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ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

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Pursuant to Article 1 of the Convention signed in Paris on 14th December 1960, and which came into force on 30th September 1961, the Organisation for Economic Co-operation and Development (OECD) shall promote policies designed:

– to achieve the highest sustainable economic growth and employment and a rising standard of living in Member countries, while maintaining financial stability, and thus to contribute to the development of the world economy;

– to contribute to sound economic expansion in Member as well as non-member countries in the process of economic development; and

– to contribute to the expansion of world trade on a multilateral, non-discriminatory basis in accordance with international obligations.

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Publié également en français.

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BASIC STATISTICS OF GREECE

THE LAND

Area (sq. km)	131 957
Agriculture area (sq. km)	39 290

Major urban areas, 2001 census (thousand inhabitants):	
Greater Athens (including Piraeus)	3 200
Greater Thessaloniki	1 047

THE PEOPLE

Population (thousands, 2001 census)	10 940
Inhabitants per sq. km	82.9
Increase over 1991-2001, per cent	6.7

Total employment (thousands, 2001)	3 901.4
By sector (per cent):	
Agriculture	15.9
Industry and construction	22.9
Services	61.2

PRODUCTION

Gross domestic product in 2001:	
Million of euros	130 426
Per head (US$)	10 674

Gross fixed investment in 2001:	
Per cent of GDP	23.2
Per head (US$)	2 476.1

THE GOVERNMENT

General government (per cent of GDP) in 2001:	
Current expenditures	38.9
Current revenue	41.6
Net lending	0.1

Composition of Parliament (number of seats):	300
Panhellenic Socialist Movement (PASOK)	158
New democracy (ND)	125
Communist Party (KKE)	11
Others	6
Last general elections: April 2000	

THE CURRENCY

Monetary unit: Euro	
Irrevocable conversion rate (drachma per euro)	340.75

Currency units per US$, average of daily figures:	
Year 2001	1.1166
May 2002	1.0891

This Survey is based on the Secretariat's study prepared for the annual review of Greece by the Economic and Development Review Committee on 6th June 2002.

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After revisions in the light of discussions during the review, final approval of the Survey for publication was given by the Committee on 10th June 2002.

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The Secretariat's draft report was prepared for the Committee by Helmut Ziegelschmidt and Vassiliki Koutsogeorgopoulou under the supervision of Nicholas Vanston.

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The previous Survey of Greece was issued in February 2001.

Assessment and recommendations

The Greek economy continued to grow strongly in 2001, but with little impact on the labour market

Domestic demand remained the main engine of activity in 2001, boosted by low nominal and real interest rates, buoyant consumer confidence, large capital inflows under the EU's *Community Support Framework*, and preparations for the 2004 Olympic Games. Nevertheless, Greece did not entirely escape unscathed the global slowdown, and GDP was slowing markedly towards the end of the year, though the year-on-year growth rate, at 4.1 per cent, was the same as in the year 2000. Unemployment fell to a still-high 10½ per cent, but despite brisk output growth in 2001, total employment may have declined slightly. The strong gains in labour productivity were mainly attributable to the ongoing major restructuring of the Greek economy, and the rising capital-labour ratio. But there may be some upward bias in measured labour productivity, to the extent that the under-recording of immigrant labour inputs is not reflected in unrecorded output.

The disinflation process appears to have stalled

The continuous period of disinflation in the 1990s, with rates coming down from double-digit levels as recently as 1994, to a trough of 2 per cent in 1999, seems to have ended. Since then, headline harmonised consumer price inflation has edged up again, reaching 3¾ per cent by 2001, and higher still in the early months of 2002. Its differential with the EU average has widened to 1¼ points. The increase in inflation since 1999 in large part reflects the waning impact of earlier indirect tax cuts and of gentlemen's agreements between government and businesses in order to help meet the Maastricht inflation criterion. Somewhat higher inflation than in economically more advanced countries is acceptable in the process of economic convergence (the Balassa-Samuelson argument). But this argument does not apply to all prices: it is essential for Greece to align price and cost inflation in tradeable sectors with the Euro area average. This might require wage restraint in general government, given the rapid increases in compensation per employee there in the past two years, which may give wrong signals for wage setting elsewhere, discouraging employment growth; though, over that period, private sector wage agreements were relatively moderate. General government pay rises do not stem from across-the-board salary increases, but from one-off increases granted to particular categories of civil servants in order to iron out inequalities; still, the end result is that they are out of line with any plausible estimate of productivity gains and thus risk compromising the government's fiscal consolidation strategy.

Buoyant business investment is boosting the economy's productive potential

The strong recovery of business investment since the mid-1990s has raised the growth of the business sector capital stock and thus helped to raise potential output growth estimates, from 2 per cent in the middle of the 1990s to around 3 per cent by 2001 and to 3½ per cent by next year (estimates provided by the Greek authorities are higher by about ½ percentage point). Other factors which raised the growth potential of the economy were a pick-up in the potential labour force, owing mainly to the inflow of migrants from neighbouring Balkan countries and higher female labour participation, as well as improved total factor productivity from microeconomic reforms. Rising potential output growth has opened room for faster non-inflationary economic growth in the future, although the gap between actual and potential output may have closed in 2001.

The economy is likely to outperform OECD growth in 2002 and 2003…

Output growth is expected to rebound in the course of 2002, in parallel with an improving international environment. Completing the infrastructure for the 2004 Olympic Games, along with the rising inflows of European structural funds should also stimulate investment activity. Household consumption is expected to remain the main pillar of domestic demand. The new tax/benefit package included in the 2002 Budget, and continuing low nominal and real interest rates, should continue to boost household spending and business investment. Private sector indebtedness is still low by international comparison, leaving ample scope for further borrowing. Given the weak carry-over from the end of 2001, year-on-year real GDP growth is likely to ease to 3½ per cent in 2002, before edging up to 4¼ per cent in 2003. The projected rise in employment is too small to allow more than a modest fall in unemployment. As domestic demand accelerates, imports are expected to pick up, but the recovery in world demand should also boost exports, reducing somewhat the drag from the external sector in 2003.

… with a risk of mounting inflationary pressures

Average earnings are projected to grow at annual rates of 5½ per cent, consistent with inflation of around 3 per cent, even if labour productivity continues to grow strongly. Inflation is thus likely to remain markedly higher than the Euro area average, with risks on the upside, given that output is projected to grow somewhat faster than potential. Labour cost increases will play a key role in this respect. Conversely, risks to activity appear balanced, depending mainly on the pace and the timing of recovery in Europe.

The stance of fiscal policy has become less restrictive

Following rapid reductions in the deficit of the general government finances from around 16 per cent of GDP in 1990 to 2½ per cent in 1998, fiscal policy has become less ambitious, moving to a broadly neutral fiscal stance in 2001. Government accounts are estimated to have closed with a small surplus of 0.1 per cent of GDP in 2001, missing the targeted surplus of ½ per cent of GDP despite the inclusion in the budget of revenues of 0.4 per cent of GDP from the sale of mobile phone licenses. As in the previous year, the Budget for 2002 includes tax cuts, equivalent to around ½ per cent of GDP, in addition to a number of social measures to be implemented over the 2002-04 period. The government expects an increase in the surplus to around 0.8 per cent of GDP in 2002, mainly because of declining debt interest payments. The OECD is less optimistic about the success of efforts to control spending, and projects a somewhat smaller surplus, possibly around ½ per cent of GDP. The fiscal stance nevertheless seems likely to move to being mildly restrictive in 2002. Given the prevailing easy monetary conditions and the strong cyclical position of the economy, a further tightening of fiscal policy (including offbudget debt-related items) would be advisable to help control inflation pressures and reduce debt from currently just below 100 per cent of GDP in 2001 to the target of around 60 per cent of GDP in 2010. Larger budget surpluses than projected by the government would also be desirable given the spending pressures that will start emerging in a few years time, arising from an ageing population and a generous public pension system which is currently under reform.

Stronger fiscal adjustment efforts are imperative to reduce the debt-to-GDP ratio to 60 per cent in 2010

In the 1990s, improvements in the budget balance have not resulted in general government debt reductions of the same magnitude because of significant off-budget debt-creating factors. Since the end of 1996, cumulated differences amount to 20 per cent of GDP, and mainly reflect valuation losses from foreign-denominated debt, capital injections to public enterprises, debt assumption by the state on behalf of third parties, the issuance of military debt and the acquisition of financial assets. Should such debt-deficit discrepancies continue on the same scale in future, primary surpluses significantly higher than projected by the government would be required to meet the government's target of an around 60 per cent debt-to-GDP ratio in 2010. OECD calculations suggest that if debt-deficit discrepancies for the period 2002-04 implied by the 2001 Update of the Stability and Growth Programme were to continue until 2010, this would require annual primary surpluses of more than 9 per cent of GDP until then, compared with a primary surplus of around 5 per cent of GDP in the absence of extra debt-creating factors. Given the very low likelihood of such high primary budget surpluses, the achievement of the government's medium-term debt target requires a clear commitment to phase down the off-budget debt-creating factors. Greater effort in this area would aid progress towards achieving debt targets.

This requires greater efficiency of public spending…

The Greek public sector, as measured by expenditure relative to nominal GDP, has greatly increased in size since the 1970s. This is not necessarily an undesirable development in itself: relative to GDP, it remains well below the EU average. But there is evidence that despite the progress that has been made recently, the effiency of both the administration and the allocation of public funds could still be improved, as could budget preparation and monitoring processes themselves. The reforms under way in the auditing of public spending are welcome, but it will be important to ensure that the new auditing institutions are adequately staffed with professionals able to monitor the efficacy of spending programmes, and value for tax-payers' money, as opposed to merely ensuring that the purely legal aspects of such programmes are respected. Important social, political and economic goals could be achieved with significantly less resources, although in the long run more resources are likely to be needed in the areas of education and health care.

… as well as better use of human resources in its administration

A major problem is the rigidities within the administration itself. Job security is high, and job flexibility is low. New demands for public services usually have to be met by creation of new posts, with no commensurate reduction in posts in less important areas, because of constitutional restrictions affecting civil service employment. Promotion continues to be based more on seniority than merit or effort, and it is doubtful if productivity levels and growth rates in the public sector justify the salary increases there for some categories of public employees, especially in recent years. The current policy of only partial replacement of retirees from the public sector is a step in the right direction, but additional reforms are required to ensure greater efficiency in the allocation and shifting of labour resources between, and within, different ministries and levels of government.

Government expenditures need to be restructured…

The long-standing custom of annual incremental changes to previous individual budget lines has probably contributed to the additional problem that the structure of public spending by now does not respond well to the economy's real needs as regards economic performance. Public expenditure on health and education are low by international standards, while that on public administration and on pensions is comparatively high. And despite its very high unemployment rate, spending on unemployment benefits is one of the lowest in the EU. Expenditure on both defence and debt service are also well above the EU average, but the latter at least is likely to continue to fall significantly. Setting expenditure in a medium-term framework could anchor the important required changes to individual programmes, and the reallocation of resources towards more growth promoting priorities. This is all the more important given the emerging demographic pressures from an ageing population.

… and the pension system has to become less generous

Without major reforms – which so far have been energetically resisted by wage-earners – the public pension system threatens in future to crowd-out public spending in areas important for Greece's ambitions to reach income levels elsewhere in the EU. This is so because the Greek pension system is one of the most generous and inequitable in the OECD, because of high replacement rates, easy eligibility criteria, and large differences in pension benefits between pension funds. It has contingent liabilities relative to GDP which are among the highest in the OECD. Age-related expenditures could rise by 12 percentage points of GDP between now and 2050, under current practice and in the absence of reforms. Three main problems of the state-run pay-as-you-go system are short contribution periods, early retirement and pension benefits guaranteed to rise indefinitely in real terms. Options for addressing these issues should include progressive scaling back of early retirement for several privileged groups, lowering benefit levels overall and implementing stricter eligibility criteria. The objective of prolonging contribution periods should include lowering the statutory replacement rates, which in extreme cases can even lead to pensions higher than the last salary in the event of 35 years of contributions. Indexing pensions to prices only would also help reduce the burden on future generations, and bring Greece into line with announced reforms or current practice in many Member countries.

Comprehensive tax reform is essential…

The Greek tax system is highly complex, which keeps compliance costs high. Comprehensive reforms are a priority. The tax base should be broadened to allow a reduction in the strong progressiveness of the personal income tax, and help reduce incentives for tax evasion. It would also allow a reduction of the high social security contribution rates paid on labour income. These reduce labour demand and provide incentives to work in the underground economy. Very importantly, tax reform should tackle the uneven distribution of the tax burden, for example by eliminating the current bias in favour of unincorporated enterprises. Fundamental tax reform has been announced by the government for 2002 and as a first step, a package of tax measures came into effect at the beginning of the year. The measures partially address some of the problems of the current system, such as the uneven taxation of capital income, high non-wage labour costs and the high cost of tax administration, but they do it once more in a piecemeal fashion.

… and the latest proposals go in the right direction

However, the Special Commission of experts, which was set up by the government last year, in order to make proposals for an overall tax reform, has come out with far reaching proposals in all areas of taxation. These proposals aim at making the tax system simpler and fairer. The proposals have been discussed with the social partners, and it is expected that a draft law for a comprehensive tax reform will be submitted to the Parliament by the autumn. Most of the proposals are in line with the recommendations made last year in the OECD *Economic Survey of Greece*, and their adoption would reduce distortions, enhance efficiency, and help improve business competitiveness. It will be important for the government to resist inevitable pressure from interest groups to dilute these reform proposals.

Structural rigidities continue to hamper employment creation…

Despite some recent improvement, the Greek labour market continues to be characterised by low employment and participation rates, and a high level of unemployment, particularly among youth and women. In large part, these poor outcomes reflect:

– labour and product market rigidities;

– distortions generated by the current tax system;

– skill mismatches related to the educational system and the functioning of employment services.

To some extent, these outcomes also reflect the under-recording of immigrant workers, whose employment and participation rates are higher and the unemployment rate lower than that of indigenous workers. Changes in legislation which came into force in April 2001 go some way to making regulations on overtime, part-time work and collective redundancies more flexible. Much more, however, needs to be done. The high severance payments for long-serving white-collar workers, which add considerably to the labour costs for these employees should be brought closer to those of blue-collar workers. Moreover, now that inflation has come down to low single-digit rates, inflation catch-up clauses in national wage bargaining should be phased out, as they contribute to real wage rigidities. The latter also exist in the form of contractual wage rates which are not differentiated according to local labour market conditions; thus, more differentiation at the local or the enterprise level should be encouraged. Although steadily falling since the early 1990s, the ratio of minimum wages to average wages still remains relatively high. Moreover, social security contributions are also high, discouraging employers from hiring. There is thus a case for extending the reduction of social security contributions for the low paid introduced in 2000 and/or raising in-work benefits. There is also ample scope for improving the efficiency of the Public Employment Service (PES) in terms of job-matching, which could be done for example by establishing a contestable employment placement market, with competition between private and public service providers. The restructuring of the Greek PES (OAED) currently under way and the operation of temporary employment agencies go some way in this direction.

... and skills and competencies need to be enhanced

There is also much scope for better tailoring the educational system to the needs of the labour market. Although the level of educational attainment has improved considerably over the past 25 years, the transition of young people from initial education to working life seems more difficult in Greece than elsewhere. Reforms of the educational system need to raise the share who complete the upper secondary cycle while enriching the general education curriculum with the acquisition of skills more attuned to the workplace. At the same time, vocational training programmes targeted at the young need to be strengthened to make the technical stream more effective as a gateway to employment. Some of the funds currently devoted to employment subsidies could well be reallocated toward such vocational training for the young in particular.

