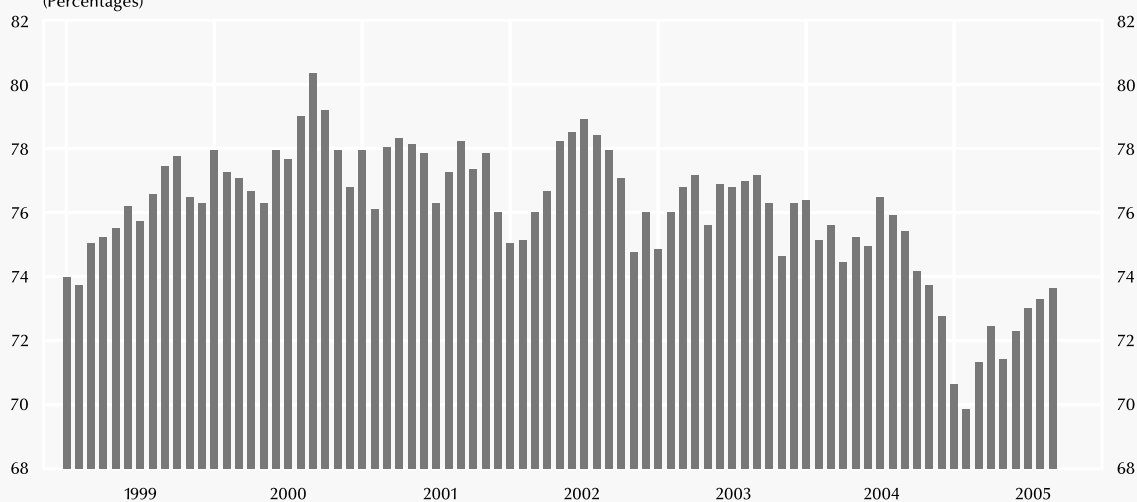
### 1.3 Prospects for inflation in the year as a whole

Based on the developments, estimates and assumptions noted above – both those concerning international oil prices, the prices of other raw materials, the exchange rate of the euro and the

<sup>26</sup> The “output gap” is defined as the difference between the level of actual output (GDP) and the country’s production potential (level of potential GDP) as a percentage of the level of potential GDP. The “output gap” is not measurable directly, but is estimated by using various alternative methods. Estimates of potential output and the “output gap” are surrounded by a high degree of uncertainty. (For estimates of the potential output, see also ECB, *Monthly Bulletin*, July 2005, Box 5.) These factors must be taken into consideration when conclusions are drawn. The change in the “output gap”, which is measured in percentage points of GDP, is perhaps a more reliable indicator.

<sup>27</sup> According to the OECD, the “output gap” was 1.4 in 2004 and will be limited to 0.5 in 2005. Estimates that the Greek economy’s positive “output gap” will narrow this year are in line with the fact that in industry (accounting for just 11% of GDP) the capacity utilisation rate is falling markedly this year (to 72.1 on average in the first nine months of the year, from 75.7 in the corresponding period of 2004 – see Chart V.11).

Chart V.11  
Industrial capacity utilisation rate (manufacturing)  
(January 1999 - September 2005)  
(Percentages)



Source: Foundation for Economic and Industrial Research (IOBE).

prices of fresh fruit and vegetables and those concerning unit labour costs, profit margins and demand (in conjunction with the production potential of the economy) – it is possible to formulate estimates for the development of inflation over the year as a whole. At the same time, firms' expectations regarding the prices of their products or services,<sup>28</sup> consumers' inflation expectations,<sup>29</sup> the more active involvement of the Competition Commission,<sup>30</sup> as well as market surveillance and other action undertaken by the Ministry of Development (e.g. the setting of indicative retail prices), are also taken into account.

In particular, it is expected that the average annual increase in the HICP for 2005 as a whole will be 3.6%, as already noted, while for the CPI it is estimated that it will reach 3.7%, i.e. both increases will be greater than in 2004 (when they were 3.0% and 2.9%, respectively). However, this estimate, which is chiefly a reflection of the fact that the impact of measures taken to increase indirect taxation was relatively limited, does not imply any intensification of inflationary pressures, as core

inflation is forecast to remain broadly unchanged or, more precisely, to fall slightly. More specifically, it is forecast that for 2005 as a whole the average annual rate of change in the HICP excluding energy and unprocessed food prices will come down to 3.2% (from 3.4% in 2004) and the average annual

**28** According to the business surveys carried out by the IOBE in the first nine months of the current year in manufacturing, retail trade and services (excluding retail trade and banks), short-term inflation prospects appear relatively favourable. These surveys show that in the second and third quarter the percentage of firms which expected that the prices of their goods or services will rise over the next 3-4 months fell markedly (to be precise, the positive differential between the percentage of firms which expected higher prices and that of those which expected lower prices – see Chart V.12). As for manufacturing, the survey for the PMI (Purchasing Managers' Index, sub-index: "output prices") shows no noticeable change in expectations for the third quarter. In addition, construction firms have been consistent in expecting a fall in their prices since last year (although these prices have no direct effect on the CPI).

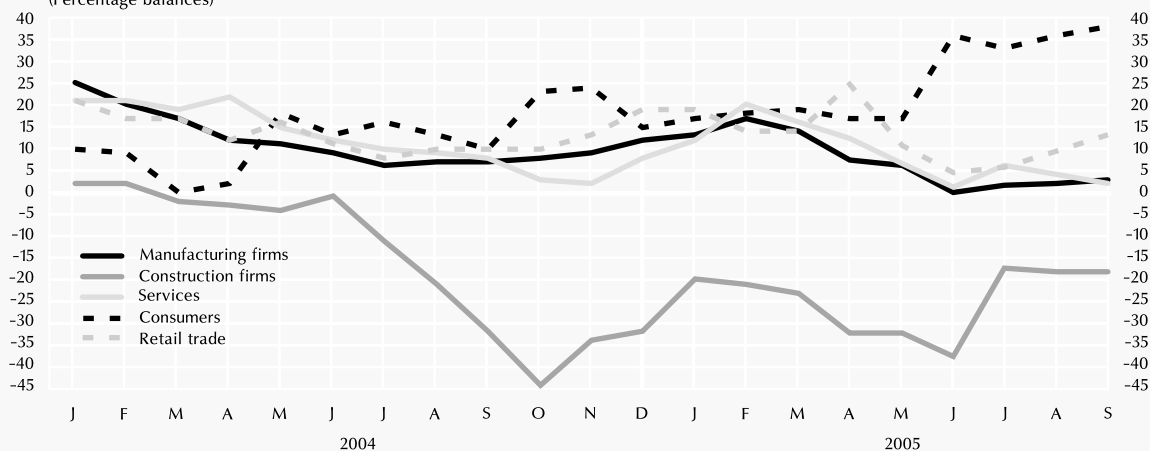
**29** The evolution of the percentage of consumers who expect inflation to increase in the next twelve months (as recorded in a survey carried out on behalf of the European Commission) indicates higher inflationary expectations in the third quarter.

**30** In this respect, Decision 277/IV/2005, published on 1 April 2005, should be noted. This decision followed an *ex officio* investigation by the Competition Commission in the branch of super-market chains, concerning possible violations of Article 1 of Law 703/1977. The decision imposed substantial fines (see also Box VI.2, Chapter VI).

Chart V.12

Inflation expectations<sup>1</sup> of consumers and business firms (January 2004 – September 2005)

(Percentage balances)



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

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

rate of change in the CPI excluding the prices of fuel and fresh fruit and vegetables will fall to 3.1% (from 3.3%). In addition, if the direct inflationary impact of increased indirect taxation is excluded (calculated at 0.4% on average for the year as a whole), it is clear that core inflation is falling. Of course, these estimates involve an element of uncertainty connected to the evolution of oil prices, exchange rates and the prices of fresh fruit and vegetables during the remainder of the year and – to a lesser extent – to the final size of the impact of the measures taken to increase indirect taxation.<sup>31</sup>

## 2. Economic activity: developments and prospects

Economic activity – as measured by its most comprehensive indicator, GDP – grew at a very high rate in 2004 (4.7% according to the latest revised NSSG data) and slightly faster than in 2003 (4.6% – see Table V.4). However, from mid-2004 onwards and after the completion of projects related to the Olympic Games, growth

showed signs of deceleration, which became clearer in early 2005. In the first quarter of 2005, the annual rate of increase in GDP fell to 3.5%, from 4.8% in the corresponding quarter of 2004. As shown by the provisional quarterly national accounts estimates of the NSSG, in the first half of 2005 the annual GDP growth rate was 3.6%, compared with 4.7% in the first half of 2004. Moreover, the coincident indicator of economic activity compiled by the Bank of Greece, which summarises information contained in a set of key short-term indicators of economic activity (see Chart V.13), has been declining since April 2004. Specifically, in July 2005 this indicator pointed to a growth rate of 3.4%, compared with 4.1% in December and 4.6% in July 2004. In addition, the economic sentiment indicator for Greece (compiled by the European Commission based on business survey results) declined almost continuously from May 2004 to July 2005, but recovered somewhat in August and September. Finally, the

<sup>31</sup> The impact on new goods (clothing and footwear, school articles) which came onto the market in September is not yet known.

Table V.4

## Demand and gross domestic product (2003-2005)

(At constant market prices of year 1995, annual percentage changes)

	2003	2004	2005 (forecast)
Private consumption	4.5	4.4	3.2
Government consumption	-2.1	3.9	2.7
Gross fixed capital formation	13.7	5.7	1.0
General government	17.1	8.8	-21.9
Other sectors (private)	13.1	5.1	5.2
Dwellings	7.3	-0.6	-1.5
Business sector	14.9	6.8	7.0
Stocks and statistical discrepancy (percentage of GDP)	0.1	0.1	0.0
Domestic final demand	5.5	4.7	2.4
Exports of goods and services	1.0	11.5	5.0
Exports of goods	4.2	-2.5	4.7
Exports of services	-1.3	21.8	5.2
Imports of goods and services	5.1	9.3	0.7
Imports of goods	7.1	9.0	0.2
Imports of services	-6.1	10.9	3.9
Gross domestic product at market prices	4.6	4.7	3.6

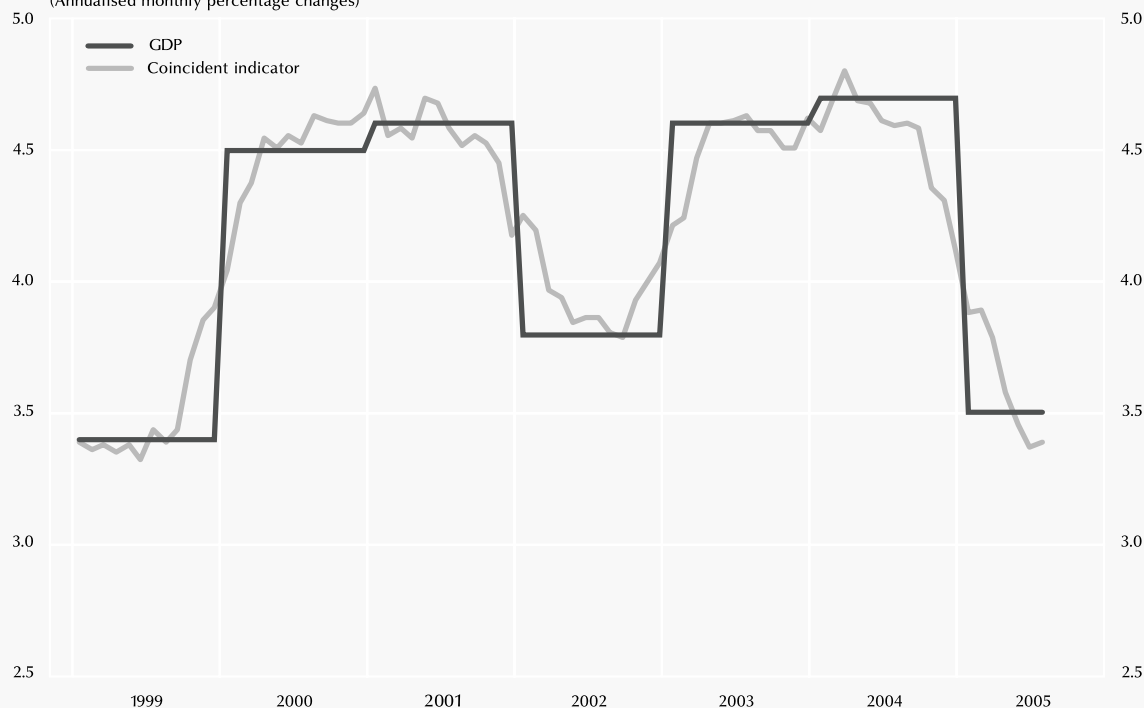
Sources: NSSG/National Accounts Directorate (September 2005) for 2003 and 2004. For 2005: Ministry of Economy and Finance, Draft State Budget 2006, 3 October 2005. See the main text for Bank of Greece estimates.

Chart V.13

## The coincident indicator of economic activity compiled by the Bank of Greece

(January 1999 - July 2005)

(Annualised monthly percentage changes)



Sources: Bank of Greece (coincident indicator, as well as GDP for 2005) and NSSG (GDP for 1999-2004).

July 2005 level of the OECD's leading indicator of economic activity foreshadowed a deterioration in industrial activity in Greece.

Evidence based on available activity indicators and survey results regarding estimates and forecasts by firms in different sectors of the economy and by consumers indicates that the annual GDP growth rate in the second half of 2005 should be lower than in the corresponding period of 2004.<sup>32</sup>

The strong performance of the Greek economy in 2003 and 2004, due to preparations for the Olympic Games and the event itself, as well as to exceptionally high receipts from shipping, was clearly above potential growth. However, once the projects associated with the Olympic Games were completed and, from early 2005, the rise in shipping receipts slowed down to levels close to the averages of the last few years, the growth rate of GDP started declining gradually, although its path was in line with the potential output of the economy. This decline also took place against the backdrop of rising oil prices. The more than satisfactory GDP growth rates in the first half of 2005, which occurred despite a number of adverse factors and the gradual return to normal rates of growth have been fostered, to a certain extent, by the fact that – although the fiscal policy stance was reversed and became tight – the correction of fiscal imbalances proceeded at a slower pace than initially envisaged in the revised Updated Stability and Growth Programme. Overall, the economy performed better than expected and was resilient to adverse shocks such as the rise in oil prices or the end of the period of preparation for the Olympic Games as well as the actual hosting of the Games themselves. This should be attributed mainly to the consolidation of macro-economic stability, associated with euro area entry, as well as to progress made in the last few years towards upgrading the productive capacity

and increasing the economy's efficiency and total factor productivity.

Taking account of economic developments and trends recorded so far this year, the announced economic policy measures and a set of reasonable assumptions about the international environment, the Bank of Greece now estimates that GDP growth will be around 3.5% in 2005. This figure is somewhat higher than earlier forecasts by the Bank<sup>33</sup> (and also higher than forecasts by various international organisations and forecasters<sup>34</sup>), which, on the one hand, had been based on previous NSSG estimates of a 4.2% GDP growth in 2004 (rather than 4.7%, as is currently estimated) and, on the other hand, had overestimated the volume of imports and underestimated tourism activity in 2005. The estimate of the Ministry of Economy and Finance is similar (3.6% increase in GDP for 2005 – see *Draft Budget for 2006*, 3 October 2005). The growth rate of GDP in Greece is still much higher than the projected rate for the euro area as a whole or the EU-25, and above the OECD average.

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<sup>32</sup> It should be noted, however, that there is some favourable evidence, such as the aforementioned recovery in the economic sentiment index in August and September, a satisfactory rise in employment in the first half of 2005 (according to the NSSG labour force survey), a rise in the PMI activity sub-index for manufacturing for four consecutive months (May-August), an improvement in construction firms' expectations from April on, as well as a small but continuous increase in capacity utilisation in industry from March on. The presence of mixed signals implies that the economic conjuncture is surrounded by uncertainty, thus making assessments difficult. For this reason, favourable signs should be seen as indications that the downward trend of economic growth will be reversed soon.

<sup>33</sup> A growth rate of about 3% was forecast in *Annual Report 2004* (April 2005) and of 3.3% in *Monetary Policy 2004-2005* (February 2005).

<sup>34</sup> The Bank of Greece estimate of around 3.5% in 2005 exceeds the average of the respective forecasts of international organisations. More recently, the International Monetary Fund revised its earlier forecast of 3.0% (*World Economic Outlook*, April 2005) slightly upwards to 3.2% (*World Economic Outlook*, September 2005). Some time earlier, the European Commission had projected GDP growth at 2.9% (*Spring Economic Forecasts*, April 2005) and the OECD at 2.8% (*Economic Outlook*, June 2005).

The expansion of the services sector is supporting economic activity and is leading to the emergence of a new growth model, based on the financial, commercial, transport and telecommunications branches of economic activity. However, the available short-term indicators of activity do not accurately reflect developments in these branches.

On the demand side, growth in 2005 has been driven by private consumption and exports. By contrast, total gross fixed capital formation is expected to slow down appreciably, while public investment is expected to bear the brunt of fiscal adjustment. The (small) decline – as shown by the provisional quarterly national accounts estimates released by the NSSG – in the imports of goods and services in the first half of 2005 (compared with a significant increase, mainly associated with the Olympic Games, in the corresponding period of 2004) implies that the evolution of the real external balance is making a positive contribution to GDP growth in 2005.

The growth rate of private consumption in 2005 is expected to decline to 3.0-3.5% (compared with 4.4% in 2004, according to revised NSSG data). The real disposable income of the private sector is expected to increase at a rate of 3.5-4.0%, down from 6.0% in 2004, but its growth should outpace that of private consumption, thus causing a further marginal rise in the private saving rate of the economy.<sup>35</sup> The expected slowdown in real disposable income growth should stem mainly from the anticipated slower increase in income from employment, reflecting, in turn, the smaller increase – compared with 2004 – both in the real average take-home pay of employees and in salaried employment (see Sections 1 and 3 of this chapter). In addition, the projected pick-up in inflation in 2005 (see Section 1 of this chapter) should dampen real disposable income growth. A boost to households' income, especially for the less bet-

ter-off sections of the population, which exhibit a higher propensity to consume, should come from transfer payments,<sup>36</sup> which are expected to grow at a high rate.

As noted in previous reports of the Bank of Greece,<sup>37</sup> consumer credit deregulation and generally low real interest rates facilitated access to bank lending for an increasing number of households, enabling them to plan their consumption expenditure over a longer time horizon on the basis of their wealth and their income prospects. Indeed, total consumption expenditure now depends much less on short-term fluctuations of real income and displays stable growth rates in the medium term. There is evidence indicating that households' wealth has increased gradually since mid-2004. Specifically, share prices on the Athens Exchange increased (the composite index rose by 21.4% during the first nine months of 2005 and by 45.3% between end-September 2004 and end-September 2005). Moreover, there was an increase in the value of government bonds held by the public, mainly indirectly, i.e. in the form of fixed-income mutual fund shares/units sold by commercial banks. In addition, there are signs that the prices of dwellings have been rising lately.<sup>38</sup> Furthermore, the annual growth rate of the outstanding balance of consumer loans declined, but remained at high levels in the first eight months of 2005 (August 2005: 31.8%, December 2004: 37.4%).<sup>39</sup>

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<sup>35</sup> Since private disposable income, as defined in the National Accounts, includes corporate saving, the rise in the private sector's saving rate could reflect the evolution of business profits.

<sup>36</sup> Including pensions and various benefits and social expenditure that aim at protecting the economically disadvantaged population groups.

<sup>37</sup> E.g. *Monetary Policy 2004-2005*, February 2005, p. 65.

<sup>38</sup> Available data (see Table V.5) show that the growth rate of dwelling prices decelerated appreciably in 2004 for the country as a whole, but picked up again in early 2005.

<sup>39</sup> The outstanding balance of securitised consumer loans has been taken into account in the calculation of the annual rate of consumer credit expansion.

Table V.5  
Dwelling price index

Period	Urban areas-total			Athens			Other urban areas		
	Index	Percentage changes		Index	Percentage changes		Index	Percentage changes	
	1997=100	Over previous period	Over corresponding period of previous year	1997=100	Over previous period	Over corresponding period of previous year	1993 Q4=100	Over previous period	Over corresponding period of previous year
<b>1994</b> .....	76.1	...	...	73.4	9.5	9.5	106.0	...	...
<b>1995</b> .....	82.6	8.5	8.5	80.1	9.2	9.2	114.3	7.8	7.8
<b>1996</b> .....	91.2	10.5	10.5	88.9	11.0	11.0	125.7	10.0	10.0
<b>1997</b> .....	100.0	9.7	9.7	100.0	12.5	12.5	134.7	7.1	7.1
<b>1998</b> .....	114.4	14.4	14.4	115.5	15.5	15.5	152.6	13.3	13.3
<b>1999</b> .....	124.5	8.9	8.9	129.6	12.2	12.2	161.5	5.8	5.8
<b>2000</b> .....	137.6	10.5	10.5	149.1	15.1	15.1	171.2	6.0	6.0
<b>2001</b> .....	157.7	14.6	14.6	175.4	17.6	17.6	190.6	11.3	11.3
<b>2002</b> .....	178.2	13.0	13.0	203.8	16.2	16.2	208.8	9.5	9.5
<b>2003</b> .....	188.4	5.7	5.7	211.9	4.0	4.0	225.2	7.9	7.9
<b>2004</b> .....	193.3	2.6	2.6	212.4	0.3	0.3	237.3	5.4	5.4
<b>2002</b> I .....	171.5	4.4	13.9	193.6	5.8	16.8	203.9	3.0	10.7
II .....	178.9	4.3	14.4	208.0	7.4	19.4	205.3	0.7	8.8
III .....	179.4	0.3	12.4	205.4	-1.3	14.9	209.9	2.3	9.7
IV .....	183.1	2.0	11.5	208.2	1.4	13.8	215.9	2.8	9.0
<b>2003</b> I .....	187.2	2.3	9.2	214.6	3.1	10.8	219.0	1.4	7.4
II .....	186.9	-0.2	4.5	210.6	-1.8	1.3	223.0	1.8	8.6
III .....	188.6	0.9	5.1	210.6	0.0	2.6	227.1	1.9	8.2
IV .....	190.8	1.2	4.2	211.5	0.4	1.6	231.7	2.0	7.3
<b>2004</b> I .....	190.7	0.0	1.8	209.7	-0.9	-2.3	233.8	0.9	6.8
II .....	191.1	0.2	2.2	209.4	-0.2	-0.6	235.3	0.6	5.5
III .....	193.4	1.2	2.6	211.1	0.8	0.2	239.1	1.6	5.3
IV .....	198.1	2.4	3.8	219.4	3.9	3.7	241.1	0.8	4.0
<b>2005</b> I .....	...	...	...	...	...	...	252.8	4.9	8.1
II .....	...	...	...	...	...	...	262.4	3.8	11.5
<b>2003</b> July .....	...	...	...	208.6	0.5	1.9	...	...	...
Aug. ....	...	...	...	211.9	1.6	4.1	...	...	...
Sept. ....	...	...	...	211.5	-0.2	1.7	...	...	...
Oct. ....	...	...	...	210.7	-0.4	2.5	...	...	...
Nov. ....	...	...	...	211.2	0.3	-0.1	...	...	...
Dec. ....	...	...	...	212.7	0.7	2.5	...	...	...
<b>2004</b> Jan. ....	...	...	...	212.7	0.0	0.2	...	...	...
Feb. ....	...	...	...	207.1	-2.6	-2.4	...	...	...
March ..	...	...	...	209.5	1.1	-4.5	...	...	...
Apr. ....	...	...	...	208.0	-0.7	-2.6	...	...	...
May ....	...	...	...	211.5	1.7	0.3	...	...	...
June ....	...	...	...	208.5	-1.4	0.4	...	...	...
July ....	...	...	...	208.8	0.1	0.1	...	...	...
Aug. ....	...	...	...	212.4	1.7	0.3	...	...	...
Sept. ....	...	...	...	212.1	-0.1	0.3	...	...	...
Oct. ....	...	...	...	217.9	2.7	3.4	...	...	...
Nov. ....	...	...	...	219.1	0.5	3.7	...	...	...
Dec. ....	...	...	...	221.2	1.0	4.0	...	...	...
<b>2005</b> Jan. ....	...	...	...	223.6	1.1	5.1	...	...	...

Sources: For the other urban areas: Bank of Greece (quarterly data). For Athens: calculations based on data from "Danos and Associates" (1993-97) and "Property Ltd" (monthly data for 1997-05). For the total of urban areas: weighted index based on the housing stock in Athens and other urban areas.

**Table V.6**  
**Indicators of consumer demand (2003-2005)**  
*(Annual percentage changes)*

	2003	2004	2005 (available period)
Volume of retail sales <sup>1</sup>	4.3	4.5	3.5 (Jan.-July)
Food-beverages-tobacco	5.3	7.1	6.6 ( » » )
Clothing-footwear	0.9	1.4	0.3 ( » » )
Furniture-household equipment	3.8	3.9	0.5 ( » » )
Books-stationery-other	7.5	4.7	-2.0 ( » » )
Revenue from VAT (constant prices)	-0.5	8.3	-4.9 (Jan.-July)
Retail trade business expectations indicator	9.3	2.8	-10.1 (Jan.-Sept.)
New passenger car registrations	-2.7	15.7	-1.4 ( » » )
Piraeus Port Authority (OLP) passengers	6.3	-4.9	-1.6 (Jan.-June)
Tax revenue from mobile telephony (monthly flat fees)	16.9	13.0	10.5 (Jan.-Aug.)
Outstanding balance of total consumer credit extended by banks <sup>2</sup>	27.2 (Dec.)	37.4 (Dec.)	31.8 (Aug.)

1 Revised retail sales volume index (2000=100) excluding VAT.

2 Adjusted rate (see footnote 39 in the main text).

**Sources:** NSSG (retail sales), Bank of Greece (VAT revenue and consumer credit), IOBE (expectations), NSSG (cars), OLP, Ministry of Economy and Finance (tax revenue from mobile telephony).

The “direct” short-term indicators (see Table V.6), the survey results and the available national accounts estimates for the first half of 2005 suggest that private consumption will decline in 2005, but will remain strong and continue to lend support to domestic demand. According to provisional NSSG estimates, in the first quarter of 2005 the annual growth rate of private consumption, on a national accounts basis, fell to 4.0%, from 4.4% in the first quarter of 2004; in the second quarter of the year, this growth rate dropped further to 3.7%, from 4.0% in the corresponding quarter of 2004. The annual growth rate of the retail trade volume index (sales of goods excluding cars) fell to 4.0% in July, from 4.9% in May, and in the first seven months of the year it stood at 3.5% on average, from 5.2% in the corresponding period of 2004 (see Chart V.14 and Table V.7). The number of new passenger car registrations fell at an average annual rate of 1.4% between January and September, compared with an increase of 19.5% in the corresponding period of 2004. These devel-

opments partly reflect the exceptional increase in passenger car imports in 2004 for the needs of the Olympic Games, therefore comparisons could be misleading.<sup>40</sup>

The growth of government consumption has decelerated. On the basis of provisional NSSG national accounts estimates, government consumption (at constant prices) rose at an annual rate of 3.4% in the first half of 2005, compared with 3.7% (according to revised data) in the first half of 2004.

Total gross fixed capital formation is expected to decline substantially to very low levels in 2005, from 5.7% in 2004 (according to revised data). However, despite this decline, the share of total

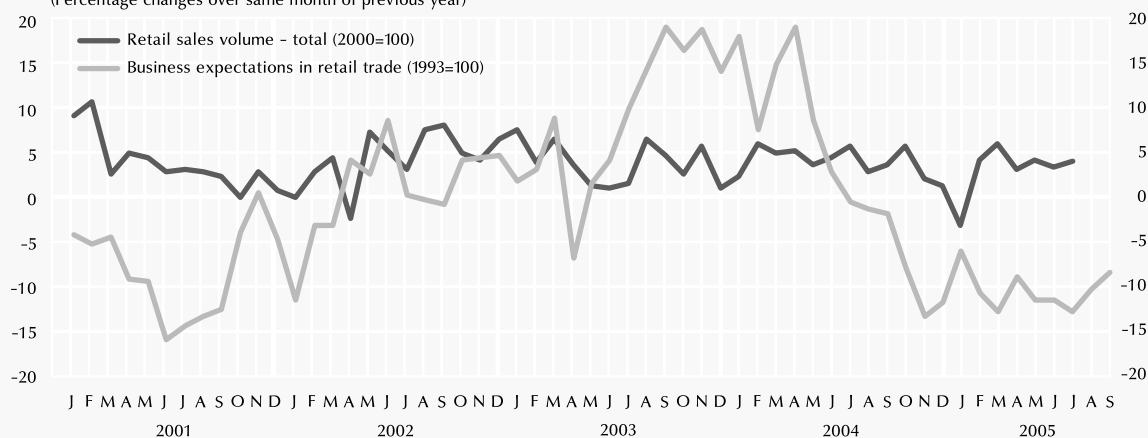
<sup>40</sup> It should be recalled that expenditure for the purchase of passenger cars has a 7% share in consumption expenditure for goods, which, in turn, accounts for about 50% of total private consumption (goods and services).

Chart V.14

Consumer demand (January 2001 - September 2005)

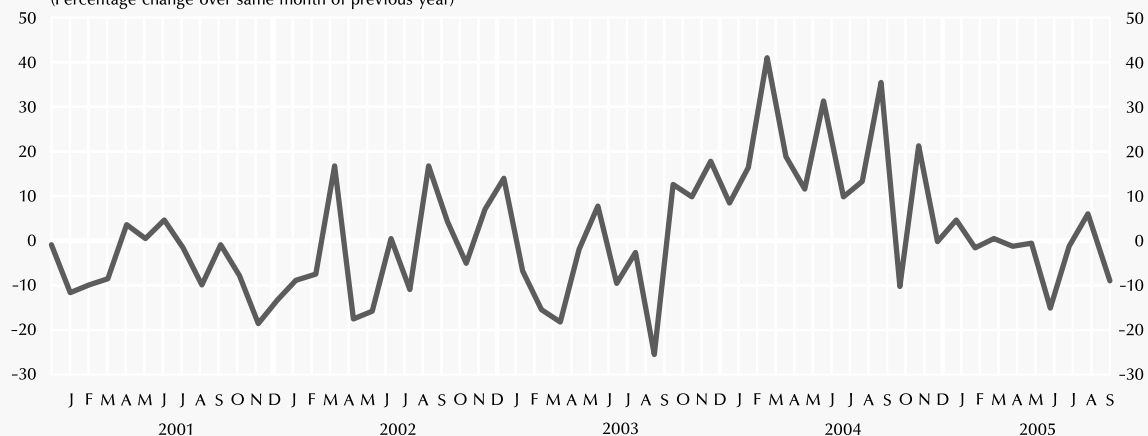
A. Retail sales volume and retail trade business expectations

(Percentage changes over same month of previous year)



B. New passenger car registrations

(Percentage change over same month of previous year)



**Sources:** NSSG - Eurostat (retail sales and cars), IOBE (expectations). The revised retail sales index (turnover of retail trade at constant prices) is based on the NSSG's new sample for the year 2000. The business expectations index is based on firms' estimates of sales and stocks as well as on their forecasts of business activity over the next six months.

investment in GDP (at current prices) continues to be sizeable and is projected to stand at around 24.5% in 2005, compared with 25.4% in 2004.

The slowdown in the growth rate of total investment can be attributed mainly to the drastic cut in government investment by about 20% (at constant prices), compared with increases of 8.8% in 2004 and 17.1% in 2003. Between January and August 2005, according to fiscal data released by the Ministry of Economy and Finance, expenditure under the Public Investment Programme (PIP)

declined (at current prices) by 36.2% (year-on-year), compared with a budgeted decrease of 15.4%. Moreover, according to Bank of Greece data on a cash basis, PIP disbursements fell at an annual rate of 31.6% in the first nine months of 2005 (see Table V.8).<sup>41</sup>

Gross private non-residential investment (includ-

<sup>41</sup> It should be noted, however, that the pronounced decline in investment expenditure is also partly due to massive disbursements during the first half of 2004 for the financing of projects related to the preparation of the Olympic Games.

Table V.7

## Retail trade turnover index (2005)

*(Percentage changes over corresponding period of previous year)*

Components	2005 (Jan.-July)
1. Big food stores	6.0
2. Department stores	6.2
3. Food-beverages-tobacco	4.1
4. Pharmaceuticals-cosmetics	7.4
5. Clothing-footwear	5.6
6. Furniture-electrical appliances- household equipment	5.5
7. Books-stationery-other	4.8
8. Retail sales not in stores	2.1
Retail trade turnover index	6.3

**Source:** NSSG. Revised retail trade turnover index (based on the NSSG's new sample for the year 2000).

ing investment by public enterprises and organisations), which is directly associated with the

activity of the business sector, is expected to increase by 4.0-5.0% in 2005, compared with 6.8% in 2004. Such an increase can be regarded as satisfactory, considering the heavy investment activity of the past few years, especially in sectors such as transport and construction, which has helped create a stock of capital that is adequate given the level of expected demand.