The liberalisation of network industries should be stepped up…

Recent years have seen wide-ranging privatisation of the large number of state-owned enterprises, and steps have been undertaken to open network industries to competition, with mixed results. The liberalisation of the telecommunication sector is well advanced, with tangible benefits for both consumers and producers, and growing competition in the mobile market. The Hellenic Telecommunications Organisation became the first public enterprise in Greece to have a majority private ownership, although the government retains a blocking minority shareholding. The domestic ferry sector is also to be liberalised, before the expiration of the derogation period at end-2004, and a regulatory agency is being set up. The privatisation of Olympic Airways has proved difficult in the post-September 11 environment, and is still pending. The transition of the trucking sector to a liberalised regime is foreseen to be implemented only cautiously and should be speeded up. Less progress has been made in opening up the energy sector. Despite its partial liberalisation in February 2001, the electricity sector remains highly integrated, with the incumbent Public Power Corporation (PPC) dominating generation, transmission and distribution, with only accounting separation. Substantial efficiency gains could be realised by the separation of production, transmission and distribution ("unbundling") of electricity and regulated "third-party access" to the grid, as well as splitting up of the generating sector itself. The PPC also has a *de facto* monopoly in the exploitation on favourable terms of the state-owned lignite deposits, which enable it to make some profit, despite comparatively low tariffs (except for industry). Barriers to entry at the generating level are thus as much economic as legal, but the end result is a lack of competition. A first public offering of PPC equity took place in December 2001, with plans for a partial privatisation of the company. However, a complete privatisation of the company should be envisaged once competitive conditions have been created in the contestable segments. Until then, strong regulation will be required to ensure that tariffs and access conditions promote efficiency while encouraging new capacity and new entry. The government has also decided to open up the gas sector before the end of the derogation period in 2006. In preparation, the Public Natural Gas Company has submitted to the energy regulator a new pricing system, which – when fully implemented – should facilitate competition in the energy sector. The existing commercial, operational and/or financial links between the major companies in the energy sector should not be allowed to become an obstacle in this context.

… accompanied by enhanced powers of specific sector regulators

Given the substantial barriers to achieving effective competition in the energy sector in the short and medium run, effective regulation is essential. Hence, steps need to be taken to enhance the powers and responsibilities of specific sector regulators to assure that tariff and access conditions are such as to promote efficiency despite the absence of competition, while creating conditions which make new entry and investment attractive. The wide powers of the National Committee for Telecommunications and Post and its effective role in ensuring competitive solutions are to be noted in this regard.

New legislation greatly enhanced the Competition Committee's means to fight anti-competitive behaviour

The reform of anti-trust legislation of August 2000 made the Competition Committee, the national antitrust authority, independent of the government. It also enhanced its human and financial resources, freed it of the obligation to survey a great number of minor merger cases, and improved its legal instruments to combat anti-competitive behaviour of firms, including the imposition of severe sanctions. Furthermore, the Committee no longer needs a request from other bodies (such as the Parliament or ministries) before it can proceed on a specific inquiry. This has strengthened the Committee's advocacy role and should allow it to shift its attention to horizontal agreements, and to novel competition issues that are arising in previously monopolised sectors. However, even after the reform, the Committee needs to be enlarged in size, and be able to pay the market rate for qualified staff. It remains among the smallest of comparable OECD countries, and its salary scales need to better reflect the specialist skills and experience required in this area. An issue that needs to be resolved is the Committee's interaction with sectoral regulators, which can specialise in the technical issues relevant to the specific sector, while an economy-wide anti-trust authority is better placed to perceive cross-sector issues. International experience suggests that the sector regulators should acquiesce to the view of the Competition Committee in the event of disagreement on anti-trust matters. Altogether, the new legislation has clearly moved the focus of the Competition Committee in the right direction, but it is too early to tell whether it will attain the clout of similar anti-trust agencies in other countries.

Rapid progress in financial market liberalisation has improved the economy's growth potential

The process of financial market liberalisation since the 1990s has progressively removed the constraints on Greek financial intermediaries for lending to the private sector. The state withdrew gradually from commercial banking through privatisation of state-owned banks in recent years, reducing the number of directly and indirectly state-controlled banks from ten in 1995 to three in 2001. More recently, the privatisation process has slowed, mainly because of the weak stock market both domestically and internationally. The policy stance is nevertheless towards continued privatisation. Although narrowing recently, average spreads between lending and deposit interest rates, still remain wider than in other EU countries. This in part reflects a high rate of non-performing loans, despite more sophisticated risk assessment procedures which commercial banks had to put in place two years ahead of the entry into the Euro zone. With a view to ensuring the safety of the financial system, changes to the financial supervisory framework are currently under consideration. Overall, while there remains work to be done in assuring the development of a robust and efficient financial sector, much has been accomplished and the framework for further development is largely in place.

Summing up

In summary, Greek economic performance has been remarkable since the early 1990s for its strong growth of productivity and output, which was underpinned by the liberalisation of product and financial markets. At the same time, greater fiscal and monetary discipline led to rapid disinflation and a substantial improvement in public finances. This demonstrates that with an appropriate policy mix, there need be no conflict between nominal and real convergence. Following some slowing of economic activity late in 2001, a solid recovery is expected in the course of 2002 and into 2003, helped by easy monetary conditions, capital transfers from the EU, preparatory works for the 2004 Olympic Games, and renewed growth in export markets. The economy is expected to be operating close to, or even above, potential, and there is an upside risk to the inflation outlook from excessive wage increases, especially in the public sector. The mildly restrictive fiscal stance in 2002 as estimated by the OECD should help damp inflation pressures somewhat. However, a move to larger budget surpluses and lower off-budget debt-creating transactions is required to arrive at the desired government debt-to-GDP ratio of around 60 per cent in 2010. Achieving this goal would be facilitated by tighter control and greater efficiency of public expenditure, which is all the more necessary given emerging demographic pressures on spending. Given the low employment-to-population ratio and very high structural unemployment, further action is needed to make wages more flexible, step up making-work-pay programmes and improve both the education-to-work transition and the efficiency of the Public Employment Service. But high structural unemployment rates do not justify the continuation of large-scale overmanning in the public sector. Rather, employment opportunities should be enhanced by the structural reforms undertaken in recent years, in particular the liberalisation of network industries and of financial markets, and competition policy reform, which are likely to have played a key role in raising multi-factor productivity and potential output growth. Such structural reforms need to be complemented by comprehensive tax reform, to set the right incentives for efficient resource allocation, and help progress in the long-term goal of achieving convergence of living standards with those of the European Union.

I. Macroeconomic developments and prospects

The Greek economy in a medium-term perspective

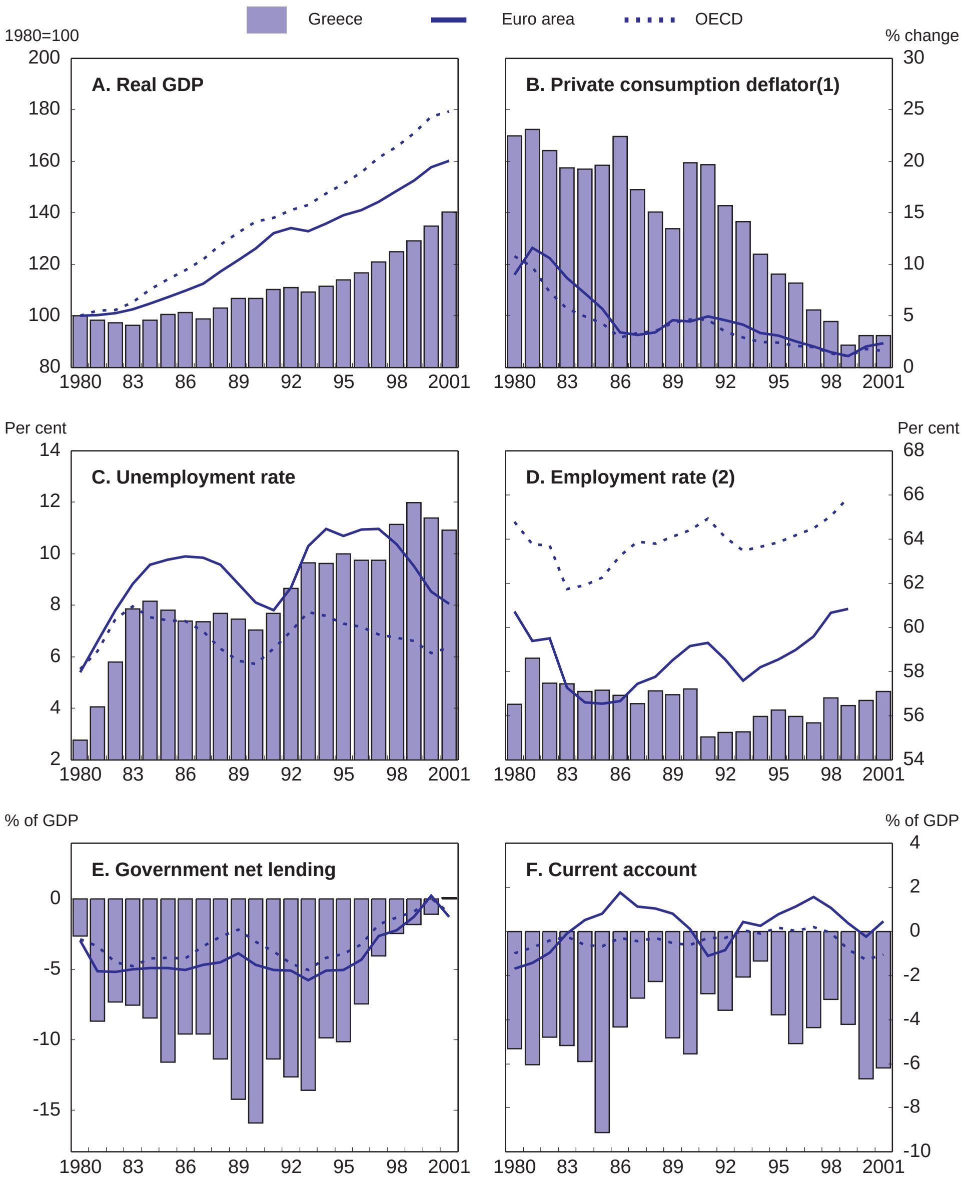
The Greek economy has expanded continuously since 1993, with growth particularly strong and averaging almost 4 per cent during the five-year period starting in 1997, exceeding that of the European Union by more than 1 percentage point. The economy was barely affected by the downturn which hit most OECD countries in the second half of 2001 and appears well placed to outperform growth of the OECD area by a substantial margin this year and next. The current expansion was led by robust domestic demand, which entailed a widening of the current external deficit to more than 6 per cent of GDP in 2000 and 2001. Notwithstanding accelerating growth, consumer price inflation, which was still in two-digit rates in 1994, has been reduced to 2 to 3 per cent in 1999-2000, before edging up somewhat in 2001. Dark spots in an otherwise bright picture are low labour market participation and the high level of structural unemployment. The actual unemployment rate appears to have fallen in 2001, but remains the second highest in the OECD (Figure 1).

Buoyant economic activity in recent years aided fiscal consolidation, and the general government financial balance moved from double-digit deficits in the first half of the 1990s to a small surplus last year. The general government gross debt-to-GDP ratio has fallen by about 10 percentage points since the mid-1990s, although at around 100 per cent of GDP in 2001 it remains among the highest in the OECD. Nevertheless, the decline in inflation and in government deficits were sufficient to permit membership of the European Economic and Monetary Union (EMU) as of January 2001. This is a remarkable achievement in view of the large macroeconomic imbalances still prevailing during much of the 1990s. It mainly reflected sustained policy reform within the framework of European integration, which restored confidence in the capacity of the government to establish a policy environment for market-led growth.

The macroeconomic policy environment

Subsequent to the short-lived but exceptionally restrictive monetary conditions experienced during the Asian financial crisis, the Bank of Greece

Figure 1. **Key indicators in international perspective**



1. OECD excludes high inflation countries.
2. Total employment as a per cent of working-age population (aged 16-64).

Source: OECD.

continued to keep monetary policy tight until the autumn of 1999, to secure disinflation gains and to qualify for EMU. There was an inverse yield curve and extraordinarily high real short-term interest rates until the end of the 1990s (Figure 2). After it became clear in the autumn of 1999 that entry into EMU was by and large ensured, short-term interest rates fell sharply as official rates were gradually adjusted to the lower Eurosystem rates. The key rate on 14-day refinancing operations ("repo rate") fell from 10¾ per cent in the second half of 1999 to 4¾ per cent in late 2000; this was equal to the European Central Bank's interest rate on main refinancing operations. On 1 January 2001, Greece joined EMU and the Bank of Greece handed monetary policy over to the European Central Bank, which cut policy-determined interest rates by another cumulative 125 basis points in the course of 2001. Altogether, the three-month interest rate in Greece has declined by some 7 percentage points since late 1999, to a level of slightly above 3 per cent in early 2002. In combination with the weakness of the Euro against the US dollar, monetary conditions in Greece have eased substantially since the late 1990s, supporting economic activity throughout 2001 and into 2002 (Figure 3). The decline in interest rates was somewhat less pronounced at the long end of the yield spectrum during the past two years as Greek long-term interest rates had already converged to Euro area levels. The long-term interest differential *vis-à-vis* the Euro area has declined to about one-third of a percentage point in early 2002, down from close to 15 percentage points some ten years ago.

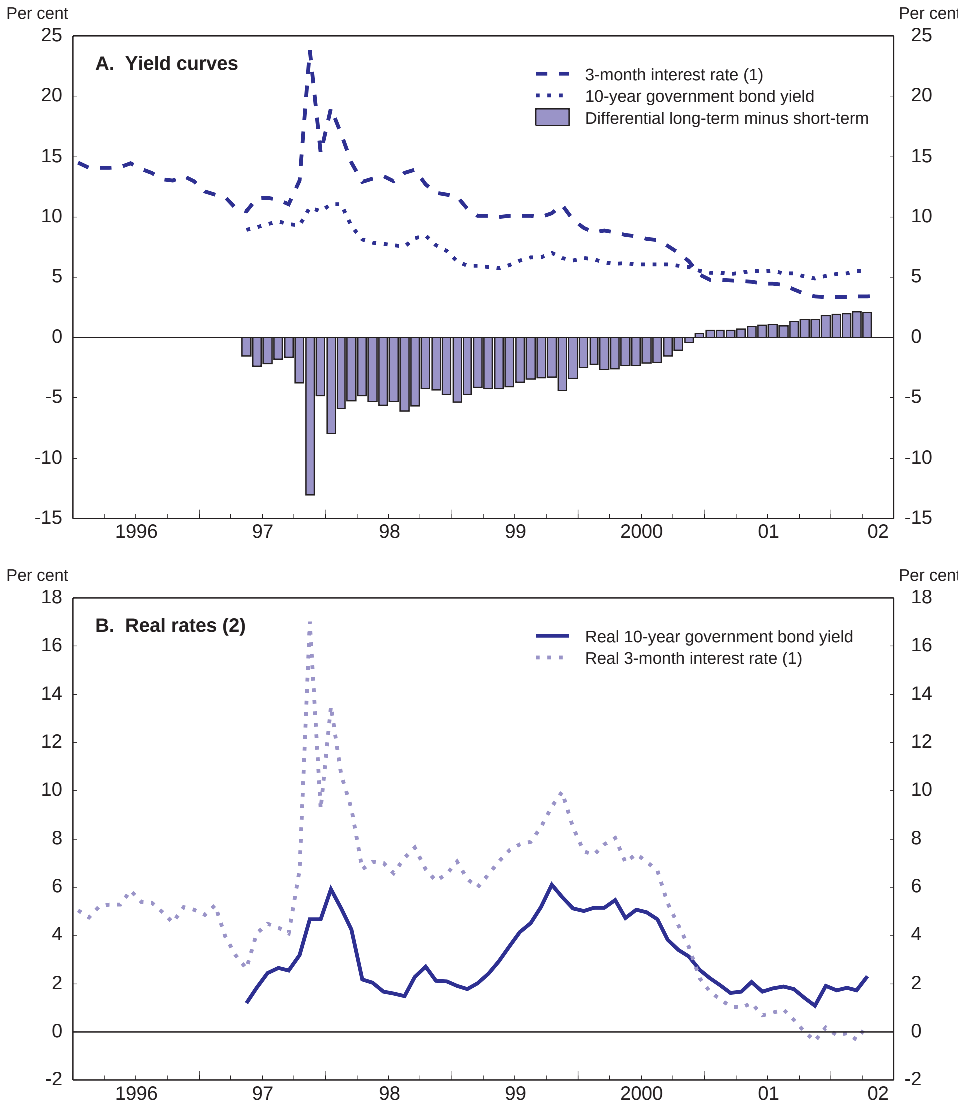
Fiscal policy was tight during most of the 1990s, bringing the structural budget deficit from around 16 per cent of GDP in 1990 to close to zero by the end of the decade. It has become less restrictive since 1998 and shifted into neutral gear in 2001. Nevertheless, large capital transfers under the third EU *Community Support Framework* (CSF) as well as preparations for the 2004 Olympic Games have stimulated public and private investment over the past two years and are likely to continue to do so in the short run. Altogether, the domestic policy environment was conducive to robust economic activity in 2001 and into 2002. Conversely, external demand conditions became less favourable in 2001 and are not expected to fully recover in 2002. However, the relative price and cost competitiveness of the exposed sector has improved substantially in 2000 and 2001, reflecting the substantial reduction in debt servicing costs of Greek enterprises, the external weakness of the Euro *vis-à-vis* the US dollar and the drachma's depreciation against the Euro of some 4 per cent in 2000 because of its convergence to its central parity rate within ERM.

Economic developments in 2001 and early 2002

Economic activity has remained buoyant

In line with the underlying favourable conditions for economic activity, real GDP is estimated to have grown by 4.1 per cent in 2001, the same rate as

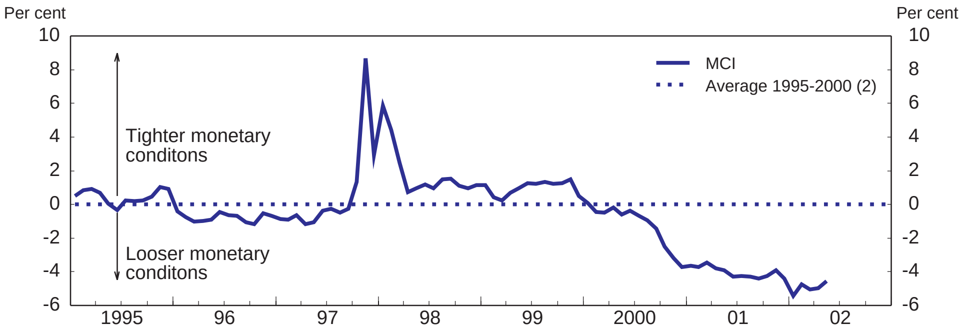
Figure 2. **Interest rates**



1. Up to December 2000, 3 month interbank interest rate (ATHIBOR). From January 2001, 3-month euro interbank offered rates (EURIBOR).
2. Deflated by the core inflation rate defined as the harmonised index of consumer prices excluding energy, food, alcohol and tobacco.

Source: Bank of Greece, *Bulletin of Conjunctural Indicators*; OECD, *Main Economic Indicators*.

Figure 3. **Monetary conditions index**[1]



1. The monetary conditions index (MCI) is defined as:
   MCI = 0.25 [E(t)/E* – 1] + 0.75 [R(t) – R*] where:
   E(t): CPI-based real effective exchange rate.
   E*: average real effective exchange rate for the period 1995-2000.
   R(t): real interest rate (3-month Athinor – CPI, until December 2000, then 3-month euribor – CPI).
   R*: average real interest rate for the period 1995-2000 (see note 2).
2. Excluding the high market turbulence period from October 1997 to February 1998.

Source: OECD, *Main Economic Indicators*.

in 2000 (Table 1). Although reliable quarterly N*ational Accounts* are not available yet, tentative estimates of the National Statistical Office[1] suggest a weakening of overall activity towards the end of 2001. This appears to have been mainly a reflection of slowing exports of goods and services in response to sluggishness in export markets, and a decline in investment demand, which coincided with a sharp fall in the industrial production of investment goods, and a deteriorating business climate.

In contrast, consumer confidence and private consumption held up well[2] and retail sales volumes were robust throughout 2001. Real disposable household incomes are estimated[3] to have expanded briskly, boosted by rising real wages, further cuts in personal income taxes and falling energy prices. In addition, residential investment recovered from the slump[4] of 2000, growing by about 3 per cent in 2001. Households continued to take advantage of the markedly lower cost of borrowing as Greek interest rates fell to Euro area levels, and of the enhanced availability of bank credit consequent upon financial market liberalisation (see Chapter IV). As a result, outstanding total household credit[5] increased by 40 per cent in 2001, following a rise of around 35 per cent in 2000, and has continued its strong expansion into 2002. Nevertheless, there remains substantial room for further credit financing of household expenditure as, despite its rapid rise, the stock of household debt is estimated to be less than 20 per cent of disposable income. By contrast, a number of OECD countries currently record debt-income ratios of 100 per cent and above.

Table 1. **Demand and output**

Percentage change, volume

	2000 Current prices, billion euros	1999	2000	2001[1]
Private consumption	84.8	2.9	3.3	3.2
Government consumption	18.8	0.9	0.7	1.8
Gross fixed investment	27.5	6.2	7.8	7.4
Private investment				
Residential	5.9	3.6	–4.3	2.9
Non-residential	16.6	7.1	13.4	8.9
Government investment	5.0	6.9	4.7	7.4
Final domestic demand	131.1	3.3	3.9	3.9
Stockbuilding[2]	0.1	–0.6	0.3	–0.1
Total domestic demand	**131.2**	**2.7**	**4.1**	**3.8**
Exports of goods and services	30.4	8.1	18.9	2.3
Imports of goods and services	40.0	3.6	15.0	1.9
Foreign balance[2]	–9.7	0.6	–0.4	–0.1
GDP at constant prices	**121.5**	**3.6**	**4.1**	**4.1**
Memorandum items:		0.6	6.1	1.7
Industrial production		3.6	4.8	. .
Potential output		2.8	2.8	3.1
Output gap[3]		–2.2	–0.9	0.1

1. OECD estimates.
2. Contribution to GDP growth.
3. As a percentage of potential GDP.

Source: Ministry of National Economy; OECD.

Business investment also gained from the lower interest rates consequent on Greece's accession to EMU, as well as financial market reform, which has reduced the spread between lending and deposit interest rates. These factors more than compensated for the effect of the weak equity market on the cost of capital. Business investment growth was in addition stimulated by general expectations of continuing strong economic growth in excess of the EU average. Credit extended to private enterprises rose more than 20 per cent in 2000 and 2001. Accordingly, corporate sector debt has increased rapidly in recent years, from an estimated 15 per cent of GDP in 1997 to about 40 per cent at present. This compares with estimates of 50 per cent of GDP for the United States and 42 per cent of GDP for the EU area. Nevertheless, Greek businesses' debt-to-equity ratios (at market value) are estimated to have been only about 36 per cent in 2001 in Greece[6] but at around 115 per cent in the EU area.

The comparatively moderate growth in government consumption is a reflection of ongoing efforts to contain the growth of public expenditure in order to curtail the high stock of public debt. Main instruments were restrictions on new government employment. Government investment, on the other hand, rose by a solid 7½ per cent in 2001, stimulated by EU Structural Fund disbursements which are estimated to have amounted to some 3 per cent of GDP in 2001 and which provide co-financing (roughly 50:50) for mostly public investment projects. Public investment activity also reflects works carried out for the Olympic Games in 2004.

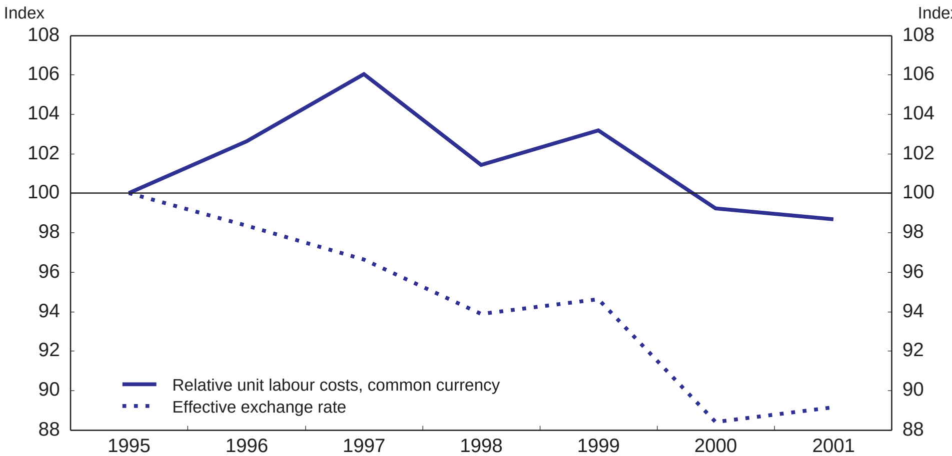
Potential output is improving

OECD calculations based on a production function of the Greek economy suggest that potential output growth amounted to about 2 per cent annually during most of the 1990s. However, the rising share of business investment in GDP since the mid-1990s[7] has raised the productive potential of the economy in recent years. Another positive influence was the increase in estimates of the potential labour force, part of it owing to the inflow of migrants from the Balkans. In addition, calculations of total factor productivity growth also point to a noticeable improvement, probably as an effect of product market liberalisation, privatisation, and financial market deregulation undertaken since the 1990s (see Chapter IV). Altogether, this may have raised potential output growth to about 3 per cent in 2001, allowing higher non-inflationary economic activity.[8] Nevertheless, the strong growth of real GDP during recent years is likely to have closed the gap between potential and actual output in 2001, ending the previous large under-utilisation of economic resources. The current comparatively high unemployment rate is thus mostly structural.

A sharp slowdown in exports and imports

The growth of goods and services export volumes (on a national accounts basis) slowed down sharply in 2001, reflecting the deteriorating global economic environment which affected most of Greece's export markets. Merchandise export volumes broadly followed trends in export markets, ending five consecutive years of gains in market shares. Export growth was supported by the ongoing depreciation of the effective (trade-weighted) exchange rate which was particularly steep in 2000, reflecting the combination of the weakening Euro exchange rate and the convergence of the drachma to its ERM central rate. This more than compensated for the higher price and cost inflation in Greece than elsewhere and thus brought about a depreciation of the real effective exchange rate in terms of relative unit labour costs in 2000 and 2001[9] (Figure 4). Price and cost competitiveness has also improved relative to the other EMU partners over the past two years. Last but not least, robust business investment over the past six years no doubt has also entailed substantial modernisation in exporting industries, which should have

Figure 4. **International competitiveness indicators**[1]
Index 1995 = 100



1. Competitiveness data for 1998 and 1999 are partly based on estimates; all data for 2001 are OECD estimates.
Source: OECD.

improved the product quality of manufactured exports. This is consistent with the Secretariat's constant market share analysis of Greek manufactured exports for the second half of the 1990s which confirms that Greek exports continue to be concentrated on country and commodity markets which grow less dynamically than world markets. However, the analysis also suggests that from 1995 to 2000, Greek exporters of manufactures have improved both their ability to adapt their export structures to the market composition and commodity mix of world imports.[10]

Balance of payments data on merchandise trade by destination – although incomplete – point to a marked decline in nominal exports to major OECD countries as well as to the Euro area in 2001. This was partly offset by a continuation of buoyant exports to Balkan,[11] central European[12] and former USSR countries, as well as other non-OECD countries, which were less affected by the global slowdown in 2001 and which together now account for almost one-fifth of Greece's merchandise exports. Evidently, Greek exporters reaped the benefits from their strong efforts made during recent years to seize new business opportunities in these latter markets, including *via* substantial Greek direct investments in neighbouring Balkan countries. Exports by commodity type show strong growth for durable consumer goods and for food, beverages and tobacco while investment goods exports continued to decline steeply in 2001.

Despite buoyant domestic demand, import volumes slowed down as sharply as exports. According to balance of payments (Bank of Greece) data, merchandise import volumes were flat, held down by decreasing imports of telecommunications equipment and automobiles. Hence, the trade deficit narrowed moderately in 2001 (Table 2). At the same time, the surplus in the services account increased somewhat. Tourism receipts appear to have slowed down only little towards the end of 2001, suggesting a smaller impact on tourism of the 11 September terrorist attacks than initially feared, which should bode well for the 2002 season. The deficit on factor income widened substantially, mainly on account of a sharp fall in net investment income from abroad, reflecting the slump in major equity markets. On the other hand, net transfers from abroad increased markedly, because of increased transfers under the third *Community Support Framework* of the EU and receipts from the sale of universal mobile telecommunications system (UMTS) licenses. Altogether, the current external deficit (on a settlements basis, including capital transfers) declined a little, from 6¾ per cent of GDP in 2000 to 6¼ per cent in 2001. The current account deficit continued to be financed principally by portfolio investment inflows. A notable development in the capital account is the swing in net foreign direct investment from deficit into a sizeable surplus.

Unemployment declined in spite of a weak employment performance

In spite of strong output growth in 2001, total employment as measured by the National Statistical Services is estimated to have declined,[13] continuing the weak employment outcomes recorded in 1999 and 2000[14] (Table 3). The disappointing employment performance is mainly a reflection of the large-scale restructuring going on in the Greek economy, which has resulted in sizeable increases in aggregate labour productivity. Employment in agriculture has declined rapidly, while reduced absorption of job-seekers in the public sector has not been accompanied by commensurate increased hiring in other parts of the economy. But it is also highly likely that the employment of immigrants[15] is under-recorded: the National Statistical Service reckons the official figures to be at between one-half to more than four-fifth of the true total. To the extent that this downward bias in employment statistics is not offset by a similar bias in output statistics, it exaggerates estimates of labour productivity at the macro level, and thus risks overstating the scope available for real wage increases.

The labour force is recorded as having fallen in 2001. Apart from under-recording of immigrants, this was also a consequence of increased participation of young people in education, as well as of population ageing in general and the existing incentives in favour of early retirement in particular. It appears that early retirement options are being increasingly used in view of the general expectation that the forthcoming reform of the pension system will reduce the generosity of early retirement provisions. However, the prevailing high unemployment rate may

Table 2. **Balance of payments**
Million euros

	1998	1999	2000	2001 est.
Current account	–3 287	–4 801	–8 372	–8 069
Goods	–14 823	–16 889	–21 927	–21 299
Non-oil balance	–13 659	–15 451	–18 941	–18 500
Oil balance	–1 164	–1 438	–2 987	–2 799
Exports	5 923	8 030	11 099	11 858
Imports	20 746	24 919	33 026	33 157
Services	6 073	6 847	8 711	8 804
Receipts	9 968	15 576	20 977	21 744
Travel	5 514	8 296	10 061	10 248
Transportation	1 932	4 872	8 641	9 113
Other services	2 523	2 408	2 275	2 383
Payments	3 896	8 729	12 266	12 940
Travel	1 558	3 761	4 949	4 665
Transportation	429	2 266	4 458	5 351
Other services	1 909	2 703	2 859	2 924
Income	–1382	–627	–955	–1 982
Receipts	1 362	2 414	3 039	2 100
Compensation of employees	335	577	631	606
Investment income	1 027	1 838	2 408	1 494
Payments	2 744	3 041	3 994	4 082
Compensation of employees	323	231	272	281
Investment income	2 421	2 809	3 722	3 801
Transfers	6 846	5 868	5 800	6 408
Current transfers				
Receipts	7 276	6 795	6 767	7 719
of which: General government	4 327	4 250	3 972	4 695
Payments	430	927	967	1 311
Financial account	3 395	4 748	8 906	6 934
Direct investment[1]	309	9	–1 116	1 087
Abroad	246	–518	–2 319	–689
Home	64	527	1 203	1 776
Portofolio investment[1]	10 700	5 706	9 108	9 465
Assets	379	–425	–933	–515
Liabilities	10 321	6 131	10 040	9 980
Financial derivatives	0	397	367	
Other investment[1]	–3 220	–518	–4 857	–9 795
Assets	–5 694	–4 457	–1 061	–1 467
Liabilities	2 474	3 939	–3 796	–8 328
(Loans of general goverment)	2 174	604	–438	–2 810
Change in reserve assets[2]	–4 395	–449	5 772	6 177
Balancing item	108	–55	535	–1 134
Reserve assets (stock)[3]	15 576	18 837	14 520	7 031

1. (+) net inflow. (–) net ouflow.
2. (+) decrease. (–) increase.
3. Eurosystem's reserve definition.