The Bank of Greece estimate regarding the growth rate of gross investment is surrounded by significant uncertainty, partly because the available statistics – especially on private business investment – do not allow reliable conclusions to be reached about current developments. On the positive side, the low opportunity cost of capital, the satisfactory financing conditions and the profitability of the most dynamic firms create a

Table V.8

## Indicators of investment demand (2003-2005)

*(Annual percentage changes)<sup>1</sup>*

	2003	2004	2005 (available period)
Capital goods output	0.8	-0.5	-6.0 (Jan.-July)
Investment expenditure (at current prices) of private industrial firms <sup>2</sup>	-8.0 <sup>3</sup>	-20.9 <sup>4</sup>	-8.4 <sup>4</sup>
Capacity utilisation rate in the capital goods industry	(78.9)	(78.6)	(71.8) (Jan.-Sept.)
Outstanding amount of loans to non-financial corporations with a maturity of over one year <sup>5</sup>	20.1 (Dec.)	18.9 (Dec.)	16.2 (Aug.)
Disbursements out of the Public Investment Programme	19.6	11.7	-31.6 (Jan.-Sept.)
Volume of private construction activity (on the basis of permits issued)	1.5	-3.4	-2.7 (Jan.-June)
Cement production	3.6	-2.3	-0.1 (Jan.-July)
Construction business expectations indicator	0.8	-28.9	-31.7 (Jan.-Sept.)
Outstanding balance of total bank credit to housing <sup>6</sup>	26.2 (Dec.)	27.2 (Dec.)	28.8 (Aug.)

1 Excluding the capacity utilisation rate.

2 Estimates of firms participating in the IOBE investment survey.

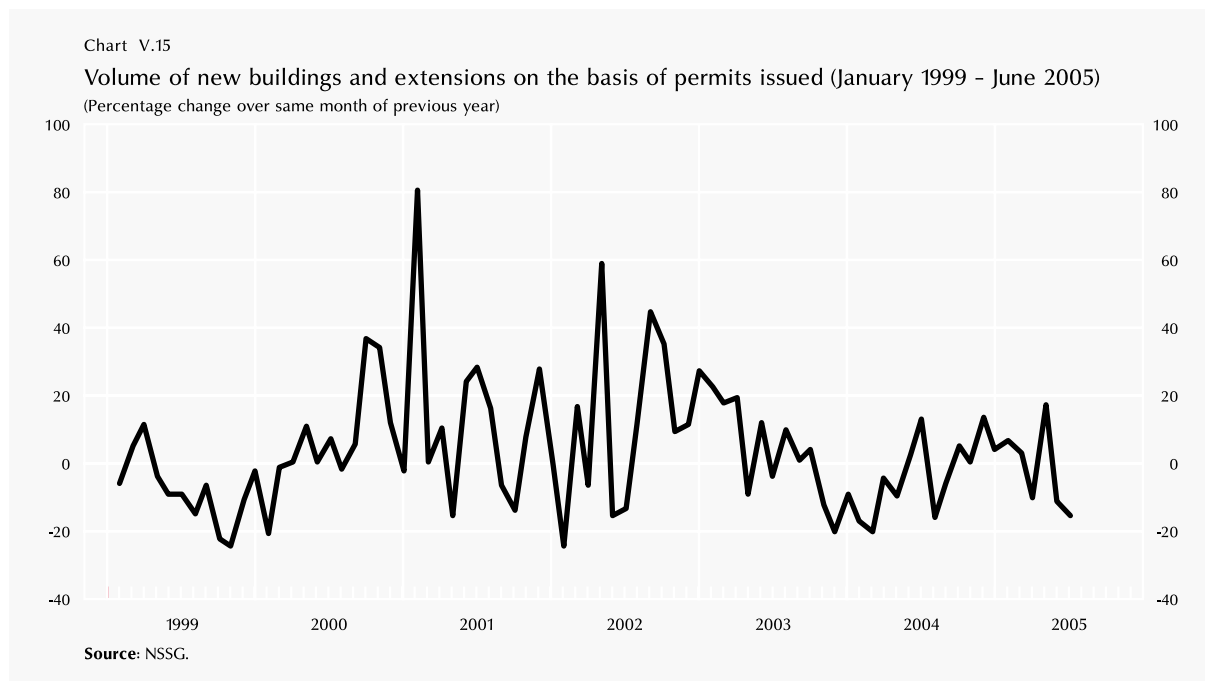
3 Estimate of the March-April 2004 survey.

4 Estimate or forecast of the March-April 2005 survey.

5 For the years 2004 & 2005, adjusted for the amount of interest write-offs.

6 Including the outstanding balance of securitised housing loans.

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



favourable environment for new investment initiatives. In addition, the government's consistent efforts to promote structural changes in the labour market and in other markets (see Box V.1 in this chapter and Box VI.2 in Chapter VI), as well as the encouragement of technological modernisation and innovation, set the stage for entrepreneurship and investment activity that enable firms to enhance their competitiveness. Investment should also be boosted by the new development law, tax cuts on business profits and measures aimed at simplifying administrative procedures. According to Ministry of Economy and Finance data, investment projects have already been approved as eligible for inclusion in the new development law.<sup>42</sup> It should be noted, however, that the implementation of investment projects approved at this stage is expected to begin later – possibly not within 2005. On the negative side, account should be taken of the adverse effects on domestic investment from the trend of relocation of industrial plants to low-wage, low-tax neighbouring countries. This relatively new phenomenon has a direct impact on

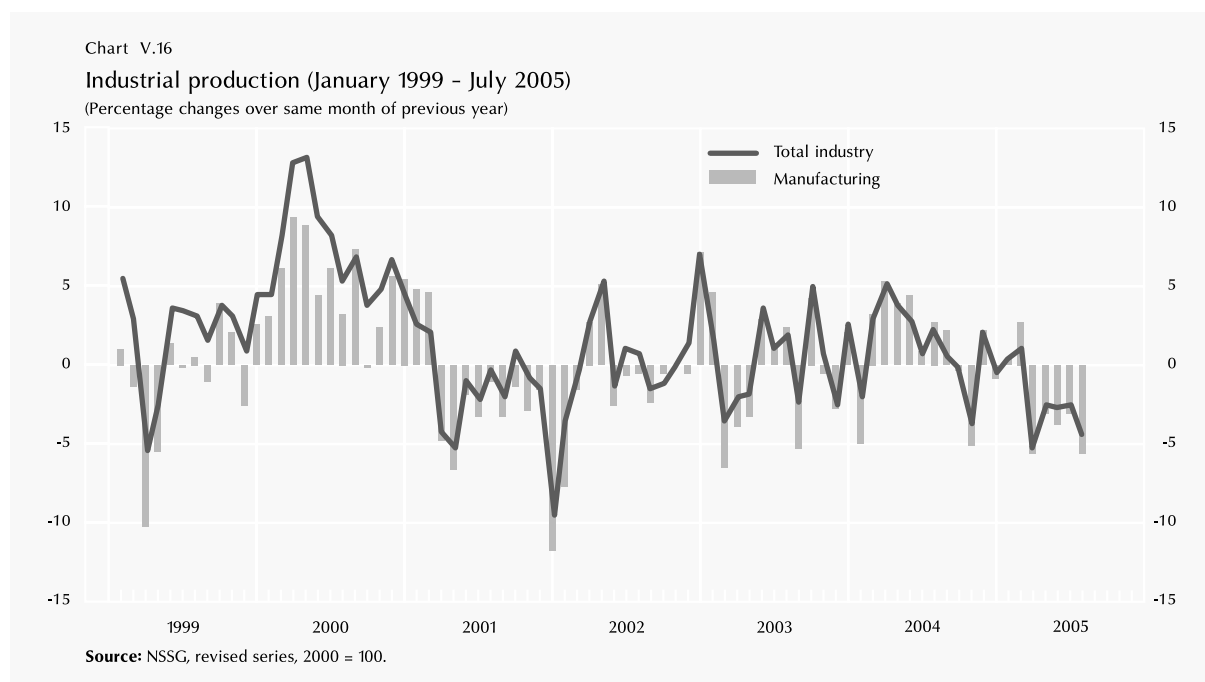
the level of investment and reduces the economy's productive capacity.

Regarding public enterprises and organisations, the implementation of projects to date, although satisfactory, is somewhat lagging behind the defined targets.<sup>43</sup> It should be noted however that, for 2005, the level of planned investment expenditure is slightly higher relative to 2004.

Private residential investment in 2005 should increase at a low rate (around 2%), following a 0.6% decline in 2004. The volume of private construction activity on the basis of permits issued, a

<sup>42</sup> According to Ministry of Economy and Finance data, by 25 August 2005, 134 investment projects with a total budget of €232.5 million had come under the provisions of the new development law (3299/2004), out of a total of 483 applications representing a total of €1,267 million. By the end of June, the Hellenic Center for Investment (ELKE) had evaluated five major investment projects amounting to €117 million in total, which is much higher than the €23 million approved by ELKE for the entire 2004.

<sup>43</sup> Available information shows that 48% of the annual investment programme of the Public Power Corporation (DEH) had been implemented by end-July, while 52% of the investment programme of the Hellenic Railways Organisation (OSE) had been implemented by mid-September.



leading indicator of economic activity in the sector, seems to have fallen substantially lately and its annual rate of decline averaged 2.7% in the first half of 2005, compared with 2.1% in the twelve months between July 2004 and June 2005 (see Chart V.15). The annual growth of the outstanding balance of housing loans remained at high levels in the first eight months of 2005 and reached 28.8% in August.<sup>44</sup> However, this should be treated with caution as an indicator of construction activity, given that, in the current environment of rising house prices and growing real estate transactions, a large part of these loans may – as already mentioned above – have been used for the purchase of older houses.

According to Bank of Greece estimates, the change in the real external balance on a national accounts basis should make a positive contribution to GDP growth, after the negative contributions over a number of years. The anticipated improvement relies crucially on an expected very small increase (about 1%) in imports of goods and services during 2005 (a small decrease was recorded in the

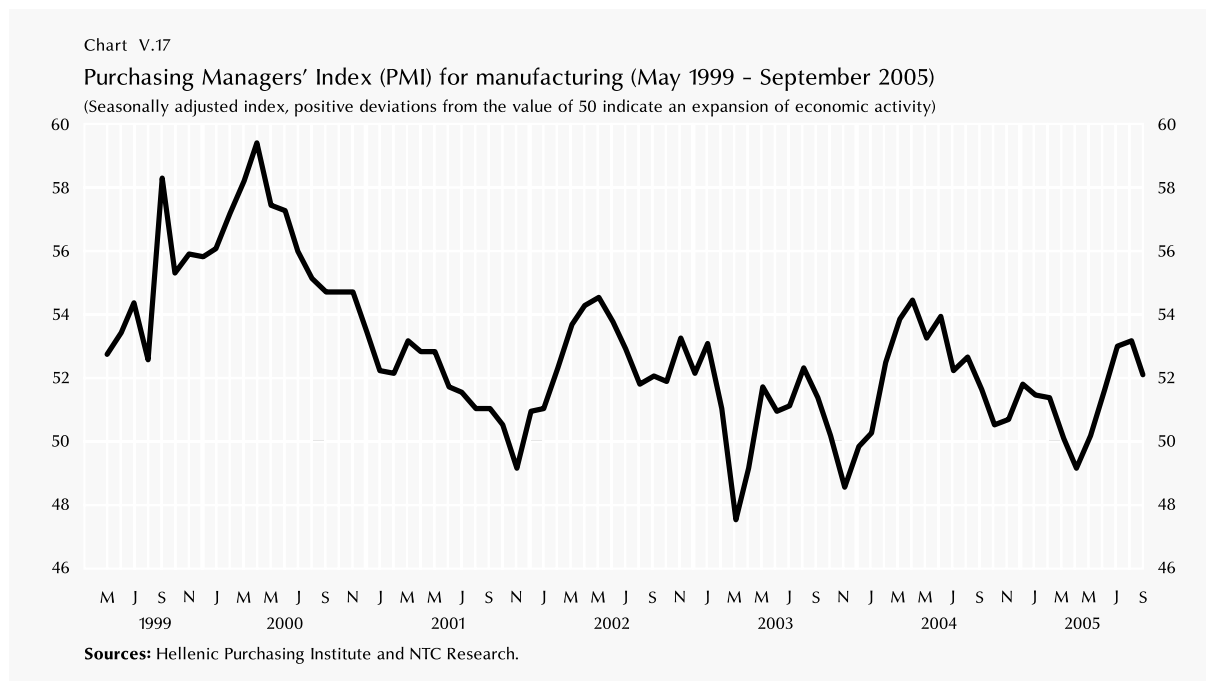
first half of the year according to NSSG national accounts estimates), following a 9.3% rise (revised data) in 2004. The significant slowdown in import growth is associated with the substantial rise seen in 2004 (mainly for reasons relating to the Olympic Games) and – to a lesser extent – with the weaker increase in final consumption in 2005. Available data from the Bank of Greece and the NSSG for the first seven months corroborate these assessments (see Section 5 of this chapter).

The growth rate of exports of goods and services is also expected to decline to around 5% in 2005, from 11.5% (revised data) in 2004.

On the supply side, as suggested by relevant indicators,<sup>45</sup> activity has been satisfactory in some ter-

<sup>44</sup> The outstanding balance of securitised housing loans (see Chapter IV) has been taken into account in the calculation of the annual rate of expansion of housing loans.

<sup>45</sup> In the first half of 2005, the retail trade employment index rose by 2.7% and the pre-tax profits of the ten largest banking groups increased by 40%. In addition, government revenue from the mobile phone tax rose by 10.5% between January and August 2005, while, according to Olympic Airlines data, passenger traffic increased by 13.2% in the first seven months of 2005.



tiary sector branches such as telecommunications, financial services, real estate services and trade.

By contrast, total industrial output fell in the first seven months of 2005, at an average annual rate of 2.4%; an even higher rate of decline (2.8%) was seen in manufacturing (see Chart V.16). Within industry as a whole, the output of capital goods and of mines and quarries fell substantially, while the output of durable consumer goods and electricity-natural gas-water supply grew by 7.7% and 2.0%, respectively, over the same period. The PMI provides a brighter picture of manufacturing, indicating an increase in production in September for the fifth consecutive month (see Chart V.17). In addition, the industrial confidence indicator in manufacturing (derived from the IOBE business survey – see Chart V.18) rose in September; in the same month, firms' estimates of production and sales prospects for the next three or four months were positive on the whole.

### 3. Employment and unemployment: developments and prospects

Changes in economic activity during the first nine months of 2005 suggest that the total number of employed persons rose compared with the corresponding 2004 period. It is estimated that the overall increase in employment was limited and the sharpest rise was recorded in trade and other services sub-sectors.

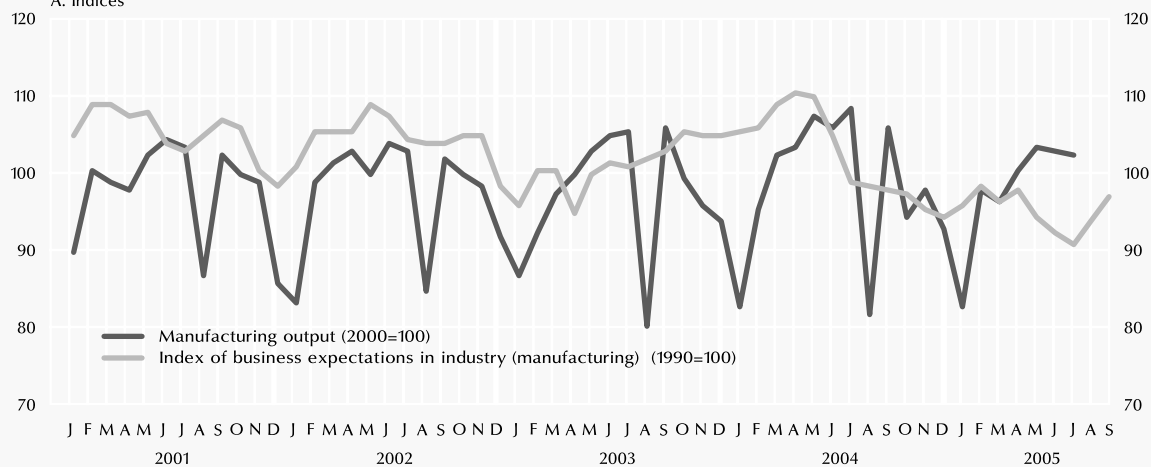
Available data from the NSSG labour force survey (see Chart V.19) conducted among households cover the first half of 2005 only, thus they cannot provide a full picture of this year's developments. Nonetheless, these data show an increase of 1.5% in employment between the first half of 2004 and the first half of 2005. This strong growth partly reflects the significant rise in employment during 2004.<sup>46</sup>

<sup>46</sup> As evidenced also by the fact that the three-month moving average of employment for the last four quarters shows an increase of 0.7% compared with the 2004 average.

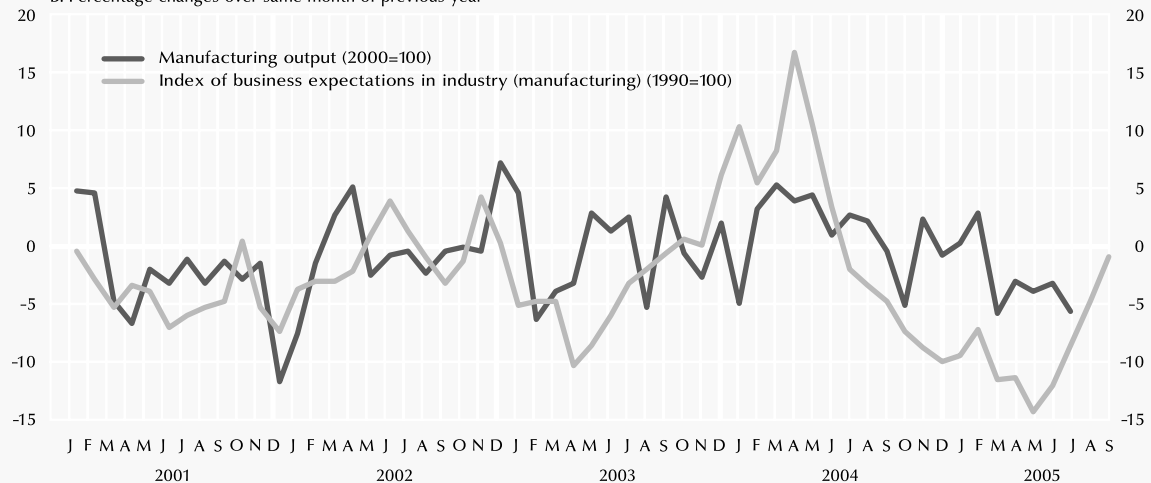
Chart V.18

Output and business expectations in manufacturing (January 2001 - September 2005)

A. Indices



B. Percentage changes over same month of previous year



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

Data available from OAED and from business surveys provide information concerning developments in employment during the first eight or nine months of 2005. According to information provided to OAED by firms, approximately 53,000 new jobs were created in the private sector between January and August 2005, i.e. 55% fewer than in the same period last year.<sup>47</sup>

As regards manufacturing, the employment sub-index of PMI suggested a decrease in employment during the first half of the year. However, from

July onwards, this sub-index has suggested a recovery in manufacturing employment.

In the construction sector, given the decline in current construction activity, as suggested by the relevant IOBE survey, employment is estimated to have declined during the first nine months of the year.<sup>48</sup>

<sup>47</sup> OAED data should be treated with caution, as they do not provide a complete picture of employment: they do not include the self-employed and do not fully record voluntary quits.

<sup>48</sup> The volume of private construction activity on the basis of building permits in the first half of 2005 has also declined.

Chart V.19

## Employment (1999 - 2005)

(Percentage changes over corresponding quarter of previous year)



\* Other employed persons= Self-employed with staff (employers)+Self-employed without staff + Assistants in family businesses.

Source: NSSG, Labour Force Surveys. New revised data for 1998-2003, published in January 2005. No changes are shown for 2004, since data are not fully comparable, due to a change in the survey sample.

Table V.9

## Business expectations for employment

(Weighted percentage balances)

	Sept. 2005	Jan. 1998-Sept. 2005 average	Maximum	Minimum
Industry	-6	-2	14 (May 2002)	-17 (Dec. 2004)
Construction	-26	21	60 (March 2000)	-64 (Sept. 2004)
Services	-6	3	38 (Q1 2000)	-37 (Q2 2001)
Retail trade	0	12	56 (Nov. 1998)	-15 (July 2005)

Source: IOBE business surveys.

In retail trade, according to the NSSG employment index, total employment during the first half of 2005 was 2.7% higher than in the corresponding 2004 period.

Employment in services (excluding banks and retail trade) seems to have decreased in the first four months of 2005, according to the relevant IOBE survey. From May onwards, however, employment in this sector gradually recovered.

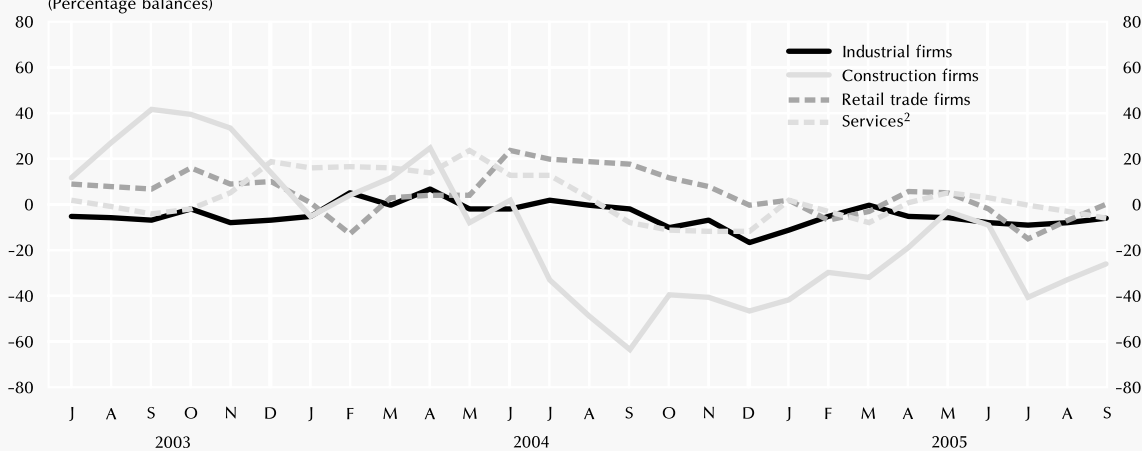
Employment in central government and public

enterprises rose by 1.9% and 1.8% respectively, year-on-year, in the first quarter of 2005.

Turning to short-term employment expectations, data from the IOBE business surveys of September (see Table V.9 and Chart V.20) point to a decline in employment in manufacturing, construction and services (excluding banks and retail trade), while firms in retail trade do not expect any changes in employment. It should be noted that these expectations were recorded before the implementation of the new law that

Chart V.20

Business and consumer expectations<sup>1</sup> for employment  
(July 2003 – September 2005)  
(Percentage balances)



1 Firms were asked to assess the prospect of an increase in their number of employees over the coming period.

2 Excluding banks and retail trade firms.

Source: IOBE, Business Surveys.

reduced overtime premia (see Box V.1) and soon after the introduction of the new opening hours scheme for retail outlets (see Box VI.2).

The number of unemployed persons, according to both labour force survey data for the first half of 2005 and OAED data for the first eight months,

## BOX V.1

### The new law to promote employment and increase labour market flexibility

In August 2005, the Greek Parliament adopted Law 3385/2005 *“Measures to promote employment, strengthen social cohesion and other provisions”*. The new law, in force since 1 October 2005, seeks to contain labour costs and increase flexibility in the labour market, through the reduction of overtime premia and the simplification of the procedures for the adoption of flexible working time arrangements, with the aim of boosting the economy’s competitiveness and increasing employment. In addition, it provides for stricter administrative and penal sanctions in case of labour law violations.

#### *Reduction of overtime premia*

Regarding the cost of overtime, Law 3385/2005 in effect abolishes the provisions of Law 2874/2000, which had increased overtime premia. According to Law 2874/2000, for firms subject to the 40-hour con-

tractual working week,<sup>1</sup> the 41st, 42nd and 43rd hours of weekly employment were “unregulated” weekly overtime. Employees had to provide the additional labour (three hours per week), which was compensated at a premium of 50%. The premia for overtime work beyond the 43rd hour depended on the total annual number of overtime hours (with the three “unregulated” hours excluded from the *annual* total). The premia were set at 50% for the first 120 annual hours of overtime and at 75% for overtime hours over and above the 120 hours. The above applied provided that the total number of annual overtime hours was within the limits set by ministerial decision<sup>2</sup> and →

<sup>1</sup> The length of the contractual working week was set at 40 hours a week, for most sectors, by the 1984 National General Collective Agreement.

<sup>2</sup> For some activities, mostly from the secondary sector, these limits are set bi-annually by the Minister of Employment and Social Protection.

→ that the number of overtime hours had been reported to the Labour Inspectorate. If these conditions were not met, overtime employment was classified as “illegal” and compensated at a premium of 150%.

By increasing overtime premia, the law aimed to encourage enterprises to meet increased demand through recruitment rather than through the extension of working time. The implementation of Law 2874/2000, as from April 2001, did not however produce the desired outcome. Therefore, the new law brings back, to a certain extent, the provisions that were in force prior to Law 2874.

More specifically, the new law extends “unregulated” weekly overtime to the 45th hour. These five hours are now termed “extra work”, the term used prior to Law 2874, are not included in the annual overtime limits and are paid at a premium of 25%. The hours of work after the 45th weekly hour and up to 120 hours annually entail an overtime premium of 50%, while the premium rises to 75% for overtime hours over 120 annually. The overtime hours for which the procedures required by law are not adhered to are termed “exceptional”, rather than “illegal”, and are remunerated at a premium of 100%.

In essence the new law effectively reduces the cost of the first eight hours of work in excess of the contractual weekly hours,<sup>3</sup> as well as the cost of “exceptional” overtime.

#### *Averaging of working hours*

In order to increase working time flexibility, Law 3385/2005 introduces two alternative schemes for averaging working hours. In both schemes, the reference period over which the average number of hours is calculated is some period longer than a week. Thus, these schemes permit for an extension of weekly hours during some period provided that the weekly hours are reduced over some other period and that the average number of hours during the reference period – that is during the whole period that includes both the extended and the shorter working hours<sup>4</sup> – is equal to contractual hours.<sup>5</sup> This enables firms to cope with variations in activity that arise either due to seasonality or due to extraordinary factors without being burdened

with the cost of overtime. The two schemes were designed having in mind the seasonal patterns of activity most commonly observed in practice. The two schemes differ with respect to: (a) the length of the reference period and (b) the procedures required for their adoption. In the *first scheme*, the reference period is 4 months; i.e. the period of increased employment (up to 2 hours daily in addition to the contractual 8 hours) and the corresponding period of reduced employment cannot in total exceed 4 months in each calendar year. In the *second scheme*, the reference period is a year and the employee is allowed to work up to 256 extra hours during some period, which cannot exceed 32 weeks, provided that hours are reduced commensurately during the remaining of the calendar year.<sup>6</sup>

In both schemes the agreement for the annualisation of working time is concluded at the enterprise level between the employer and the workers’ union. In the absence of a union or works council or association of persons, the employer and the entire personnel may submit a written request to the local “Committee on the Rearrangement of Working Time”. These committees, one in each prefecture,<sup>7</sup> are made up of five members serving for a two-year term; one Labour Inspector, two employers’ representatives and two workers’ representatives. In case the employer and the employees’ representatives fail to conclude an agreement on a scheme averaging working time over a four-month period, the decision is made by the local “Committee on the Rearrangement of Working Time”. In any case, however, the law specifies that the minimum rest period requirements have to always be met. Also according to the law, employees have the right to refuse the additional work required under the averaging scheme if →

<sup>3</sup> The 120 hours of annual overtime, excluding unregulated overtime, correspond to 2.5-2.6 hours per week under the assumption of an annual total of 46-48 working weeks (due to annual leave and public holidays).

<sup>4</sup> “Unregulated” and “legal” weekly overtime are not included during the period of shorter working hours.

<sup>5</sup> Average weekly hours during the reference period cannot exceed 48 hours *inclusive* of the hours of “unregulated” and “legal” overtime.

<sup>6</sup> The 256 hours arise as the difference between a 48-hour working week over 32 weeks (a total of 1,536 hours) and a 40-hour working week over 32 weeks (a total of 1,280 hours).

<sup>7</sup> Except for the prefecture of Attica where four Committees have been set up.

→ they are unable to provide it and if such refusal is in good faith. Refusal to work under such a scheme cannot constitute a reason for dismissal.

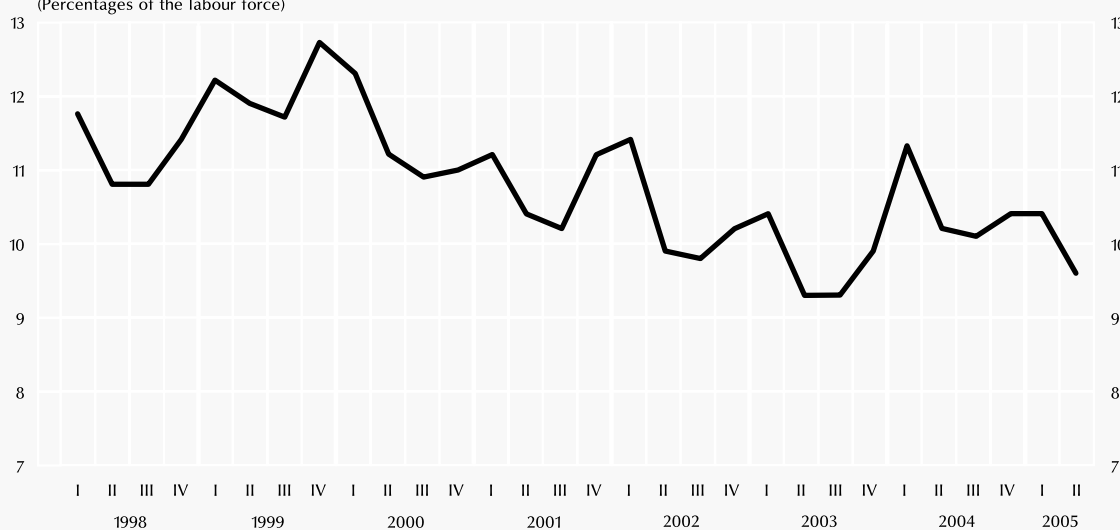
The schemes for the averaging of working hours are not new in Greece. Law 1892/1990 permitted the use of averaging of working time with a reference period of six months, while Laws 2639/1998 and 2874/2000 allowed for the annualisation of working time (i.e. the reference period was a year). Only a handful of enterprises, however, made use of these provisions,<sup>8</sup> since the procedures required for the adoption of such schemes were complicated. For example, in firms with no unions or works council the law required an agreement between the employer and the corresponding workers' union at the branch level. The main differences between the new provisions and those of Law 2874 are: (a) a simplification of the procedures required for the implementation of these schemes and (b) the abolition of the

trade-off in terms of reduced average weekly hours (from 40 to 38 hours) for employees following such schemes. These changes are expected to encourage the use of schemes for the averaging of working hours. Such schemes are already used extensively in a number of other European Union countries. For example, according to data from the European Industrial Relations Observatory,<sup>9</sup> about a third of employees in Germany, Denmark and Spain are covered by agreements which provide for some form of averaging of working hours. Similar schemes are also implemented in Belgium, Finland (about 14% of employees in 2001), Italy and the UK (about 5% of employees in 2001).

<sup>8</sup> The Minister of Employment and Social Protection at a press conference on 15 July 2005 stated that since 2000 only 5 or 6 enterprises had agreed on the averaging of working hours.

<sup>9</sup> European Industrial Relations Observatory, *Annualised hours in Europe* <http://www.eiro.eurofound.eu.int/2003/08/study/tn0308101s.html>

Chart V.21  
Total unemployment rate (1998 - 2005)  
(Percentages of the labour force)



Source: NSSG, Labour Force Surveys. New revised data for 1998-2004, published in January 2005.

has been reduced relative to 2004. According to the labour force survey definition and data, the number of unemployed persons in the first half of 2005 was about 485,000, i.e. less by 34,000 compared with the first half of 2004. The unemployment rate fell from 10.8% in the first half of 2004

to 10.0% in the first half of 2005 (see Chart V.21). The drop in the number of unemployed persons seems to have stemmed mainly from lower unemployment rates of male workers as well as of people who had remained out of job for less than a year. The number of long-term unemployed also

fell, but the contribution of this development to the decline of total unemployment was limited. Indeed, the share of long-term unemployed in the total unemployed rose to 54.8% (from 53.2% in the first half of 2004).

Labour force survey data show, however, that the rise in employment and the decline in unemployment were accompanied by a slight increase in the number of persons not economically active, mainly in the 20-24 age group.

The drop in unemployment was probably also a result of the implementation of “active employment policies”. In this respect, the percentage of the registered unemployed who benefited from personalised guidance rose from 15% of the total in the beginning of 2004 to 45% in August 2005.

Structural measures that are expected to boost employment include the extension of retail trade opening hours (Law 3377/2005 – see Box VI.2), the facilitation of schemes for the rearrangement (averaging) of working time and the reduction of overtime premia (Law 3385/2005 – see Box V.1).