Source: Bank of Greece.

Table 3. **Labour market indicators**[1]

Annual percentage changes

	1998 level 000's	1999	2000	2001
Civilian labour force	4 446.9	0.4	–0.8	–1.6
Participation rate[2]	62.6	63.0	62.9	62.1
Unemployment rate[3]	11.1	11.9	11.1	10.5
Total employment	**3 952.5**	**–0.5**	**0.0**	**–0.8**
Agriculture	704.5	–2.4	–3.3	–6.6
Industry	914.1	–2.1	–0.4	0.1
of which:				
Manufacturing	574.2	–1.2	–1.9	–0.3
Construction	284.4	–4.7	3.3	1.7
Services	2 333.9	0.7	1.2	0.4
of which:				
Wholesale and retail trade	667.7	0.3	1.2	–0.4
Hotels and restaurants	238.6	0.6	2.7	0.3
Transport, storage and communication	247.0	1.5	–1.2	0.5
Financial intermediation	94.7	1.2	11.5	–1.7
Real estate, renting and business activities	192.3	2.2	1.0	8.0
Public administration and defence; compulsory social security	279.0	2.0	4.2	–1.4
Education	237.1	0.5	1.3	4.0
Health and social work	182.8	2.4	–2.6	–3.0
Other community, social and personal services activities	138.3	–2.3	–5.0	0.1
Private households with employed persons	54.7	–5.9	2.7	–6.0
Dependent employment	2 232.9	1.8	1.3	2.2
Self-employment	1 719.6	–3.5	–1.7	–5.1
Memorandum item:				
Productivity	. .	4.1	4.0	5.0

1. Annual average of quarterly data.
2. Labour force aged 15-64 as a percentage of population aged 15-64.
3. As a percentage of total labour force.

Source: Statistics of Greece.

also have discouraged a substantial number of unemployed from further job-seeking. Despite falling markedly from its peak of 12.4 per cent in late 1999, the unemployment rate averaged 10½ per cent in 2001, according to labour force survey data.

An encouraging feature of the latest Labour Force Survey results is the more than proportionate decline in the joblessness of women, the young[16] (aged 15 to 29) and the long-term unemployed in the first half of 2001; the share of the latter in total unemployment having decreased from about 58 per cent in 2000 to around 54 per cent in 2001. Nevertheless, OECD estimates of the non-accelerating inflation rate of unemployment (NAIRU) remain unchanged at just under 10 per cent. This implies that there is only limited scope for further cyclical reduction in unemployment, a view which is corroborated by business surveys which report severe skill shortages in parts of the services sector. It is also consistent with the termination of the deceleration of wage inflation. Hence, further progress in raising employment and reducing unemployment without jeopardising price stability will require structural reforms of the labour market (see Chapter IV).

The disinflation process has stalled

Government wage increases are out of line with productivity

Until recently, stabilisation policy was underpinned by wage moderation, which brought down wage increases from two-digit rates which had prevailed until 1997, to below 5 per cent in 1999. Since then, the process of wage disinflation appears to have stalled, in spite of high unemployment and the government's incomes policy, which encouraged moderate wage agreements between social partners and which aimed at public sector wage restraint.

The two-year collective agreement of April 2000 provided for increases in the minimum wage by 3½ per cent in 2000 and 3¼ per cent in 2001. It thus appears in line with the government's objective of wage moderation. However, the agreement also increased the generosity of annual and maternity leave provisions.[17] In combination with customary pay increases due to seniority and promotions, average earnings in the private sector rose by around 5 per cent both in 2000 and 2001 (Table 4). This compares with annual increases in compensation per employee in the Euro area of 2 to 2½ per cent. But with (estimated) labour productivity growth having been strong and exceeding that of the Euro area average by a large margin, unit labour costs in the business sector may have increased by 2½ to almost 3 per cent in 2000 and 2001, bringing them broadly into line with cost developments in the EMU. Even if allowance is made for an upward bias in productivity from under-recorded labour inputs and thus somewhat higher unit labour costs, it appears that private sector wage developments were broadly consistent with inflation staying around 3 per cent.

On the other hand, compensation per general government employee is estimated to have grown by about 7 per cent both in 2000 and in 2001, although productivity gains in general government are unlikely to have exceeded those in the private sector. Hence, average earnings increases in general government in 2000 and 2001 not only run counter the government's consolidation policy, but also risk fuelling inflation *via* conveying wrong signals to the private sector. To the extent that rises in government wages lead to private sector wage increases through worker flow dynamics, they are a cause of high unemployment.[18] However, high growth in compensation per general government employee did not stem from across-the-board salary increases, but from one-off increases granted to

Table 4. **Wages and prices**
Percentage changes

	1998	1999	2000	2001
Wages				
Average earnings				
Private sector (non financial)	5.8	4.4	5.0	5.3
Public sector (central government)	9.2	3.5	7.1	7.1
Manufacturing, blue collar	4.7	4.4	5.5	5.5
Banks	4.0	13.1	6.8	6.3
Public enterprises	5.7	4.8	13.7	8.2
Minimum wage, blue collar	5.4	3.5	4.2	3.5
Unit labour cost, business sector	3.3	2.7	2.5	2.9
Prices				
Price deflators				
GDP deflator	5.2	3.0	3.4	3.2
Private consumption deflator	4.5	2.1	3.1	3.1
Consumer prices				
CPI of NSSG	4.8	2.6	3.2	3.4
HICP	4.5	2.1	2.9	3.7
Core inflation[1]	5.3	2.9	2.0	3.8
Wholesale prices, total (period average)	3.9	2.1	7.8	3.5
of which:				
Exports	3.0	–0.1	10.5	2.5
Imports	5.4	0.5	6.1	3.0
Industry (for domestic consumption)	2.8	3.7	8.4	3.1
Memorandum item:				
Effective exchange rate	–5.9	–0.9	–6.2	–0.6

1. CPI excluding fuels, fresh fruit and vegetables.
Source: Bank of Greece; Greek National Statistical Service (NSSG).

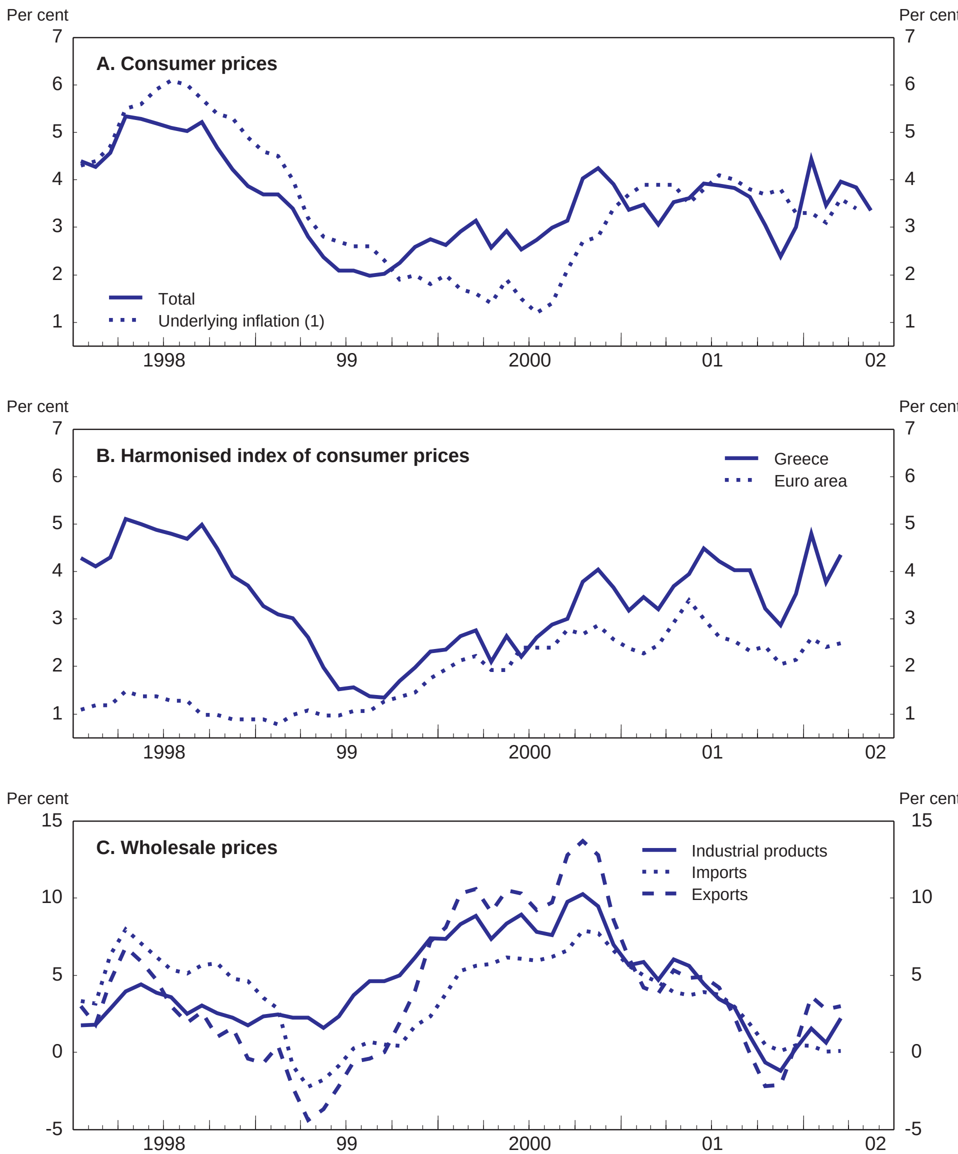
particular categories of civil servants in order to eliminate unequal treatment. Generalised salary increases applicable to all civil servants were only about 2½ per cent in 2000 and about 3 per cent in 2001; for this reason, wrong signals were not actually conveyed to the private sector, at least not *ex ante*.

Price inflation has crept up

The reduction in inflation during the 1990s was impressive: it fell from above 20 per cent in 1990 to 2.1 per cent in 1999 as defined by the Harmonised Index of Consumer Prices (HICP; Figure 5).[19] This satisfied the Maastricht inflation criterion to qualify for entry to EMU. Key instruments in the disinflation process over recent years were tight monetary policy, fiscal consolidation and relatively moderate wage settlements to keep unit labour costs under control. Macroeconomic stabilisation policies were supplemented by a number of gentlemen's

Figure 5. **Price developments**

Change over corresponding period of previous year



1. Consumer price index, excluding energy and fresh food products.

Source: Bank of Greece; OECD, *Main Economic Indicators*.

agreements between the government and business representatives to limit goods and services price increases during a period (August 1998-December 1999) which was important for assessing inflation performance in view of Euro area entry. Permanent cuts in excise taxes on petrol, heating oil, electricity and cars,[20] which were gradually introduced between October 1998 and December 1999, also helped to achieve a low inflation outcome in 1999 and 2000. However, the inflation-dampening impact of these tax cuts was bound to be only temporary.

Largely as a consequence of the cuts in indirect tax rates implemented in 1999, core (or underlying) inflation, which excludes energy and unprocessed food from the HICP, declined during much of 2000. Disinflation was also helped by a steep fall in telecommunication charges, the latter being the result of deregulation and subsequent intense competition in this sector. At the same time, headline CPI inflation was driven up by the sharp increase in automobile fuel prices, as it was in other EU countries. Primarily because of the indirect tax cuts, and in spite of a higher weight of the fuel component in the CPI than elsewhere, the differential between headline inflation in Greece and the Euro area disappeared in 2000.

In 2001, when falling energy prices exerted a dampening effect on headline inflation, core inflation converged with HICP inflation. Both inflation measures were affected by sharp rises in processed food and services prices, the unwinding of the effect of earlier tax cuts, higher taxes on cigarettes, and administered increases in electricity prices and taxi fares. It is also probable that the strong increase in local currency fuel import prices as well as the substantial effective exchange rate depreciation during 2000 induced lagged second-round price effects at the consumer level in 2001. At the same time, although easy monetary conditions boosted consumer demand, profit margins seem not to have risen, most probably because of price competition from imports (whose prices slowed down considerably in 2001). As a result of these influences, both HICP and core inflation averaged 3¾ per cent in 2001.

The increase in HICP inflation in 2001 implied an opening up of the inflation differential between Greece and the Euro area to 1¼ percentage points in 2001, back to where it had been in 1999. However, somewhat higher inflation in Greece than in the European Union may be justifiable by the sizeable gap in labour productivity levels and the large potential for Greece to catch up. Indeed, the 1¼ percentage point inflation differential in 2001 is in line with estimates based on the Balassa-Samuelson model[21] and recent trends in productivity and wages.

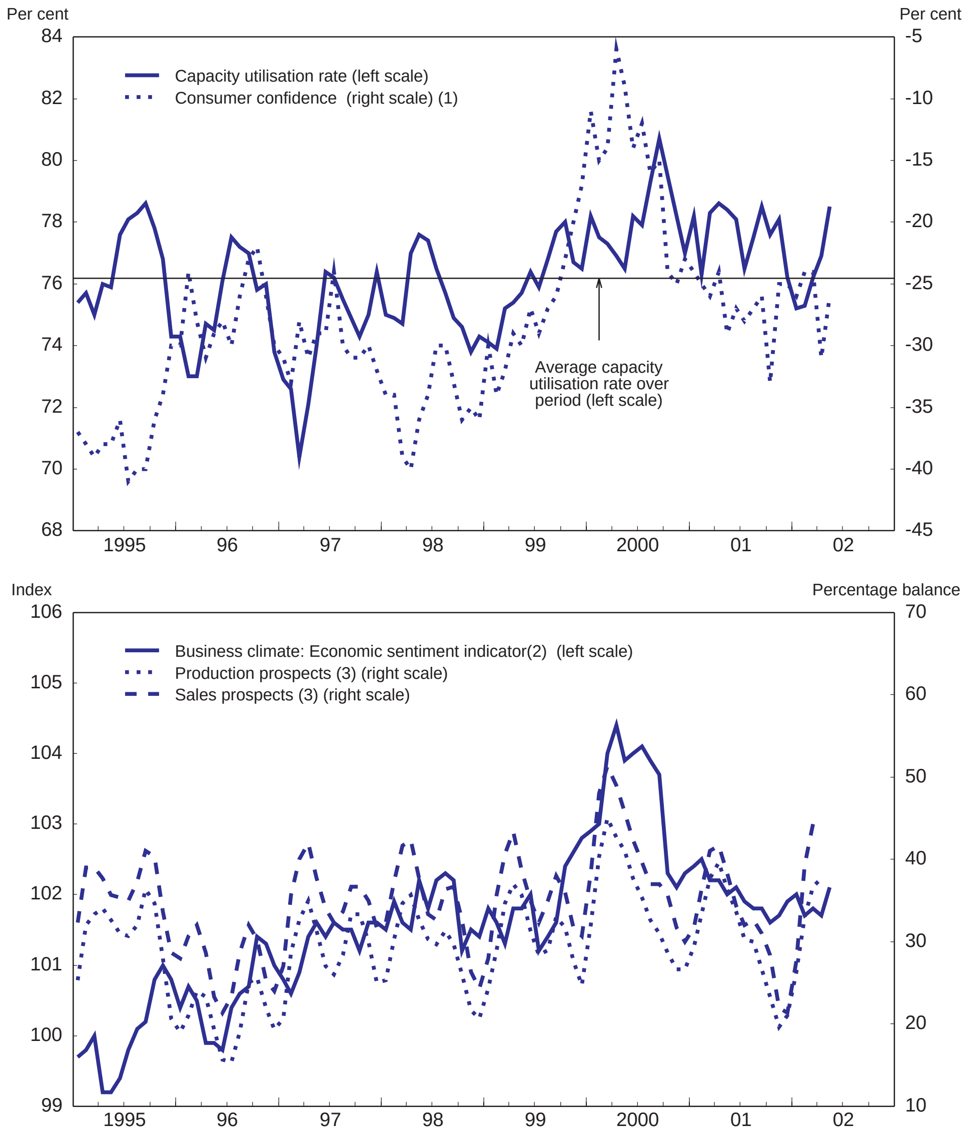
Headline (HICP) inflation accelerated further to 4¼ per cent in the first quarter of 2002, with prices for fresh food surging in response to the unusually cold weather, while core inflation remained at around 3½ per cent, noticeably below its peak rate of 4 per cent in mid-2001. Preliminary indicators suggest some slowing of headline inflation during the second quarter of 2002. Nevertheless, it appears that the disinflation process of the 1990s has essentially run its course. To bring inflation back to levels seen in 1999 and 2000, support is needed from the side of labour costs. Hence, real wage increases should reflect gains in (appropriately measured) labour productivity. Moreover, with monetary conditions still being easy and the economy possibly operating close to its potential, fiscal policy should opt to err on the side of tightening.

The economic outlook to 2003

The projection presented here is based on the technical assumptions of an oil price of $23.90 per barrel in 2002 and of $25 in 2003 and an unchanged exchange rate of the Euro as of 4 April 2002. With price and cost increases likely to remain higher in Greece than in major trading partner countries, the constant nominal exchange rate assumption implies a mild real effective exchange rate appreciation, hence a relatively minor loss in price and cost competitiveness. However, on the basis of the OECD projection of a global economic recovery, export market growth should strengthen in 2002 and particularly so in 2003. Monetary conditions are expected to remain generally easy, with short and long-term interest rates likely to creep up somewhat from current low levels. But with credit interest rates in Greece still being high by international comparison, the ongoing intensification of competition in financial markets should narrow financial intermediaries' interest margins further and put downward pressure on lending interest rates. Reflecting the government's fiscal consolidation strategy, the surplus in the general government budget should increase this year and next, and should be accompanied by a small rise in the structural budget balance, while the fiscal stance as measured by the cyclically-adjusted budget balance may become mildly restrictive.

Following the slowing of economic activity towards the end of 2001, output growth is expected to rebound in the course of 2002, in parallel with an improving international environment. Given the weak carry-over from the end of 2001, year-on-year real GDP growth is likely to ease further to 3½ per cent in 2002, before edging up to 4¼ per cent in 2003. Latest surveys suggest an improvement in consumer confidence (Figure 6), which should be underpinned by the expected improvement in the labour market and by capital gains of households from the ongoing rise in real-estate prices. Households will also benefit from the implementation of the new tax/benefit package, included in the 2002 Budget (see below). Persistently low nominal and real credit interest rates should continue to boost household spending and business investment. This is all the more so as both household and business indebtedness relative to income is still low by international comparison, leaving ample scope for further borrowing. Moreover, completing the infrastructure for the 2004 Olympic Games, along with the projected rising inflows of European structural funds should stimulate

Figure 6. **Indicators of economic activity**



1. Balance of positive and negative responses.
2. Index, seasonally adjusted.
3. 3-month moving average.

Source: Eurostat; OECD, *Main Economic Indicators.*

investment activity. Imports are expected to pick up, but the recovery in world demand should also boost exports, containing the drag from the external sector in 2003. This is reflected in a small decline in the deficit of the current external account from 6¼ per cent of GDP in 2001 to around 5½ per cent of GDP in 2003.

Continued robust economic growth should eventually have a positive effect on employment and reduce unemployment. The improvement is, however, likely to be very small, leaving the unemployment rate above NAIRU estimates of just under 10 per cent. Potential output growth is expected to improve further (Table 5), with brisk business investment growth boosting the growth of the

Table 5. **Short-term projections**

Percentage changes

	2001	2002	2003
A. Demand and output			
Private consumption	3.2	2.8	3.2
Government consumption	1.8	–0.3	0.9
Gross fixed investment	7.4	8.0	8.3
Residential investment	2.9	2.2	3.0
Business investment	8.9	10.1	10.2
Government investment	7.4	7.3	7.4
Final domestic demand	3.9	3.5	4.1
Stockbuilding[1]	–0.1	0.0	0.0
Total domestic demand	3.8	3.5	4.1
Exports of goods and services	2.3	3.3	7.3
Imports of goods and services	1.9	3.5	6.2
Net exports of goods and services[1]	–0.1	–0.3	–0.2
GDP at constant prices	4.1	3.5	4.2
GDP at current prices	7.4	6.6	7.2
B. Prices, costs and employment			
GDP deflator	3.2	3.0	2.9
Private consumption deflator	3.0	3.0	2.9
Private compensation per employee	6.3	5.6	5.5
Total employment	–0.1	0.3	0.8
Unemployment rate	10.4	10.3	10.0
C. Financial variables			
Short-term interest rate	4.2	3.3	3.9
General government balance[2]	0.1	0.4	1.0
D. Memorandum item			
Potential output	3.1	3.4	3.6
Output gap[3]	0.1	0.2	0.7

1. Changes expressed as a percentage of GDP in the previous period.
2. Net lending as a percentage of GDP.
3. As a percentage of potential GDP.

Source: OECD.

business sector capital stock. Nevertheless, with the output gap estimated to have closed in 2001, the projected vigorous economic growth implies an increase in actual output above potential, which could give rise to inflation pressures. An average earnings growth rate of 5½ per cent would be compatible with inflation of around 3 per cent on the basis of the expected continuation of strong growth of labour productivity. Nevertheless, this implies inflation remaining distinctly higher than the Euro area average.

Risks to the outlook for activity appear fairly balanced, depending mainly on the pace and the timing of recovery in Europe. A major uncertainty attached to the projection is whether comparatively low inflation can be maintained, in view of the expected ongoing strength of the economy and the strain on resources indicated by a positive and growing output gap. This is all the more so as there is the likelihood of somewhat faster growth of private sector average earnings under the new two-year collective agreement, including the wage compensation paid out in 2002 for the inflation overrun in 2001.[22]

II. Fiscal policy issues

Greece has made substantial progress towards controlling public finances since the early 1990s, correcting fiscal imbalances within the framework of convergence programmes. The general government deficit declined by around 15 percentage points of GDP during the 1990s, falling to below 1 per cent of GDP in 2000. The fiscal improvement was aided by strongly rising revenues, and since the mid-1990s, by lower debt interest payments. By contrast, primary current expenditure has continued to drift up. The debt-to-GDP ratio, though falling since 1996 to its current value of about 100 per cent of GDP, remains well above the 60 per cent Maastricht ceiling, despite sizeable privatisation proceeds. Fiscal policy has become less restrictive since 1998, moving to a neutral stance in 2001. On a cyclically adjusted basis, net lending narrowed only slightly between 1998 and 2001 (by around 1 percentage point, compared with 12½ percentage points between 1990 and 1997). However, budgetary outcomes up to 2000 have been close to, or even outperformed, the initial targets, reflecting mainly positive surprises on the revenue side.

Budgetary developments in 2001

The improvement in the budget continued in 2001, with the general government balance estimated to have recorded a small surplus of 0.1 per cent of GDP – for the first time in decades – albeit somewhat below the targeted surplus of 0.5 per cent of GDP (Table 6; Box 1). The cyclically-adjusted budget balance (excluding receipts of about 0.4 per cent of GDP from the sale of mobile phone licences), however, remained largely unchanged at around –0.4 per cent of potential GDP in 2001, implying a broadly neutral fiscal stance. The adoption of a tax package in November 2000, introducing reductions in personal and corporate income tax[23] and amounting to around 0.4 per cent of GDP, was largely offset by enhanced revenue from more efficient tax collection methods (through the computerisation of the tax system) and further progress in the containment of tax evasion.

Fiscal prospects for the period 2002-04 and medium-term fiscal issues

The 2002 Budget[24] and the 2001 updated Stability Programme[25] (Table 7) target a general government surplus of 0.8 per cent of GDP for the year. The envisaged fiscal outcome is substantially lower than initial forecasts of 1.5 per cent

Table 6. **Budget plans and outcomes**
Million euros

	2000		2001		2002
	Budget	Outcome	Budget	Estimate[1]	Budget
Central government					
Current expenditure	**33 162**	**34 377**	**35 969**	**35 985**	**36 637**
(per cent of GDP)	27.9	28.3	27.7	27.6	26.2
of which:					
Salaries and pensions	12 059	12 406	13 081	13 261	14 123
Goods and services	1 993	2 106	2 211	2 256	2 239
Grants and subsidies	5 157	5 164	5 628	5 592	5 914
Interest	9 450	9 914	9 714	9 714	8 951
Payments to EU	1 291	1 401	1 579	1 559	1 579
Net current revenue[2]	**31 211**	**33 392**	**36 028**	**35 734**	**37 453**
(per cent of GDP)	26.3	27.5	27.8	27.4	26.8
Current revenue	32 150	34 257	36 977	36 684	38 920
Direct taxes	10 829	13 682	14 318	13 641	14 618
Indirect taxes	18 330	18 621	20 221	19 621	20 666
Non-tax revenue	2 990	1 954	2 438	3 422	3 636
Transfers from the EU	217	134	171	170	201
Tax refunds	–939	–865	–949	–949	–1 467
Investment budget balance	–3 639	–4 156	–4 329	–4 329	–4 863
Budget balance (administrative basis)	**–5 591**	**–5 141**	**–4 270**	**–4 580**	**–4 047**
(per cent of GDP)	–4.7	–4.2	–3.3	–3.5	–2.9
Acquisition of equities	1 966	1 692	1 849	1 849	1 908
National accounts balance	**–3 624**	**–3 449**	**–2 421**	**–2 731**	**–2 139**
(per cent of GDP)	–3.1	–2.8	–1.9	–2.1	–1.5
Memorandum items:					
Surplus of public entities and other adjustments	**2 230**	**2 161**	**3 037**	**2 832**	**3 298**
(per cent of GDP)	1.9	1.8	2.3	2.2	2.4[3]
General government balance	**–1 394**	**–1 288**	**616**	**101**	**1 159**
(per cent of GDP)	–1.2	–1.1[4]	0.5	0.1	0.8

1. Estimate at the time of next year's Budget.
2. Excluding tax refunds.
3. The surplus of social security funds and other public entities amounts to around 3.2 per cent of GDP.
4. The outcome for 2000 was revised later to –0.8 per cent of GDP, reflecting revisions in the surplus of public entities, while the outcome for the central government remained unchanged.

Source: Ministry of Finance.

of GDP in the 2000 Stability and Growth Programme, and of 1.3 per cent of GDP in the first draft budget announced in October 2001. The downward adjustment reflects the weaker-than-expected international environment, which led the government to lower its forecasts for output growth in 2002,[26] as well as the introduction of a new package of tax measures aiming to boost the economy and employment – the

Box 1. Implementation of the 2001 Budget

Fiscal developments in 2001* were less favourable than originally projected. Shortfalls in tax revenue (equivalent to 1 per cent of GDP), following a weaker-than-assumed output growth in 2001 (4.1 per cent compared with initial forecasts of 5.0 per cent), have reduced the estimated general government surplus to 0.1 per cent of GDP, compared to the target of 0.5 per cent of GDP set in the 2001 Budget and the 2000 Stability and Growth Programme of Greece. The fiscal under-performance would have been worse had it not been for the additional revenues from the sale of mobile phone licences (around 0.4 per cent of GDP), not included in the 2001 Budget. Without such one-off receipts, the general government balance would have been in a small deficit.

Direct tax revenue fell by around ½ per cent of GDP relative to the budget target, with a slippage in corporate tax revenue more than offsetting a better-than-expected performance in personal income tax revenue – despite the reduction in the highest marginal tax rate (from 45 per cent to 42.5 per cent) and an increase in the exemption threshold by 4½ per cent, embodied in the November 2000 tax package. The shortfall in corporate tax receipts reflected both lower profitability of Greek firms and technical reasons related to the corporate income tax collection system. In addition, lower interest rates on bank deposits, along with a shift from bank deposits to repurchase transactions (which were not taxed until end-2001) reduced the revenue from the taxation of interest income. Indirect tax revenue also fell below the target. Value added tax (VAT) revenue, however, increased broadly as budgeted – at a pace exceeding consumption spending – because of improved tax collection procedures. But there was a significant shortfall (by more than ½ per cent of GDP) in the revenue from capital transfers, reflecting a sharp decline in the activity on the Athens Stock Exchange in 2001 and a reduction, by 50 per cent, in the tax rate imposed on the corresponding transactions. The slippage on overall tax revenue was partly offset by higher than expected non-tax revenues (exceeding the budget target by nearly ¾ per cent of GDP), mainly proceeds of the mobile phone licenses and higher than-anticipated dividends from public enterprises.

Regarding expenditure, the budget performed broadly in line with expectations. Expenditure on salaries and pensions exceeded its target marginally (by around 0.1 per cent of GDP) while expenditure on grants and subsidies undershot initial projections (despite agricultural subsidies being somewhat higher than budgeted). Finally, the public investment programme has been implemented without deviations from the budget target.

* On the basis of the estimates at the time of the 2002 Budget (presented to Parliament in November 2001).

Table 7. **The 2001 Update of the Stability and Growth Programme (2001-2004)**[1]

	2000	2001	2002	2003	2004
	As a per cent of GDP				
Fiscal account					
General government balance	–0.8	0.1	0.8	1.0	1.2
Total revenue	46.3	46.4	45.7	45.3	45.1
Current revenue	42.5	42.0	41.8	41.6	41.5
Total expenditures	47.1	46.4	44.8	44.3	43.9
Current primary expenditure	32.7	32.7	32.3	32.3	32.3
of which:					
Government final consumption expenditure	15.4	15.4	15.1	14.9	14.8
Social transfers	16.3	16.0	16.3	16.5	16.8
Interest payments	7.0	6.2	5.5	5.1	4.7
Gross fixed capital formation	3.7	3.8	3.9	4.0	4.2
Primary surplus	6.2	6.3	6.3	6.1	5.9
Debt of general government	102.8	99.7	97.3	94.4	90.0
	Percentage changes				
Macroeconomics assumptions					
Real GDP growth	4.1	4.1	3.8	4.0	4.0
Total employment	–0.3	–0.1	0.8	1.3	1.5
Unemployment rate	11.2	10.4	10.0	9.2	8.4
Private consumption deflator	3.1	3.0	2.8	2.7	2.8
GDP deflator	3.4	3.2	3.1	3.0	3.0
Unit labour costs	1.3	1.9	2.5	2.4	2.8
Nominal GDP growth	7.6	7.4	7.0	7.1	7.1

1. Incorporating changes to the December 2001 version of the updated Stability and Growth Programme arising from subsequent revisions to data for the years 2000 and 2001.

Source: Ministry of National Economy.

impact of which is only partly offset by a downward revision of around 0.2 per cent of GDP in the primary current expenditure. The enacted tax package is in addition to a three-year (2002-04) package of social support measures, which accompanied the draft budget for 2002 (Box 2).