At the same time, the government seeks to facilitate the smooth integration of immigrants into the labour market. To this end, Law 3386/2005 (“Entry, residence and social inclusion of third-country nationals in the Greek territory”) was recently passed, which, among other things, simplifies the immigrants’ legalisation procedure.

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## 4 Fiscal developments

### *4.1 Developments in the January-August 2005 period based on administrative data*

According to available data (on an administrative basis), the state budget deficit narrowed to €8,103 million or 4.5% of GDP in the January-

August 2005 period, from €8,857 million or 5.3% of GDP in the same period a year earlier. An improvement was also observed in the state budget primary balance, which moved from a primary deficit of 0.8% of GDP to a primary surplus of 0.3% of GDP (see Table V.10).

This improvement mainly resulted from a curtailment of investment expenditure, which declined by 36.2% in the reviewed period compared with the same period last year. This decline was more than double the budgeted reduction of 15.5% for the entire year. As a result, the deficit of the public investment budget shrank to 1.2% of GDP, from 2.3% in the corresponding period of 2004. By contrast, the ordinary budget deficit widened to €5,888 million or 3.3% of GDP, from €5,020 million or 3.0% of GDP in the corresponding period of 2004, primarily owing to higher interest payments and a shortfall in revenue. As discussed further below, the increase in interest payments was only temporary and, therefore, should be smoothed by the inclusion of data for the next months.

Fiscal developments in the first eight months of 2005 were marked by a shortfall of about 6 percentage points in the growth of ordinary budget revenue<sup>49</sup> (4.2% against a budget target of 10.1%) before tax refunds. Detailed revenue data for the January-July 2005 period<sup>50</sup> indicate that this shortfall was due to a 1.3% decline in indirect tax receipts. On the other hand, receipts from direct taxes rose by 9.1%. It should be noted that the January-July 2005 revenue has been affected favourably by the fiscal measures announced on 29 March 2005.<sup>51</sup>

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<sup>49</sup> Excluding proceeds from the sale of 16.4% of OPAP (the Greek Soccer Pools Organisation) shares totalling €1.1 billion.

<sup>50</sup> Available revenue data cover the January to July period only.

<sup>51</sup> Specifically, the standard VAT rate was raised from 18% to 19%, the reduced VAT rate from 8% to 9% and the special reduced VAT rate from 4% to 4.5%. The special consumption tax on alcoholic beverages (other than wine and beer) was also increased by 20%. Finally, a “minimum excise duty” was imposed only on those cigarettes whose retail price was lower than the price category most in demand for 2004.

**Table V.10**  
**State Budget results**  
(Million euro)

	January-August				Percentage changes			Annual data				Percentage changes				
	2002	2003	2004	2005*	2003/02	2004/03	2005*/04	2002	2003	2004	Budget for 2005	Estimated outcome for 2005**	2003/02	2004/03	Budget for 2005/04	Estimated outcome for 2005**/04
<b>I Revenue<sup>1</sup></b>	<b>25,831</b>	<b>27,375</b>	<b>29,189</b>	<b>29,971</b>	<b>6.0</b>	<b>6.6</b>	<b>2.7</b>	<b>41,051</b>	<b>41,704</b>	<b>45,042</b>	<b>49,710</b>	<b>49,042</b>	<b>1.6</b>	<b>8.0</b>	<b>10.4</b>	<b>8.9</b>
1. Ordinary budget	25,490	26,431	27,538	28,686	3.7	4.2	4.2	39,048	39,881	42,054	46,310	45,964 <sup>4</sup>	2.1	5.4	10.1	9.3
2. Public investment budget	341	944	1,651	1,285	176.8	74.9	-22.2	2,003	1,823	2,988	3,400	3,078	-9.0	63.9	13.8	3.0
— Own revenue	...	...	...	...	—	—	—	14	77	75	100	80	450.0	-2.6	33.3	6.7
— Revenue from the EU	...	...	...	...	—	—	—	1,989	1,746	2,913	3,300	2,998	-12.2	66.8	13.3	2.9
<b>II. Expenditure<sup>1</sup></b>	<b>29,599</b>	<b>34,508</b>	<b>38,046</b>	<b>38,074</b>	<b>16.6</b>	<b>10.3</b>	<b>0.1</b>	<b>46,412</b>	<b>51,551</b>	<b>57,811</b>	<b>58,227</b>	<b>58,284</b>	<b>11.1</b>	<b>12.1</b>	<b>0.7</b>	<b>0.8</b>
1. Ordinary budget	26,184	29,317	32,558	34,574	12.0	11.1	6.2	39,398	43,116	48,289	50,177	50,584	9.4	12.0	3.9	4.8
— Interest payments <sup>2</sup>	6,988	7,391	7,483	8,711	5.8	1.2	16.4	9,134	9,416	9,464	9,800	9,730	3.1	0.5	3.6	2.8
— Primary ordinary budget expenditure	19,196	21,926	25,075	25,863	14.2	14.4	3.1	30,264	33,700	38,825	40,377	40,854	11.4	15.2	4.0	5.2
2. Public investment budget	3,415	5,191	5,488	3,500	52.0	5.7	-36.2	7,014	8,435	9,522	8,050	7,700	20.3	12.9	-15.5	-19.1
<b>III. Net deficit (-)/surplus (+)</b>	<b>-3,768</b>	<b>-7,133</b>	<b>-8,857</b>	<b>-8,103</b>				<b>-5,361</b>	<b>-9,847</b>	<b>-12,769<sup>3</sup></b>	<b>-8,517</b>	<b>-9,242</b>				
<b>Percentage of GDP</b>	<b>-2.6</b>	<b>-4.6</b>	<b>-5.3</b>	<b>-4.5</b>				<b>-3.8</b>	<b>-6.4</b>	<b>-7.6</b>	<b>-4.8</b>	<b>-5.1</b>				
1. Ordinary budget	-694	-2,886	-5,020	-5,888				-350	-3,235	-6,235	-3,867	-4,620				
2. Public investment budget	-3,074	-4,247	-3,837	-2,215				-5,011	-6,612	-6,534	-4,650	-4,622				
<b>IV. Primary deficit (-)/surplus (+)</b>	<b>3,220</b>	<b>258</b>	<b>-1,374</b>	<b>608</b>				<b>3,773</b>	<b>-431</b>	<b>-3,305</b>	<b>1,283</b>	<b>488</b>				
<b>Percentage of GDP</b>	<b>2.3</b>	<b>0.2</b>	<b>-0.8</b>	<b>0.3</b>				<b>2.7</b>	<b>-0.3</b>	<b>-2.0</b>	<b>0.7</b>	<b>0.3</b>				
Amortisation payments <sup>2</sup>	13,713	16,704	14,301	18,531	21.8	-14.4	29.6	20,860	21,615	20,356	21,786	21,767	3.6	-5.8	7.0	6.9
Ministry of National Defence programmes for the procurement of military equipment <sup>2</sup>	—	434	459	566	—	5.8	23.3	—	987	826	1,600	1,500	—	-16.3	93.7	81.6

1 For comparability purposes, tax refunds are included in expenditure and have not been deducted from revenue.

2 For the year 2002 including interest and amortisation payments taken over by the Ministry of National Defence. From 2003 onwards, such payments are recorded in the off-budget item 'Ministry of National Defence programmes for the procurement of military equipment'.

3 Including the subsidisation of OTE's personnel insurance fund (TAP-OTE) with €220 million.

4 Including the advance collection of revenue (€1,800 million) from the planned securitisation of tax arrears.

\* Provisional data.

\*\* According to the 2006 Draft State Budget.

Source: Ministry of Economy and Finance, General Accounting Office.

According to detailed data for the January-July period, the shortfall in indirect tax revenue stemmed from the following categories:

(a) Revenue from VAT on both domestic and imported goods and services decreased by 1.7% compared with the same period of 2004. As this decline occurred in spite of the beneficial effects of the increase in VAT rates,<sup>52</sup> higher international oil prices<sup>53</sup> and a rise of 6.3% in the value of retail sales,<sup>54</sup> it can only be attributed to increased tax evasion.

(b) Receipts from the special consumption tax on fuel shrank by 6.2% compared with the same period of the previous year, reflecting a 0.4% fall in total fuel consumption. According to provisional data,<sup>55</sup> lower fuel consumption stemmed mainly from diesel oil (−4.1%) and heating oil (−1.0%). By contrast, petrol consumption picked up by 2.8%. Data on fuel consumption imply that the decline in the fuel tax revenue was mainly due to higher tax evasion by substituting heating oil for diesel oil.<sup>56</sup>

(c) Revenue from car registration fees contracted by 3.8% in the January-July 2005 period, as new passenger car registrations dropped by 2.2% over the same period.

(d) Revenue from tobacco tax also fell by 5.5%, reflecting a 5.7% decline in cigarette consumption.

(e) Finally, receipts from all other indirect taxes also declined, with the exception of real property transfer tax (receipts from this tax rose by 25.3% in the January-July 2005 period), as relevant transactions were expedited in anticipation of an increase in “objective” (i.e. set for tax purposes) real estate prices.

Unlike the poor performance of indirect taxes,

revenue from direct taxes grew by 9.1%, as already mentioned, reflecting the following main factors:

(a) An increase of 11.3% in revenue from personal income tax withheld at the source (wages and pensions). This was the combined effect of the new tax schedule,<sup>57</sup> the 2005 nominal wage increases, the abolition of the tax deduction for family expenditure and the lowering of the tax discount for timely payment of the tax. These measures are estimated to have raised the tax burden on some categories of workers and pensioners whose income exceeds a certain threshold, e.g. workers or pensioners with taxable annual income of over €13,072, spouse without income and two children.<sup>58</sup>

(b) The high yield of the July 2004 measures concerning the settlement of pending tax cases and the collection of tax arrears. Relevant revenue increased by 60.3% in the January-July 2005 period compared with the corresponding period of 2004.

(c) Additional tax revenue from the one-off taxation of the adjusted value of fixed corporate assets (land and buildings).

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<sup>52</sup> Data on the January-July 2005 VAT revenue also reflect receipts from VAT payments made on the basis of the new rates during the last three months of that period.

<sup>53</sup> Compared with 2004, VAT revenue from oil products expanded by 16% in the seven-month period January-July 2005.

<sup>54</sup> See Table V.7.

<sup>55</sup> For the first half of 2005.

<sup>56</sup> Heating oil consumption is double that of diesel oil, implying widespread tax evasion. It should be noted that the special consumption tax on diesel oil (24.5 euro cents per litre) is twelve times as much as that on heating oil (2 euro cents per litre), leading to substantial differences in their respective retail prices. The Ministry of Economy and Finance is currently looking into ways of dealing with this problem.

<sup>57</sup> Including the adjustment of personal income tax allowance.

<sup>58</sup> The tax burden on lower incomes was reduced. Estimations assume that income growth between 2004 and 2005 is 3.5%, roughly as much as the increase in the regular salaries of civil servants (see Bank of Greece, *Annual Report 2004*, April 2005, Annex to Chapter VIII).

In the context of efforts to significantly reduce the budget deficit this year, it is planned to securitise central government tax arrears and transfer them to banks. Such securitisation<sup>59</sup> (the relevant legal framework was laid down by Article 71 of Law 3371/2005) is expected to bring about a deficit reduction of 1% of GDP.

During the January-August 2005 period, ordinary budget expenditure<sup>60</sup> increased by 6.2% compared with the corresponding period of 2004, reaching €34,574 million. Primary ordinary budget expenditure rose by 3.1% only, against a budgeted 4.0% for the year as a whole. By contrast, interest payments overshot the budget target of 3.6%, rising by 16.4% in January-August 2005. This reflected, on the one hand, increased borrowing in the early part of 2004 (with interest falling due in the first months of 2005) and, on the other hand, higher interest payments in April and May on interest rate swap agreements made in 2001 and maturing from 2004 onwards. However, as the corresponding interest payments for 2004 were made in September of that year, the increase in interest payments was only temporary and, therefore, should be smoothed by the inclusion of data for the next months.

Regarding the breakdown of primary expenditure, provisional data for the January-August 2005 period suggest the following:

(a) The increase in total personnel outlays (including pensions) was contained to 3.0%, owing to a moderation in average wage and pension growth in central government. In particular, central government payroll outlays rose by 4.0% and pension costs by 1.8%, while all other components of personnel outlays (health care costs, transportation costs, bonuses, etc.) declined.

(b) Over the same period, outlays for government grants rose by 10.6%.

(c) Payments related to Greece's contribution to the EU budget grew by 12.4%.

By contrast, all other expenditure components recorded a decline in the reviewed period, as their respective cash limits (which are set by ministerial decisions) were drastically squeezed.

Turning to the public investment budget, developments in the January-August 2005 period were marked by a 36.2% drop in expenditure over the corresponding period of 2004. Public investment budget revenue (i.e. inflows from the various EU funds) also fell, by 22.2%, during the same period. As a result of developments in public investment budget expenditure and revenue in the January-August 2005 period, the deficit of the public investment budget narrowed by 1.1 percentage points of GDP and that of the state budget slightly less (by 0.8 percentage point of GDP). Obviously, the evolution of the public investment budget – particularly investment expenditure – over the remainder of the year will crucially affect the overall budget deficit.

#### *4.2 Developments in the January-August 2005 period based on cash data*

Available data on a cash basis for the January-August 2005 period, which also reflect transactions excluded from the deficit, as calculated on an administrative basis, show that the central government deficit stood at €11,223 million or 6.2% of GDP, compared with €10,018 million or 6.0% of GDP in the corresponding period of 2004 (see Table V.11). The increase in the central govern-

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<sup>59</sup> A securitisation of tax arrears was effected by the Portuguese government in December 2003.

<sup>60</sup> Excluding grants for the settlement of overdue liabilities to hospital suppliers totalling about €1.8 billion. Also excluding payments of about €1.0 billion for the capital increase of the Agricultural Bank of Greece.

Table V.11

Net borrowing requirement of central government on a cash basis<sup>1,2</sup>

(Million euro)

	January-August				Years		
	2002	2003	2004	2005*	2002	2003	2004
<b>Central government</b>	<b>2,714</b>	<b>7,107</b>	<b>10,018</b>	<b>11,223</b>	<b>7,102</b>	<b>10,526</b>	<b>15,605</b>
– State budget	3,616	8,357	11,083	12,600	6,674	10,833	15,377
(Ordinary budget) <sup>3</sup>	1,993	4,232	7,324	10,488 <sup>5</sup>	2,128	4,106	8,841
(Public investment budget)	1,623	4,125	3,759	2,112	4,546	6,727	6,536
– OPEKEPE <sup>4</sup>	–902	–1,250	–1,065	–1,377	428	–307	228
<b>Percentage of GDP</b>	<b>1.9</b>	<b>4.6</b>	<b>6.0</b>	<b>6.2</b>	<b>5.0</b>	<b>6.8</b>	<b>9.3</b>

1 As shown by the respective accounts with the Bank of Greece and other credit institutions.

2 Excluding the repayment of government debt to the Social Insurance Institute (IKA) through bond issuance (Law 2972/2001, Article 51). The debt, totalling €3,927.9 million, was repaid in three instalments (2002: €1,467.4 million, 2003: €1,549.5 million and 2004: €911 million).

3 Including movements in public debt management accounts.

4 Payment and Control Agency for Guidance and Guarantee Community Aid. It replaced DIDAGEP (Agricultural Markets Management Service) as from 3 September 2001.

5 Including the subsidisation of hospitals with about €1,800 million and expenditure (of €1,028.5 million) for the capital increase of the Agricultural Bank of Greece. Also including proceeds of €1,090 million from the sale of 16.4% of OPAP (the Greek Soccer Pools Organisations) shares.

\* Provisional data.

Source: Bank of Greece.

ment borrowing requirement came as a result of a higher ordinary budget deficit on a cash basis (January-August 2005: 5.8% of GDP, January-August 2004: 4.4% of GDP). By contrast, the deficit of the public investment budget shrank from 2.2% of GDP in 2004 to 1.2% of GDP in the reviewed period, owing to a 36.2% decrease year-on-year in investment expenditure.

As already mentioned, the budget deficit on a cash basis has been affected by transactions that are excluded from the deficit on an administrative basis (which declined in the January-August 2005 period, as discussed in Section 4.1 above). Specifically, the cash deficit of the ordinary budget was affected upwards by: (a) payments totalling about €1,800 million for the settlement of overdue liabilities to public hospital suppliers; and (b) the disbursement of €1,028.5 million as government participation in the share capital increase of the Agricultural Bank of Greece. On the other hand, the proceeds (€1,090 million) from the sale of 16.4% of OPAP shares<sup>61</sup> contributed to the nar-

rowing of the deficit. If these extraordinary payments and receipts are excluded, the central government deficit on a cash basis is limited to €9,485 million or 5.3% of GDP, compared with €10,018 million or 6.0% of GDP in the corresponding period of 2004.

Finally, it should be noted that the 2005 deficit on a national accounts basis will not be affected by payments related to liabilities of hospitals, as the National Accounts have already included the total amount of these outlays (which are estimated to reach €2,200 million by the end of 2005) in the deficit figures for the years 2001-2004 (see Section 4.3). Similarly the level of the general government deficit, as recorded in the National Accounts in accordance with the definitions and the conventions of the European System of Accounts 1995 (ESA 1995), will not be affected by the aforementioned capital injection or privatisa-

<sup>61</sup> In the corresponding period of 2004, privatisation proceeds amounted to €192 million only.

**Table V.12**  
Revision of general government deficit  
(Million euro)

	2001	2002	2003	2004
1. Deficit as per Greece's report dated 28 February 2005	4,716	5,783	7,934	10,148
<i>Percentage of GDP</i>	3.6	4.1	5.2	6.1
2. Deficit as per Greece's report dated 20 September 2005	8,010	7,038	8,823	11,105
<i>Percentage of GDP</i>	6.1	4.9	5.7	6.6
<b>Revision of the deficit (2-1)</b>	<b>3,294</b>	<b>1,255</b>	<b>889</b>	<b>957</b>
<i>Percentage of GDP</i>	2.5	0.8	0.5	0.5
<b>Determinants of the revision</b>				
Downward correction of expected receipts from the various EU funds for the Public Investment Budget	2,975	1,045	607	1,134
Revision of tax revenue adjustment	-51	105	-76	-97
Public hospitals' liabilities <sup>1</sup>	370	193	235	103
Revision of social security organisations' results	-	-88	-51	-37
Other	-	-	174	-146

1 The amounts for hospitals presented in this table are in excess of those reported to Eurostat on 28 February 2005 (2002: €500 million, 2003: €500 million and 2004: €300 million). After the new report, hospitals' total liabilities came to €370 million for 2001, €693 million for 2002, €735 million for 2003 and €403 million for 2004.

**Source:** Greece's report to Eurostat dated 20 September 2005, submitted in the framework of the Excessive Deficit Procedure.

tion receipts, given that both represent financial transactions.

#### 4.3 New revision of fiscal data for the 2001-2004 period

In the context of the Excessive Deficit Procedure, revised general government deficit and debt figures for the years 2001-2004 were notified<sup>62</sup> to the Statistical Office of the European Communities (Eurostat). Based on the new data, the general government deficit figures of the 2001-2004 period have been revised upwards. Debt figures have remained unchanged in absolute terms, but debt-to-GDP ratios have declined, owing to a substantial upward revision of nominal GDP.

An analysis of the revised data shows that the general government deficit on average for the 2002-2004 period was 0.6 percentage point of GDP annually higher than the figures reported in

the EDP notification of 28 February 2005, while the respective deficit figure for 2001 was 2.5 percentage points higher (see Table V.12).

The increase in the deficit figures for the years 2001-2003 was due to two main factors: (i) the upward revision of public hospital liabilities (the amount of this revision is indicated in Table V.12); and (ii) a downward correction of Public Investment Budget expected receipts<sup>63</sup> from the EU Structural Funds, whereas the remainder resulted from minor

<sup>62</sup> On 20 September 2005. These data were then published by Eurostat in its news release No. 120/2005 of 26 September 2005. However, Eurostat noted that "in the case of Greece some pending issues remain for the recording of EU transactions, the accounts of social security and the amounts of other receivables and payables for the years 2002-2004." Eurostat is seeking, in a dialogue with the National Statistical Service of Greece (NSSG), a clarification of these issues allowing it to withdraw its reservations.

<sup>63</sup> These refer to amounts that would have been received from the EU funds on the basis of requests for the co-financing of investment projects which are submitted – along with the required supporting documents – to the European Commission. Such amounts however had not been absorbed by 31 December of each year from 2001 to 2003.

Table V.13

## Revision of general government debt

(Million euro)

	2001	2002	2003	2004
1. Debt as per Greece's report dated 28 February 2005	150,695	158,885	167,722	182,702
<i>Percentage of GDP</i>	114.8	112.2	109.3	110.5
2. Debt as per Greece's report dated 20 September 2005	150,695	158,885	167,722	182,702
<i>Percentage of GDP</i>	114.4	111.6	108.8	109.3
<b>Revision of the debt (2-1)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<i>Percentage of GDP</i>	-0.4	-0.6	-0.5	-1.2
GDP as per Greece's report dated 28 February 2005	131,317	141,669	153,472	165,280
GDP as per Greece's report dated 20 September 2005	131,769	142,369	154,153	167,169

Source: Greece's report to Eurostat dated 20 September 2005, submitted in the framework of the Excessive Deficit Procedure.

revisions in other items (as indicated in the same table).

For 2004, the above two factors have contributed €1,237 million to the upward revision of the deficit figure. On the other hand, among factors with a negative contribution were an upward revision of social security organisations' revenue and surpluses (by €97 and €37 million respectively), as well as changes amounting to €146 million in other items. As a result of the interplay between these developments, the increase in the 2004 general government deficit is limited to €957 million or 0.5% of GDP and therefore the general government deficit for 2004 reached 6.6% of GDP.

While the general government debt figures for the 2001-2004 period have not been revised in absolute terms, the debt-to-GDP ratio has been reduced by 0.5 percentage point of GDP on average for each year between 2001 and 2003 and by 1.2 percentage points of GDP for 2004 (see Table V.13). This reduction was exclusively due to the upward revision of nominal GDP for the respective years. The most significant change in nominal

GDP (almost €2.0 billion) referred to the year 2004 (see Table V.13).

## 5. Balance of payments: developments and prospects

### 5.1 Current account

#### 5.1.1 New presentation of the balance of payments and new methodology of recording interest on bonds

*The availability of detailed data that cover a sufficient time span makes possible the presentation, as from this report, of balance of payments figures according to a breakdown in line with the prevailing international practice.<sup>64</sup> Specifically, transfer payments and receipts are broken down into current and capital transfer payments and receipts. The criterion for this breakdown is the final purpose of the transfer payment, i.e. whether it is aimed at increasing the recipient's income (current transfer)*

<sup>64</sup> The new presentation started from the data release for July 2005 (see Bank of Greece Press Release, 16 September 2005).

**Table V.14**  
Current account balance

	2002	2003	2004
	Million euro		
New presentation (excl. capital transfers)	-10,221	-11,044	-10,453
Former presentation (sum of new current account balance and capital transfers balance)	-8,571	-9,805	-8,067
	Percentage of GDP		
New presentation (excl. capital transfers)	-7.2	-7.2	-6.3
Former presentation (sum of new current account balance and capital transfers balance)	-6.0	-6.4	-4.8

**Source:** Bank of Greece.

or increasing –directly or indirectly– the recipient’s stock of capital (capital transfer). On the basis of this breakdown, the transfers balance is now divided into two parts: the current transfers balance, which is classified under the current account, and the capital transfers balance, which is a separate section. Current transfers from the EU mainly include receipts from the Guarantee Section of the European Agricultural Guidance and Guarantee Fund (EAGGF) in the context of the Common Agricultural Policy (CAP), as well as Greece’s payments to the Community budget. Capital transfers from the EU primarily include receipts from the Structural Funds and the Cohesion Fund under the Community Support Framework.

The new current account balance now includes the trade balance, the services balance, the income account balance and the current transfers balance, while the capital transfers balance is an independent part of the balance of payments. Therefore, in this new presentation of the balance of payments, the algebraic sum of the current account balance and the capital transfers balance corresponds to the current account balance as presented in previous Bank of Greece reports. Naturally, the current account deficit according to the new presentation is higher than under the previous presentation,

since it does not include the considerable capital transfers surplus (see Table V.14).

Moreover, in the course of 2005<sup>65</sup> there was an important change in the methodology of recording interest on bonds in the balance of payments statistics. Specifically, interest payments are now recorded on an accruals basis in the balance of payments statistics, instead of on a cash basis, as was the case earlier (see Table V.15). This methodological change was effected with a view to fulfilling Greece’s obligation to harmonise the practice of recording interest with the international standards of the IMF<sup>66</sup> and Eurostat.<sup>67</sup> At the same time, the amount of interest paid to non-residents is recorded more accurately. Specifically, under the previous methodology, which was based on data on transactions reported through the banking system, when a breakdown into principal and interest payments was not available, banks used to report the entire amount paid, which was then recorded in the balance of payments statistics as principal payment. Furthermore, when interest or interest

<sup>65</sup> Starting from the data release for April 2005 (see Bank of Greece Press Release, 23 June 2005).

<sup>66</sup> *Balance of Payments Manual – 5th edition.*

<sup>67</sup> European System of Accounts – ESA 95.

**Table V.15**  
Income balance  
(Million euro)

	2003		2004	
	Old method	New method	Old method	New method
<b>Balance</b>	<b>-2,598</b>	<b>-3,756</b>	<b>-2,457</b>	<b>-4,113</b>
<b>Receipts</b>	<b>1,569</b>	<b>2,257</b>	<b>1,687</b>	<b>2,471</b>
Wages, salaries	337	337	280	280
Interest, dividends, profits	1,232	1 920	1,407	2,191
<b>Payments</b>	<b>4,167</b>	<b>6,013</b>	<b>4,144</b>	<b>6,584</b>
Wages, salaries	170	170	189	189
Interest, dividends, profits	3,997	5,843	3,955	6,395

Source: Bank of Greece.

and principal were reinvested, which is a very usual practice in portfolio management, banks, despite the relevant instructions, were not always able to report to the system two entries: an outflow of interest abroad and a simultaneous re-inflow of interest for investment in securities or deposits. These weaknesses had led to disputes about the exact amount of interest recorded in the balance of payments statistics. The Bank of Greece, in order to adjust the methodology to international standards, has been collecting since the beginning of 2004 (according to Bank of Greece Governor's Act 2537/11 February 2004) detailed data on a monthly basis on both banks' own portfolios and the portfolios managed by banks as custodians on behalf of third parties (residents or non-residents). This has gradually led to the creation of the necessary database and it is now possible to estimate the interest accruals corresponding to residents' portfolio holdings of foreign securities and to non-residents' portfolio holdings of Greek securities.<sup>68</sup>

### 5.1.2 Review of developments and the outlook for 2005 as a whole

In January-July 2005, the current account deficit (according to the new presentation) widened by €1,655 million over the same period of 2004 and

reached €8,194 million. This reflected (a) a growth of the oil deficit, as a result of spiralling world crude oil prices; (b) a considerable increase in the payments for the purchase of sea-going vessels; (c) a rise in the income account deficit (mainly owing to higher interest payments); and (d) a fall in the current transfers surplus. By contrast, the services surplus showed a considerable increase, which, however, was not enough to offset the above developments (see Chart V.22 and Table 7 of the Statistical Appendix).

As regards the outlook for 2005 as a whole, on the basis of the latest available data and certain reasonable assumptions about the course of domestic and world economic activity, it is estimated that the current account deficit (according to the new presentation) will rise to around 7.5% of GDP in 2005, from 6.3% in 2004 and 7.2% in 2003.<sup>69</sup> The algebraic sum of the current account deficit

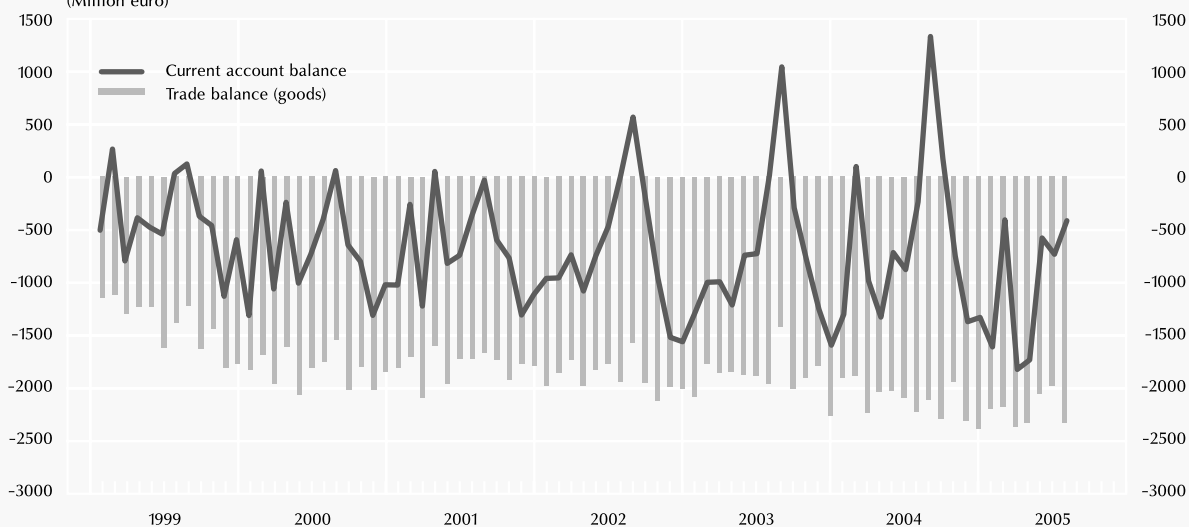
<sup>68</sup> On the basis of this information and the relevant estimates, the data on interest for the last three years (up to and including January 2003) were also revised. Thus, the balance of payments tables show comparable data on interest accruals for the years 2003-2005. Detailed revised data are available at the Bank of Greece website, <http://www.bankofgreece.gr/en/sdds/SDDSEXTERNALBALANCEOFPAYMENTS.xls>.

<sup>69</sup> These estimates also take into account the new methodology of recording interest on bonds.

Chart V.22

Trade balance and current account balance (January 1999 - July 2005)

(Million euro)



Source: Bank of Greece.

and the capital transfers surplus, which corresponds to the current account deficit under the previous presentation, is estimated to come close to 6% of GDP this year, compared with 4.8% in 2004 and 6.4% in 2003.<sup>70</sup> This estimate takes into account the rebound in tourist inflows, which is continuing after July, sustained strong growth in the world (notably the Chinese) economy, as well as persistently high world crude oil prices.

### 5.1.3 Trade balance

The increase in the trade deficit in the January-July 2005 period is exclusively attributable to a deterioration in the oil and ships' balances. By contrast, the trade deficit excluding oil and ships narrowed.

Specifically, the net oil import bill grew by €855 million to 21.1% of the overall trade deficit. This was a result of the large increase in the world crude oil price<sup>71</sup> and the appreciation of the US dollar against the euro over the same period.

Moreover, the trade balance has been consider-

ably affected by purchases and sales of second-hand sea-going vessels and orders for new vessels abroad. In recent years, the increase in such transactions by shipping companies resident in Greece has both boosted the transport capacity and driven down the average age of the Greek-owned merchant fleet.<sup>72</sup> It should be pointed out that sales of second-hand ships accounted for 11.6% of non-oil export receipts in 2004 (compared with a mere 2.6% in 2003), while in the first seven months of 2005 this share rose to 17.7% (compared with 11.3% in the same period of 2004). Furthermore, in the first seven months of 2005, purchases of ships rose to 7.6% of the total non-oil import bill, compared with 0.8% in the same

<sup>70</sup> Before the revision of the methodology of recording interest on bonds, the current account deficit (previous presentation) was calculated at 3.8% of GDP in 2004 and 5.6% of GDP in 2003.

<sup>71</sup> The gross oil import bill grew by 35.3%, while the average crude oil price in euro terms rose by around 47% year-on-year in the first seven months of 2005 (see also Section 1 of this chapter). These data imply a decline in oil import volumes.

<sup>72</sup> Bank of Greece, *Annual Report 2004*, April 2005, Box IX.2. Furthermore, according to recent data from Intertanko, the Greek-controlled tanker fleet grew considerably in the last ten years, reaching 28% of the world fleet (in terms of deadweight tonnage).