The Budget forecasts a central government deficit of 1.5 per cent of GDP in 2002 together with surpluses of the social security funds (and other public entities) amounting to around 3.2 per cent of GDP. The projected improvement in the fiscal outcome owes largely to a reduction in interest payments, while primary expenditure is projected to decline only slightly as a percentage of GDP. However, the Budget includes a shift in the composition of primary expenditure towards investment, reflecting attempts to restrict consumption expenditure, improve management of resources, and boost development and employment, in line with

Box 2. The new tax and social measures in the 2002 Budget

The 2002 Budget embodies a package of tax measures,* within the context of a comprehensive reform of the tax system currently under way (discussed below), which aims to reduce some tax distortions and promote employment. The total cost of the package during the period 2002-03 is estimated at around € 0.7 billion (approximately ½ per cent of 2002 GDP). In addition, the budget contains a social support package, spread over the period 2002-04, the total cost of which has been set at € 2.5 billion (equivalent to around 2 per cent of 2002 GDP). The new measures include:

Tax measures (included in Laws 2990 and 2992 of 2002)

- a 20 per cent increase in the tax free threshold for all taxpayers and the abolition of the income bracket corresponding to the 5 per cent marginal tax rate for wage earners (estimated cost € 0.2 billion);
- a reduction of 1, 2 or 2.5 percentage points (*i.e.* from 35 per cent to 34, 33 or 32.5 per cent) on the tax rate on 2002 corporate income, hinging on an increase in employment by 5 per cent, 10 per cent or 12.5 per cent respectively in the same year (estimated cost € 0.2 billion);
- abolition of stamp duty (estimated cost € 0.4 billion) on certain categories of transactions including: private sector employees' payrolls (1.2 per cent shared equally by employees and employers), notification to public authorities of starting or changing corporation activity, and promissory note and bills of exchange;
- the imposition of a 7 per cent tax on the interest income from previously tax-exempt repos (estimated additional revenue around € 0.1 billion);
- a 50 per cent reduction in the tax on heavy oil (estimated cost € 0.04 billion).

Social measures

- an increase in the pension of farmers and support for low-income pensioners (estimated at around € 1.2 billion over three years). The primary agricultural monthly pension is set to rise by € 14.67 in January 2002 from its previous level of € 141.5 per month and by the same amount in each of the next two years. Similarly, the monthly allowance to low-income pensioners will be gradually increased to € 125.9 per month in 2004 from € 81.8 in 2001;
- an increase in standard unemployment benefits by 5 per cent, subsidies to the poor and the disabled, and allowances to low-income families with children (€ 0.6 billion). These include: *i*) an annual income allowance of € 293.5 to 587 to poor households; *ii*) monthly allowance of € 140.9 (for a maximum of 12 months) to long-term unemployed who are of low income and aged 45-65; *iii*) annual schooling allowance of € 293.5 to poor families with children; *iv*) a 10 per cent increase in allowances to disabled persons; *v*) a one-off grant of € 2 935 to families with three children; and *vi*) a 10 per cent increase in allowances to family units with many children;

Box 2. **The new tax and social measures in the 2002 Budget** (*cont.*)

- extension of family allowance to both working spouses (this applies only to civil servants and the estimated cost is € 0.6 billion);
- promotion of employment policies (estimated cost € 0.1 billion).

* The government has also introduced tax incentives for venture capital activity and temporary merger incentives.

the Stability and Growth Pact. Primary expenditure in the Public Investment Programme is set to grow by around 11½ per cent in 2002, reflecting an acceleration of the implementation of the projects under the third *Community Support Framework* (CSF III) and the preparation of the 2004 Olympic Games. On the revenue side, the budgeted growth in tax revenue is lower than that of nominal GDP (6.1 per cent compared with 6.9 per cent), because of the introduction of the new tax measures. Additionally, the 2001 Budget had provided for a further reduction, in 2002, of the top personal income tax rate from 42.5 per cent to 40 per cent and of the corporate tax rate on non-listed companies from 37.5 per cent to 35 per cent, in line with that of listed companies. Nevertheless, direct tax revenue is projected to be more buoyant than nominal GDP with an estimated growth rate of 7.2 per cent in 2002, assuming improvements in tax administration and in the collection of tax arrears. Once again, improved tax collection is expected to result in VAT revenue increasing faster than consumption spending. Non-tax revenues are also expected to make an important contribution to the budget (amounting to 2.6 per cent of GDP), arising from seignorage from the issuance of new coins in Euro and increased dividends from public enterprises.

The OECD's less buoyant projection for a general government surplus of 0.4 per cent of GDP in 2002 mainly reflects a lower degree of current expenditure retrenchment than projected by the authorities. The fiscal stance is assessed by the OECD to become somewhat restrictive in 2002, with the cyclically-adjusted overall balance moving to a small surplus of 0.2 per cent of potential GDP in 2002 from a deficit of 0.4 per cent in the previous year. Given the accommodative monetary conditions and the strong cyclical position of the economy, a tighter stance would be advisable in order to ensure a faster reduction of the still high debt-to-GDP debt and to stem risks of demand pressures, especially in light of the persisting inflation differentials *vis-à-vis* the Euro area.

For the years beyond 2002, the 2001 update of the Stability and Growth Programme (covering the period 2001-2004) projects that the general government balance will remain in surplus, reaching 1.2 per cent of GDP in 2004 (instead of 2 per cent previously envisaged)[27] (Table 7). This positive fiscal outlook results from a further decline in interest payments, while primary current expenditure is projected to remain broadly unchanged, as the envisaged reduction in government consumption is largely offset by the increase in social transfers. Current revenue, on the other hand, is projected to rise less quickly than nominal GDP, reflecting the first wave of tax measures taken in the 2002 Budget, as well as the expected implementation of more comprehensive reforms of the tax system in 2003. The ratio of the general government primary surplus to GDP is also projected to fall gradually between 2002 and 2004. High primary surpluses are essential to ensure a rapid reduction of the high public debt-to-GDP ratio in Greece, which remains well above the 60 per cent Maastricht ceiling. A sound fiscal position would provide greater scope for fiscal easing during cyclical downturns – given the 3 per cent of GDP deficit constraint specified in the Stability and Growth Pact[28] – and ensure a lower country risk premium. The role of automatic stabilisers in smoothing output fluctuations is especially important after the adoption of a single monetary policy with the other member countries following entry in the Euro zone. The use of automatic stabilisers (and recourse to discretionary fiscal policy) should be symmetrical in periods of economic deceleration and subsequent recovery. The asymmetric use of fiscal stabilisers was in fact one of the factors behind the deterioration in public finances during previous decades: the stabilisers were allowed to work during periods of recessions, building up debt, but not in expansions, with revenue windfalls being used for additional spending or tax cuts. Prudent fiscal policy making would require that any tax reduction be met by structural spending cuts.

Maintaining a sizeable primary surplus over the medium term will be a major challenge. In addition to fiscal adjustment fatigue, the prospective increase in budgetary costs stemming from an ageing population adds pressure on the primary balance. The recent OECD/EU projections exercise[29] shows such expenditure increasing by 12 percentage points of GDP between now and 2050, under current practices and in the absence of reforms. This is by far the largest increase for any EU country. Restraint in, and restructuring of, current primary expenditure and other reforms are indispensable for achieving the required surpluses to meet the debt-ratio target (see also Chapter III). However, some spending areas should not be curtailed, in order not to harm important social and distributional objectives. It needs to be stressed that in the absence of reforms to broaden the tax base, additional increases in tax rates could adversely affect incentives to work, save and invest. Empirical studies for the first part of the 1990s conclude that public spending is exogenously determined and then taxes are raised to meet the higher expenditure.[30] This finding reinforces the view that further fiscal consolidation efforts should principally rely on expenditure containment rather than tax increases.

In the updated 2001 Stability and Growth Programme, the government stated its intention to pursue important reforms in the areas of budgeting and expenditure management, at the level of both central government and the broader public sector, as well as to introduce systems of closer internal audit and of quantifiable targets and expenditure assessments.[31] As a first step in this direction, the 2002 Budget includes multi-year budgets by ministries covering the years to 2004. While tentative and not binding, the ministry-specific expenditure forecasts provide useful information about prospective developments and targets for 2003 and 2004. Containing spending pressures over the medium term will depend, of course, on the speed at which wide-ranging reforms are put in place in key public expenditure areas including health care, pension and public administration, as well as in the tax system. Such reforms need to be stepped up well before the expenditure pressures from an ageing population start rising. As discussed in Chapter III, efforts are already under way in reforming the health care system and improving the efficiency of public administration. Some steps were also taken – through the package of tax measures accompanying the 2002 Budget (Box 2) – towards a comprehensive reform of the tax system, with a major overhaul envisaged for 2003. As for pensions, the government has already tabled a draft law for a reform of the system before Parliament. Failure to achieve reform would lead to an uncontrolled rise in public debt, or entail large increases in taxes and contributions, thereby reducing potential growth and slowing the pace of convergence of per-capita incomes to the level of other EU countries (see also Chapter IV).

Public debt developments and debt management

Budgetary adjustment since the mid-1990s helped establish a downward trend in the debt-to-GDP ratio. The fiscal consolidation strategy has been based on the maintenance of high primary surpluses, which, with the benefit of declining interest rates, high growth rates, and the acceleration of the privatisation in recent years, made possible the decline of the government debt ratio to an estimated 99.7 per cent of GDP in 2001 from 111.3 per cent in 1996 (Table 8).[32] This outcome was further helped by changes in the composition of debt, particularly through the introduction of ten-year fixed-rate bonds in 1997, which reduced the government's heavy reliance on short-term borrowing. The realised debt reduction of around 11½ percentage points of GDP, however, was much lower than that implied by a cumulative recorded primary surplus of over 27 per cent of GDP during the period 1997-2001. Unfavourable "deficit-debt adjustments", including the revaluation of government debt denominated in foreign currencies (no longer a significant factor with the introduction of the Euro), debt assumption by the state on behalf of third parties, the issuance of military debt and acquisitions of financial assets, such as capital injections to public enterprises, have slowed the rate of reduction in the debt ratio.[33] A portfolio shift in the assets of the social security funds from government bonds to equities will also result in a discrepancy

Table 8. **Public debt developments**

As a percentage of GDP

	1996	1997	1998	1999	2000	2001[1]	2002[1]	2003[1]	2004[1]	2005-10[2]
Gross debt (end of period)	111.3	108.2	105.0	103.8	102.8	99.7	97.3	94.4	90.0	60.0
Change in general government debt	12.4	7.6	5.5	5.4	6.3	4.1	4.2	3.5	1.8	–0.6[3]
General government surplus (+)/deficit (–)	–7.4	–4.0	–2.4	–1.7	–0.8	0.1	0.8	1.0	1.2	4.8[3]
Deficit-debt adjustment	**5.0**	**3.6**	**3.1**	**3.7**	**5.5**	**4.2**	**5.0**	**4.5**	**3.0**	**4.2[4]**
Primary surplus required to attain the 2010 debt target	3.1	4.2	5.3	5.6	6.2	6.3	6.3	6.1	5.9	9.3[5]

1. The 2001 Update of the Hellenic Stability and Growth Programme: 2001-2004 (incorporating subsequent revisions made by the Ministry of National Economy in light of revisions to data for the years 2000 and 2001).
2. Period average, except where otherwise indicated.
3. The calculations assume nominal GDP growth of 6 per cent.
4. Average deficit-debt adjustment over the period 2002-04.
5. The primary surplus was determined from the following basic formula for debt dynamics:
   $(D/Y)_t - (D/Y)_{t-1} = (P/Y)_t + [(r_t - g_t)/(1 + g_t)] * (D/Y)_{t-1} + O_t$
   where:
   $(D/Y)_t$ = government gross debt as per cent of GDP, at time t.
   $(P/Y)_t$ = government primary balance as per cent of GDP, at time t.
   r_t = real interest rate on government debt, at time t.
   g_t = real growth rate of the economy, at time t.
   O_t = other factors.
   The underlying real growth and interest rate assumptions are, respectively, 3.4 per cent and 3.6 per cent.

Source: OECD; Ministry of National Economy.

between changes in the general government fiscal balance and the public debt.[34] The total of these adjustments amounted to about 20 per cent of GDP over the period from the end of 1996 to 2001, and would have been considerably higher had there not been significant privatisation receipts and securitisation revenues.[35]

The 2001 update of the Stability and Growth Programme foresees a decline in the government debt-ratio to 90 per cent at end-2004, from around 100 per cent in 2001. In the absence of debt-creating financial operations (which are not recorded in the Eurostat-definition of fiscal deficit but appear directly in the debt figures), however, and taking into account a projected average primary surplus of around 6 per cent of GDP between 2002 and 2004, the debt-to-GDP ratio should be reduced to around 80 per cent of GDP at the end of the period. Even more important, the persistence of sizeable discrepancies between changes in the debt stock and the general government fiscal balances could risk a breach of the medium-term target of reducing the public debt-to-GDP ratio to around 60 per cent by 2010, requiring significantly more ambitious primary surpluses. OECD calculations suggest that the 60 per cent debt target for 2010 could only be met with a yearly primary surplus of 9¼ per cent of GDP, if deficit-debt adjustments at the level implied by the 2001 update of the Stability and Growth Programme for 2002-04 were to continue beyond the end of the period.[36] This compares unfavourably with an estimated primary surplus of around 5 per cent of GDP in the absence of such adjustments.

Debt management strategy

In addition to debt reduction, the government's debt management strategy in recent years has been focused on:

- improving the currency and interest composition of the outstanding debt stock by lengthening average maturity, smoothing the yield curve, the use of derivatives and other policy instruments. Within the broader aim of improving the debt dynamics, debt management has also focused on reducing government guarantees;
- increasing transparency and efficiency of the bond market, through improvements in primary and secondary markets of government securities, including the introduction of electronic systems and the establishment of active repos and future markets;
- improving the competitiveness and attractiveness of Greek government securities in the integrated Euro zone market, through the establishment of benchmark issues.

Between 1998 and 2001 (mid-year), the average residual maturity and duration of the domestic tradable debt rose by, respectively, 1.7 and 1.9 years (to 5.6 and 4 years), reducing the sensitivity of the budget to changes in interest rates.[37] This was achieved through the substitution of bonds for Treasury Bills, accounting in 2000 for around 83 per cent and 4½ per cent of total domestic debt respectively. In addition, in the past few years Greece raised funds through primary dealer auctions and syndicated bond issues, with maturities ranging from 3 to 20 years. The interest composition of the debt stock also improved over time, with fixed-rate securities (including T-bills), accounting for around 70 per cent of the debt stock in 2001, against less than 50 per cent in 1997.[38] High priority was also given to reducing the sensitivity of the debt to movements in the exchange rate, through cross-currency swaps and other derivative instruments. At the end of 2001, only 5.8 per cent of debt was exposed to foreign exchange risk, while the rest of the obligations were in Euros.

Tax reform

There have been no systematic tax reform programmes for many years. Instead, changes to taxation have been made in a piecemeal fashion, with legislation changing frequently, creating an environment of uncertainty for investment. This has led to a complex and non-transparent system, characterised by narrow tax bases and fairly high tax rates. Revenue raising has further suffered from the practice of tax amnesties and bank secrecy for tax purposes. In general, there has also been a lack of strong and uniform tax enforcement, although in recent years considerable efforts have been undertaken to improve tax compliance as well as administration. This has been reflected in stronger revenue growth. Nevertheless, major and costly distortions remain. These are not so much related to the overall level of taxation, which is not high by international comparison, but to poor application of tax policies and to the uneven distribution of the tax burden.

Analysis of the tax system in last year's OECD *Economic Survey of Greece* concluded that there are numerous options to widen the tax bases and to reduce the higher and more distorting tax rates. For instance, the taxation of the various forms of income from financial capital is uneven and likely to distort saving decisions. Hence, the overall tax rate on income from financial capital should be equalised, while the current practice of using easy-to-administer withholding taxes could be continued. Moreover, the methods used for assessing income of the self-employed has meant that they have paid little tax in practice. Full and reliable book-keeping by the self-employed needs to be enforced to arrive at a more accurate income assessment and auditing.

Concerning the personal income tax base, the generosity of tax breaks, including for owner-occupied housing, needs to be reconsidered. This would provide an impetus to the development of the rental housing market, enhancing labour mobility, while at the same time reducing tax privileges for higher-income groups. A broadening of the tax base would allow a reduction in the strong progressiveness of the personal income tax, which in turn would help to reduce incentives for tax evasion. It would also allow a reduction of the high social security rates paid on labour income, that are likely to have adverse effects on labour demand and provide incentives to work in the underground economy.

There is also a wide range of tax incentives for the business sector that could be re-assessed and streamlined. Such incentives complicate tax administration and increase compliance costs. Moreover, the difficulty of targeting these incentives is likely to lead to a waste of resources. Tax incentives should in principle only be provided in the few areas where market failures are clearly demonstrated to exist. Additional revenues from base broadening could be used to harmonise the corporate income tax rate at a single relatively low rate. This would eliminate the current bias in favour of unincorporated businesses. Other issues which tax reform in the business sector should address include the taxation of environmental pollutants, which should provide the right signals for abatement. As regards lower levels of government, local governments should be given greater flexibility in setting property taxes, which are their main revenue source. This would narrow the gap between their revenue-raising and spending powers and allow sub-national governments to become more accountable and responsive to voters.

The government has indicated on various occasions[39] that it plans to introduce a comprehensive tax reform in 2002, which will aim at the simplification of the very complex present system; a more equitable distribution of the tax burden; the enhancement of the competitiveness of Greek firms; improvements in the functioning of the tax administration; and further containment of tax evasion. The planned reform is hoped to improve significantly the efficiency of the Greek economy and to reduce the administrative costs of collecting taxes and the compliance costs of taxpayers.

As a first step of reform, the government announced in its budget for 2002 a package of tax measures which came into effect on 1 January 2002 and which may entail budgetary costs of around ½ per cent of GDP (see Box 2 for details). The most significant measures may be summarised as follows:

– for all mergers and acquisition that will take place until the end of 2004, the corporate income tax rate for the first year after the merger will be reduced by 10 percentage points, while for the second year the reduction will be 5 percentage points; the measure seeks to promote corporate consolidation, to make firms competitive at a European level;

– the zero-rated bracket of the personal income tax schedule is increased by 20 per cent to € 7 400 for non-wage earners, and to € 8 400 for wage and salary earners;

– the stamp duty levied on the private sector employees' payroll has been abolished, together with stamp duty on a number of other transactions; this measure should reduce administrative red tape;

– previously tax-exempt income from repurchase transactions is now taxed at a rate of 7 per cent, bringing it closer to the 15 per cent tax on income from bank deposits;

– tax treatment of income from mutual funds investing in venture capital companies will become more favourable, in order to promote venture capital activity;

– for those companies that will increase employment in 2002, there will be a reduction of the corporate income tax up to 2.5 percentage points, in proportion to the extra employment that will be created relative to 2001.

The government expects that the above measures will improve the competitiveness of Greek firms. The tax package's positive effect on wage earners' disposable incomes – in particular for low incomes – is hoped to have a moderating impact on this year's collective bargaining agreements.

The package addresses some of the problems of the current tax system, such as the uneven taxation of capital income and the high cost of tax administration. It can be considered as a first step of a comprehensive tax reform which is

Box 3. The proposed tax reform

Greece is considering a comprehensive reform of its tax system. In April 2002, a special Commission of experts submitted to the government a far-reaching reform proposal which covers all taxes levied by the central government and local authorities, as well as all taxes levied on behalf of third parties, including the Social Security Funds. Social security contributions proper were addressed: these will be addressed in the planned reform of the social security system. The proposals have been discussed with social partners, but detailed proposals have yet to be put before Parliament.

Objectives of the reform proposals

- simplification of the tax system and reduction of administrative and compliance costs;
- removal of features which impact negatively on international competitiveness;
- improvement in resource allocation, especially of capital;
- shift in the tax burden to less mobile capital assets, to minimise capital outflows;
- a more equitable tax system.

Major reform proposals

Income tax

- reduction of the number of income sources from six to four by treating income from business, agriculture and from liberal professions as one source;
- abolition of most of the existing reductions, exemptions, allowances and special treatments of incomes from different activities;
- harmonisation of the taxation of interest income;
- revision of the tax schedule, including the reduction of the number of brackets from 5 to 4; granting a larger personal allowance; increasing the lowest tax rate from 5 to 20 per cent; and reduction of the top marginal tax rate first from 40 to 38 per cent; and later to 35 per cent;
- improvements in the taxation of incomes in kind, including especially business cars;
- simplification of the personal income tax administration *via* exempting a large number of taxpayers from the obligation to file an income tax statement (those whose incomes fall below a certain threshold);
- subjecting unincorporated companies that were previously taxed under the personal income tax regime to the corporate income tax;
- gradual reduction in the corporate tax rate in future;
- measures to deal with the problem of offshore companies.

Box 3. The proposed tax reform (*cont.*)

Property holding and transfer taxes

- widening of the property tax base, to cover all property in the country, with minor allowances and exemptions, in place of a variety of taxes levied on immovable property under the current system;
- abolition of the property transfer tax on all property transfers that will be subjected to the value-added tax, and a substantial reduction of the tax on all other property transfers;
- reform of the inheritance and gifts tax (reduction in the number of tax schedules and tax rates).

***Value-added tax* (VAT)**

- extension of VAT to cover immovable property (supplies of new buildings);
- abolition of the special treatment for the Aegean islands;
- abolition of the preferential taxation on some products (*e.g.* soft drinks, restaurants, electricity) and subjecting them to the standard VAT rate;
- abolition of the preferential treatment for certain professions (*e.g.* lawyers, notaries);
- measures to simplify administration of VAT, especially for small and medium-sized firms;
- possible VAT rate increases to offset revenue losses from the abolition of other indirect taxes.

Other indirect taxes

- abolition of all stamp duties;
- increase in excise tax rates (on tobacco, beverages and oil), to compensate for part of the revenue losses from stamp duty abolition and the rate cut of indirect taxes on intermediate products;
- abolition of the special turnover tax on certain insurance premia;
- abolition or – at least – reduction in tax rates on advertising.

Taxes levied on behalf of lower levels of government and third parties

- granting of the property tax revenues to local authorities;
- abolition of most taxes levied on behalf of third parties.

Administrative reforms

Wide revisions to tax administration, aiming at simplifying procedures and documents, and reducing the obligations that tax authorities place on taxpayers and third parties.

Source: Ministry of National Economy.

currently under way. To this end the government set up last year a special Commission, with experts from the public administration and academia, with the mandate to make proposals for a reform of the tax system. The Commission submitted its proposals last April, and they have been discussed with social partners. The Commission proposed far-reaching changes in all aspects of the tax system with emphasis on simplification. The proposals include the abolition of a number of taxes, of tax allowances and exemptions, the broadening of the tax base, the harmonisation of gift and inheritance taxes with the property taxes, and the introduction of a new property tax. The Commission also proposed measures that would significantly reduce collection and compliance costs. If the Government finally adopts these proposals, which are in line with OECD's recommendations in last year's *Survey*, it would constitute the most important change of the tax system in the last 25 years (Box 3).

III. Public expenditure in Greece

Introduction and summary

This chapter discusses and evaluates public expenditure trends in Greece, as well as future prospects and implications for policy. The evolution of total public expenditures is discussed, and the major driving factors identified. Policy issues are raised and ongoing reforms are described. A short account and evaluation of the budgetary process and the management of public money is given, with emphasis placed on the system and the bodies responsible for public expenditure auditing and control. Lastly some conclusions are drawn and recommendations are given.

The summary findings are:

– Total government expenditures as a percentage of GDP increased only slowly up to the middle 1970s, followed by a sharp increase in the next twenty years and a small reduction in recent years. Social transfer spending and interest payments were the fastest-growing components, reflecting unsatisfied demands for the former in earlier years, and a massive debt build-up more recently.

– Greek public expenditure is nevertheless about in the middle range of OECD countries as a share of GDP, and is currently lower than the EU average.

– Administration and defence absorb a comparatively large amount of resources by international comparison, with social spending comparatively low.

– Within social spending, old age (and disability) pensions account for a comparatively high proportion and, absent reforms, their share will increase very substantially in coming decades.

– Incentives in favour of efficiency in spending have been lacking and control mechanisms have been weak, making it likely that resources are wasted. There is a number of units within the Ministry of Finance dealing with expenditure auditing and control for example, but little attention is given to cost-benefit appraised, or value for money.

– Compared with many other OECD countries, there is as yet only little recourse to market mechanisms such as contracting-out, user fees, etc.
– The allocation of spending between programmes appears to be sub-optimal, in the sense that spending in areas important for faster growth and better social outcomes is comparatively low.
– Wide reforms in several key public expenditure areas are now being prepared. Pressures on social expenditures will come from desired improvements in the provision of social security, health and education services, as well as demographic pressures on the public pension system. To the extent possible, these pressures should be met by efficiency gains, and expenditure restraint elsewhere, especially in administration, and defence. Over a longer term horizon, large scale and comprehensive reforms to the public pension system are required to prevent severe cutbacks in all other public expenditure programmes.

Size and structure of the public sector

Total government expenditures

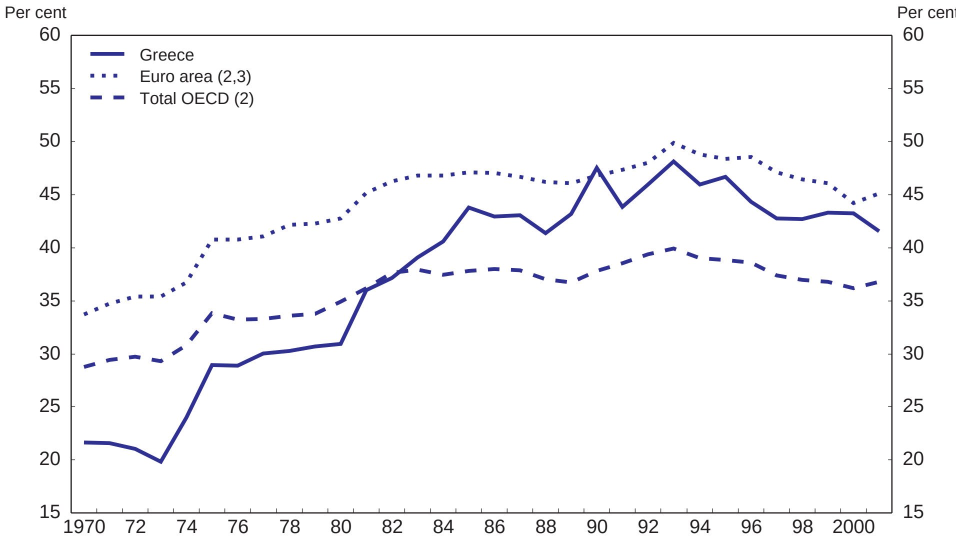
Government expenditure, as a share of GDP, has markedly increased in the post-war period, especially in the last thirty years. Between the early 1970s and the early 1990s, it almost doubled from 24 per cent to 47 per cent of GDP, rising especially quickly in most election years.[40] Since then, it has been gradually falling, reaching about 42 per cent currently.[41] Based on standard indicators, government expenditure in Greece is lower than the EU or Euro zone average by about 4 percentage points of GDP, though higher than the OECD average by about the same amount (Figure 7 and Annex Table A1).

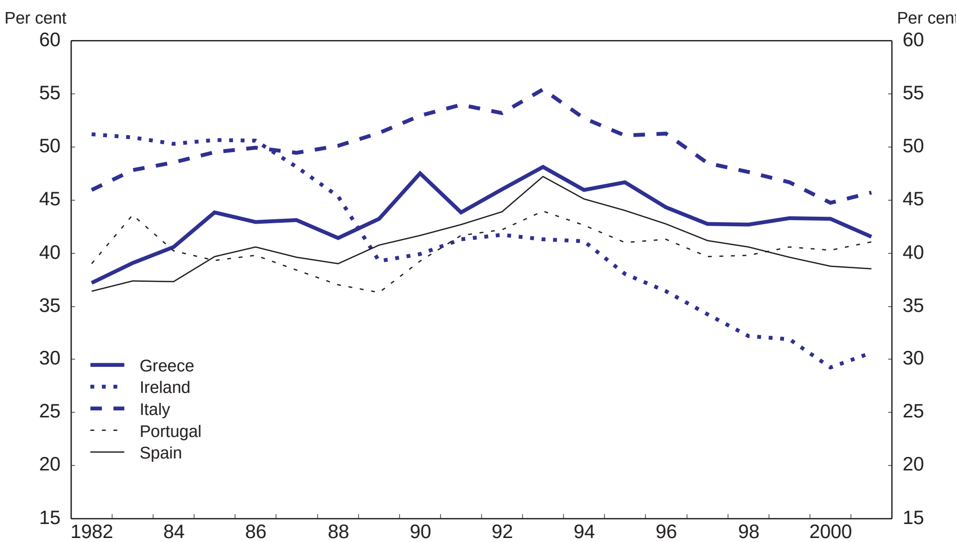
Local government

Three layers of lower government exist in Greece: regional, prefectural (second tier) and municipal/community (first tier; see Box 4). Regional authorities are a comparatively recent creation and are in fact regional extensions of central government. They are effectively regionally devolved arms of central government, with responsibility for implementing national and EU policies in their territory. Because of the obstacles to transferring civil servants from one post for another, their creation has probably entailed in the first instance some duplication of posts and functions. The first and second tier have limited responsibilities in a large number of areas. Collectively, they account for around 3 per cent of GDP, financed by grants from the central government, local and other taxes and loans (the latter currently equivalent to around ¼ percentage point of GDP). Issues of efficiency arise, because of overlapping responsibilities and bureaucratic delays (OECD 2001b), but given their small economic size, they raise no important macro-economic policy issues for the moment.

Figure 7. **Trends in general government spending:**[1] **an international comparison**

Per cent of GDP





1. Total spending is defined as current outlays plus net capital outlays.
2. Weighted average of available data, based on 1995 GDP and purchasing power parities (PPPs).
3. Greece has been included in the calculation of the euro area throughout the period.

Source: OECD, *Economic Outlook* 71.

Box 4. Lower levels of government[1]

Structure and financing

Local government in Greece is in three levels: regions (13), first-tier local authorities (1 033 urban municipalities and rural communities) and second-tier local authorities (51 prefectural authorities).[2] The local authorities account for about 3 per cent of GDP, and receive about half of their finance from annual specific grants from the central government.[3] The remainder comes from service charges (sanitation, water, use of public buildings etc.), taxes (real estate transactions, residential property etc., altogether amounting to less than ½ per cent of GDP), property income, and loans (about ¼ per cent of GDP). The relatively recent regional authorities are funded by both central government and EU programmes.

Responsibilities

The first-tier local authorities have, within their circumscribed territory, responsibility for a wide range of social, cultural, environmental, legal, transportation and economic activities. Given their limited resources, their responsibilities in many cases go no further than granting licenses, or maintenance and equipment, *e.g.* of school buildings. They are responsible also for pre-school education, urban roads and distribution of water, natural gas etc. The second tier (prefectural) authorities have responsibility for a similar range of activities, where these go outside the scope of the municipal or community authorities. They may also administer central government affairs that the central government has assigned to them, together with the necessary resources. They do not oversee the first-tier authorities. The regional authorities have responsibility for overseeing the first and second tier authorities, and have authority to exercise the powers of state administration at regional level. They implement national and EU policy relating to economic, social and cultural development of their regions, help frame regional development policy, and implement government policy at regional level.

1. Source: "Regional and Local Government in the European Union" (CdR Studies E-1/2001), EU, Committee of the Regions, 2001.
2. In 1998.
3. First-tier level authorities receive 20 per cent of income tax receipts, 50 per cent of road tax and 3 per cent of property transfer tax. Second-tier authorities (Prefectures) receive 15 per cent of road tax, 10 per cent of tax on sales of real estate and land, 2 per cent of VAT, and other minor items.