Table V.16

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

## A. Export receipts

	Percentage share of each product category in total export receipts					Percentage change in export receipts		
	2002	2003	2004	2004 Jan.-July	2005* Jan.-July	2003/2002	2004/2003	2005/2004 Jan.-July
Agricultural products	19.4	22.7	19.7	19.1	20.9	20.2	-11.5	8.3
Chemicals, plastics	11.1	12.8	13.5	13.4	14.1	19.3	7.3	4.2
Metallurgy <sup>1</sup>	8.7	8.2	11.1	9.8	14.4	-3.3	38.5	45.1
Machinery, appliances	5.4	7.5	6.2	6.1	6.6	42.2	-15.1	7.6
Means of transport excl. ships	0.3	0.7	1.5	1.0	1.8	124.8	116.2	60.3
Other manufacturing branches <sup>1</sup>	19.2	20.7	20.2	20.7	20.1	10.8	-0.8	-4.4
Unclassified goods <sup>2</sup>	35.9	27.4	27.8	29.9	22.1	-21.4	3.4	-26.9
Total (excl. oil and ships)	100.0	100.0	100.0	100.0	100.0	2.9	1.9	-1.3

## B. Import bill

	Percentage share of each product category in total import bill					Percentage change in import bill		
	2002	2003	2004	2004 Jan.-July	2005* Jan.-July	2003/2002	2004/2003	2005/2004 Jan.-July
Agricultural products	14.8	14.5	14.6	14.3	14.0	-2.6	9.8	-5.9
Chemicals, plastics	16.8	16.0	15.2	14.9	16.9	-5.2	4.3	8.7
Metallurgy	8.2	8.9	9.5	9.5	10.7	8.5	17.5	8.5
Machinery, appliances	21.6	21.4	20.7	21.1	18.6	-1.4	6.3	-15.1
Consumer durables	3.6	3.7	2.9	3.5	3.2	1.7	-13.0	-10.6
Capital goods	13.1	13.4	13.7	13.5	11.0	1.6	12.1	-21.6
Computers	2.3	1.9	2.0	1.9	2.2	-16.1	14.5	11.1
Fixed-voice and mobile telephony	2.6	2.4	2.1	2.2	2.2	-7.6	-3.9	-4.9
Means of transport excl. ships	12.2	14.2	14.5	14.8	15.1	16.0	11.3	-1.8
Passenger cars	6.3	7.2	8.1	7.3	7.6	14.2	23.1	0.4
Other manufacturing branches <sup>1</sup>	22.0	22.1	21.5	21.4	23.0	0.1	6.3	3.3
Other goods	0.4	0.3	0.4	0.3	0.2	-13.6	36.7	-48.1
Unclassified goods <sup>2</sup>	4.0	2.6	3.6	3.6	1.5	-37.1	52.3	-60.4
Total (excl. oil and ships)	100.0	100.0	100.0	100.0	100.0	-0.5	9.4	-3.8

1 Including raw materials used.

2 Products for which no code number has been reported.

\* Provisional data.

Source: Bank of Greece.

period of 2004. As a result of these developments, which were also affected by a hike in ship prices, the net import bill for ships came to €247 million in the first seven months of 2005, compared with net receipts of €567 million in the same period of 2004, thus pushing up the trade deficit by €814 million. However, it should be noted that increased purchases of ships largely reflect the positive assessment of Greek-based shipping

firms about the medium-term prospects of sea transport worldwide, owing to continued strong world trade growth. These prospects, in turn, create favourable conditions for an improvement in the current account balance over the medium term, with the backing of higher sea transport receipts.

By contrast, the trade deficit excluding oil and

Table V.17

## Breakdown of Greece's external trade by geographical area\*

## A. Exports

	Percentage share in the value of total exports					
	2001	2002	2003	2004	2004 Jan.-June	2005 Jan.-June
European Union (15)	42.0	43.5	46.7	47.8	50.2	47.7
Euro area	32.3	35.2	37.8	38.8	40.4	45.5
New Member States <sup>1</sup>	9.5	8.8	8.5	7.6	7.7	7.4
OECD countries <sup>2</sup>	12.9	12.3	14.3	13.3	12.6	13.3
USA	5.5	5.3	6.6	5.3	5.0	5.7
Balkan countries <sup>3</sup>	18.4	16.6	16.4	17.0	15.7	14.9
Commonwealth of Independent States	4.3	4.3	3.5	3.0	2.7	2.2
Northern Africa & Middle East countries <sup>4</sup>	6.7	7.1	5.5	6.4	6.7	6.8
China & Southeastern Asia <sup>5</sup>	1.9	2.1	1.6	2.0	1.6	2.6
Other countries	4.3	5.3	3.5	2.9	2.8	5.1
Total	100.0	100.0	100.0	100.0	100.0	100.0

## B. Imports

	Percentage share in the value of total imports					
	2001	2002	2003	2004	2004 Jan.-June	2005 Jan.-June
European Union (15)	54.5	52.2	54.5	53.7	55.9	53.6
Euro area	47.3	46.3	48.3	47.2	49.1	47.7
New Member States <sup>1</sup>	2.0	2.0	1.8	2.1	2.1	2.4
OECD countries <sup>2</sup>	13.8	17.9	18.9	15.9	17.1	15.0
USA	3.5	4.7	5.0	4.5	5.6	5.1
Balkan countries <sup>3</sup>	3.6	2.7	2.7	3.1	2.6	3.0
Commonwealth of Independent States	6.8	9.3	7.3	6.4	5.6	8.6
Northern Africa & Middle East countries <sup>4</sup>	10.4	7.0	7.2	8.8	8.0	8.8
China & Southeastern Asia <sup>5</sup>	5.2	5.0	4.7	5.1	5.3	5.2
Other countries	3.7	3.9	2.9	4.9	3.4	3.4
Total	100.0	100.0	100.0	100.0	100.0	100.0

1 Estonia, Latvia, Lithuania, Poland, Czech Republic, Slovakia, Hungary, Slovenia, Cyprus, Malta.

2 The OECD Member States not included in any other category.

3 Albania, Bulgaria, Romania and former Yugoslavia countries (Bosnia, Croatia, FYROM and Serbia-Montenegro).

4 Greece's major trading partners in Northern Africa and the Middle East.

5 Greece's major trading partners in Southeastern Asia.

\* All the data are provisional.

Source: NSSG.

ships contracted by €626 million. This reflects the fact that a €73 million (or 1.3%) decline in export receipts excluding oil and ships by far fell short of a €699 million (or 3.8%) decrease in the corresponding import bill.<sup>73</sup>

According to detailed Bank of Greece data on the breakdown of exports and imports excluding oil

<sup>73</sup> It should be noted that, according to Bank of Greece data, receipts from non-oil exports (including ships) rose by 6.3% in the January-July 2005 period, while the corresponding payments for imports grew by 3.2%. Besides, according to available provisional NSSG data, the value of non-oil exports increased by 4.8% in the first seven months of 2005, while the value of non-oil imports declined by 5.1%. It should be recalled that the differences between Bank of Greece and NSSG trade statistics arise for many reasons, the chief one being that the former relate to receipts and payments mainly through the domestic banking system, while the latter are based on customs data (for transactions with non-EU countries) and tax data (INTRASTAT) (for intra-EU transactions) and remain provisional for a long time.

Table V.18

## Export price index and effective exchange rate of the currency (2004-2005)

*(Percentage changes over same month of previous year)*

	Effective exchange rate of the domestic currency	Producer prices for the external market (prices of exported products)			
		Total		Excluding oil	
		In domestic currency	In foreign currency	In domestic currency	In foreign currency
<b>2004</b> Jan. ....	2.3	2.4	4.7	2.3	4.6
Feb. ....	1.8	1.3	3.2	2.5	4.4
March ....	1.3	3.0	4.3	2.6	3.9
Apr. ....	0.5	6.8	7.3	3.4	3.9
May ....	-0.2	8.9	8.7	3.7	3.5
June ....	-0.3	6.7	6.4	3.2	2.8
July ....	0.2	6.0	6.2	2.3	2.5
Aug. ....	0.5	5.7	6.2	2.0	2.5
Sept. ....	0.8	6.4	7.3	1.2	2.1
Oct. ....	0.9	5.8	6.7	0.0	0.8
Nov. ....	1.3	4.1	5.4	-0.5	0.7
Dec. ....	0.9	3.1	4.1	-0.8	0.1
<b>2005</b> Jan. ....	0.4	2.0	2.4	-0.9	0.5
Feb. ....	0.4	2.9	3.3	0.2	0.6
March ....	1.0	3.1	4.2	-0.3	0.7
Apr. ....	1.3	2.4	3.7	-0.9	0.3
May ....	0.6	1.2	1.8	-0.6	0.0
June ....	0.0	3.3	3.3	-0.2	-0.2
July ....	0.1	3.9	4.0	0.2	0.3
Aug. ....	0.3	4.4	4.7	0.5	0.7

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

and ships by product category (see Table V.16), the decline observed in export receipts in the January-July 2005 period is mainly accounted for by textiles, which are included in the "other branches" of manufacturing. By contrast, there was a rise in receipts from exports of all other products (other than products that cannot be classified,<sup>74</sup> which have an appreciable share and recorded a decline). As regards imports excluding oil and ships, there was a decrease in payments for agricultural products, machinery, consumer durables, telephony equipment, transport equipment, as well as unclassified products. By contrast, import payments for computers and other manufacturing products picked up. The decline in import payments for machinery was expected, since this category had increased markedly in the same period of 2004, owing to the completion of the Olympic projects and to imports of passenger cars for covering requirements during the Olympic Games.

Regarding the geographical breakdown of exports, on the basis of the latest available NSSG data for the first half of 2005 (see Table V.17), the share of exports to the euro area increased and the share of exports to the other 13 countries of the EU-25 shrank. Hence, the data point to some shift of exports from the other EU countries to the euro area countries. (Developments in export prices are shown in Table V.18.) With respect to the geographical breakdown of imports, the shares of imports from both the euro area and the other EU-25 countries dropped, while the share of imports from non-EU countries grew, mainly as a result of higher world crude oil prices.

<sup>74</sup> This is so because commercial banks, in submitting to the Bank of Greece data for the compilation of the balance of payments statistics, do not give a code number for these products. Since unclassifiable products have an appreciable share in total exports, growth rates for the other categories may not reflect accurately developments in those categories.

**Table V.19**  
World sea trade

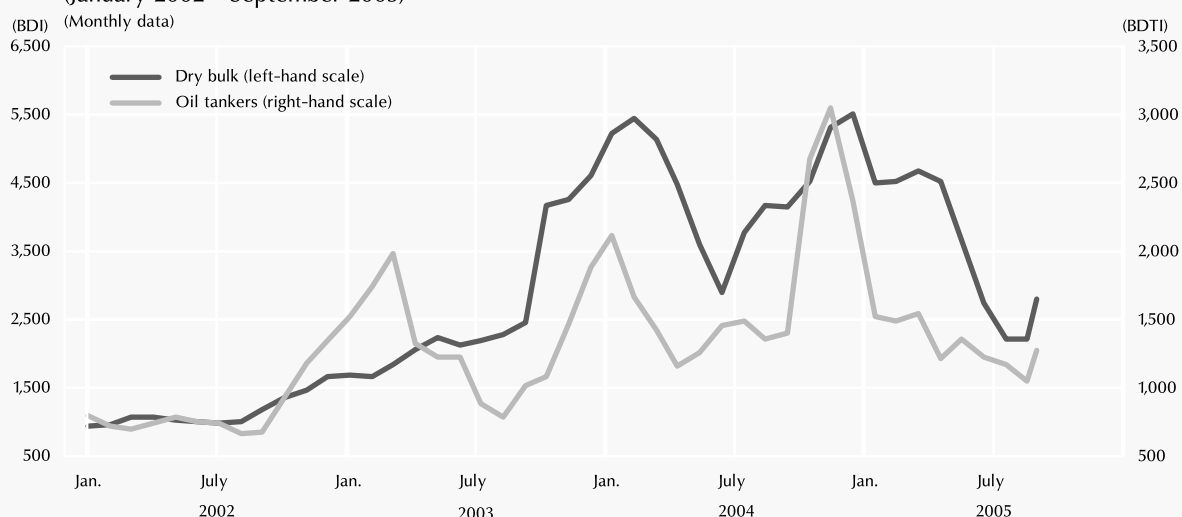
Year	Million tonnes				Percentage changes			
	Dry bulk	Oil & petroleum products	Other products	Total	Dry bulk	Oil & petroleum products	Other products	Total
2000	3,429	2,148	142	5,719	6.89	3.17	9.23	5.52
2001	3,504	2,207	143	5,854	2.19	2.75	0.70	2.36
2002	3,612	2,178	149	5,939	3.08	-1.31	4.20	1.45
2003	3,764	2,310	161	6,235	4.21	6.06	8.05	4.98
2004	3,942	2,405	169	6,516	4.73	4.11	4.97	4.51
2005*	4,084	2,438	177	6,699	3.60	1.37	4.73	2.81

\* Forecasts.

Source: Clarkson Research.

Chart V.23

Developments in freight rate indices for dry bulk ships and oil tankers  
(January 2002 - September 2005)



Source: Calculations based on Bloomberg data.

#### 5.1.4 Services balance

In the January-July 2005 period, the services surplus reached €8,355 million, i.e. it rose by 7.3% year-on-year. This reflected a continued –albeit slower– increase in net transport (mainly shipping) receipts (of 9.2% over the already high level in the same period of 2004),<sup>75</sup> as a result of sustained high growth in sea transport worldwide (see Table V.19).<sup>76</sup>

<sup>75</sup> Gross transport receipts rose by 8.6%.

<sup>76</sup> It should be noted that the average daily receipts of oil tankers rose to \$44,012 in 2004, from \$27,963 in 2001, \$16,362 in 2002 and \$29,351 in 2003. The corresponding figures for dry bulk ships were \$8,064 in 2001, \$7,133 in 2002, \$14,379 in 2003 and \$27,661 in 2004. As shown in Chart V.23, receipts were also boosted considerably by the large rise in freight rates. Of course, according to this chart, both dry bulk freight rates (BDI) and oil tanker freight rates (BDTI) have shown a decline in the first months of 2005. More recently, however, increased demand for oil tanker services seems to have led to a rebound in freight rates in mid-September.

Gross travel receipts, i.e. travel spending by non-residents in Greece, rose by €476 million or 9.9%, while gross payments, i.e. travel spending by residents abroad, increased by €197 million or 16.3%; as a result, net travel receipts grew by €279 million year-on-year. Finally, the “other” services deficit widened to €291 million, compared with €178 million in the same period of 2004.

#### 5.1.5 Income account

The income account deficit grew by €674 million over the same period of 2004 to €3,152 million as a result of increased net interest, dividend and profit payments. The widening of the deficit is mainly accounted for by a continued rise in non-residents’ old and new government bond holdings.

#### 5.1.6 Current transfers balance

In the January-July 2005 period, the current transfers surplus narrowed by €503 million year-on-year to €2,039 million. Underlying this were principally a drop in the net receipts of the “other” sectors (emigrants’ remittances, etc.) and, secondarily, a fall in net receipts from the EU. It should be noted that, while current receipts from the EU (mainly receipts from the EAGGF Guarantee Section in the context of the CAP) rose to €3,174 million, from €2,666 million in the same period of 2004, there was a considerable increase in Greece’s payments to the EU during the same period.<sup>77</sup>

#### 5.2 Capital transfers balance

In January-July 2005, the capital transfers surplus narrowed by €313 million year-on-year to €1,025 million. This primarily reflects a drop in capital transfers from the EU (mainly inflows from the Structural Funds and the Cohesion Fund

under the Community Support Framework – CSF) to €1,085 million, compared with €1,400 million in the same period of 2004. In the remainder of 2005, the rate of absorption from the Structural Funds is expected to pick up,<sup>78</sup> as in July 2005 negotiations with the European Commission on the final settlement of pending issues connected with CSF III were completed. At the same time, new arrangements were set in place for the control and management of projects and programmes, with a view to making the utilisation of Community resources more efficient and preventing further losses of funds.<sup>79</sup>

Taking into account the fact that inflows from the EAGGF Guarantee Section to Greece in the context of the CAP remain at the same levels every year, net EU transfers to general government (current transfers plus capital transfers) are expected to be between €4.3 billion and €4.5 billion in 2005.

#### 5.3 Financial account

In the first seven months of 2005, net financial inflows to the Greek economy increased year-on-year. Specifically, financial investment, i.e. the sum of direct, portfolio and “other” investment, showed a net inflow of €7,098 million, compared with €4,213 million in the same period of 2004.

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<sup>77</sup> In addition to regular payments to the Community budget, which are distributed almost evenly in the course of the calendar year, general government payments also include other amounts, which show occasional increases in certain months.

<sup>78</sup> By the end of July 2005, the rate of absorption from the Structural Funds had reached – on a cash basis – about 38% of the overall Community contribution under CSF III.

<sup>79</sup> In early June 2005, the European Commission decided to withdraw its threat to suspend payments to Greece following the audits conducted by the Community services for the past three years. At the same time, it imposed a fiscal correction, which was limited to €518 million. This amount (which concerns funds already paid by the Community) will be refunded through a withholding from future inflows in four annual instalments (€100 million in 2005, €100 million in 2006, €150 million in 2007 and €168 million in 2008).

This is almost exclusively accounted for by the contribution of portfolio investment (net inflow of €8,149 million), while the financial account had negative contributions from, primarily, “other investment” (net outflow of €891 million) and, secondarily, direct investment (net outflow of €160 million).

Underlying the substantial inflow for portfolio investment were, once again, chiefly purchases of Greek bonds by non-resident investors. Specifically, non-residents’ holdings of Greek bonds reached €16.7 billion in the January-July 2005 period, rising considerably year-on-year (from €12.1 billion). This reflects, among other things, sales of Greek government bonds to non-resident investors by domestic commercial banks in the context of their portfolio restructuring policies. Non-residents’ purchases of Greek corporate bonds were much lower (€2.3 billion, compared with €1.3 billion in the same period of 2004). At the same time, resident investors’ holdings of foreign bonds increased considerably (to €8.7 billion, from €6.6 billion in the same period of 2004).

Direct investment recorded a net outflow of €160 million, compared with a net inflow of €435 million in the same period of 2004. This was a result of a substantial decrease in non-residents’ investment in Greece (from €748 million in the first seven months of 2004 to €398 million in the same period of 2005), while residents’ investment abroad increased from €312 million in the first seven months of 2004 to €558 million in the same period of 2005. The most important direct

investments in Greece by non-residents concern a €60 million inflow for the acquisition of Elliniki Technodomiki by a Luxembourg-based company and a €40 million inflow in the context of the acquisition of Interamerican’s participation in Nova Bank’s capital by the Portuguese bank BCP. On the other hand, the acquisition of Jubanka bank in Serbia by Alpha Bank, worth €152 million, and Cosmote’s participation in Cosmorom’s capital increase in Romania, worth €120 million, are the largest direct investments by residents abroad. In general, the fact that foreign direct investment remains limited continues to be an important constraint on the development of the Greek economy.

Under “other investment”, a net outflow of €891 million reflects the fact that a €13,583 million outflow, mainly for residents’ investment in deposits and repos abroad, more than offset a €12,693 million inflow, principally for non-residents’ investment in deposits and repos in Greece.

Greece’s reserve assets dropped by €98 million in the January-July 2005 period, to stand at €1.9 billion at end-July 2005.<sup>80</sup>

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**80** It should be recalled that, since Greece joined the euro area in January 2001, reserve assets, as defined by the European Central Bank, include only monetary gold, the “reserve position” with the IMF, “Special Drawing Rights”, and Bank of Greece 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.



## VI. The current state of the Greek economy and challenges for economic policy and the social partners

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### 1. The current state of the economy

As mentioned in the previous chapters, economic growth in Greece is projected to slow down in 2005, albeit less than expected earlier, remaining relatively high and far exceeding average growth in the euro area or the EU for the tenth consecutive year. Inflation has picked up this year, owing to the impact of the world oil price rise and the increase in indirect taxes announced on 29 March 2005; the inflation differential between Greece and the euro area has widened. The current account deficit is expected to grow, reflecting, *inter alia*, the effect of rising oil prices. The rate of increase in wages has slowed down in 2005, but is still high. The fiscal policy stance ceased to be expansionary and the continuous worsening of fiscal imbalances since 2000 came to a halt in 2005; however, the imbalance remains substantial, putting macroeconomic stability at risk. Finally, a number of important measures were adopted to address the structural weaknesses of the Greek economy.

Real GDP growth is expected to be around 3.5% in 2005, compared with 4.7% in 2004, continuing to be driven by domestic demand. The contribution of the real external balance to GDP growth is estimated to turn out positive for the first time in many years. This is attributable to the fact that, after a sharp rise in 2004 associated with the Olympic Games, the volume of goods and services imports has decreased, or increased only slightly in 2005, while the volume of goods and services exports has grown, but at a considerably lower rate.<sup>1</sup> The rate of increase in private con-

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<sup>1</sup> According to NSSG revised quarterly national accounts data, goods and services imports (at constant prices) dropped by 1.8% year-on-year in the first half of 2005, compared with a rise of 8.5% in the same period of 2004. The annual rate of increase in goods and services exports (at constant prices) was 4.4% in the first half of 2005, compared with 8.4% in the first half of 2004.

sumption is expected to slow down to 3-3.5%, from 4.4% (according to revised data) in 2004. While private – notably business – investment is expected to rise, total investment is projected to remain virtually unchanged in 2005, mainly reflecting drastic cuts in public investment. Furthermore, government consumption growth has decelerated.<sup>2</sup> The projected GDP growth rate of around 3.5% in 2005 is somewhat higher than earlier forecasts by the Bank of Greece<sup>3</sup> (as well as various international organisations and analysts), which had not taken into account the NSSG's recent revision of the growth figure for 2004 from 4.2% to 4.7% and had also overestimated import volumes and underestimated tourist activity.

The current account deficit as a percentage of GDP is expected to widen in 2005 (see Chapter V.5), thus reversing the improvement recorded in 2004, since the impact from the oil price hikes and higher interest payments (as a result of a continuing rise in Greek government debt held by non-residents) more than offset the favourable effect of lower imports and increased receipts from shipping and tourism.

Average annual inflation is expected to be higher in 2005, at 3.6% in HICP terms and 3.7% in CPI terms, from 2.9% and 3.0% respectively in 2004, but this is exclusively due to extraordinary factors, namely the impact of the world oil price rise and the increase in indirect taxes as from April 2005. Core inflation (as measured by the HICP excluding energy and unprocessed food prices) is expected to fall slightly (to 3.2% at average annual levels, from 3.4% in 2004).<sup>4</sup> These projections for inflation in 2005 represent a downward revision to the April 2005 forecast, in the Bank of Greece *Annual Report 2004*, for a CPI average annual increase of around 4%, despite a larger than expected rise in oil prices in the meantime. The difference is partly attributable to the fact that

those forecasts were based, *inter alia*, on the technical assumption that the increase in indirect taxes would be fully passed on to consumers, while the inflation outturn suggests that firms have absorbed part of this increase. It also reflects the relative containment in the increase of public utility rates and the more effective market surveillance by the Ministry of Development and the Competition Commission.

As mentioned in Chapter V, 2005 saw a stepping up of efforts to correct fiscal imbalances, as well as a slowdown in the growth of average earnings in the whole economy. However, fiscal imbalances remain exceptionally large. Moreover, despite the slowdown in wage increases, unit labour costs continue to rise at a considerably faster pace than in the euro area; as a result, inflation remains relatively high and the international competitiveness of the Greek economy continues to be eroded. At the same time, although a number of measures have been implemented or decided upon recently to address the structural problems of the Greek economy, the structural reform effort must continue in order to boost potential output growth and to ensure high rates of growth over the longer term.

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## 2. Challenges for economic policy and the social partners

In a few months, it will be five years since Greece joined the euro area and adopted the euro. The benefits from EMU entry are important (see

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<sup>2</sup> According to NSSG revised quarterly national accounts data, government consumption (at constant prices) grew at an annual rate of 3.4% in the first half of 2005, compared with 3.7% in the first half of 2004.

<sup>3</sup> In the *Annual Report 2004* (April 2005), GDP was forecast to grow by 3%. Earlier, in the *Monetary Policy 2004-2005* (February 2005), it had been forecast to grow by 3.3%.

<sup>4</sup> Core CPI inflation, i.e. CPI inflation excluding fuel and fresh fruit and vegetables, is projected to fall to 3.1% (from 3.3% in 2004).

Chapter II). Since 2001, inflation has stood at levels considerably lower than in the previous fifteen years and real GDP growth has been substantially stronger than before. Euro area entry has meant an increase in credibility, since the country has joined a monetary regime of low and stable inflation. The gain in credibility is confirmed by the drastic decline in the yield spread between the Greek Government 10-year bond and the comparable German bond following the adoption of the euro.

However, as was stressed in the latest Bank of Greece *Annual Report* (April 2005), sustainable strong GDP growth will require a transformation of the economy from one where growth is driven mainly by domestic demand – as has been the case in recent years – into one where supply responds more effectively to changing economic conditions and can successfully withstand the increasingly intense competition in world markets, so that the external sector becomes a key driver of growth. An essential precondition for such a transformation is the reduction of macroeconomic imbalances – mainly achieving fiscal consolidation and ensuring price stability<sup>5</sup> – so as to boost confidence and improve the economy's international price competitiveness. At the same time, it is necessary to raise the economy's production potential, through an increase in investment and structural reforms that will contribute to higher productivity.

### 2.1 Fiscal policy

As part of the Excessive Deficit Procedure for Greece,<sup>6</sup> in March 2005 the Greek government prepared a revised Stability and Growth Programme Update (SGPU) for the 2004-2007 period, which was examined by the ECOFIN Council on 12 April 2005. The programme targets a reduction of the general government deficit ratio below 3% of

GDP by 2006 and continued fiscal adjustment in 2007.

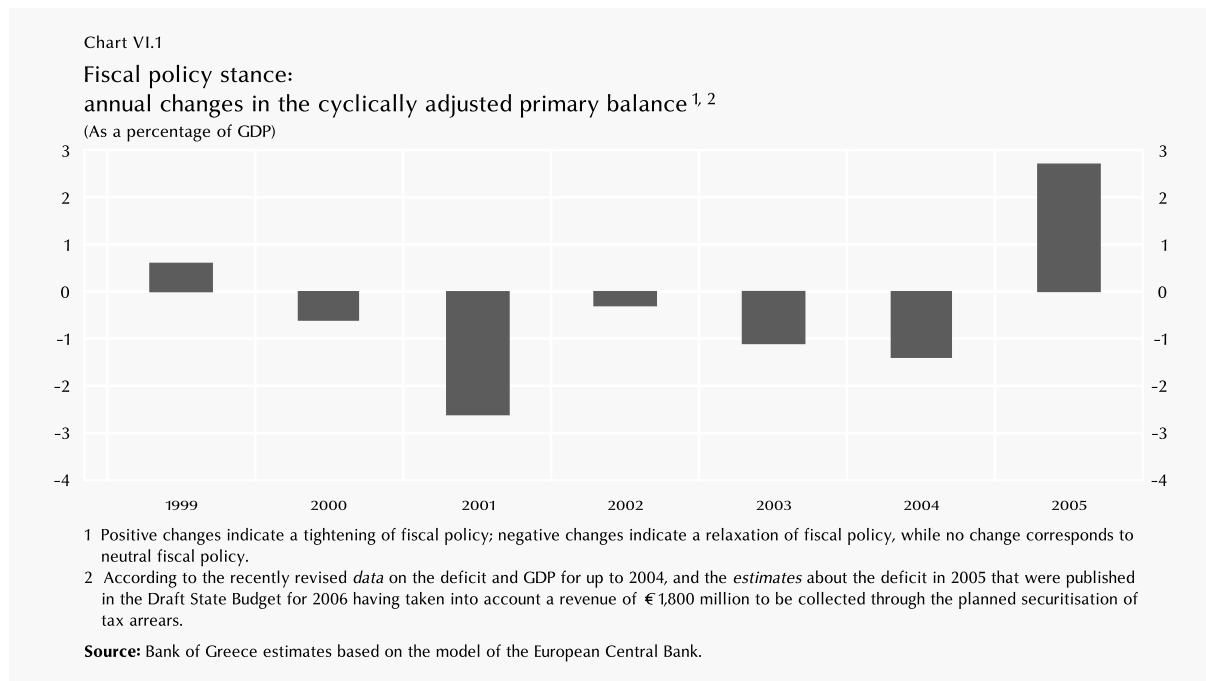
The "baseline scenario" of the revised SGPU envisages a gradual reduction of the fiscal deficit to 3.5% of GDP in 2005, 2.8% of GDP in 2006 and 2.2% of GDP in 2007. The public debt-to-GDP ratio (110.5% in 2004 according to the SGPU) is projected to decline substantially by 2007 (to 99.9%), remaining however well above the Maastricht reference value of 60%. For 2005 in particular, the general government deficit (on a national accounts basis) is projected to decrease by 2.6 percentage points (baseline scenario) reflecting the lower central government deficit (on an administrative basis), as the surplus of the other sections of general government (mainly social security organisations) is expected to remain unchanged as a percentage of GDP.

Previous Bank of Greece reports have noted that in the five-year period 2000-2004 the fiscal policy stance was expansionary, as indicated by the declining trend of the cyclically adjusted general government primary surplus (see Chart VI.1). In 2005, based on the State Budget implementation so far and government estimates regarding the year-end outcomes of fiscal aggregates, the fiscal policy stance has reversed and has become restrictive, thus contributing to a correction of fiscal imbalances, albeit not at the pace envisaged by the revised SGPU. Moreover, the fiscal adjustment does not sufficiently rely on measures that would ensure a structural and permanent improvement in the fiscal position. According to the Draft State Budget for 2006 (3 October 2005), the general government deficit in 2005 should decrease to 3.6% of GDP (i.e. a level consistent with the 1st

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<sup>5</sup> Or inflation at a level below but close to 2%, according to the ECB's definition.

<sup>6</sup> See Bank of Greece, *Annual Report 2004*, April 2005, p. 43.



alternative scenario of the revised SGPU). However, this significant reduction (of 3.0 percentage points, from 6.6% in 2004 according to revised data) is expected to be achieved partly through measures of a temporary nature. These include the collection of revenue through the planned securitisation of tax arrears (this item had not been included in the Budget) and a substantial cut of Public Investment Budget expenditure.<sup>7</sup> These extraordinary measures are expected to offset a considerable shortfall of Ordinary Budget revenue.<sup>8</sup> As this shortfall is not justified by the course of economic activity, whose growth is satisfactory, it is largely due to increased tax evasion.

Fiscal adjustment efforts must continue in the coming years. In addition to a major reduction in the government deficit in 2005-2006, a permanent further improvement in the fiscal position is required, not only to achieve the targets set in the SGPU and fulfil the country's commitments under the Stability and Growth Pact (see Box VI.1), but also for the reasons discussed below. Specifically, the level of public debt (109.3% of GDP in 2004

based on revised GDP data), combined with the expected increase in expenditure connected to population ageing, renders fiscal consolidation urgently necessary if the debt-to-GDP ratio is to fall to 60% by 2015, when government expenditure for pensions will start growing as a percentage of GDP. The gradual reduction of public debt requires sizeable primary surpluses in the years ahead, to be achieved by limiting primary expenditure on a permanent basis and by increasing revenue. Aside from reducing government deficit, it is also necessary to change the structure of both expenditure and revenue. This will secure sufficient resources for financing the necessary public investment in infrastructure and human capital and will allow a further cut in direct tax rates. With policies along these lines, the reduction of deficits, essential for a permanent improvement of the fiscal position, will

<sup>7</sup> This securitisation is expected to result in revenue totalling €1,800 million, equivalent to a deficit reduction of 1% of GDP. The shortfall of Public Investment Budget expenditure in the first eight months of the year contributes to a deficit reduction of 0.6% of GDP.

<sup>8</sup> The shortfall of Ordinary State Budget revenue in the first eight months of 2005 adds 0.9% of GDP to the deficit.

## BOX VI.1

### The reform of the Stability and Growth Pact

#### 1. The Stability and Growth Pact and its recent reform

The Stability and Growth Pact was established in order to improve economic policy coordination within Economic and Monetary Union (EMU) and ensure budgetary discipline and sustainable growth. Sound fiscal policies are essential for the smooth operation of EMU, and a precondition for efficient monetary policy conduct, macroeconomic stability, growth and cohesion in the euro area.

In 1997, the European Council complemented the Maastricht Treaty provisions on economic policy and the common fiscal rules in EMU with the Stability and Growth Pact (SGP),<sup>1</sup> which strengthened budgetary surveillance and economic policy coordination and accelerated and clarified the implementation of the procedure for correcting excessive fiscal deficits. One of the SGP's cornerstones is that Member States should seek to achieve budgetary positions close to balance or in surplus over the economic cycle, as this allows automatic stabilisers<sup>2</sup> to operate freely without risk of breaching the reference value of 3% for the fiscal deficit as a percentage of GDP.

Budgetary developments in recent years, chiefly the high government deficits in several Member States and the failure of EU fiscal rules and mechanisms to correct such imbalances,<sup>3</sup> have led to the decision to amend some of the SGP's rules. Notwithstanding such amendments, ensuring sound public finances has remained the SGP's guiding principle.

Following the European Commission's Communication of 3 September 2004 on "Strengthening economic governance and clarifying the implementation of the Stability and Growth Pact", the extraordinary ECOFIN Council of 20 March 2005 adopted a report entitled "Improving the implementation of the Stability and Growth Pact". The European Council, at its meeting of 22 March 2005, endorsed that report, which constitutes part of the new SGP, and called upon the Commission to draw up proposals for the amendment of the relevant Council Regulations.

Building on the Commission's proposals, the Council decided in June to issue the Regulations amending the SGP. These Regulations were published in the *Official Journal* of the EU on 7 July 2005<sup>4</sup> and came into effect twenty days later.

Most observers agree that the amendments concerning the SGP's preventive arm and the improvement of economic governance are steps in the right direction. Reservations have been expressed as to the amendments referring to the SGP's corrective arm and its ability to ensure fiscal discipline (see the ECB's view further below).

On its part, the Commission, through the competent Commissioner, Joaquin Almunia, noted that it "will continue to implement the Pact's rules with transparency, →

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**1** The SGP comprised two Council Regulations – (i) Council Regulation (EC) No 1466/97 on the strengthening of the surveillance of budgetary positions and the surveillance and coordination of economic policies, *Official Journal (OJ)* L 209, 2 August 1997, pp. 1-5, and (ii) Council Regulation (EC) No 1467/97 on speeding up and clarifying the implementation of the excessive deficit procedure, *OJ* L 209, 2 August 1997, pp. 6-11 – and a political agreement reached at the Amsterdam European Council of 17 June 1997 (Resolution on the Stability and Growth Pact).

**2** Some components of public expenditure and revenue are sensitive to changes in income and economic activity. Thus, as the economy enters into a cyclical downturn, the deficit automatically widens since government expenditure increases and tax revenue decreases, thereby smoothing the effects of the downturn. The opposite happens during a cyclical expansion, i.e. the deficit automatically narrows (in fact it should turn into a surplus if the budgetary position is balanced throughout the economic cycle). In this fashion, fiscal policy automatically mitigates the effects of cyclical fluctuations.

**3** For a discussion of recent developments regarding Member States in an excessive deficit situation, see Chapter III.2.4 of this report.

**4** Council Regulation (EC) No 1055/2005 of 27 June 2005 amending Council Regulation (EC) No 1466/97, and Council Regulation (EC) No 1056/2005 of 27 June 2005 amending Council Regulation (EC) No 1467/97. In order to facilitate implementation of the reforms by all Member States and relevant EU institutions and bodies, the "Code of Conduct on the content and format of the stability and convergence programmes" for the implementation of the Stability and Growth Pact, originally endorsed by the ECOFIN Council of 10 July 2001, was also updated (following consultation with the Commission and the Economic and Financial Committee). The updated Code will be submitted to the Council for approval.

→ equity but also rigour to ensure sound fiscal policies by all Member States, a necessary prerequisite for stronger growth in Europe".<sup>5</sup>

It is worth stressing that, although individual provisions of the SGP have been strongly debated, its usefulness is generally recognised. Even advocates of its reform admit that the Stability and Growth Pact is necessary to ensure observance of the fiscal rules and coordination of economic and fiscal policies and, ultimately, the smooth operation of EMU. There has been consensus that sound public finances and coordinated economic policies are essential for a well-functioning monetary union, particularly for the maintenance of monetary stability and the creation of conditions conducive to sustainable growth and a rise in employment.

## 2. The major changes to the Stability and Growth Pact

The most important changes made to the SGP as a result of the adoption of the ECOFIN Council Report of 20 March 2005 by the European Council and the amendment of the relevant Council Regulations are the following:

### 2.1 Preventive arm of the SGP<sup>6</sup>

- Definition of the Medium-Term budgetary Objective (MTO)

Medium-term objectives may be differentiated to take into account the diversity of economic and fiscal positions and developments and the sustainability of public finances. "Implicit liabilities" (related to increased government expenditure in view of population ageing) should be taken into account once appropriate criteria and modalities for doing so have been established.<sup>7</sup> Country-specific objectives may diverge from the requirement of a budgetary position close to balance or in surplus.<sup>8</sup> For euro area countries and those participating in the Exchange Rate Mechanism (ERM) II, the country-specific MTOs (in cyclically adjusted terms, *net of one-off and temporary measures*) should range between -1% of GDP for countries with low debt/high potential growth and balance or surplus for countries with high debt/low potential growth.<sup>9</sup>

These objectives should provide a safety margin with respect to the 3% of GDP government deficit ratio and ensure rapid progress towards sustainability.<sup>10</sup>

- Adjustment path to the medium-term objective

Euro area countries and ERM II Member States<sup>11</sup> that have not yet achieved their MTO should pursue an annual adjustment (in cyclically adjusted terms, *net of one-off and temporary measures*) of 0.5% of GDP. Efforts for fiscal adjustment should be greater in good times (economic upturns) and could be more limited in bad times (downturns).

- Taking structural reforms into account

Member States that implement major structural reforms which have long-term cost-saving effects (including by raising potential growth), and therefore a verifiable impact on the long-term sustainability of public finances, may deviate from the adjustment path to their MTO. However, this applies under the condition that the deviation is only temporary – i.e. the budgetary position is expected to return on course towards the MTO within the programme period – and that a safety margin with respect to the fiscal deficit reference value (3% of GDP) is preserved. →

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<sup>5</sup> "Stability and Growth Pact reform: Commission welcomes agreement on new Regulations", European Commission Press Release, 27 June 2005.

<sup>6</sup> The SGP's preventive arm is based on Council Regulation (EC) No 1466/97, as amended by Council Regulation (EC) No 1055/2005.

<sup>7</sup> The Commission will submit a relevant report to the Council by the end of 2006.

<sup>8</sup> In practice, government deficits of up to 0.5% of GDP were interpreted by the Commission and the Council as compliant with the close to balance budgetary position requirement.

<sup>9</sup> This distinction between countries with low debt/high potential growth and countries with high debt/low potential growth appears in the ECOFIN Council Report of 20 March 2005, which, as already mentioned, forms an integral part of the new SGP.

<sup>10</sup> For EU Member States not participating in the euro area or in ERM II, the Regulation does not define a specific range for the MTO or a minimum annual adjustment. Therefore, such countries fall under the other provisions of the Regulation, which envisage country-specific MTOs that provide a safety margin with respect to the reference value of 3% in any specific year and ensure rapid progress towards sustainability (Article 2(a) of Council Regulation (EC) No 1466/97, as amended by Council Regulation (EC) No 1055/2005).

<sup>11</sup> See footnote 8.

→ 2.2 Corrective arm of the SGP (Excessive Deficit Procedure)<sup>12</sup>

- Definition of “exceptional and temporary” deficit excess

Amendments in this field refer to the redefinition of the exceptions provided for in Article 104(2)(a) of the Treaty, concerning the initiation of the excessive deficit procedure (for Member States with deficits close to the reference value). By the amendment, an excess over the reference value is defined as exceptional when it results from a negative annual GDP growth rate or from an accumulated loss of output during a protracted period of very low annual GDP growth relative to its potential. It should be noted that, as a rule, prior to the SGP’s reform an annual GDP fall of at least 2% was necessary for the “exceptional circumstances” clause to be invoked. Also, under certain conditions, an excess over the reference value could be considered exceptional even in cases of a less than 2% per year fall in GDP.<sup>13</sup>

- Definition of “other relevant factors”

Article 104(3) of the Treaty stipulates that the Commission, in its report to the Council prepared in case of a Member State’s non-compliance with the fiscal discipline criteria, should take into consideration whether the deficit exceeds government investment expenditure, as well as “all other relevant factors”. Prior to the SGP’s reform, neither its regulations nor any other official text offered a definition of these “other relevant factors”. The amendment assigns a specific content to this term, as including the following:

- factors affecting the medium-term economic developments and prospects – in particular potential growth, the prevailing cyclical conditions, the implementation of the Lisbon agenda and policies to foster research and development and innovation; and
- factors affecting the medium-term budgetary developments and prospects – in particular, fiscal consolidation efforts in good times, debt sustainability, public investment and the overall quality of public finances.

Moreover, the Commission should also take into consideration any other factors which, in the opinion of the Member State concerned, are relevant to a comprehensive assessment of the excess over the reference value in qualitative terms.

- Pension reforms

In assessing budgetary positions as part of the excessive deficit procedure, the Commission and the Council duly take into consideration the implementation of pension system reforms. This refers in particular to the introduction of a multi-pillar system that includes both a publicly managed pillar and a mandatory fully funded pillar. It should be noted that such pension reforms entail increased budgetary costs in the short term before medium- to long-term savings can be achieved. Therefore, small excesses over the deficit reference value will be taken into account when they reflect the cost of pension reforms in the direction described above. Furthermore, the net cost of such reforms will be taken into consideration when assessing whether the excessive deficit has been corrected and whether the deficit has declined substantially and continuously and has come close to the reference value.

- Increased focus on debt and sustainability

The debt surveillance framework is strengthened, given that the assessment of whether the government debt ratio “is sufficiently diminishing and approaching the reference value at a satisfactory pace” is carried out in qualitative terms while also taking into account macro-economic conditions and debt dynamics. The higher the debt ratio is, the greater the effort for its rapid reduction should be. For Member States with a debt ratio above the reference value of 60% of GDP, the →

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<sup>12</sup> The SGP’s corrective arm is based on Article 104 of the Maastricht Treaty and on Council Regulation (EC) No 1467/97, as amended by Council Regulation (EC) No 1056/2005.

<sup>13</sup> Specifically, a fall of 0.75%-2.00% accompanied by an abrupt downturn and an accumulated loss of output relative to past trends. In cases where the negative rate of change in GDP was not over 0.75% per year, Member States had undertaken not to invoke the exceptional nature of their deficit regarding severe economic downturns (see the European Council Resolution of 17 June 1997 on the Stability and Growth Pact).

→ ECOFIN Council will formulate recommendations on debt dynamics in its opinions on the stability and convergence programmes.<sup>14</sup>

- Deadlines for the correction of excessive deficits

Deadlines for the correction of an excessive deficit may be extended in order to allow the Member State in question to adopt structural (as opposed to temporary) measures.<sup>15</sup> In addition, procedural deadlines for the Commission to prepare an Excessive Deficit Procedure (EDP) report, for Member States to submit a programme of corrective measures and for the Council to issue decisions are extended by one to two months as per the case. Furthermore, the initial deadline for correcting an excessive deficit may be revised if unexpected adverse economic events with unfavourable budgetary effects occur during the EDP. Repetition of a recommendation under Article 104(7) or a notice under Article 104(9) is possible if the Member State concerned has taken effective action in compliance with the initial recommendation or notice.

- Minimum annual improvement

The SGP's reform introduces the notion of minimum fiscal improvement, which Member States in an excessive deficit position are required to achieve. This is defined as an annual improvement of at least 0.5% of GDP in the cyclically adjusted balance *net of one-off and temporary measures*.<sup>16</sup>

### 2.3 Improvement of the SGP's implementation

The ECOFIN Council, in its aforementioned report on "Improving the implementation of the Stability and Growth Pact", stressed the importance of improving governance and strengthening national ownership of the fiscal framework. To this end, the report called for:

- Close and constructive cooperation among Member States, the Commission and the Council in the process of economic and fiscal surveillance in order to guarantee certainty and effectiveness to the SGP's rules.
- National institutional bodies to assume a more promi-

nent role in budgetary surveillance, so as to strengthen national ownership of the fiscal rules and objectives.

- Continuity with respect to the budgetary targets endorsed by the Council on the basis of stability/convergence programmes, as well as description of the specific policies and measures for their achievement, in case of a change of government.

- Presentation of stability/convergence programmes and Council opinions thereon to national Parliaments.

- Budgetary projections based on realistic macroeconomic forecasts. In this respect, the usefulness of Commission forecasts is highlighted.

- Member States to affirm their commitment to produce reliable statistical data, in view of the great importance of fiscal statistics; imposing sanctions should be considered in cases of non-compliance (a relevant provision will be included in a forthcoming Council Regulation for the improvement of fiscal statistics).

Given that this ECOFIN Council report was endorsed by the European Council and forms part of the new Stability and Growth Pact, the above proposals are already part of the SGP.

### 3. The ECB's view on the reform of the SGP

In the context of the consultation procedure involving the European Parliament and the ECB, as required by the Treaty, the ECB expressed its view on the SGP's →

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<sup>14</sup> See ECOFIN Council Report of 20 March 2005, p. 17.

<sup>15</sup> The new rules have already been applied in the cases of Italy and Portugal: Following the Council's decision of 28 July 2005 on the existence of an excessive deficit in Italy, the relevant Council Recommendation allows the Italian government two years (instead of one) to put an end to its excessive deficit. As for Portugal, the respective Council Recommendation (of 20 September 2005) concedes it three years to do the same. In addition, as far as euro area countries are concerned, the cases of the excessive deficits of France, Germany and Greece had already been treated in the spirit of the then under formation rules on fiscal adjustment deadlines.

<sup>16</sup> It should be noted that with respect to correcting excessive deficits – and not just approaching the MTOs – no distinction is made between euro area countries and ERM II participants on the one hand and other Member States on the other: the requirement of an annual fiscal improvement of at least 0.5% of GDP applies to all EU Member States.

→ reform through a statement of its Governing Council on 21 March 2005 (just after the ECOFIN report was released on 20 March 2005). More officially, the ECB expressed its view in its two Opinions of 3 June 2005 on the proposed Council Regulations. Furthermore, with an article entitled “The reform of the Stability and Growth Pact” in the August 2005 issue of its *Monthly Bulletin*, it discussed and assessed the most important changes entailed by the SGP’s reform.

- Statement of the ECB Governing Council on 21 March 2005

Regarding the ECOFIN Council’s report of 20 March 2005 on the improvement of the implementation of the SGP, the ECB Governing Council issued the following statement:

*“The Governing Council of the ECB is seriously concerned about the proposed changes to the Stability and Growth Pact. It must be avoided that changes in the corrective arm undermine confidence in the fiscal framework of the European Union and the sustainability of public finances in the euro area Member States. As regards the preventive arm of the Pact, the Governing Council also takes note of some proposed changes which are in line with its possible strengthening.*

*Sound fiscal policies and a monetary policy geared to price stability are fundamental for the success of Economic and Monetary Union. They are prerequisites for macroeconomic stability, growth and cohesion in the euro area. It is imperative that Member States, the European Commission and the Council of the European Union implement the revised framework in a rigorous and consistent manner conducive to prudent fiscal policies.*

*More than ever, in the present circumstances, it is essential that all parties concerned fulfil their respective responsibilities. The public and the markets can trust that the Governing Council remains firmly committed to deliver on its mandate of maintaining price stability”.*

- The ECB Opinions on the proposed Council Regulations

In each of its Opinions on the proposed Council Regu-

lations,<sup>17</sup> issued on 3 June 2005 at the request of the Council in the context of the consultation procedure, the ECB noted the following:

*“Sound fiscal policies are fundamental to the success of economic and monetary union (EMU). They are prerequisites for macroeconomic stability, growth and cohesion in the euro area. The fiscal framework enshrined in the Treaty and in the Stability and Growth Pact is a cornerstone of EMU and thus key to anchoring expectations of fiscal discipline. This rules-based framework, which aims to secure sustainable public finances while allowing the smoothing of output fluctuations through the operation of automatic stabilisers, needs to remain clear, simple and enforceable. Compliance with these principles will also facilitate transparency and equal treatment in the implementation of the framework”.*

Regarding the amendment of Council Regulation (EC) No 1466/97 concerning the preventive arm of the SGP, the ECB “[...] endorses the aim of improving the surveillance and coordination of economic policies so as to achieve and maintain medium-term objectives that ensure the sustainability of public finances. A rigorous and consistent implementation of the surveillance procedures would be conducive to prudent fiscal policies”.

As to the amendment of Council Regulation (EC) No 1467/97 concerning the corrective arm of the SGP, the ECB expresses more reservations, favours only limited changes in the Regulation, and asks for increased strictness in the implementation of its provisions:

*“The ECB [...] reiterates that the EDP needs to be both credible and effective as a safeguard against unsustainable public finances, maintaining a strict time frame. Against this background, the ECB favours an amendment that is as limited as possible of Council Regulation (EC) No 1467/97 of 7 July 1997 on speeding up and clarifying the implementation of the EDP. A rigorous and consistent implementation of the EDP would be conducive to prudent fiscal policies”.* →

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<sup>17</sup> Opinion (CON/2005/18) of 3 June 2005 on a proposal for a Council regulation amending Regulation (EC) No 1466/97 and Opinion (CON/2005/17) of 3 June 2005 on a proposal for a Council regulation amending Regulation (EC) No 1467/97.

→ • Article in the ECB *Monthly Bulletin* of August 2005

The above views of the ECB are further elaborated in an article published in its *Monthly Bulletin* in August 2005.

The article stresses the importance of sound fiscal rules for the smooth operation of EMU and explains and assesses the major aspects of the recent reform of the SGP.

It recognises that changes to the preventive arm of the SGP have the potential to strengthen the fiscal surveillance framework by making it more adaptable to country-specific circumstances. However, these changes also reduce the clarity and simplicity of the rules and do not specifically tackle shortcomings in the incentives for compliance.

As for the corrective arm, the article notes that the

changes make the implementation of the excessive deficit procedure more flexible and entail risks of weakening the SGP. That is why the ECB had recommended not to modify the corrective arm of the SGP.

In conclusion, the article stresses that, now that a new framework has been agreed, what matters is its proper implementation. Member States, the Commission and the Council need to respond to the considerable short- and long-term fiscal challenges that lie ahead, including the prompt correction of existing budgetary imbalances, the reduction of debt ratios, and reforms to deal with the approaching fiscal pressures related to population ageing. A rigorous and consistent implementation of the revised rules would be conducive to fiscal discipline and would help restore the credibility of the EU fiscal framework as well as confidence in prudent fiscal policies.

contribute to a decline in inflation and the achievement of price stability, and will help strengthen confidence and consolidate macroeconomic stability, all of which are prerequisites for maintaining high growth rates over the long run.

However, the impact of population ageing on public expenditure cannot be addressed solely by curtailing other outlays or increasing taxation, as this would undermine growth and the provision of elementary public services. A timely reform of the social security system is also necessary, so that the serious actuarial deficits of this system can be dealt with. Progress in reducing unemployment and increasing the employment rate, especially of women and the young, will further strengthen the sustainability of the social security system. The launch of a social dialogue on a pension reform and the structural measures recently adopted constitute positive steps towards tackling a difficult problem that, if it remains unresolved, could have critical consequences on the economy's long-term prospects.

## 2.2 Wage developments

As repeatedly pointed out, the inflation differential between Greece and the euro area contributes to an erosion of the international competitiveness of the Greek economy. Given that the main aim of the single monetary policy of the ECB is price stability in the euro area as a whole, the task of eliminating inflation differentials and boosting competitiveness falls on national economic policies, such as fiscal policy and structural policies, as well as on the behaviour of the social partners through their contribution to the wage bargaining process. Certainly, fiscal policy is a necessary adjustment instrument, as already mentioned, but is not enough to achieve an efficient decline in inflation – i.e. one that would not imply adverse short-term side-effects on activity and employment. Hence, the effort to reduce inflation should be accompanied by wage increases that are compatible with achieving price stability but do not lead to a decline in real incomes. To this end, as already proposed in previous Bank of Greece reports, the rises in *contractual earnings*

should be compatible with a rate of increase in nominal *average actual earnings* that gradually converges towards the sum of the growth rate of productivity in Greece and the average inflation rate in the euro area (rather than in Greece), until the inflation differential between Greece and the euro area is effectively eliminated and price stability is achieved. At the same time, it is necessary to strengthen competition in the product markets, so that profit margins are at normal levels.

In order to assess – from the point of view of reducing inflation – the significance of the implementation of the above proposal which concerns the determination of increases in nominal average actual earnings, a number of simulations were carried out using the econometric model of the Bank of Greece.<sup>9</sup> Specifically, it was indicatively examined what would have happened if the proposal had been implemented during the 2002-2005 period. In the simulations it was assumed that in each of these years (a) the rise in nominal average actual earnings<sup>10</sup> was equal to the sum of the HICP inflation rate in the euro area as a whole and the rate of productivity growth in Greece;<sup>11</sup> and (b) the other factors that influence economic developments, e.g. profit margins, oil prices or the exchange rate of the euro, were not different from their actually observed levels. (The latter assumption is very important, as it implies that the containment of nominal wage increases would not lead e.g. to a widening of profit margins.) The simulation results for the key economic aggregates (inflation, unit labour costs, real wages, GDP and employment) are presented in Table VI.1.

These results show the beneficial effects on the economy in case this proposal had been implemented in the last four years and – obviously – if the proposal were to be implemented in the future. Specifically, inflation would have fallen to 3.1% in 2002 and 2.3% in 2003, and more progress would

have been made in the next two years. Despite the increase in oil prices, inflation would have reached 1.3% in 2004 and 2.0% in 2005.<sup>12</sup> This decline in inflation to a level below that in the euro area as a whole would have allowed a partial recovery of past losses in competitiveness, without an appreciably lower rise in real wages. Also, during the simulation period, the cumulative increase in average real wages would have reached 9.4% (compared with an actually observed increase of 10.2%), i.e. it would have been lower by around one percentage point only. At the same time, however, both GDP and employment would have gained from lower inflation. The cumulative growth of GDP and of the number of employees during the simulation period would have been 1.5-2 percentage points higher (18.9% for the former, instead of 17.2%, and 9.5% for the latter, instead of 8.0%). Thus, stronger employment growth would have more than offset the slightly lower increase in real wages and, as a result, the cumulative real rise in the total compensation of employees would have eventually been higher (19.7%, instead of 19.2%). Even more substantial gains could be expected if the proposal were to be implemented over a longer time period.

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**9** For the econometric models of the Bank of Greece, see (i) N. Zonizilos, "Econometric modelling at the Bank of Greece", Bank of Greece Working Paper No. 14, June 2004; and (ii) D. Sideris and N. Zonizilos, "The Greek model of the European System of Central Banks multi-country model", Bank of Greece Working Paper No. 20, February 2005. These models are similar in structure to those used by other national central banks either in a national context or for the purpose of Eurosystem-wide forecasts and simulations.

**10** To be precise, compensation per employee, which includes employers' social security contributions. The rise in average actual earnings or compensation per employee is usually higher than the increase in contractual earnings, mainly owing to the inclusion of seniority benefits (and wage drift in general).

**11** Productivity is measured by the ratio of GDP to total employment. For the rise in employment in 2002 and 2003, the revised data from the NSSG Labour Force Survey (LFS) were taken into account. Employment growth was estimated at 1.3% in 2004 (the LFS data for that year are not comparable with those for 2003) and at around 1% for 2005 (the available LFS data refer to the first half of 2005).

**12** The rise – according to the simulation – in inflation in 2005 was to be expected, taking into account the oil price hikes and the inflationary impact from the increase in VAT rates.

Table VI.1

## Nominal average earnings, inflation, GDP and employment

A. Reference (actual) developments: annual percentage changes					
	2002	2003	2004	2005 <sup>7</sup>	Average annual rate of increase
Nominal average actual earnings <sup>1</sup>	5.9	5.5	7.6	5.2	6.0
Unit labour costs <sup>2</sup>	5.1	3.5	4.5	2.7	3.9
HICP inflation	3.9	3.4	3.0	3.6	3.5
Real average earnings <sup>3</sup>	1.9	2.0	4.5	1.5	2.5
GDP <sup>4</sup>	3.8	4.7	4.2	3.5	4.0
Total employment <sup>5</sup>	2.2	2.4	1.3	1.0	1.7
Number of employees <sup>5</sup>	3.0	2.6	1.2	1.0	1.9
Real compensation of employees <sup>6</sup>	5.0	4.7	5.8	2.5	4.5
Euro area HICP inflation	2.3	2.1	2.1	2.2	2.2
GDP per employee in Greece	1.5	2.3	2.9	2.5	2.3

B. Simulation results (full implementation of the proposal for average nominal wage increases): annual percentage changes					
	2002	2003	2004	2005	Average annual rate of increase
Nominal average gross earnings	3.8	4.4	5.0	4.7	4.5
Unit labour costs	3.1	2.7	1.6	2.0	2.3
HICP inflation	3.1	2.3	1.3	2.0	2.2
Real average earnings	0.7	2.1	3.7	2.6	2.3
GDP	3.7	5.0	4.7	4.3	4.4
Total employment	2.2	2.8	1.3	1.3	1.9
Number of employees	3.0	3.3	1.3	1.6	2.3
Real compensation of employees	3.7	5.5	5.0	4.2	4.6

1 "Actual" earnings as opposed to "contractual" earnings. In this table, this variable is measured by compensation per employee, which includes employers' social security contributions.

2 Ratio of compensation per employee to GDP per employee. Bank of Greece estimates. The rates of change in unit labour costs differ slightly from those in Table V.3 because the simulation for the years 2002-2004 took into account the GDP growth rates *before* their recent revision, as the detailed revised data were not yet available.

3 Compensation per employee, deflated by the HICP. The rates differ slightly from those in Table V.3, which have been calculated on the basis of *average gross earnings* and the *CPI*.

4 GDP growth rates before the NSSG's September 2005 revision for the years 2002-2004, because at the time of the simulation the detailed revised data were not yet available.

5 For 2002 and 2003: data from the NSSG's Labour Force Survey. For 2004 and 2005: Bank of Greece estimates.

6 (Real average earnings) X (number of employees).

7 Bank of Greece estimates.

Of course, the Bank of Greece's proposal provides for a *gradual* convergence of the rate of increase in nominal average actual earnings towards the sum of the inflation rate in the euro area and the rate of productivity growth in Greece. According to an alternative simulation, even if the proposal had been implemented *gradually* over the 2002-2005 period, the effects on

inflation, GDP and employment would not have been much different.<sup>13</sup> Finally, it is worth men-

<sup>13</sup> Specifically, if the rate of increase in nominal actual earnings had exceeded the sum of the inflation rate in the euro area and the rate of productivity growth in Greece by 0.5 percentage point in 2002, 0.3 percentage point in 2003 and 0.2 percentage point in 2004, inflation would have been 3.3% in 2002, 2.6% in 2003, 1.6% in 2004 and 2.2% in 2005.

tioning a third simulation. This has shown that if the containment in nominal wage increases had been combined with measures to enhance market competition (as recommended repeatedly by the Bank of Greece), which would have driven down average profit margins across the economy by around one percentage point, inflation would have fallen to even lower levels: to 2.9% in 2002, 2.0% in 2003, 1.0% in 2004 and 1.7% in 2005. Moreover, the cumulative growth of GDP and the number of employees would have been even higher in the simulation period (19.8% and 9.7% respectively), while the cumulative rise in average real wages would have reached 10.7%, exceeding the actually observed outcome.

It should be pointed out that the above results are only indicative and should not be seen as accurate estimations, since they are derived from econometric model simulations, which always involve some margin of error. The interpretation of the results is subject to the caveats typically applying to such exercises. The purpose of these simulations is not to measure the *precise size* of the effects on inflation from different nominal wage developments, but to provide useful information on the *direction* and the *order of magnitude* of these effects. Moreover, an econometric model is an abstraction from reality and, thus, cannot reproduce price formation with any degree of precision. For example, the model cannot capture the favourable effects that the scenario under consideration would have had on inflation expectations, which in turn are an important determinant of the inflation outcome. Still, the conclusion is essentially the same: lower nominal wage increases help achieve lower inflation and higher GDP and employment growth, without leading to appreciably lower average real wage increases. Besides, the somewhat lower rise in average real wages is more than offset by the higher rise in employment. Similar favourable effects on key economic

aggregates can also be expected from measures to enhance competition, which lead to a reduction of profit margins in cases where these are excessively big.

Therefore, it is very important that both government policy for civil servant salaries and collective bargaining between the social partners in the coming months contribute to nominal increases in average actual earnings in the public and the private sector for the 2006-2007 period that are compatible with price stability.

### 2.3 Structural reforms

During the last six months, the Greek government took a series of measures aimed at tackling some of the economy's structural weaknesses (see Box VI.2). Specifically, in order to improve the functioning of product markets, the government introduced longer opening hours for retail shops, is promoting the further liberalisation of electricity and natural gas markets, and strengthened the role of the Hellenic Competition Commission, which is engaging more actively in combatting phenomena of "concerted practices" among enterprises. As regards the labour market, new legislation was enacted on the "rearrangement" (averaging) of working time on an annual basis – mainly to assist businesses with seasonal needs – and on the reduction of overtime premia. In order to improve the efficiency of public enterprises, with a view to their privatisation or total independence from the state, the government is planning to adapt labour regulations in public sector firms to those prevailing in the private sector and, in general, to introduce private-sector criteria and corporate governance principles in their operation. Moreover, a single legal framework for public-private partnerships has been introduced, so as to encourage this type of investment and increase the transparency of relevant contracts.

## BOX VI.2

### Recent structural reforms

During the last six months the government took further measures to lift regulatory restrictions in some areas, stimulate economic activity, reduce red tape, enhance competition, promote labour market flexibility, make public sector enterprises more efficient and further modernise capital markets. These reforms, together with steps to address issues relating to education and the diffusion of technology, aim to boost the economy's competitiveness. Box V.1, in Chapter V, presents the measures concerning labour market flexibility, while the present box outlines the remaining reforms referred to above.

A presentation of further measures the government is planning can be found in the draft "National Reform Programme for Growth and Jobs, 2005-2008", released for public consultation on 14 September 2005.<sup>1</sup>

#### *1. Improving the regulatory environment and boosting economic activity*

##### 1.1 Extension of shop-opening hours for retail shops

The shop-trading hours regime in force until recently, provided for shop-opening hours of retail outlets including food stores up to 8 p.m. on weekdays during the winter (November to March) and up to 6 p.m. on Saturdays. In the summer period, closing time on weekdays was extended by an hour.<sup>2</sup> No restriction on opening times existed under this regime. Longer business hours were only permitted for shops located in designated tourist areas. In practice, however, various local trade associations, with the approval of prefectural councils, imposed on their members shorter opening hours than statutory ones, with sanctions for non-compliance.

The new regime, introduced by Articles 12 and 13 of Law 3377/2005 ("Principles and rules for streamlining the operation and development of key sectors of commerce, and other Ministry of Development issues") passed in July 2005, establishes a single nationwide framework, irrespective of location, season and line of

business,<sup>3</sup> with opening hours starting not earlier than 5 a.m. and ending at 9 p.m. on weekdays and 8 p.m. on Saturdays. Closing times may be extended by decision of prefectural councils, following consultation with the relevant associations of shop owners and employees. Local retailer associations are also free to establish shorter business hours for their members (e.g. associations in Thessaly agreed to shorter business hours), although there are no sanctions for shops that choose to apply the longer national opening hours.<sup>4</sup>

The new provisions aim to enhance economic activity and employment, as well as to better meet consumers' needs, especially those amongst them that are employed. To assist small shops (with 3 or less employees) in their adjustment to the new framework, the Ministries of Development and Employment subsidise the hiring of additional part-time personnel.

##### 1.2 Cutting down on "red tape"

As part of the efforts to reduce the administrative burden on citizens and in line with provisions of Law 3242/2004, certain public authorities no longer require citizens to submit certain official documents, but instead seek to obtain these documents themselves from the respective issuing authorities. So far, a total of →

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<sup>1</sup> See also Appendix to Chapter III. The final version of the Programme ([http://www.mnec.gr/LISBON-NRP\\_GREECE-new.pdf](http://www.mnec.gr/LISBON-NRP_GREECE-new.pdf)) was released and submitted to the European Commission on 15 October 2005.

<sup>2</sup> The relevant framework was laid down in Article 23 of Law 2294/1994 and Joint Decision 1162/1997 of the Ministers of National Economy, Development and Labour and Social Security.

<sup>3</sup> It should be noted that this framework does not apply to petrol stations, stores that sell products intended mostly for consumption within the premises and other similar types of shops listed in Article 42 of Law 1892/1990 and Article 14 of Law 2194/1994, as well as pharmacies (the opening hours of which are, according to Law 2639/1998, the responsibility of the Prefect).

<sup>4</sup> According to Law 3377, however, sanctions will continue to be imposed to those shops that stay open beyond the national closing time or beyond the extended hours decided by the competent prefectural council.

→ 28 certificates (including transcripts of criminal, vital, military and tax records) have come under the scope of this provision.<sup>5</sup>

Furthermore, the administrative burden on enterprises is expected to be lightened through the enactment of the draft law “Establishment of a General Registry of Commercial Enterprises and updating of Law 2081/1992 regarding Chambers of Business”, which envisages the establishment of “one-stop shops” within local Chambers of Commerce and Industry.

### 1.3 Reform of bankruptcy law

An *ad hoc* committee of experts has undertaken to overhaul the existing bankruptcy legislation. According to the draft *National Reform Programme for Growth and Jobs*, the committee is expected to conclude its work by June 2006. The aim of the reform is to speed up bankruptcy procedures and allow a second opportunity to be given, under certain circumstances, to individuals or enterprises facing insolvency.

### 1.4 Public-Private Partnerships (PPPs)

Several large infrastructure projects have already been completed through the method of Public-Private Partnerships in Greece (e.g. Attiki Odos Motorway, Rion-Antirion Bridge, International Athens Airport). Since, however, no standardised legal framework existed until recently, a concession agreement for each of these projects had to be ratified *ad hoc* by Parliament. Law 3389/2005, enacted in September 2005, is expected to encourage the use of PPPs, both for infrastructure projects and in the provision of services, and to increase the transparency of relevant contracts. These partnerships benefit from the know-how of the private sector and are expected to lead to an increase in investment, the precipitation of infrastructure projects, the on-time completion of works, risk-sharing (financing risk, construction risk etc.) between the private and the public sector, and the improvement of public finances. The law sets out the minimum provisions of such agreements and describes the rights and obligations of the partners. An inter-ministerial committee, charged with designing government policy and making the relevant decisions, assisted by a special

secretariat is also being set up. The first pilot applications under the new law will be in the areas of health-care, more effective use of public sector real estate, and Information and Communication Technology (ICT).

## 2. Enhancing competition

### 2.1 Liberalisation of electricity and natural gas markets

Regarding the electricity market, two important developments took place in the last few months: the adoption, in May 2005, of the *New Grid and Power Exchange Electricity Code* and the submission to Parliament of a bill providing for the harmonisation of national legislation with EU legislation, as specified by Directive 2003/54/EC. The forthcoming further liberalisation of the natural gas market, through the transposition of Directive 2003/55/EC into national law, is also expected to help attract investment in the energy sector.<sup>6</sup>

A further important development, expected to create an integrated energy market in Southeastern Europe, is the multilateral agreement on the *Energy Community Treaty*, to be signed in late October this year between five European Union Member States and ten other Southeastern Europe countries.<sup>7</sup>

Meanwhile, the government has announced measures to reduce the economy's dependency on oil, namely a switch to natural gas for public sector buildings and →

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<sup>5</sup> For criminal records, such intra-governmental document retrieval procedures were introduced by Joint Ministerial Decision 2458, Government Gazette 267/B/1 March 2005. Details of the other documents covered by this arrangement are specified in a decision of the Minister of Interior, Public Administration and Decentralisation (Government Gazette 373/B/23 March 2005) and in Joint Ministerial Decisions (Government Gazette 400/B/28 March 2005, 488/B/13 April 2005, 610/B/9 May 2005 and 726/B/30 May 2005).

<sup>6</sup> Ministry of Development Press Release of 14 July 2005. The draft laws, prepared by the Regulatory Authority for Energy (RAE), were released for public consultation in July.

<sup>7</sup> The treaty is to be signed by 5 European Union Member States (Austria, Greece, Hungary, Italy, Slovenia) and by Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Former Yugoslav Republic of Macedonia, Romania, Serbia, Montenegro, Turkey and the United Nations Mission in Kosovo (UNMIK) on behalf of Kosovo.

→ the installation of equalisation capacitors on the power grid throughout the country.

## 2.2 Structural reforms in public enterprises

One of the objectives in the government's reform agenda is to ensure the soundness of public enterprises and to establish a modern operational framework for them. To this end, a draft law is being prepared that will introduce clear private sector criteria and corporate governance principles in the operation of public enterprises. At the same time there will be closer supervision of these companies to ensure that their social role is fulfilled. Furthermore, in an environment of strong competition, labour regulations in public sector firms will have to be adapted to those prevailing in the private sector. The first example of this approach was seen in the Hellenic Telecommunications Organisation (OTE), where the management of the group agreed with union representatives that all future hirings of OTE fixed-line personnel will be governed by standard private employment contracts. Also, in order to increase OTE's efficiency, an agreement was reached between the management and the union on a voluntary retirement scheme for around 6,000 employees (accounting for about 37% of the total staff of the parent company as at June 2005) who were close to retirement.<sup>8</sup>

In the context of the policy of disengaging the public sector from business activities, the government sold 16.4% of its holding in OPAP (the Greek soccer pools organisation – "Organisation of Football Match Prognostics SA")<sup>9</sup> and about 10% of its holding in OTE – thereby reducing its stakes to 34.4% and 38.7% and collecting proceeds of €1.3 billion and €835 million, respectively. Future privatisation plans include the Postal Savings Bank, the Athens International Airport and port authorities. The government plans to take some action regarding its participation in the Agricultural Bank of Greece and Emporiki Bank.

## 2.3 The new competition law and the activities of the Hellenic Competition Commission

The role of the Hellenic Competition Commission (HCC) has been enhanced through the adoption in July of Law

3373/2005 ("Replacement and updating of Law 703/1977 'On the control of monopolies and oligopolies and the protection of free competition' "). The law aims to harmonise Greek legislation with EU law and to enhance the framework of principles and rules for the protection of free competition. These changes are required in order for the Competition Commission to be able to fulfil its role in the current market environment.<sup>10</sup> More specifically, the law provides for, *inter alia*, an increase in HCC personnel (from 80 to 150) and introduces mechanisms for the monitoring and analysis of market structures. It also gives regulatory powers to the HCC, enabling it to intervene in defence of the principles of transparency, non-discrimination, accounting unbundling, cost-based pricing etc. in market segments where competition appears weak. Furthermore, the law eliminates the market share threshold as a criterion for giving notice of a planned merger and speeds up procedures for the monitoring of planned mergers. The implementation of the new law is expected to contribute to increased independence of the HCC and to a wider recognition of its role by the market, to the benefit of consumers and the economy as whole.

Over the past twelve months, the HCC has already become more active, both by initiating investigations and by analysing the market structure and degree →

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<sup>8</sup> The provisions for the OTE's voluntary retirement scheme (VRS) are contained in Article 74 of Law 3371/2005 adopted in June. It was then estimated that around 6,000 employees were eligible to participate in the scheme. OTE management had calculated that if all 6,000 employees made use of their right then the total cost of the scheme for OTE and the pension funds (that is, compensation to pension funds for foregone contributions, pensions and lump-sum payments to retirees and the cost of the special incentives) would amount to €1.5 billion. The management, however, expected that the cost would be less since they estimated that only about 4,000 would make use of the scheme and because new employees, to be hired at a proportion of 1 person for every 5 retirees, cost less for the company. The cost of the VRS will be predominantly borne by OTE; the Greek state for its part, however, will contribute 4% of its holding of OTE shares to the OTE Employees' Pension Fund. During the debate on Law 3371 in Parliament in June 2005, this cost for the state was estimated at about €314 million on the basis of the closing price of OTE's share on 15 June 2005.

<sup>9</sup> Notification 1489/21 July 2005 of OPAP to the Hellenic Capital Market Commission.

<sup>10</sup> A more detailed discussion on the relevant draft law can be found in the Bank's *Annual Report 2004*, April 2005, pp. 75-76.

→ of competition in a number of sectors.<sup>11</sup> Furthermore, in order to ensure the smooth operation of the market, the Ministry of Development has upgraded the General Secretariat of Consumer Protection, which monitors market operation extensively and provides information to consumers.

### 3. Further measures to modernise the economy

#### 3.1 Capital market issues

Law 3340/2005, enacted in April, transposes EU Directives 2003/6/EC, 2003/124/EC, 2003/125/EC and 2004/72/EC into Greek legislation for the protection of capital markets from market abuse.<sup>12</sup> To this effect, the law prohibits: (a) certain transactions (e.g. sale or purchase of financial instruments) by persons possessing insider information and (b) market manipulation, and envisages administrative and penal sanctions in case of non-compliance. Furthermore, the same law introduces a number of pre-emptive measures (e.g. public disclosure of insider information), which aim to increase investor confidence.

Law 3152/2003 (“Establishment and supervision of stock exchanges and regulated markets, new responsibilities of the Hellenic Capital Market Commission and amendments to stock exchange legislation”) transferred the regulatory and administrative responsibilities of the Athens Exchange (AE) to the Hellenic Capital Market Commission (HCMC). Further to the above legislation, Law 3371/2005, adopted in June, expands the regulatory powers of the stock exchange (under the supervision and control of the HCMC) and homogenises all relevant rules for organised exchanges. In accordance with EU legislation, the new law sets the minimum requirements for the introduction of financial instruments in organised exchanges, providing however that the Stock Exchange Regulation, under the supervision of the HCMC, may specify stricter requirements for some or all of the markets.

Furthermore, Law 3401/2005, recently adopted by Parliament, transposes into national legislation EU Directive 2003/71/EC regarding the revised procedures to be followed to draw up, approve and distribute the prospectus required when securities are offered to the public or admitted for trading.

#### 3.2 Education

The recent legislative initiatives in the field of education aim to upgrade and modernise higher education (Laws 3374/2005 and 3404/2005), to promote lifelong learning and to improve the link between vocational training and the labour market (Law 3369/2005). More specifically, Law 3374/2005 (“Quality assurance in education – Credit transfer and accumulation system – Diploma Supplement”), adopted in July, laid down a framework for the systematic and regular evaluation of higher education institutions. Such evaluation will be both internal and external, while an independent authority (“Agency for Quality Assurance in Higher Education”) will provide support and coordination at the national level. Law 3404/2005 (“Regulation of issues relating to university and technical higher education and other provisions”) was adopted in October and its purpose is the institutional and operational upgrading of Technological Education Institutes (TEI), by establishing stricter entry requirements, increasing staff numbers and streamlining curricula. Regarding lifelong learning, Law 3369 of June 2005 provided a systematic approach and delineated the respective roles of educational institutions of the various levels in this process. Under this law, the framework linking Vocational Education and Training →

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**11** In the context of the combat against anti-competitive practices, in October 2004 the Secretariat of the HCC launched an investigation in certain super market chains on grounds of alleged breaches of competition rules (Article 1 of Law 703/1977 and Article 81 of the European Community Treaty). In April 2005, the HCC concluded by simple majority that the Association of Greek Supermarkets (SESME) was obstructing competition by drawing up a list of discounts on price lists and by attempting to ensure its universal application. Furthermore, the HCC ascertained that seven super market chains had behaved in a concerted fashion to prevent the free commercial action of wholesale suppliers (HCC decision 277/IV/2005 of 1 April, 2005). Following this decision, the HCC imposed fines of €15 million to SESME and around €3 million to each of the seven super market chains that were thought to violate competition rules. The HCC decision warns that in case violations are repeated, further fines will be imposed (HCC Decision 284/IV/2005 of 5 July 2005). SESME has appealed these decisions. Furthermore, in August 2005, the Minister of Development requested the HCC to investigate into possible anti-competitive behaviour on the part of retail and wholesale petroleum product distributors (Ministry of Development Press Release of 3 August 2005).

**12** This law replaces the relevant provisions of Presidential Decree 53/1992 “On confidential information in accordance with Directive 89/592/EC”.

→ with the Labour Market (ESSEKA) is activated to identify needs for lifelong education and vocational training. The same law enables the associations of social partners<sup>13</sup> to establish institutions providing lifelong education and vocational training.

### 3.3 Technology diffusion

Recent measures to improve the deployment of technology include:

(a) Incentives to encourage investment in broadband technology: the Ministry of Transport and Communications, in the context of the "Information Society Operational Programme" subsidises 50% of the cost of adopting wireless technology in businesses from all

branches of economic activity, especially those active in the tourist industry.

(b) Incentives to small enterprises (with 2-10 employees) to upgrade their technology infrastructure by subsidising the cost of introducing Information and Communication Technology applications.<sup>14</sup>

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<sup>13</sup> These are the signatories to the National General Collective Labour Agreement, as well as the Confederation of Civil Servants Trade Unions (ADEDY). The General Confederation of Greek Workers (GSEE) has already established an "Academy of Labour".  
<sup>14</sup> Information Society S.A. announced on 16 September 2005 that during the first stage of the online submission of proposals there had been strong interest on the part of businesses and over 4,500 proposals of a total budget of €43 million had been submitted. The final number of eligible businesses and the total expenditure will become known after the evaluation of the proposals.

The above measures, which aim to improve the functioning of product and labour markets, increase the efficiency of public enterprises and encourage investment under a regime of increased transparency, are expected to favourably affect productivity and employment. Undeniably though, Greece lags behind most of its EU partners in reform efforts and its economy is not yet in a position to effectively deal with the challenges of international competition, which is becoming more intense due, *inter alia*, to the increasing integration of emerging market economies into the world economy.

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### 3. The stability of the credit system

The Greek banking system as a whole is sound and its stability has been ensured. The capital adequacy ratios, the profitability and liquidity of Greek banks are very satisfactory. Certainly, the Bank of Greece monitors and evaluates carefully the risks arising from persistently strong credit expansion and has tightened banking supervision in recent years, especially after the deregulation of personal loans.<sup>14</sup>

In the last few months, the growth of the total outstanding amount of loans to households has slowed down slightly, owing to a decline in the rate of increase in consumer loan growth that more than offset a strengthening in housing loan growth, as discussed in detail in Chapter IV.2. However, credit expansion has remained robust in both categories of loans; as a result, household indebtedness as a percentage of nominal GDP rose further (to 32.5% in August 2005, from 30.9% in December 2004) and the differential with the corresponding euro area average (51.4% in August 2005, compared with 50% in December 2004) gradually narrowed. Despite relatively low household indebtedness in Greece, the continuing strong credit expansion to households is a factor that could potentially amplify the impact of banks' credit risk, to the extent that such risk is mispriced. Moreover, there are risks to the financial position of households, insofar as they underestimate the consequences of additional borrowing on their ability to smoothly service their total outstanding debt in the future. The possibility of inadequate

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<sup>14</sup> See Bank of Greece, *Monetary Policy 2004-2005*, February 2005, Chapter V.

risk assessment by banks and/or consumers is higher in the event of (a) an economic slowdown, which would affect indebted households' disposable income, or (b) a future euro interest rate rise from the current historical lows. In the latter case, loan servicing costs would increase, since the majority of new consumer and housing loans (July 2005: 97% and 87% respectively) have been agreed at floating rates or with an initial rate fixation of up to one year. (To illustrate this, in July 2005 new housing loans with an initial rate fixation of more than five years accounted for only 7.6% of total new housing loans in Greece, compared with 34.3% in the euro area.) The lack of adequate historical data for correlating credit risk with the economic cycle, as well as households' inexperience in debt management, add to the uncertainty surrounding the magnitude of these consequences.

As regards commercial banks' consumer loans, the rise in the ratio of non-performing loans to total loans (to 7.6% in March 2005, from 7.2% in December 2004) already points to increased credit risk, while for housing loans this ratio remained almost stable (at around 4.5%) during the same period. In assessing developments in the non-performing loan ratios in terms of proper risk pricing, the following should be taken into account: First, in an environment of increasingly strong competition and accelerating credit expansion, banks tend to loosen their credit standards, thereby pushing up the non-performing loans ratio. Second, however, strong credit expansion leads to a fast increase in total loans and may cause the non-performing loans ratio to decline in the short term, since any loan servicing problems typically arise some time after the loan has been granted. Moreover, a substantial share of loans that are refinanced by being transferred to other banks may have actual or potential servicing problems. The above considerations imply that (a) banks need to factor in these risks when evaluat-

ing loan applications and when pricing loans; and (b) it is necessary to further enhance and utilise the "Tiresias Bank Information Systems S.A." database, the usefulness of which has been weakened by certain restrictions or special conditions that have been imposed.<sup>15</sup>

In this connection, the Bank of Greece has repeatedly pointed out that banks should not loosen their credit standards under the pressure of competition, while households should evaluate carefully – on the basis of realistic assumptions about their income prospects and interest rate developments – their ability to meet their total debt obligations. This will minimise the extent to which borrowers' assets have to be used to enforce the loan, something which is associated with social costs. In particular, with respect to loans secured by residential property, the Bank of Greece has recommended that banks should limit total lending to each borrower to a percentage up to 75% of the market value of the real estate used as collateral and, in addition to the value of such collateral, take more account of borrowers' overall credit standing. These recommendations are in line with international experience and are included in the new capital adequacy framework ("Basel II"). They are also well-timed because banks now tend to finance borrowers in excess of the loan-to-collateral ratio of 75%. This usually happens when a property is used to secure not only a loan for house purchase or construction, but also a repair or consumer loan granted to the same borrower.

The rate of credit expansion to non-financial corporations has slowed down<sup>16</sup> and falls consider-

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<sup>15</sup> For example, under a decision of the Data Protection Authority, certain data may not be entered in the "Tiresias S.A." database without the borrower's written consent.

<sup>16</sup> However, pointed out in Chapter IV.2, including MFIs' holdings of corporate bonds and doubtful loan write-offs under Law 3259/2004, the rate of increase in credit institutions' total claims on firms has remained virtually unchanged.

ably short of the corresponding rate for credit to households. However, the ratio of non-performing corporate loans to total loans has picked up slightly, from 5.6% in December 2004 to 5.9% in March 2005 (excluding the loans granted by one bank), which points to increased risk for commercial banks from corporate loans. At the same time, the boom in unpaid cheques (which have shown a 64.9% year-on-year rise in value terms in the first seven months of 2005) suggests that the financial situation of a considerable number of firms has worsened, as they have been adversely affected by strong international competition. These developments could increase banks' credit risk, insofar as they are not adequately taken into account in risk assessment.

It is a well-known fact that the single monetary policy has led to low nominal interest rates across the euro area. Low nominal interest rates, along with lower real interest rates relative to the euro area as a result of a positive inflation differential, have boosted credit expansion. Besides, both in Greece and in the euro area, banks operate in an open market environment with free competition. Credit expansion therefore cannot be contained

through administrative measures. The Bank of Greece monitors the dynamics of credit expansion and evaluates its implications for inflation, the stability of the banking system and households' financial position. However, following Greece's entry into the euro area and the implementation in Greece of the single monetary policy, which is formulated by the European Central Bank taking into account monetary conditions in the euro area as a whole, the Bank of Greece has limited scope for containing credit expansion and can only influence it indirectly and marginally. Specifically, it cannot intervene in the determination of bank interest rates or impose credit restrictions.<sup>17</sup>

On the positive side, credit expansion, to the extent that it does not lead to higher inflation, helps maintain strong growth. At all events, the Bank of Greece has an interest in the stability of the banking system and the protection of borrowers (for its supervisory role, see Box VI.3). In this respect, the Bank of Greece seeks to ensure the smooth operation of credit institutions through the

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<sup>17</sup> For a detailed discussion, see *Monetary Policy 2004 – Interim Report*, October 2004, Box V.1.

### **BOX VI.3**

#### **Banks and the supervisory role of the Bank of Greece**

##### *1. Purpose of banking supervision*

The economic and social significance of a sound and effective financial system is self-evident. Reflecting this, the supervision of financial intermediaries, i.e. banks, investment firms, insurance companies and other entities of the financial sector, is of the utmost importance. Banks no doubt play a dominant role and their involvement in payment systems and financial markets – either directly or through insurance, securities and mutual fund management subsidiaries – is decisive.<sup>1</sup> Therefore, the stability of the Greek financial system

depends crucially on the stability of the banking system.

The supervision of the banking system is carried out by the Bank of Greece with a view to ensuring banking stability. Broadly speaking, the assessment of banking stability focuses on: (i) the nature and level of risks →

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<sup>1</sup> The credit institutions under the direct supervision of the Bank of Greece account for 80% of the domestic financial sector. Including financial undertakings controlled by banks, this percentage comes to almost 90%.

→ assumed by banks, in the light of potential developments in the economic environment, and (ii) the efficiency and capital adequacy of banks, as key determinants of banks' ability to absorb any adverse shocks that may increase banking risks.

## 2. The supervisory role of the Bank of Greece

### 2.1. Scope of supervision

The Bank of Greece, in accordance with Article 55A of its Statute and banking legislation (Laws 1665/1951 and 2076/1992), is responsible for authorising and supervising credit institutions and certain financial organisations, in particular factoring, leasing, money transfer companies and bureaux de change. Excluded from this scope are branches of banks with a registered office in other EU or EEA<sup>2</sup> countries: instead, these are subject to home country supervision, as envisaged in EU legislation.<sup>3</sup>

### 2.2 Instruments and content of banking supervision

The content and extent of banking supervision are defined by specific legislative provisions. Supervision is exercised by the Bank of Greece on the basis of Acts of its Governor (Bank of Greece Governor's Acts) and/or decisions of bodies authorised by the Governor that lay down regulatory provisions in the Bank's field of competence.

Such provisions specify quantitative measures for the analysis and evaluation of the various banking risks and respective capital requirements (e.g. capital adequacy ratio, loan loss provisioning ratio), as well as measures of a qualitative nature (referring to organisational structures, customer information, prevention of money laundering etc.).

In particular, supervision focuses on:

(a) capital adequacy, prevention of risk concentration, liquidity adequacy, sound governance and internal control mechanisms, monitoring the acquisition of participations in the financial sector. The relevant provisions are aimed at preserving and strengthening depositors' confidence in banks' ability to repay the funds entrusted to them;

(b) the prevention of money laundering (Law 2331/1995).

In order to check compliance by the supervised institutions or persons with the applicable rules, the Bank of Greece carries out prudential and *ex post* audits. In cases where it detects an omission or violation of the provisions laid down by itself or where it has been explicitly authorised by law, the Bank of Greece may impose sanctions in accordance with Article 55A of its Statute and Article 22 of Law 2076/1992.

### 2.3 Need for ongoing adjustment

The meaning, content and instruments of banking supervision are subject to constant adjustment in response to changing risk factors and developments in the international market environment faced by banks and customers.

Consequently, the Bank of Greece, as the supervisory authority:

– Monitors the smooth operation of supervised institutions, with a view to protecting the interests of depositors who may not be adequately qualified to assess the risks assumed by the banks that manage their savings. Specifically, the Bank of Greece examines the nature and size of the risks assumed by supervised institutions, the complexity of transactions, the adequacy of risk management and internal control systems and, in general, takes all appropriate measures for preventing any situation that would jeopardise the interests of depositors.

– Evaluates, on a cost-benefit basis, the need for any new supervisory measures or requirements to be introduced, without imposing a disproportionate burden on the supervised institutions and ultimately on consumers, hence without discouraging innovation. →

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<sup>2</sup> EEA: the European Economic Area, comprising the EU-25 as well as Iceland, Lichtenstein and Norway.

<sup>3</sup> It should be noted that the Bank of Greece does supervise such branches in respect of certain clearly defined fields such as liquidity, transparency of transactions and customer information, and more generally, issues falling within the notion of public interest (as specified by the Court of Justice of the European Communities).

→ – Takes account of developments in financial markets and structures, as well as in the competitive environment faced by the supervised institutions and contributes, by the adoption of best international practices, to a level playing field and enhanced market discipline.

#### 2.4 Other responsibilities

Under the current institutional framework, the Bank of Greece is also entrusted with making rules aimed at ensuring the transparency of terms and conditions governing banking transactions and with monitoring compliance with such rules. The Bank of Greece has already laid down provisions (Bank of Greece Governor's Act 2501/2002) on the information that banks must disclose to their customers (depositors, investors and borrowers), so as to enable them to get a clear picture of the risks entailed and to select what best fits their interests among alternative products and/or credit institutions. By encouraging competition, the Bank of Greece actively supports the availability of several alternative options to bank customers.

With the exception of cases where the role of the interest rate in shaping competitive conditions is distorted,

the Bank of Greece has no competence to lay down ceilings on the prices charged by credit institutions for the services offered. Actually, it is competitive forces that determine banking prices, including interest rates, commission fees and recovery of costs incurred by credit institutions. Also, the Bank has no competence to review the abusive nature of the terms and conditions of the agreements underlying banking transactions.

It goes without saying that, in addition to specific banking regulation, the institutions supervised by the Bank of Greece are also subject to: (a) general safeguards of law, such as those referring to the abusiveness of contracts, which does not coincide with the notion of transparency and is determined by the competent courts; and (b) decisions of other supervisory authorities as appropriate, e.g. on matters pertaining to stock exchange or insurance regulation.

Cooperation and exchange of information between all the supervisory authorities of the financial sector, in the circumstances and by the procedures specified by law, contribute to the effective supervision of the individual segments of the market and of the financial system as a whole.

coverage of credit risk with adequate funds, reserves and provisions. In specifying the relevant measures, it must (and does) take into account the need for convergence with international practices, so that the competitiveness of Greek banks is not impaired. Such measures include the imposition of increased minimum provisioning ratios (as applied to consumer loans), as well as the ability of the Bank of Greece to raise the minimum capital adequacy ratio above the standard ratio of 8% on an *ad hoc* basis, after evaluating banks' risk exposure and the effectiveness of their risk management systems or equivalent measures (application of different weights by loan category), as is already the case e.g. with commercial real estate. It is self-evident that these measures ensure better coverage of credit risk through more efficient pricing, which in turn affects financing costs. They can also lead

to an improvement in the structure of banks' loan portfolios, thereby contributing to the protection of customers from excessive borrowing. In the same vein, the Bank of Greece has established transaction transparency rules. Finally, the Bank of Greece, in the context of its monitoring of household indebtedness, has decided to repeat the survey it conducted three years ago. The new survey should enable an assessment of developments in household indebtedness in the light of more recent data. The survey started in mid-September and will be completed in mid-December.<sup>18</sup> Its results will be discussed in the Bank's next report on monetary policy.

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<sup>18</sup> The survey is being conducted by TNS-ICAP.

The analysis in this chapter confirms the crucial importance of restoring fiscal balance and achieving fiscal consolidation; ensuring price stability (*inter alia*, by strengthening competition in the domestic product and factor markets and promoting wage increases in line with price stability); and continuing to implement a policy of structural

reforms to raise productivity and potential output. These are the key conditions for improving the international competitiveness of the Greek economy, maintaining strong GDP growth and increasing employment in an environment where competition in the world market is becoming more intense.



# Monetary policy measures of the Eurosystem

## **13 January 2005**

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

## **14 January 2005**

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

## **3 February, 3 March, 7 April, 4 May, 2 June, 7 July, 4 August, 1 September and 6 October 2005**

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



# Glossary

**Community Support Framework (CSF):** compiled by the Commission of the European Communities in co-operation with the Member State and approved by the Commission. It includes the country's growth strategy, activity priorities and financing resources (participation of the Community, national public expenditure, participation of the private sector).

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

**Deposits redeemable at notice:** this instrument comprises savings deposits which the depositor may withdraw once he has given notification thereof within a predetermined time period. At some instances, it is possible to withdraw part of the amount deposited at notice or before, subject to penalty.

**Deposits with an agreed maturity:** deposits with a fixed maturity, which, according to the national practice, are either not convertible into cash before their maturity or are convertible into cash subject to penalty. They include some non-negotiable instruments, such as non-negotiable certificates of (private) deposit.

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

**EONIA (euro overnight index average):** a measure of the interest rate prevailing in the euro interbank overnight market, based on transactions.

**EURIBOR (euro interbank offered rate):** the rate at which a prime bank is willing to lend funds in euro to another prime bank, computed daily for interbank deposits with different maturities of up to 12 months.

**Euro area:** the area encompassing those Member States in which the euro has been adopted as the single currency in accordance with the Treaty and in which a single monetary policy is conducted under the responsibility of the *Governing Council* of the *ECB*. The euro area currently comprises 12 countries: Austria, Belgium, Germany, Greece, Finland, France, Ireland, Italy, Luxembourg, the Netherlands, Portugal and Spain.

**European Central Bank (ECB):** the ECB lies at the centre of the *European System of Central Banks* (ESCB) and the *Eurosystem* and has legal personality under Community law. It ensures that the tasks conferred upon the Eurosystem and the ESCB are implemented either through its own activities or through those of the national central banks, pursuant to the Statute of the ESCB and of the ECB. The ECB is governed by the *Governing Council* and the *Executive Board*, and, as a third decision-making body, by the *General Council*.

**European System of Central Banks (ESCB):** composed of the *ECB* and the national central banks of all 25 EU Member States, i.e. it includes, in addition to the members of the *Eurosystem*, the national central banks of those Member States that have not yet adopted the euro. The ESCB is governed by the *Governing Council* and the *Executive Board*, and, as a third decision-making body, by the *General Council*.

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

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

**General 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 the 25 EU national central banks.

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

**Governing Council:** one of the decision-making bodies of the *ECB*. It comprises all the members of the *Executive Board* and the governors of the national central banks of the countries that have adopted the euro.

**Harmonised Index of Consumer Prices (HICP):** a measure of consumer prices which is compiled by Eurostat and harmonised for all EU Member States.

**Key ECB interest rates:** the interest rates, set by the *ECB*, which reflect the monetary policy stance of the *ECB*. Currently, key ECB interest rates are the minimum bid rate on the *main refinancing operations*, the interest rate on the *marginal lending facility* and the interest rate on the *deposit facility*.

**Main refinancing operation:** a weekly open market operation conducted by the *Eurosystem*. The operations are conducted as variable rate tenders with a pre-announced minimum bid rate and have a maturity of one week.

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

**Monetary aggregates:** a monetary aggregate is the sum total of currency in circulation plus the overdue amounts of certain liabilities of MFIs and central governments which have a high degree of “moneyness” (or liquidity in a broad sense). The narrow monetary aggregate M1, as defined by the *Eurosystem*, comprises currency in circulation plus *overnight deposits* which non-MFI *euro area* residents (other than cen-

tral government) keep with *euro area* institutions that issue money. The monetary aggregate M2 comprises M1 plus *deposits with an agreed maturity* of up to two years plus *deposits redeemable at a period of notice* of up to three months. The broad monetary aggregate M3 comprises M2 and repurchase agreements (repos), money market fund shares/units, money market paper and debt securities with a maturity of up to two years.

**Overnight deposits:** deposits due on the next working day. This instrument comprises both fully transferable (through cheques etc.) and non-transferable deposits convertible into cash upon request or until the end of the next working day. Particularly for Greece, this instrument includes sight deposits, deposits in current accounts and savings deposits.

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



# Statistical appendix



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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
<b>2001</b> . . . . .	106.4	3.4	106.7	3.2	105.9	3.7	105.3	3.8	105.0	3.7
<b>2002</b> . . . . .	110.2	3.6	110.1	3.2	110.4	4.3	109.0	3.6	108.7	3.6
<b>2003</b> . . . . .	114.1	3.5	113.5	3.1	115.1	4.2	112.6	3.2	112.2	3.1
<b>2004</b> . . . . .	117.4	2.9	116.0	2.3	119.5	3.8	116.2	3.3	115.7	3.2
<b>2004</b> I . . . . .	115.8	2.7	114.4	1.8	118.0	4.0	114.3	3.3	113.7	3.2
II . . . . .	118.2	2.9	117.5	2.3	119.1	3.9	116.6	3.3	116.1	3.2
III . . . . .	116.5	2.8	114.3	2.1	119.9	3.9	116.0	3.4	115.3	3.4
IV . . . . .	119.1	3.2	117.9	2.9	121.0	3.5	118.0	3.0	117.8	2.9
<b>2005</b> I . . . . .	119.7	3.3	118.0	3.1	122.3	3.6	118.1	3.3	117.7	3.5
II . . . . .	122.1	3.3	121.0	3.0	123.7	3.8	120.1	3.0	119.8	3.1
<b>2003</b> Jan. . . . .	111.8	3.1	110.8	2.1	113.4	4.7	110.4	3.7	109.9	3.6
Feb. . . . .	112.0	4.3	111.1	4.1	113.3	4.7	109.7	3.8	108.9	3.5
March . . . . .	114.5	4.1	115.2	4.1	113.4	4.1	112.0	3.4	111.6	3.1
Apr. . . . .	114.6	3.4	114.6	2.6	114.6	4.5	112.6	3.4	112.3	3.1
May . . . . .	115.1	3.8	115.4	3.9	114.7	3.7	112.8	2.9	112.6	2.8
June . . . . .	114.9	3.8	114.9	3.6	114.9	4.2	113.0	3.0	112.7	3.0
July . . . . .	112.7	3.6	111.1	3.2	115.0	4.1	111.2	2.9	110.5	2.9
Aug. . . . .	112.6	3.3	110.9	2.8	115.2	4.0	111.4	3.0	110.7	2.9
Sept. . . . .	114.8	3.3	113.9	2.8	116.1	4.2	113.8	3.2	113.5	3.1
Oct. . . . .	115.2	3.2	114.4	2.5	116.4	4.2	114.3	3.2	114.1	3.2
Nov. . . . .	115.4	3.3	114.7	2.9	116.5	4.1	114.4	3.1	114.3	3.2
Dec. . . . .	115.9	3.1	114.7	2.2	117.7	4.5	115.2	3.3	115.0	3.4
<b>2004</b> Jan. . . . .	115.1	2.9	113.3	2.3	117.9	3.9	114.0	3.2	113.4	3.2
Feb. . . . .	114.8	2.5	112.7	1.5	117.9	4.0	113.2	3.1	112.2	3.1
March . . . . .	117.6	2.7	117.2	1.8	118.2	4.2	115.9	3.4	115.3	3.3
Apr. . . . .	117.9	2.9	117.2	2.3	119.0	3.9	116.3	3.2	115.9	3.2
May . . . . .	118.5	2.9	118.1	2.4	119.0	3.8	116.6	3.3	116.1	3.2
June . . . . .	118.1	2.8	117.3	2.1	119.4	3.9	116.9	3.5	116.5	3.3
July . . . . .	116.0	2.9	113.6	2.2	119.6	4.0	115.5	3.8	114.8	3.8
Aug. . . . .	115.7	2.7	113.0	1.9	119.8	4.0	115.0	3.2	114.1	3.1
Sept. . . . .	118.0	2.8	116.4	2.2	120.5	3.7	117.5	3.3	117.1	3.2
Oct. . . . .	118.9	3.2	117.9	3.1	120.4	3.5	117.7	3.0	117.5	3.0
Nov. . . . .	119.0	3.1	117.9	2.8	120.7	3.6	117.9	3.1	117.6	2.9
Dec. . . . .	119.5	3.1	117.9	2.8	121.8	3.5	118.5	2.9	118.2	2.8
<b>2005</b> Jan. . . . .	119.8	4.0	118.1	4.3	122.3	3.7	118.7	4.2	118.5	4.5
Feb. . . . .	118.3	3.1	115.8	2.8	122.1	3.6	116.6	3.0	115.8	3.2
March . . . . .	121.0	2.9	120.1	2.4	122.5	3.6	119.0	2.7	118.7	2.9
Apr. . . . .	121.9	3.4	120.9	3.1	123.5	3.8	119.8	3.0	119.4	3.1
May . . . . .	122.3	3.2	121.3	2.7	123.8	4.0	120.2	3.2	119.9	3.3
June . . . . .	122.0	3.3	120.8	3.1	123.8	3.7	120.3	3.0	120.0	3.0
July . . . . .	120.5	3.9	118.3	4.1	124.0	3.7	119.3	3.3	118.8	3.5
Aug. . . . .	120.0	3.7	117.3	3.8	124.1	3.6	118.3	2.9	117.5	3.0

Source: Calculations based on NSSG data.

Table 2

## Harmonised index of consumer prices: general index and basic sub-indices

Period	HICP (general index)		Unprocessed food		Processed food		Non-energy industrial goods	
	(1996=100)	Percentage change over previous year	(1996=100)	Percentage change over previous year	(1996=100)	Percentage change over previous year	(1996=100)	Percentage change over previous year
<b>2001</b> .....	120.1	3.7	124.8	6.7	120.4	5.1	115.1	2.9
<b>2002</b> .....	124.8	3.9	133.5	6.9	127.0	5.5	118.0	2.5
<b>2003</b> .....	129.0	3.4	142.0	6.4	131.7	3.6	119.8	1.6
<b>2004</b> .....	133.0	3.0	137.8	-2.9	138.0	4.8	122.6	2.3
<b>2004</b> I .....	130.9	2.9	146.2	3.7	135.9	4.9	118.9	1.7
II .....	133.9	3.1	142.8	-5.1	138.2	5.9	124.5	2.1
III .....	132.0	3.0	128.9	-7.2	138.9	4.9	120.8	3.0
IV .....	135.0	3.2	133.3	-3.1	139.0	3.6	126.4	2.6
<b>2005</b> I .....	135.4	3.4	140.4	-4.0	139.3	2.5	123.9	4.2
II .....	138.2	3.2	138.9	-2.7	141.4	2.3	127.6	2.5
<b>2003</b> Jan. ....	126.4	3.3	136.6	-4.7	128.9	4.5	116.1	1.9
Feb. ....	126.1	4.2	141.6	3.0	129.7	5.0	113.1	1.5
March ..	129.3	3.9	144.8	4.4	130.2	4.5	121.3	1.7
Apr. ....	129.6	3.3	147.7	6.8	130.5	2.8	121.5	1.7
May ....	130.2	3.5	153.8	16.1	130.6	2.3	122.2	1.8
June ...	130.0	3.6	149.8	14.2	130.7	2.1	122.2	1.7
July ....	127.3	3.5	141.2	11.6	130.8	2.1	115.5	1.6
Aug. ....	127.3	3.3	137.8	8.3	132.0	2.9	115.2	1.3
Sept. ...	129.9	3.3	137.6	7.2	134.3	4.6	121.4	1.1
Oct. ....	130.4	3.2	136.3	4.2	134.2	4.5	122.8	1.4
Nov. ...	130.6	3.2	137.4	3.8	134.1	4.3	123.2	1.5
Dec. ...	131.4	3.1	138.9	3.3	134.2	4.4	123.4	1.7
<b>2004</b> Jan. ....	130.3	3.1	142.3	4.1	134.7	4.5	118.4	1.9
Feb. ....	129.4	2.6	148.1	4.5	135.8	4.7	114.6	1.3
March ..	133.1	2.9	148.3	2.4	137.2	5.4	123.6	1.9
Apr. ....	133.6	3.1	144.6	-2.1	137.5	5.4	123.8	2.0
May ....	134.2	3.1	144.8	-5.8	138.5	6.1	124.7	2.0
June ...	133.9	3.0	138.9	-7.3	138.7	6.2	125.0	2.3
July ....	131.3	3.1	127.9	-9.5	138.8	6.1	119.7	3.6
Aug. ....	130.9	2.8	129.4	-6.1	138.9	5.2	117.5	2.0
Sept. ...	133.7	2.9	129.5	-5.9	138.9	3.5	125.4	3.3
Oct. ....	134.7	3.3	130.9	-4.0	138.9	3.5	126.4	2.9
Nov. ...	134.8	3.2	131.4	-4.4	139.1	3.7	126.3	2.6
Dec. ...	135.5	3.1	137.6	-1.0	139.1	3.7	126.4	2.4
<b>2005</b> Jan. ....	135.8	4.2	138.0	-3.0	139.2	3.4	126.5	6.9
Feb. ....	133.5	3.2	141.3	-4.6	139.2	2.5	118.5	3.5
March ..	136.9	2.9	141.8	-4.4	139.5	1.7	126.6	2.4
Apr. ....	138.0	3.3	140.9	-2.6	140.4	2.1	127.1	2.6
May ....	138.5	3.2	141.2	-2.5	141.5	2.1	127.8	2.5
June ...	138.2	3.2	134.6	-3.1	142.2	2.5	127.9	2.3
July ....	136.4	3.9	126.4	-1.2	142.8	2.9	123.9	3.5
Aug. ....	135.6	3.6	129.7	0.2	142.9	2.9	120.0	2.1

Source: Calculations based on NSSG data.

Table 2 (continued)

## Harmonised index of consumer prices: general index and basic sub-indices

Period	Energy		Services		HICP excluding unprocessed food and energy	
	(1996=100)	Percentage change over previous year	(1996=100)	Percentage change over previous year	(1996=100)	Percentage change over previous year
<b>2001</b> . . . . .	106.4	-1.7	128.1	3.9	121.1	3.8
<b>2002</b> . . . . .	106.1	-0.3	133.8	4.5	125.8	3.9
<b>2003</b> . . . . .	110.0	3.7	139.4	4.1	129.7	3.1
<b>2004</b> . . . . .	117.0	6.4	144.7	3.8	134.2	3.4
<b>2004</b> I . . . . .	110.4	-3.3	142.8	4.0	131.5	3.3
II . . . . .	117.2	9.7	144.3	3.8	134.8	3.5
III . . . . .	118.2	7.9	145.3	3.9	133.8	3.7
IV . . . . .	122.4	11.6	146.5	3.6	136.6	3.2
<b>2005</b> I . . . . .	122.7	11.2	147.9	3.6	136.3	3.6
II . . . . .	132.9	13.5	149.8	3.8	138.9	3.1
<b>2003</b> Jan. . . . .	111.0	11.2	137.7	4.8	127.0	3.7
Feb. . . . .	115.2	14.5	137.2	4.7	125.7	3.6
March . . . . .	116.1	12.0	137.3	4.0	129.1	3.2
Apr. . . . .	107.9	-0.6	139.0	4.5	130.0	3.2
May . . . . .	105.9	-2.0	138.8	3.2	130.2	2.5
June . . . . .	106.5	-0.3	139.1	4.0	130.4	2.8
July . . . . .	108.4	1.3	139.3	4.0	127.8	2.8
Aug. . . . .	110.1	1.7	139.6	4.1	128.0	2.9
Sept. . . . .	110.1	1.3	140.4	4.0	131.2	3.0
Oct. . . . .	110.5	1.4	140.8	4.1	131.9	3.1
Nov. . . . .	110.6	5.2	140.8	4.0	132.1	3.1
Dec. . . . .	107.9	-0.2	142.7	4.3	133.0	3.3
<b>2004</b> Jan. . . . .	109.5	-1.4	143.0	3.9	131.2	3.3
Feb. . . . .	108.9	-5.5	142.5	3.9	129.6	3.1
March . . . . .	112.8	-2.9	143.0	4.1	133.7	3.5
Apr. . . . .	115.6	7.0	144.3	3.8	134.4	3.4
May . . . . .	119.0	12.4	143.9	3.7	134.7	3.5
June . . . . .	116.9	9.8	144.6	4.0	135.2	3.7
July . . . . .	117.5	8.4	144.9	4.0	133.2	4.2
Aug. . . . .	118.6	7.8	145.2	4.0	132.4	3.5
Sept. . . . .	118.3	7.5	145.8	3.8	135.9	3.6
Oct. . . . .	125.1	13.3	145.7	3.5	136.3	3.3
Nov. . . . .	124.6	12.7	145.9	3.6	136.3	3.2
Dec. . . . .	117.5	8.9	147.8	3.6	137.2	3.1
<b>2005</b> Jan. . . . .	118.1	7.9	148.0	3.5	137.4	4.7
Feb. . . . .	122.1	12.1	147.6	3.6	134.0	3.4
March . . . . .	127.9	13.4	148.1	3.6	137.5	2.8
Apr. . . . .	132.6	14.7	149.6	3.7	138.4	3.0
May . . . . .	131.9	10.8	149.9	4.1	139.0	3.2
June . . . . .	134.3	14.9	149.8	3.6	139.2	2.9
July . . . . .	135.1	15.0	150.1	3.6	137.8	3.4
Aug. . . . .	137.3	15.8	150.2	3.5	136.3	2.9

Source: Calculations based on NSSG data.

**Table 3**  
**Industrial producer price index (PPI) for the domestic market: general index and basic sub-indices**

Period	PPI – domestic market (General index)		Energy (total)		Fuels		General index excl. energy	
	(2000=100)	Percentage change over previous year	(2000=100)	Percentage change over previous year	(2000=100)	Percentage change over previous year	(2000=100)	Percentage change over previous year
<b>2001</b> .....	103.6	3.6	97.1	-2.9	93.7	-6.3	105.1	5.1
<b>2002</b> .....	106.0	2.3	99.2	2.1	93.3	-0.4	107.6	2.3
<b>2003</b> .....	108.5	2.3	101.0	1.8	91.6	-1.8	110.2	2.5
<b>2004</b> .....	112.3	3.5	105.0	4.0	95.6	4.3	115.4	4.7
<b>2004</b> I .....	109.8	1.3	100.2	-3.6	86.6	-15.9	114.0	4.3
II .....	112.3	4.4	104.6	6.0	95.3	11.0	115.6	5.3
III .....	113.3	4.4	107.1	6.5	99.9	10.8	116.0	5.0
IV .....	113.8	4.1	108.2	7.4	100.5	14.7	116.3	4.3
<b>2005</b> I .....	114.8	4.6	110.1	9.9	103.0	19.0	116.9	2.6
II .....	117.8	4.9	116.8	11.6	116.1	21.9	118.2	2.3
<b>2003</b> Jan. ....	108.0	3.5	103.0	7.2	100.7	15.6	109.0	2.5
Feb. ....	108.8	4.3	105.1	9.6	106.4	22.6	109.3	2.8
March ..	108.6	3.1	103.6	5.8	101.7	10.2	109.6	2.3
Apr. ....	107.7	1.6	99.1	-0.3	87.2	-9.5	109.8	2.2
May ....	107.4	1.4	97.9	-1.0	83.5	-11.9	109.8	2.1
June ....	107.7	2.0	99.1	1.3	86.7	-5.2	109.8	2.2
July ....	108.2	2.2	100.6	2.4	91.6	0.6	109.9	2.2
Aug. ....	108.5	2.0	100.6	0.2	91.5	-2.2	110.4	2.5
Sept. ....	108.9	1.7	100.6	-1.6	87.3	-12.1	110.9	2.6
Oct. ....	109.2	1.8	101.3	-1.1	89.5	-10.2	111.1	2.7
Nov. ....	109.5	2.5	101.1	1.2	88.6	-3.1	111.6	2.9
Dec. ....	109.3	2.0	99.9	-1.4	84.7	-11.6	111.7	2.9
<b>2004</b> Jan. ....	109.3	1.2	99.9	-3.0	86.2	-14.4	113.3	4.0
Feb. ....	109.5	0.7	99.2	-5.6	84.5	-20.6	114.0	4.3
March ..	110.6	1.8	101.4	-2.1	89.1	-12.4	114.6	4.5
Apr. ....	111.9	3.9	103.4	4.3	92.9	6.4	115.5	5.2
May ....	112.9	5.1	106.4	8.7	99.0	18.5	115.7	5.3
June ....	112.2	4.2	104.1	5.1	93.9	8.3	115.6	5.4
July ....	112.8	4.3	105.9	5.3	97.5	6.5	115.7	5.3
Aug. ....	113.4	4.5	107.5	6.9	100.7	10.0	116.0	5.1
Sept. ....	113.7	4.4	107.9	7.3	101.5	16.3	116.2	4.8
Oct. ....	114.9	5.2	111.8	10.3	109.5	22.3	116.3	4.7
Nov. ....	114.0	4.1	108.2	7.1	99.7	12.5	116.5	4.4
Dec. ....	112.6	3.0	104.5	4.6	92.2	9.0	116.0	3.9
<b>2005</b> Jan. ....	113.6	3.9	107.0	7.1	96.9	12.5	116.4	2.7
Feb. ....	114.5	4.6	109.1	10.0	101.2	19.8	116.9	2.5
March ..	116.4	5.3	114.2	12.6	110.9	24.6	117.4	2.5
Apr. ....	117.6	5.1	116.6	12.8	115.9	24.9	118.1	2.2
May ....	117.1	3.7	114.7	7.8	112.0	13.2	118.1	2.1
June ....	118.6	5.7	118.9	14.3	120.3	28.0	118.5	2.4
July ....	119.2	5.6	120.6	13.9	123.8	26.9	118.5	2.4
Aug. ....	120.2	6.0	123.5	14.9	129.2	28.3	118.8	2.5

Source: Calculations based on NSSG data.

Table 4

Industrial producer price index (PPI) for the external market and wholesale price index (imported products)

Period	PPI – external market				Wholesale price index		Wholesale price index excl. energy	
	General index		General index excl. energy					
	(2000=100)	Percentage change over previous year	(2000=100)	Percentage change over previous year	(1995=100)	Percentage change over previous year	(1995=100)	Percentage change over previous year
<b>2001</b> . . . . .	100.7	0.7	103.4	3.4	120.7	1.9	119.8	2.3
<b>2002</b> . . . . .	101.8	1.1	105.1	1.6	121.2	0.4	120.6	0.7
<b>2003</b> . . . . .	101.5	-0.3	104.4	-0.6	122.5	1.1	121.6	0.9
<b>2004</b> . . . . .	106.6	5.0	106.3	1.8	123.1	0.5	122.0	0.3
<b>2004</b> I . . . . .	104.4	2.3	105.9	2.5	122.5	0.0	121.7	0.3
II . . . . .	107.0	7.4	106.9	3.4	123.1	0.6	122.1	0.5
III . . . . .	107.7	6.0	106.5	1.8	123.2	0.5	122.0	0.2
IV . . . . .	107.3	4.4	106.0	-0.4	123.7	0.9	122.3	0.4
<b>2005</b> I . . . . .	107.2	2.7	105.9	0.0	124.2	1.4	122.9	0.9
II . . . . .	109.4	2.3	106.3	-0.6	125.2	1.7	123.6	1.2
<b>2003</b> Jan. . . . .	101.7	0.8	103.3	-2.1	122.4	1.4	121.4	1.0
Feb. . . . .	102.5	1.5	103.2	-2.4	122.7	1.6	121.4	1.1
March . . . . .	102.1	0.1	103.5	-1.8	122.7	1.4	121.3	0.8
Apr. . . . .	99.8	-2.9	103.5	-1.9	122.4	1.0	121.6	0.9
May . . . . .	99.0	-3.1	103.2	-2.0	122.3	0.9	121.5	0.9
June . . . . .	99.9	-1.4	103.4	-1.3	122.3	1.0	121.5	0.9
July . . . . .	101.2	0.3	104.2	-0.3	122.4	1.2	121.6	1.1
Aug. . . . .	102.0	0.2	104.4	-0.6	122.6	1.0	121.8	0.9
Sept. . . . .	101.6	-1.4	105.2	0.1	122.7	0.9	121.9	0.9
Oct. . . . .	102.9	0.0	106.3	1.2	122.6	0.9	121.8	0.8
Nov. . . . .	103.1	1.9	106.7	1.9	122.6	0.9	121.8	0.7
Dec. . . . .	102.5	0.8	106.6	2.1	122.5	0.6	121.6	0.5
<b>2004</b> Jan. . . . .	104.2	2.4	105.6	2.3	122.4	0.0	121.5	0.1
Feb. . . . .	103.9	1.3	105.8	2.5	122.5	-0.1	121.7	0.2
March . . . . .	105.2	3.0	106.3	2.6	122.7	0.0	121.9	0.4
Apr. . . . .	106.6	6.8	107.0	3.4	123.2	0.7	122.2	0.5
May . . . . .	107.8	8.9	107.0	3.7	123.1	0.7	122.1	0.5
June . . . . .	106.6	6.7	106.7	3.2	123.0	0.6	122.0	0.4
July . . . . .	107.3	6.0	106.6	2.3	123.1	0.5	122.0	0.3
Aug. . . . .	107.8	5.7	106.4	2.0	123.1	0.3	121.9	0.1
Sept. . . . .	108.1	6.4	106.5	1.2	123.5	0.7	122.1	0.2
Oct. . . . .	108.8	5.8	106.3	0.0	123.8	0.9	122.3	0.4
Nov. . . . .	107.4	4.1	106.1	-0.5	123.7	0.8	122.3	0.4
Dec. . . . .	105.7	3.1	105.7	-0.8	123.5	0.9	122.3	0.5
<b>2005</b> Jan. . . . .	106.2	2.0	105.7	0.1	123.8	1.1	122.5	0.8
Feb. . . . .	106.9	2.9	106.0	0.2	124.2	1.4	122.9	1.0
March . . . . .	108.5	3.1	105.9	-0.3	124.7	1.6	123.2	1.1
Apr. . . . .	109.1	2.4	106.0	-0.9	125.2	1.6	123.5	1.1
May . . . . .	109.1	1.2	106.3	-0.6	125.1	1.6	123.5	1.2
June . . . . .	110.1	3.3	106.5	-0.2	125.4	1.9	123.6	1.3
July . . . . .	111.5	3.9	106.8	0.2	125.7	2.1	123.9	1.5
Aug. . . . .	112.5	4.4	106.9	0.5	...	...	...	...

Source: Calculations based on NSSG data.

Table 5

## 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	2000	2001	2002	2003	2004
Primary sector (agriculture)	7,277	-4.2	-4.1	-1.6	-4.0	0.6	...
Secondary sector	16,550	5.4	6.6	2.1	6.1	0.5	...
Mining and quarrying	476	23.2	2.2	8.4	-4.8	0.6	...
Manufacturing	9,572	4.6	3.3	2.5	3.5	-1.5	...
Electricity - natural gas - water supply	1,751	4.8	1.3	1.8	7.8	4.1	...
Construction	4,751	5.7	15.1	0.9	10.8	2.4	...
Tertiary sector	50,031	5.1	6.1	3.8	6.7	6.5	...
Trade	10,018	3.1	13.9	2.1	9.4	0.5	...
Hotels - restaurants	4,821	5.4	6.3	6.1	7.5	9.3	...
Transport - communications	4,978	16.2	1.3	5.9	6.3	20.8	...
Financial intermediaries	3,112	10.0	7.6	-8.9	21.9	9.4	...
Real estate management and other activities	12,577	3.5	4.4	2.1	2.8	0.2	...
Public administration - security	5,308	-2.8	1.0	8.4	-4.3	14.0	...
Education	3,298	1.6	-1.0	12.0	12.3	1.6	...
Health	3,855	3.0	2.5	5.8	5.4	0.4	...
Miscellaneous services	2,064	7.6	15.2	9.5	4.9	11.8	...
Gross value added at basic prices	73,858	4.4	5.4	3.1	5.8	4.7	...
Financial services indirectly measured (FISIM)	-2,175	13.8	18.8	-12.7	31.6	11.3	...
Gross value added (excluding FISIM)	71,683	4.1	4.9	3.8	4.8	4.4	...
Private consumption	58,405	2.0	3.1	3.3	4.5	4.4	3.2
Public consumption	12,250	14.8	-1.5	7.3	-2.1	3.9	2.7
Gross fixed capital formation	14,867	8.0	6.5	5.7	13.7	5.7	1.0
Housing	4,031	-4.3	4.8	8.8	7.3	-0.6	-1.5
Other constructions	5,391	8.9	8.2	0.7	13.2	6.1	2.2
Equipment	4,680	14.1	4.9	6.9	18.3	8.0	1.1
Other	765	7.6	20.1	21.0	3.4	6.9	1.1
Change in stocks and statistical discrepancy (as a percentage of GDP)	251	0.7	0.2	0.3	0.1	0.1	0.0
Domestic final demand	85,774	5.7	2.7	4.4	5.5	4.7	2.4
Exports of goods and services	14,087	14.0	-1.0	-7.7	1.0	11.5	5.0
Exports of goods	8,344	8.7	-1.6	-7.1	4.2	-2.5	4.7
Exports of services	5,743	18.0	-0.7	-8.1	-1.3	21.8	5.2
Final demand	99,861	7.2	2.0	2.2	4.7	5.8	2.9
Imports of goods and services	19,934	15.1	-5.1	-2.7	5.1	9.3	0.7
Imports of goods	18,084	15.2	-6.3	3.7	7.1	9.0	0.2
Imports of services	1,849	14.4	-0.1	-28.0	-6.1	10.9	3.9
GDP at market prices	79,927	4.5	4.6	3.8	4.6	4.7	3.6

Sources: NSSG/National Accounts, September 2005: final data for 2000 and revised data for 2001-2004. For 2005, Ministry of Economy and Finance (Draft Budget 2006, 3 October 2005).

Table 6

## Employed persons (in thousands) of 15 years and over, by branch of economic activity

	2005 Q2	
	Total employed persons	Salaried employees
<b>Total</b>	<b>4,381.8</b>	<b>2,748.7</b>
Agriculture, animal breeding, hunting and forestry	530.4	34.1
Fishing	14.2	2.8
Mining and quarrying	17.7	16.8
Manufacturing	560.3	413.0
Electricity, gas, steam and water supply	37.7	37.7
Construction	376.3	244.3
Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods	782.1	406.6
Hotels and restaurants	304.1	177.6
Transport, storage and communication	267.7	199.5
Financial intermediation	113.0	101.9
Real estate, renting and business activities	289.2	160.1
Public administration and defence, compulsory social security	343.6	342.1
Education	312.4	285.9
Health and social work	220.2	186.8
Other community, social and personal service activities	153.6	110.9
Private households with employed persons	67.6	64.1
Extra-territorial organisations and bodies	0.6	0.6
<b>Source:</b> NSSG, Labour Force Survey.		

Table 7  
Balance of payments  
(Million euro)

	January - July			July		
	2003	2004	2005	2003	2004	2005
<b>I CURRENT ACCOUNT BALANCE (I.A+I.B+I.C+I.D)</b>	<b>-6,765.1</b>	<b>-6,538.5</b>	<b>-8,193.5</b>	<b>-202.9</b>	<b>-232.3</b>	<b>-410.9</b>
<b>I.A TRADE BALANCE (I.A.1-I.A.2)</b>	<b>-13,267.7</b>	<b>-14,391.9</b>	<b>-15,434.7</b>	<b>-1,961.2</b>	<b>-2,223.1</b>	<b>-2,330.1</b>
Oil trade balance	-2,449.2	-2,396.0	-3,250.6	-270.6	-336.5	-529.7
Non-oil trade balance	-10,818.5	-11,995.9	-12,184.1	-1,690.6	-1,886.6	-1,800.4
Ship balance	-27.5	567.1	-247.5	-8.3	103.0	14.2
Trade balance excl. oil and ships	-10,791.0	-12,563.0	-11,936.7	-1,682.3	-1,989.6	-1,814.6
I.A.1 Exports of goods	6,397.1	7,154.5	7,832.2	968.8	1,097.2	1,252.4
Fuel	783.7	802.6	1,078.1	83.1	128.1	248.4
Ships (receipts)	34.2	718.6	1,193.5	0.0	121.1	138.2
Other goods	5,579.2	5,633.3	5,560.6	885.7	848.0	865.8
I.A.2 Imports of goods	19,664.8	21,546.4	23,266.9	2,930.0	3,320.3	3,582.5
Fuel	3,232.9	3,198.6	4,328.7	353.7	464.6	778.1
Ships (payments)	61.7	151.5	1,440.9	8.3	18.1	124.0
Other goods	16,370.2	18,196.3	17,497.3	2,568.0	2,837.6	2,680.4
<b>I.B SERVICES BALANCE (I.B.1-I.B.2)</b>	<b>5,929.9</b>	<b>7,789.2</b>	<b>8,354.6</b>	<b>1,951.5</b>	<b>2,128.8</b>	<b>2,366.0</b>
I.B.1 Receipts	11,385.2	14,175.1	15,063.1	2,828.3	3,129.6	3,425.4
Travel	4,640.4	4,815.0	5,290.5	1,780.0	1,710.0	1,997.0
Transport	5,444.5	7,659.6	8,247.9	838.0	1,146.4	1,173.0
Other services	1,300.3	1,700.4	1,524.6	210.3	273.2	255.4
I.B.2 Payments	5,455.3	6,385.8	6,708.5	876.8	1,000.9	1,059.3
Travel	1,033.3	1,210.5	1,407.7	156.9	180.0	250.0
Transport	2,763.1	3,297.3	3,485.4	410.1	501.5	510.8
Other services	1,658.9	1,878.1	1,815.4	309.8	319.4	298.5
<b>I.C INCOME BALANCE (I.C.1-I.C.2)</b>	<b>-2,206.3</b>	<b>-2,478.4</b>	<b>-3,152.4</b>	<b>-407.8</b>	<b>-520.7</b>	<b>-768.4</b>
I.C.1 Receipts	1,377.5	1,383.4	1,621.5	197.4	200.9	222.4
Wages, salaries	203.6	168.7	160.6	36.6	26.7	25.2
Interest, dividends, profits	1,173.9	1,214.7	1,460.9	160.7	174.2	197.2
I.C.2 Payments	3,583.8	3,861.8	4,773.9	605.2	721.6	990.8
Wages, salaries	90.5	104.1	121.3	15.6	16.1	20.9
Interest, dividends, profits	3,493.3	3,757.7	4,652.6	589.6	705.6	969.9
<b>I.D CURRENT TRANSFERS BALANCE (I.D.1-I.D.2)</b>	<b>2,779.0</b>	<b>2,542.6</b>	<b>2,039.1</b>	<b>214.6</b>	<b>382.7</b>	<b>321.5</b>
I.D.1 Receipts	4,125.1	4,075.4	4,422.5	438.6	567.7	546.7
General government (mainly transfers from the EU)	2,809.7	2,665.8	3,174.4	206.0	335.0	311.3
Other sectors (emigrants' remittances etc.)	1,315.4	1,409.5	1,248.2	232.7	232.7	235.5
I.D.2 Payments	1,346.1	1,532.8	2,383.4	224.0	184.9	225.2
General government (mainly payments to the EU)	1,110.9	1,249.9	1,920.4	185.5	148.5	145.4
Other sectors	235.2	282.9	463.0	38.5	36.5	79.8
<b>II CAPITAL TRANSFERS BALANCE (II.1-II.2)</b>	<b>586.2</b>	<b>1,338.7</b>	<b>1,025.4</b>	<b>130.8</b>	<b>267.1</b>	<b>-21.9</b>
II.1 Receipts	672.6	1,486.1	1,190.2	144.1	334.5	38.1
General government (mainly transfers from the EU)	577.6	1,400.1	1,084.7	127.6	321.7	21.6
Other sectors (emigrants' remittances etc.)	95.0	86.0	105.5	16.5	12.8	16.5
II.2 Payments	86.4	147.5	164.7	13.3	67.4	60.0
General government (mainly payments to the EU)	8.5	61.9	11.6	1.7	51.5	1.8
Other sectors	78.0	85.6	153.2	11.6	15.9	58.2
<b>III CURRENT ACCOUNT AND CAPITAL TRANSFERS BALANCE</b>	<b>-6,178.9</b>	<b>-5,199.8</b>	<b>-7,168.0</b>	<b>-72.1</b>	<b>34.8</b>	<b>-432.8</b>
<b>IV FINANCIAL ACCOUNT BALANCE (IV.A+IV.B+IV.C+IV.D)</b>	<b>5,876.6</b>	<b>5,344.4</b>	<b>7,196.4</b>	<b>78.1</b>	<b>-1.7</b>	<b>240.3</b>
<b>IV.A DIRECT INVESTMENT<sup>1</sup></b>	<b>-579.7</b>	<b>435.4</b>	<b>-160.0</b>	<b>-36.5</b>	<b>89.0</b>	<b>-154.7</b>
By residents abroad	-416.4	-312.3	-558.2	-50.5	-89.5	-195.6
By non-residents in Greece	-163.3	747.6	398.2	14.1	178.5	40.9
<b>IV.B PORTFOLIO INVESTMENT<sup>1</sup></b>	<b>10,520.4</b>	<b>6,845.7</b>	<b>8,149.4</b>	<b>-907.8</b>	<b>1,274.8</b>	<b>3,210.4</b>
Assets	-5,238.5	-6,820.8	-10,854.1	-241.7	-559.9	176.6
Liabilities	15,758.9	13,666.5	19,003.5	-666.0	1,834.8	3,033.8
<b>IV.C OTHER INVESTMENT<sup>1</sup></b>	<b>-8,022.1</b>	<b>-3,067.6</b>	<b>-891.0</b>	<b>1,132.3</b>	<b>-1,229.6</b>	<b>-2,735.4</b>
Assets	-3,636.3	-7,561.2	-13,583.5	691.9	-897.6	-2,515.4
Liabilities	-4,385.7	4,493.6	12,692.6	440.4	-332.0	-220.0
(General government loans)	-1,882.6	-372.14	688.3	-24.61	-58.54	306.7
<b>IV.D CHANGE IN RESERVE ASSETS<sup>2</sup></b>	<b>3,958.0</b>	<b>1,131.0</b>	<b>98.0</b>	<b>-110.0</b>	<b>-136.0</b>	<b>-80.0</b>
<b>V ERRORS AND OMISSIONS</b>	<b>302.3</b>	<b>-144.6</b>	<b>-28.4</b>	<b>-6.0</b>	<b>-33.1</b>	<b>192.5</b>
<b>RESERVE ASSETS<sup>3</sup></b>				<b>5,056.0</b>	<b>3,474.0</b>	<b>1,896.0</b>

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

2 (+) decrease, (-) increase.

3 Since Greece joined 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.

Source: Bank of Greece.

Table 8

Monetary aggregates of the euro area<sup>1,2</sup>

(Outstanding balances in billion euro, not seasonally adjusted)

End of period	Currency in circulation (1)	Overnight deposits (2)	M1 (3)=(1)+(2)	Deposits with agreed maturity up to two years (4)	Deposits redeemable at notice up to three months (5)	M2 (6)=(3)+(4)+(5)	Repurchase agreements (7)	Money market fund shares/units (8)	Money market paper and debt securities up to two years (9)	M3 <sup>3</sup> (10)=(6)+(7)+(8)+(9)
<b>2001</b> . . . . .	239.7	2,039.2	2,279.0	1,088.8	1,316.6	4,684.4	218.5	398.0	145.9	5,446.8
<b>2002</b> . . . . .	341.2	2,158.3	2,499.4	1,075.7	1,406.3	4,981.4	226.9	470.5	127.6	5,806.4
<b>2003</b> . . . . .	397.9	2,329.2	2,727.1	1,039.2	1,529.6	5,295.8	208.7	581.5	92.7	6,178.7
<b>2004</b> . . . . .	468.4	2,480.5	2,948.9	1,040.5	1,642.9	5,632.2	228.8	604.9	102.3	6,568.2
<b>2003</b> Jan. . . . .	312.1	2,128.7	2,440.8	1,077.2	1,405.5	4,923.8	233.0	534.9	109.2	5,800.5
Feb. . . . .	319.3	2,131.9	2,451.2	1,079.6	1,420.7	4,950.8	233.3	547.2	109.0	5,841.1
March . . . . .	327.2	2,170.3	2,497.5	1,072.9	1,435.8	5,003.6	224.0	550.8	99.4	5,880.3
Apr. . . . .	336.3	2,190.9	2,527.2	1,082.1	1,443.1	5,052.4	230.5	565.5	122.6	5,970.9
May . . . . .	343.8	2,217.7	2,561.5	1,097.4	1,450.5	5,109.4	231.7	571.5	103.7	6,016.3
June . . . . .	351.0	2,254.4	2,605.4	1,060.6	1,464.0	5,130.1	215.0	570.5	99.9	6,015.5
July . . . . .	361.5	2,223.3	2,584.8	1,064.1	1,475.3	5,124.3	219.9	585.0	94.1	6,023.3
Aug. . . . .	362.7	2,210.5	2,573.2	1,070.1	1,482.7	5,126.0	217.1	587.3	92.5	6,022.8
Sept. . . . .	364.8	2,250.7	2,615.6	1,038.6	1,482.8	5,136.9	211.5	576.9	87.6	6,013.0
Oct. . . . .	371.2	2,249.1	2,620.4	1,049.6	1,487.9	5,157.9	224.7	582.3	104.1	6,069.0
Nov. . . . .	379.1	2,288.6	2,667.8	1,043.5	1,494.8	5,206.0	224.7	585.2	103.6	6,119.7
Dec. . . . .	397.9	2,329.2	2,727.1	1,039.2	1,529.6	5,295.8	208.7	581.5	92.7	6,178.7
<b>2004</b> Jan. . . . .	389.1	2,313.8	2,702.9	1,021.7	1,547.2	5,271.7	213.4	591.7	95.6	6,172.4
Feb. . . . .	393.5	2,309.8	2,703.3	1,016.4	1,553.8	5,273.5	227.7	599.2	97.0	6,197.5
March . . . . .	399.6	2,345.9	2,745.5	1,005.6	1,559.1	5,310.2	218.6	602.6	94.5	6,225.9
Apr. . . . .	409.4	2,361.3	2,770.7	1,006.3	1,567.5	5,344.5	224.8	611.0	99.5	6,279.8
May . . . . .	416.6	2,372.0	2,788.7	1,015.4	1,573.4	5,377.4	221.2	609.0	96.2	6,303.8
June . . . . .	423.0	2,410.4	2,833.4	989.0	1,585.6	5,408.0	216.9	609.2	100.1	6,334.2
July . . . . .	436.2	2,398.6	2,834.8	1,000.4	1,593.3	5,428.5	223.0	613.0	97.8	6,362.3
Aug. . . . .	433.4	2,362.3	2,795.7	1,003.5	1,598.9	5,398.0	224.3	624.1	99.3	6,345.6
Sept. . . . .	438.0	2,419.1	2,857.1	993.1	1,600.9	5,451.1	215.9	609.5	100.1	6,376.7
Oct. . . . .	444.4	2,421.6	2,866.0	1,019.4	1,605.0	5,490.4	229.7	617.1	99.0	6,436.1
Nov. . . . .	448.7	2,465.0	2,913.7	1,003.7	1,611.5	5,528.9	223.9	613.4	103.6	6,469.7
Dec. . . . .	468.4	2,480.5	2,948.9	1,040.5	1,642.9	5,632.2	228.8	604.9	102.3	6,568.2
<b>2005</b> Jan. . . . .	459.9	2,506.1	2,966.0	1,015.4	1,655.9	5,637.3	228.7	616.4	99.2	6,581.7
Feb. . . . .	463.6	2,507.1	2,970.7	1,013.0	1,660.3	5,643.9	227.0	615.4	114.1	6,600.4
March . . . . .	471.8	2,526.4	2,998.1	1,017.7	1,665.2	5,681.0	227.0	614.6	106.1	6,628.6
Apr. . . . .	481.1	2,549.3	3,030.4	1,034.8	1,672.5	5,737.7	226.3	627.8	121.0	6,712.7
May . . . . .	485.8	2,578.7	3,064.5	1,035.7	1,678.7	5,778.9	239.2	634.8	113.5	6,766.4
June . . . . .	496.6	2,808.6	3,305.1	1,028.9	1,520.0	5,854.0	238.8	621.1	118.8	6,832.6
July . . . . .	506.4	2,813.5	3,319.9	1,043.1	1,525.6	5,888.6	238.7	635.1	119.4	6,881.8
Aug.* . . . .	500.9	2,766.3	3,267.2	1,054.6	1,529.7	5,851.6	249.1	638.8	119.3	6,858.7

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 Data for the euro area until the end of 2000 concern the Euro-11. As from 1 January 2001, they concern the Euro-12.

3 M3 and its components exclude non-residents' holdings of money market fund shares/units and debt securities up to two years.

\* Provisional data.

Source: ECB.

Table 9

The Greek contribution to the main monetary aggregates of the euro area<sup>1</sup>*(Outstanding balances in billion euro, not seasonally adjusted)*

End of period	Overnight deposits		Deposits with an agreed maturity up to two years	Deposits redeemable at notice up to three months <sup>2</sup>	Repurchase agreements (repos)	Money market fund shares/units	Debt securities up to two years	Total <sup>3</sup> (M3 excluding currency in circulation)	
	Sight deposits and current accounts	Savings deposits							
	(1)	(1.1)	(1.2)	(2)	(3)	(4)	(5)	(6)	(7)=(1)+(2)+ +(3)+(4)+ +(5)+(6)
<b>2001</b> .....	70.8	16.1	54.7	29.4	2.4	24.2	9.7	0.1	136.7
<b>2002</b> .....	71.7	15.2	56.5	28.9	2.3	20.0	10.7	0.2	133.8
<b>2003</b> .....	79.5	17.6	61.9	32.3	2.0	10.8	15.7	0.5	140.8
<b>2004</b> .....	91.7	20.7	71.0	33.4	1.9	9.5	15.2	0.5	152.3
<b>2003</b> Jan. ....	70.3	14.2	56.1	28.9	2.2	20.2	12.0	0.2	133.7
Feb. ....	71.8	14.4	57.4	27.1	2.2	19.2	12.9	0.2	133.5
March ..	72.5	14.9	57.6	27.3	2.2	16.8	14.1	0.2	133.2
Apr. ....	72.7	14.6	58.1	28.7	2.2	16.3	14.4	0.3	134.7
May ....	71.9	14.5	57.4	28.8	2.0	15.7	14.7	0.3	133.4
June ....	74.9	16.7	58.2	29.7	2.1	13.5	15.7	0.4	136.3
July .....	72.9	15.8	57.1	32.0	2.1	13.0	15.8	0.4	136.3
Aug. ....	74.0	16.1	57.9	33.0	2.2	12.2	15.7	0.4	137.5
Sept. ....	74.9	17.1	57.8	32.7	2.1	12.0	15.6	0.4	137.7
Oct. ....	74.0	16.2	57.8	33.3	2.1	11.8	15.6	0.5	137.3
Nov. ....	74.1	15.4	58.7	32.9	2.1	11.6	15.5	0.5	136.7
Dec. ....	79.5	17.6	61.9	32.3	2.0	10.8	15.7	0.5	140.8
<b>2004</b> Jan. ....	79.5	17.2	61.6	32.5	2.1	10.6	15.2	0.5	139.7
Feb. ....	79.6	17.3	62.3	32.1	2.1	10.5	15.2	0.5	139.9
March ..	82.1	17.8	64.3	31.8	2.1	9.5	15.8	0.4	141.6
Apr. ....	81.4	17.8	63.6	33.5	2.2	9.1	15.9	0.4	142.5
May ....	82.5	17.0	65.5	32.2	2.1	8.9	15.6	0.4	141.8
June ....	84.9	18.3	66.6	32.4	2.1	9.4	15.8	0.4	145.0
July .....	85.5	18.3	67.2	33.0	2.1	9.3	15.9	0.4	146.2
Aug. ....	84.9	17.7	67.2	33.2	2.1	9.6	15.8	0.4	146.1
Sept. ....	86.0	18.7	67.3	33.4	2.1	10.5	15.3	0.5	147.8
Oct. ....	86.4	18.9	67.5	33.6	2.0	10.4	15.4	0.5	148.2
Nov. ....	87.5	19.6	67.9	33.8	2.0	10.1	15.3	0.5	149.1
Dec. ....	91.7	20.7	71.0	33.4	1.9	9.5	15.2	0.5	152.3
<b>2005</b> Jan. ....	90.4	19.8	70.6	37.8	2.0	5.6	14.9	0.5	151.2
Feb. ....	91.9	20.8	71.1	39.4	2.0	4.4	14.6	0.5	152.8
March ..	890.9	20.4	70.6	41.0	2.0	4.2	14.2	0.4	152.6
Apr. ....	91.1	20.2	70.9	42.3	2.6	3.8	13.0	0.5	153.4
May ....	91.5	20.2	71.2	42.6	2.8	4.1	12.5	0.5	153.9
June ....	96.8	23.9	72.9	42.2	3.1	3.7	10.9	0.4	157.2
July .....	93.8	21.8	72.0	43.9	3.3	3.3	10.7	0.4	155.4
Aug. ....	93.5	21.2	72.3	45.0	3.6	3.3	10.1	0.3	155.8

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 Including savings deposits in currencies other than the euro.

3 As in all other euro area countries, Greece's M3 can no longer be calculated accurately, since part of the quantity of euro banknotes and coins in circulation in each country is held by residents of other euro area countries (as well as non-euro area residents). Owing to these technical problems, the compilation of the Greek M0, M1, M2 and M3 was discontinued in January 2003.

Source: Bank of Greece.

Table 10

Greece: deposits of domestic firms and households with OMFIs,<sup>1</sup> 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 <sup>2</sup>	Deposits in other currencies	Sight deposits	Savings deposits	Time deposits <sup>3</sup>
<b>2001</b> .....	101,809.5	79,566.0	22,243.5	13,385.2	58,323.1	30,101.1
<b>2002</b> .....	104,761.1	87,732.3	17,028.8	13,367.3	60,406.1	30,987.7
<b>2003</b> .....	115,750.1	98,119.3	17,630.8	15,395.8	65,141.1	35,213.2
<b>2004</b> .....	128,424.6	110,206.7	18,217.9	18,274.2	73,954.2	36,196.1
<b>2003</b> Jan. ....	102,687.7	85,423.3	17,264.4	11,703.0	59,707.7	31,277.0
Feb. ....	102,455.9	85,527.5	16,928.4	12,419.8	60,981.4	29,054.7
March ....	103,684.4	86,637.5	17,046.9	12,996.7	61,203.6	29,484.0
Apr. ....	105,407.4	87,642.8	17,764.6	12,664.5	61,690.6	31,052.2
May ....	104,593.8	86,997.3	17,596.5	12,586.4	60,809.6	31,197.8
June ....	108,637.5	90,199.0	18,438.5	14,702.7	61,700.5	32,234.3
July ....	108,694.9	89,934.1	18,760.8	13,670.6	60,471.2	34,553.1
Aug. ....	110,793.2	91,498.3	19,294.9	14,035.9	61,242.3	35,515.0
Sept. ....	111,384.5	92,881.7	18,502.8	14,958.4	61,151.5	35,274.5
Oct. ....	111,068.9	92,207.8	18,861.1	14,024.4	61,020.5	36,024.0
Nov. ....	110,668.9	92,383.7	18,285.2	13,157.4	61,846.9	35,664.6
Dec. ....	115,750.1	98,119.3	17,630.8	15,395.8	65,141.1	35,213.2
<b>2004</b> Jan. ....	114,996.0	96,977.6	18,018.4	14,874.7	64,645.4	35,476.0
Feb. ....	115,491.9	97,036.0	18,455.9	15,089.7	66,332.2	34,070.0
March ....	117,571.4	98,647.3	18,924.1	15,479.0	67,322.0	34,770.4
Apr. ....	118,835.4	99,526.4	19,309.0	15,687.6	66,697.8	36,450.0
May ....	118,645.4	99,905.7	18,739.7	14,995.6	68,548.9	35,100.9
June ....	120,997.2	102,774.4	18,222.8	16,078.1	69,641.4	35,277.7
July ....	122,396.3	103,778.5	18,617.8	16,368.9	70,186.6	35,840.9
Aug. ....	122,065.6	103,347.9	18,717.7	15,579.5	70,397.0	36,089.1
Sept. ....	123,471.3	104,687.8	18,783.6	16,727.8	70,396.8	36,346.7
Oct. ....	123,971.8	105,394.3	18,577.5	16,840.4	70,593.6	36,537.8
Nov. ....	124,875.8	106,408.6	18,467.2	17,304.0	70,903.5	36,668.3
Dec. ....	128,424.6	110,206.7	18,217.9	18,274.2	73,954.2	36,196.1
<b>2005</b> Jan. ....	131,749.7	114,232.0	17,517.7	17,586.6	73,515.5	40,647.6
Feb. ....	134,088.9	116,771.1	17,317.8	17,866.2	74,096.0	42,126.7
March ....	134,801.8	116,303.2	18,498.7	17,521.9	73,527.1	43,752.9
Apr. ....	136,854.8	118,087.9	18,766.9	17,333.7	74,453.1	45,068.0
May ....	137,472.3	118,223.8	19,248.5	17,189.9	75,046.6	45,235.8
June ....	142,951.8	123,548.2	19,403.6	20,868.4	77,036.6	45,046.9
July ....	142,253.9	122,248.8	20,005.1	19,144.9	76,318.4	46,790.5
Aug. ....	143,123.5	122,629.8	20,493.7	18,436.6	76,764.9	47,922.0

1 Other Monetary Financial Institutions (OMFIs) 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 11**  
**ECB and Bank of Greece interest rates**  
*(Percentages per annum)*

1. ECB interest rates				2. Bank of Greece interest rates				
With effect from: <sup>1</sup>	Deposit facility	Main refinancing operations <sup>3</sup>	Marginal lending facility	With effect from:	Overnight deposit facility – first tier <sup>4</sup>	Overnight deposit facility – second tier <sup>4</sup>	14-day intervention rate	Lombard rate
<b>1999</b> 1 Jan.	2.00	3.00	4.50	<b>1999</b> 14 Jan.	11.50	9.75	12.00	13.50
4 Jan. <sup>2</sup>	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					
<b>2000</b> 4 Feb.	2.25	3.25	4.25	<b>2000</b> 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 <sup>3</sup>	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
<b>2001</b> 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					
<b>2002</b> 6 Dec.	1.75	2.75	3.75					
<b>2003</b> 7 March	1.50	2.50	3.50					
6 June	1.00	2.00	3.00					

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 12  
Money market interest rates

(Percentages per annum, period averages)

Period	Overnight deposits <sup>1</sup>	1-month deposits <sup>2</sup>	3-month deposits <sup>2</sup>	6-month deposits <sup>2</sup>	9-month deposits <sup>2</sup>	12-month deposits <sup>2</sup>
<b>2001</b> .....	4.39	4.33	4.26	4.15	4.10	4.08
<b>2002</b> .....	3.29	3.30	3.32	3.35	3.41	3.49
<b>2003</b> .....	2.32	2.35	2.33	2.31	2.31	2.34
<b>2004</b> .....	2.05	2.08	2.11	2.15	2.20	2.27
<b>2003</b> Jan. ....	2.79	2.86	2.83	2.76	2.72	2.71
Feb. ....	2.76	2.77	2.69	2.58	2.53	2.50
March .....	2.75	2.60	2.53	2.45	2.42	2.41
Apr. ....	2.56	2.58	2.53	2.47	2.45	2.45
May ....	2.56	2.52	2.40	2.32	2.27	2.26
June ....	2.21	2.18	2.15	2.08	2.04	2.01
July ....	2.08	2.13	2.13	2.09	2.07	2.08
Aug. ....	2.10	2.12	2.14	2.17	2.21	2.28
Sept. ....	2.02	2.13	2.15	2.18	2.21	2.26
Oct. ....	2.01	2.10	2.14	2.17	2.23	2.30
Nov. ....	1.97	2.09	2.16	2.22	2.31	2.41
Dec .....	2.06	2.13	2.15	2.20	2.28	2.38
<b>2004</b> Jan. ....	2.02	2.08	2.09	2.12	2.15	2.22
Feb. ....	2.03	2.06	2.07	2.09	2.11	2.16
March .....	2.01	2.04	2.03	2.02	2.02	2.06
Apr. ....	2.08	2.05	2.05	2.06	2.11	2.16
May ....	2.02	2.06	2.09	2.14	2.21	2.30
June ....	2.03	2.08	2.11	2.19	2.29	2.40
July ....	2.07	2.08	2.12	2.19	2.26	2.36
Aug. ....	2.04	2.08	2.11	2.17	2.22	2.30
Sept. ....	2.05	2.08	2.12	2.20	2.28	2.38
Oct. ....	2.11	2.09	2.15	2.19	2.25	2.32
Nov. ....	2.09	2.11	2.17	2.22	2.27	2.33
Dec .....	2.05	2.17	2.17	2.21	2.25	2.30
<b>2005</b> Jan. ....	2.08	2.11	2.15	2.19	2.25	2.31
Feb. ....	2.06	2.10	2.14	2.18	2.24	2.31
March .....	2.06	2.10	2.14	2.18	2.25	2.33
Apr. ....	2.08	2.10	2.14	2.17	2.21	2.27
May ....	2.07	2.10	2.13	2.14	2.16	2.19
June ....	2.06	2.10	2.11	2.11	2.10	2.10
July ....	2.07	2.11	2.12	2.13	2.15	2.17
Aug. ....	2.06	2.11	2.13	2.16	2.19	2.22
Sept. ....	2.09	2.12	2.14	2.17	2.19	2.22

1 Euro overnight index average (EONIA).

2 Euro interbank offered rates (EURIBOR).

Sources: Bank of Greece and Bloomberg.

**Table 13**  
**Greek government paper yields**  
*(Percentages per annum, period averages)*

Period	Yield on one-year Treasury bills	Bond yields						
		3-year	5-year	7-year	10-year	15-year	20-year	32-year
<b>2001</b> .....	4.08	4.28	4.58	4.82	5.30	5.51	5.76	...
<b>2002</b> .....	3.50	4.06	4.45	4.78	5.12	5.24	5.52	...
<b>2003</b> .....	2.34	2.82	3.37	3.83	4.27	4.32	4.91	...
<b>2004</b> .....	2.27	2.87	3.37	3.81	4.25	4.53	4.77	...
<b>2003</b> Jan. ....	2.70	2.91	3.36	3.81	4.43	4.51	4.97	...
Feb. ....	2.50	2.65	3.31	3.89	4.24	4.27	4.83	...
March ....	2.41	2.82	3.38	3.83	4.26	4.33	4.90	...
Apr. ....	2.46	2.99	3.50	3.96	4.38	4.45	5.02	...
May ....	2.25	2.64	3.12	3.57	4.02	4.09	4.73	...
June ....	2.02	2.38	2.88	3.33	3.81	3.86	4.57	...
July ....	2.08	2.62	3.18	3.65	4.12	4.16	4.83	...
Aug. ....	2.28	2.98	3.51	3.91	4.29	4.34	4.90	...
Sept. ....	2.26	2.91	3.47	3.91	4.32	4.37	4.96	...
Oct. ....	2.30	2.94	3.52	3.95	4.38	4.43	5.02	...
Nov. ....	2.41	3.06	3.67	4.09	4.51	4.55	5.10	...
Dec. ....	2.38	2.97	3.58	4.02	4.45	4.49	5.04	...
<b>2004</b> Jan. ....	2.21	2.71	3.34	3.81	4.37	4.33	4.94	...
Feb. ....	2.17	2.91	3.28	3.90	4.35	4.28	4.91	...
March ....	2.06	2.71	3.26	3.71	4.17	4.43	4.75	...
Apr. ....	2.16	2.90	3.45	3.90	4.35	4.72	4.88	...
May ....	2.30	3.08	3.63	4.07	4.49	4.86	5.01	...
June ....	2.41	3.19	3.73	4.15	4.55	4.89	5.03	...
July ....	2.36	3.07	3.61	4.03	4.44	4.79	4.93	...
Aug. ....	2.30	2.91	3.43	3.85	4.28	4.63	4.78	...
Sept. ....	2.37	2.91	3.40	3.79	4.22	4.56	4.70	...
Oct. ....	2.32	2.76	3.25	3.65	4.11	4.47	4.61	...
Nov. ....	2.33	2.66	3.12	3.53	3.97	4.33	4.47	...
Dec. ....	2.30	2.59	2.98	3.36	3.77	4.10	4.24	...
<b>2005</b> Jan. ....	2.31	2.72	2.96	3.29	3.69	3.99	4.12	...
Feb. ....	2.31	2.80	2.97	3.34	3.69	3.94	4.04	...
March ....	2.34	2.88	3.06	3.56	3.92	4.12	4.24	4.49
Apr. ....	2.27	2.70	3.06	3.37	3.76	3.98	4.11	4.38
May ....	2.19	2.55	2.89	3.21	3.60	3.82	3.95	4.21
June ....	2.10	2.35	2.70	3.02	3.44	3.66	3.79	4.05
July ....	2.17	2.42	2.75	3.06	3.46	3.71	3.84	4.10
Aug. ....	2.22	2.49	2.79	3.07	3.47	3.69	3.82	4.08
Sept. ....	2.22	2.42	2.66	2.92	3.30	3.52	3.64	3.91

Source: Bank of Greece.

Table 14

## Greece: domestic MFI loans to domestic firms and households, by branch of economic activity

(Balances in million euro)

End of period	Total	In euro	In foreign currency	Branch of economic activity						
				Agriculture	Industry <sup>1</sup>	Trade	Housing	Tourism	Consumer credit	Other
<b>2001</b> . . . . .	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
<b>2002</b> . . . . .	86,510.5	80,099.7	6,410.8	3,224.7	14,364.0	15,670.8	21,224.7	2,903.2	9,755.4	19,367.7
<b>2003</b> . . . . .	101,178.1	95,649.4	5,528.7	3,082.7	15,865.1	16,514.4	26,534.2	3,488.2	12,409.6	23,283.9
<b>2004</b> . . . . .	117,201.7	111,951.1	5,250.6	3,248.0	15,675.6	18,821.6	33,126.8	4,040.0	17,053.8	25,235.9
<b>2003</b> Jan. . . . .	88,241.8	81,751.6	6,490.2	2,964.2	14,529.2	16,321.5	21,599.4	2,978.4	9,884.9	19,964.2
Feb. . . . .	88,787.7	82,332.2	6,455.5	2,980.5	14,485.6	16,310.3	22,062.6	3,049.0	10,023.3	19,876.4
March . . . . .	89,363.0	83,075.2	6,287.8	2,994.0	14,422.3	16,053.5	22,366.8	3,095.5	10,247.3	20,183.6
Apr. . . . .	90,770.3	84,710.6	6,059.7	3,043.0	14,565.0	16,113.4	22,747.1	3,149.2	10,344.7	20,807.9
May . . . . .	92,497.1	86,811.4	5,685.7	3,027.6	14,866.7	16,488.6	23,183.1	3,085.8	10,432.6	21,412.7
June . . . . .	94,344.1	88,447.4	5,896.7	3,062.3	15,165.2	16,139.3	23,705.7	3,201.0	10,600.9	22,469.7
July . . . . .	96,253.7	90,203.0	6,050.7	3,062.9	15,674.1	16,307.5	24,267.2	3,207.5	10,871.8	22,862.7
Aug. . . . .	97,350.8	91,177.5	6,173.3	3,102.1	15,681.4	16,700.8	24,573.2	3,255.1	11,075.2	22,963.0
Sept. . . . .	97,747.2	91,865.5	5,881.7	3,103.0	15,544.4	16,612.9	25,043.9	3,278.1	11,301.1	22,863.8
Oct. . . . .	98,403.4	92,480.6	5,922.8	3,117.3	15,481.2	16,393.0	25,559.5	3,321.0	11,670.4	22,861.0
Nov. . . . .	99,829.3	94,044.9	5,784.4	3,093.6	15,780.9	16,633.3	25,808.6	3,392.4	12,063.2	23,057.3
Dec. . . . .	101,178.1	95,649.4	5,528.7	3,082.7	15,865.1	16,514.4	26,534.2	3,488.2	12,409.6	23,283.9
<b>2004</b> Jan. . . . .	102,748.9	96,982.9	5,766.0	3,055.4	16,005.1	16,822.7	26,902.8	3,536.8	12,690.8	23,735.3
Feb. . . . .	103,899.7	98,214.0	5,685.7	3,042.0	15,948.2	17,060.8	27,334.5	3,587.7	13,041.9	23,884.6
March . . . . .	105,263.2	99,372.4	5,890.8	3,095.5	15,831.8	17,012.4	27,894.2	3,661.6	13,442.3	24,325.4
Apr. . . . .	106,447.1	100,530.0	5,917.1	3,150.5	15,734.1	17,134.7	28,465.8	3,703.2	13,798.6	24,460.2
May . . . . .	108,835.0	103,158.1	5,676.9	3,242.6	15,950.4	17,773.5	29,080.6	3,766.9	14,169.3	24,851.7
June . . . . .	109,806.8	104,096.1	5,710.7	3,324.8	15,831.1	17,952.6	29,035.7	3,801.5	14,585.6	25,275.5
July . . . . .	111,624.2	105,976.3	5,647.9	3,348.0	15,997.2	18,214.6	29,822.1	3,862.7	14,985.2	25,394.4
Aug. . . . .	111,905.0	106,222.2	5,682.8	3,376.4	15,740.2	18,062.7	30,244.2	3,841.8	15,327.8	25,311.9
Sept. . . . .	113,392.1	107,821.5	5,570.6	3,402.8	15,743.6	18,335.8	30,832.5	3,865.3	15,722.9	25,489.2
Oct. . . . .	114,868.1	109,490.1	5,378.0	3,397.8	15,988.2	18,687.8	31,404.7	3,987.5	16,114.1	25,288.0
Nov. . . . .	115,636.5	110,275.4	5,361.1	3,303.2	15,755.2	18,612.8	32,138.9	3,930.4	16,580.3	25,315.7
Dec. . . . .	117,201.7	111,951.1	5,250.6	3,248.0	15,675.6	18,821.6	33,126.8	4,040.0	17,053.8	25,235.9
<b>2005</b> Jan. . . . .	118,387.3	112,849.1	5,538.2	3,237.8	15,645.2	18,921.1	33,672.4	4,079.3	17,275.8	25,555.7
Feb. . . . .	118,906.4	113,426.3	5,480.1	3,161.6	15,623.8	19,104.7	34,281.6	4,129.9	17,610.7	24,994.1
March . . . . .	120,704.9	114,825.5	5,879.4	3,079.3	15,565.9	19,309.8	35,091.5	4,180.8	17,995.6	25,482.0
Apr. . . . .	123,037.2	117,015.9	6,021.3	3,059.3	15,926.1	19,565.9	35,878.7	4,211.2	18,550.0	25,846.0
May . . . . .	124,228.8	118,054.2	6,174.6	3,038.1	15,872.9	19,520.5	36,610.2	4,225.7	18,896.4	26,065.0
June . . . . .	125,452.3	119,070.9	6,381.4	3,096.1	15,918.8	20,142.8	36,102.8	4,293.7	19,386.6	26,511.5
July . . . . .	127,215.3	120,827.5	6,387.8	3,119.2	16,123.2	20,352.3	37,238.6	4,135.7	18,897.0	27,349.3
Aug. . . . .	127,788.5	121,323.1	6,465.4	3,123.3	15,838.2	20,027.5	37,850.0	4,110.4	19,245.4	27,594.0

1 Comprising manufacturing and mining.

Source: Bank of Greece.

Table 15

## Greece: bank rates on new euro-denominated deposits of, and loans to, euro area residents

*(Percentages per annum, period averages unless otherwise noted)*

Period	Deposits by households			Deposits by non-financial corporations		Repurchase agreements (repos)
	Overnight deposits <sup>1,2</sup>	Savings deposits <sup>2</sup>	Deposits with agreed maturity up to one year	Overnight deposits <sup>2</sup>	Deposits with agreed maturity up to one year	
<b>2003</b> .....	0.93	0.92	2.48	0.63	2.49	2.24
<b>2004</b> .....	0.91	0.90	2.29	0.55	2.17	1.98
<b>2003</b> Jan. ....	1.10	1.09	2.83	0.74	2.88	2.75
Feb. ....	1.10	1.10	2.73	0.75	2.79	2.71
March .....	1.06	1.05	2.68	0.69	2.40	2.54
Apr. ....	1.05	1.04	2.70	0.73	2.67	2.46
May .....	1.04	1.03	2.61	0.70	2.66	2.45
June .....	0.82	0.81	2.44	0.55	2.41	2.10
July .....	0.80	0.79	2.38	0.60	2.36	2.04
Aug. ....	0.81	0.79	2.29	0.52	2.31	2.00
Sept. ....	0.81	0.80	2.30	0.55	2.30	1.98
Oct. ....	0.87	0.85	2.27	0.62	2.37	1.98
Nov. ....	0.87	0.85	2.29	0.54	2.33	1.94
Dec. ....	0.87	0.86	2.22	0.59	2.35	1.98
<b>2004</b> Jan. ....	0.88	0.86	2.26	0.55	2.18	1.99
Feb. ....	0.88	0.87	2.18	0.57	2.17	1.98
March .....	0.89	0.87	2.29	0.54	2.13	1.95
Apr. ....	0.89	0.88	2.26	0.56	2.13	1.97
May .....	0.90	0.89	2.24	0.56	2.23	1.95
June .....	0.91	0.90	2.29	0.54	2.16	1.97
July .....	0.91	0.91	2.32	0.56	2.18	1.97
Aug. ....	0.92	0.91	2.31	0.60	2.19	1.96
Sept. ....	0.93	0.92	2.33	0.53	2.12	1.97
Oct. ....	0.94	0.93	2.35	0.53	2.17	1.98
Nov. ....	0.95	0.94	2.36	0.51	2.18	2.00
Dec. ....	0.96	0.94	2.30	0.55	2.20	2.01
<b>2005</b> Jan. ....	0.96	0.95	2.25	0.56	2.08	1.97
Feb. ....	0.95	0.94	2.19	0.55	2.07	1.97
March .....	0.93	0.91	2.22	0.55	2.02	1.97
Apr. ....	0.89	0.86	2.22	0.55	2.07	1.98
May .....	0.89	0.87	2.20	0.56	2.04	1.99
June .....	0.89	0.86	2.21	0.58	2.07	1.99
July .....	0.88	0.86	2.20	0.60	2.07	1.98
Aug. ....	0.89	0.86	2.19	0.59	2.08	1.98

1 The rate on overnight deposits by households is the weighted average of the current account rate and the savings deposit rate.

2 End-of-month interest rate.

Source: Bank of Greece.

Table 15 (continued)

Greece: bank rates on new euro-denominated deposits of, and loans to, euro area residents

(Percentages per annum, period averages unless otherwise noted)

Period	Loans to households <sup>1</sup>					Loans to non-financial corporations <sup>1</sup>		
	Loans without defined maturity <sup>2,3</sup>	Consumer loans		Housing loans		Loans without defined maturity <sup>2,4</sup>	With a floating rate or an initial rate fixation of up to one year	
		With a floating rate or an initial rate fixation of up to one year	Total consumer loans average rate	With a floating rate or an initial rate fixation of up to one year	Total housing loans average rate		Up to €1 million	Over €1 million
<b>2003</b> .....	14.41	10.57	10.47	4.51	4.78	6.86	5.29	3.98
<b>2004</b> .....	13.81	9.55	9.86	4.30	4.51	7.01	4.98	3.67
<b>2003</b> Jan. ....	14.71	10.46	10.17	4.53	4.77	7.15	5.53	4.39
Feb. ....	14.68	11.13	10.60	4.58	4.81	7.09	5.59	4.27
March .....	14.66	10.82	10.76	4.58	4.87	7.04	5.37	4.06
Apr. ....	14.76	11.15	10.82	4.58	4.93	7.07	5.55	4.14
May ....	14.58	11.13	10.70	4.59	4.93	6.95	5.68	3.76
June ....	14.54	10.61	10.44	4.53	4.86	6.84	5.15	3.47
July ....	14.24	10.41	10.33	4.37	4.66	6.70	5.06	3.68
Aug. ....	14.05	10.24	10.37	4.48	4.76	6.67	4.95	3.60
Sept. ....	14.14	10.37	10.60	4.62	4.81	6.67	5.14	4.27
Oct. ....	14.22	10.57	10.58	4.57	4.81	6.68	5.24	4.68
Nov. ....	14.27	10.36	10.46	4.35	4.63	6.72	5.14	3.66
Dec. ....	14.08	9.60	9.86	4.31	4.53	6.78	5.13	3.78
<b>2004</b> Jan. ....	13.92	9.82	9.94	4.36	4.68	6.74	5.12	3.92
Feb. ....	13.97	9.94	9.99	4.35	4.63	6.85	5.16	4.09
March .....	14.00	9.44	9.87	4.37	4.63	7.13	4.88	3.45
Apr. ....	14.06	9.56	9.85	4.36	4.55	7.11	5.15	3.49
May ....	13.79	9.82	10.07	4.33	4.54	7.02	4.91	3.45
June ....	13.89	9.71	10.05	4.30	4.54	7.06	4.89	3.58
July ....	13.84	9.60	9.67	4.24	4.43	7.03	4.84	3.53
Aug. ....	13.77	9.70	10.05	4.34	4.53	7.06	4.95	3.52
Sept. ....	13.62	9.37	9.91	4.23	4.43	7.05	4.87	3.80
Oct. ....	13.72	9.68	9.87	4.29	4.45	7.02	4.86	3.83
Nov. ....	13.75	9.40	9.72	4.23	4.36	7.05	5.06	3.61
Dec. ....	13.41	8.58	9.36	4.21	4.37	6.97	5.04	3.77
<b>2004</b> Jan. ....	13.42	8.85	9.39	4.23	4.39	6.95	4.89	3.54
Feb. ....	13.72	8.99	9.62	4.20	4.34	6.95	5.08	3.53
March .....	13.51	8.53	9.43	4.15	4.27	6.94	5.00	3.70
Apr. ....	13.74	8.58	9.37	4.13	4.23	6.94	5.09	3.58
May ....	13.63	8.88	9.13	4.12	4.21	6.89	4.96	3.47
June ....	13.48	8.16	8.78	4.07	4.18	6.87	4.82	3.46
July ....	13.14	8.45	9.35	4.06	4.14	6.82	5.01	3.50
Aug. ....	13.16	8.48	9.39	4.11	4.18	6.84	5.12	3.50

1 Associated costs are not included.

2 The interest rate is the weighted average of the rates on loans to households through credit cards, on open account loans and on overdrafts from current accounts.

3 End-of-month interest rate.

4 The interest rate is the weighted average of the rates on corporate loans via credit lines and on overdrafts from sight deposit accounts.

Source: Bank of Greece.

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