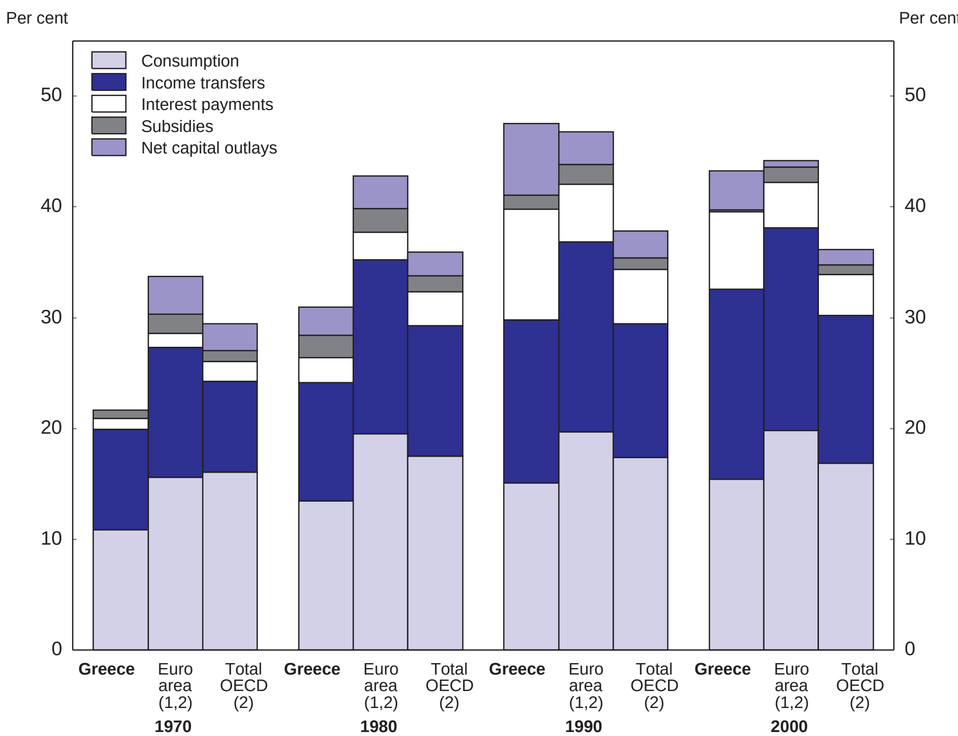
Economic classification

Rising interest payments underlay the sharp increase in expenditures in the 1980s and the early 1990s, reflecting rising debt to GDP ratios as borrowing increased (Figure 8 and Annex Table A2). The government's successful efforts to fulfil the Maastricht criteria after 1993 resulted in a substantial reduction in the size of deficits and the public debt, as well as inflation rates and interest rates. Interest payments fell by 6 percentage points of GDP to 6.6 per cent, in 2001.

Transfer payments to households have also been a major factor in the gradual increase in public sector size in the 1980s and the 1990s, when the welfare state in Greece, following post-war trends in other European countries,

Figure 8. **General government spending by economic category in Greece, Euro area and OECD**

Per cent of GDP



1. Weighted average of available data, based on 1995 GDP and purchasing power parities (PPPs).
2. Greece has been included in the calculation of the euro area throughout the period.

Source: OECD, *Economic Outlook* 71.

considerably increased in scope (Annex Table A2). By contrast, subsidies have fallen substantially in the last ten years, as a result of the abolition of export subsidies in the context of the single European Market. Government consumption increased as a share of GDP in the early 1980s but has remained fairly constant since the late 1980s, and is much smaller than the Euro-area average.

The dynamics of expenditures by economic classification in Greece have differed from those of both the Euro-area and the OECD region on average. Though remaining comparatively low, government consumption as a percentage of GDP in Greece has nearly doubled whereas that of the Euro-area increased by only about one third, and that of the OECD countries on average has remained approximately constant. Relative to GDP, interest payments have risen 12-fold, compared with "only" 3-fold in the Euro-area and 2-fold in the OECD as a whole. Government investment expenditure has increased faster than GDP over the last ten years, driven to a large extent by the implementation of the European Union's *Community Support Framework*. Net public-sector capital outlays in Greece are much higher relative to GDP than in both the Euro area and the OECD region.

Functional classification

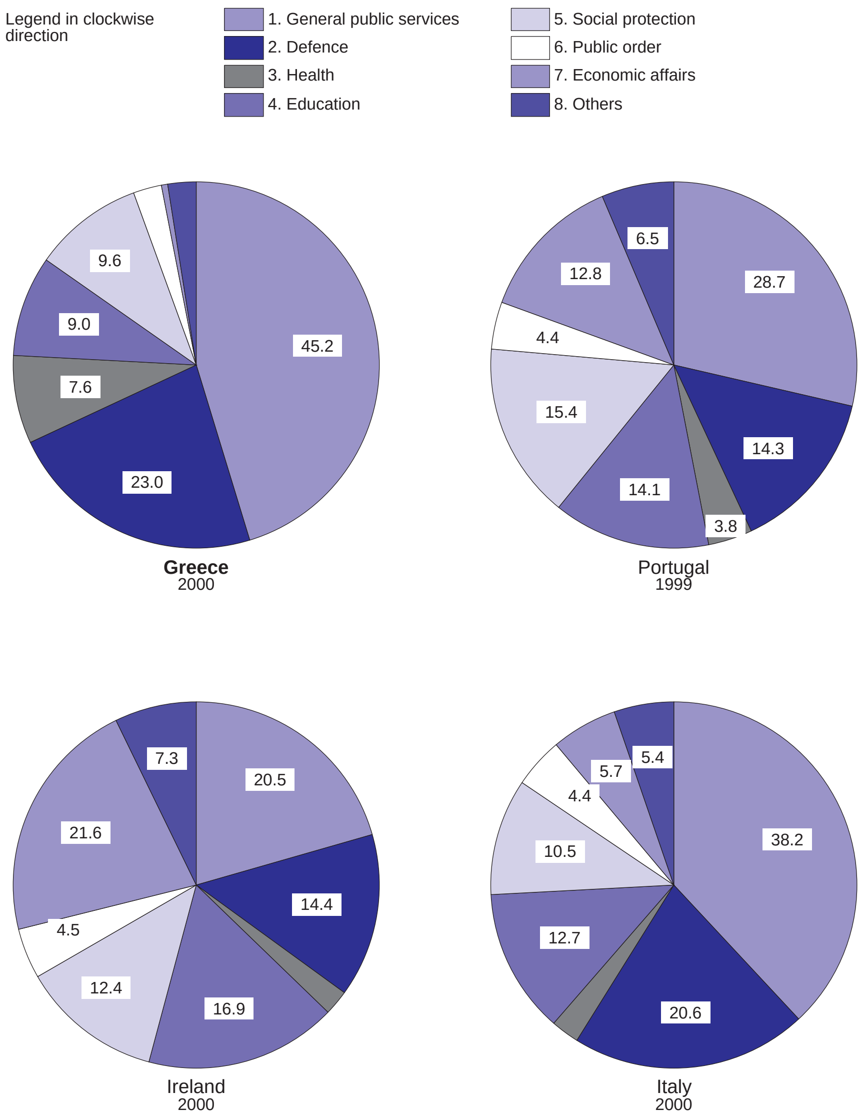
Available data do not allow a detailed picture of total government spending by function over a long period, since data have been recently revised completely according to the new national accounting standards (ESA 95) and cover only the last six years. Figure 9 gives an international comparison of the structure of general government expenditure by function. Social protection (excluding health expenditures) absorbs about half the total general government resources and general public services about a quarter.[42] Education, health and defence also absorb considerable resources, whereas other functions (public order and safety, economic affairs, environmental protection, housing and communities, recreation, culture and religion) absorb only a minor amount. The overall picture is thus one of a country where total expenditure is not out of line with that of other countries, but whose structure differs considerably.

Driving forces

The sharp increase in government spending in the last 25 years can be attributed to (at least) four factors:

– The size of the public sector increased by only 5 percentage points of GDP over the post-war period until 1973, and it remained constant over the seven-year military regime period 1967-74.[43] As in other European countries, part of the slow growth of government expenditures in the earlier period is explained by the relatively rapid growth of the economy, which created rising real resources for public service provision, even with relatively low increases in the ratio of government

Figure 9. **General government expenditure by function**
As a percentage of total expenditure



Source: OECD, *National Accounts*.

expenditures to income. After the mid-1970s, there was a rapid rise, irrespective of whether the governments in power were socialist or conservative. Greece was not alone in this respect: expenditure on social programmes especially expanded rapidly in other EU countries during the 1970s and 1980s.

– Secondly, expenditure on public pensions rose as life expectancy increased, entitlement to pensions became more widespread, and pensions themselves became more generous.

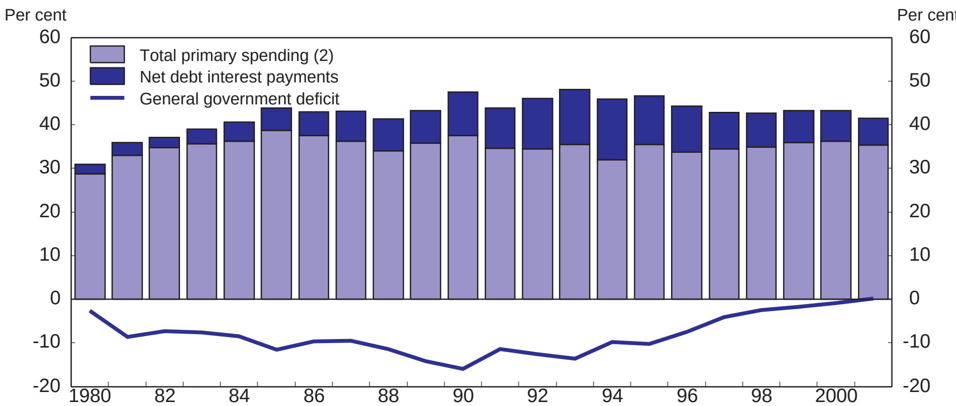
– Thirdly, a factor relevant to Greece and only a few other countries is that substantial amounts of resources are now transferred to the country from the European Union budget, only part of which substitutes for domestic resources. Such transfers affect the size of the public sector both directly, as these resources are received and spent by the government, and indirectly, *via* the co-financing of the various projects in the context of the structural funds. Indeed, the gross amount of resources received by Greece in the last five years total 5 per cent of GDP per year and 12 per cent of total government expenditures.

– Finally, the poor performance of the Greek economy in the period 1979-1993, when the economy's annual growth rate was considerably lower than the EU average (0.9 per cent, compared with 2.1 per cent), resulted in pressures to raise public spending, but without concomitant increases in receipts. Two reasons can be identified here. *First*, subsidies to public and pseudo-public enterprises[44] in order to save jobs, covered huge losses and deficits, thereby increasing the size of the public debt, driving up interest rates and sharply raising the level of interest payments. Figure 10 gives a picture of the evolution of primary spending, net debt interest payments and the general government deficit in the last twenty years. *Second*, expenditure on unemployment compensation, as unemployment increased substantially (from less than 2 per cent at the end of the 1970s to 7 per cent at the end of the 1980s and to above 10 per cent today).

Assessing public expenditures

This section examines the structure of public expenditure with a view to evaluating the efficiency with which services are delivered, and whether the allocation of resources among competing claims appears optimal. Measuring efficiency directly is problematic in the absence of market testing. International comparisons of spending programmes can help, but their interpretation is not straightforward when countries are at different stages of development.

Figure 10. **Trends in total government spending[1] and the budget deficit**
Per cent of GDP



1. Total spending is defined as current outlays plus net capital outlays. In 2001 one off revenues from the sale of mobile telephone licenses are recorded as negative capital outlays, amounting to 0.4 per cent of GDP.
2. Total spending excluding net debt interest payments.
Source: Ministry of Finance; OECD, *Economic Outlook* 71.

Public employment

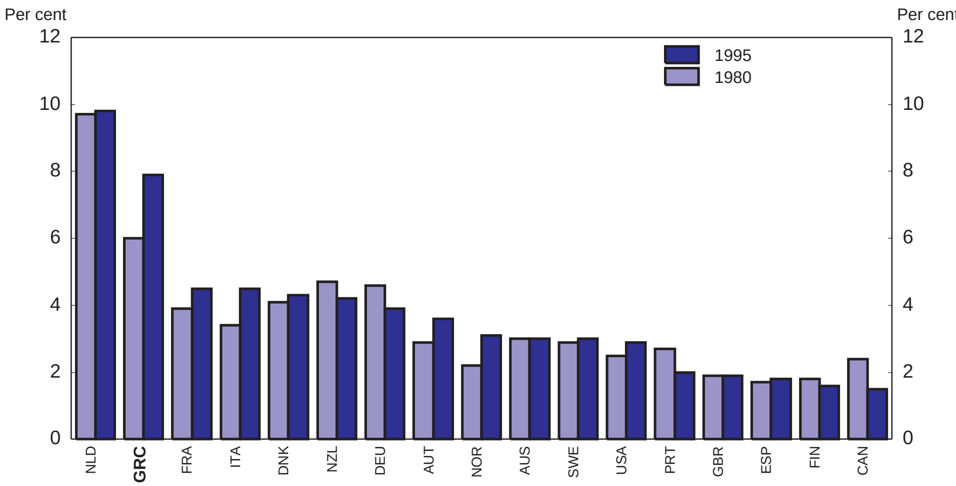
Public employment, expressed as a percentage of total employment, is one measure of the importance of the public sector in a country. In practice, however, the exact measurement of public employment is problematic. Given the range of employment status, activities in which the public sector is engaged directly or indirectly as provider and institutional arrangements, there are many obstacles to constructing an internationally consistent data set.

Personnel outlays, despite their slower growth since the mid-1990s, still constitute the largest category of ordinary budget expenditure, with a share around 50 per cent of total expenditures. Despite the slowdown, the total wage bill increased faster than budgeted during the last three years, pushed up by the increase in the numbers recruited (school-teachers, nurses and administrative personnel in hospitals, public security forces personnel), as well as increased overtime payments to National Health System physicians.

Administration

The available data show that expenditure on public administration in Greece absorbs a much higher percentage of total government expenditures than in most other OECD countries (Figure 11).[45] Though difficult to prove directly, the

Figure 11. **Public services spending in the OECD countries**
Per cent of GDP



Source: OECD, *National Accounts*.

likelihood is that this arises from over-staffing and other sources of inefficiency rather than a high volume of services delivered. A number of factors exist that *a priori* can be expected to result in over-staffing of the public sector. *First*, the pressures exercised on the political system to create public-sector posts by the relatively high levels of unemployment over the first two post-war decades. *Second*, the strong incentives for workers to get jobs in the public sector, which are secure and usually well paid, at least if account is taken of all direct and indirect benefits, including social security benefits. *Third*, the administrative and other obstacles to shifting public employees from declining public activities in central government to growing ones, which has resulted in new appointments in the former without corresponding reductions in the latter.[46] *Fourth*, the relatively rapid decentralisation of public activities, which has also resulted in additional net new employment in the public sector, because of the difficulties in shifting public employees from the central government to the prefecture and local authorities (though recent reforms address this issue).

The long-standing problem of overstaffing has been exacerbated by a mismatch of skills and responsibilities. This mainly reflects the following: *First*, appointments in the public sector, at least until the early 1980s, were often made in a context of political patronage rather than on the basis of merit, so that appointees' skills were not necessarily suited to their tasks. A significant proportion of the existing public sector labour force is still in this category. *Second*, promotions in the public sector are not always made on the basis of performance or aptitude but rather on the basis of seniority or other formal criteria, thus incidentally reducing further the incentives for productivity and efficiency. *Third*, the lack of any strict connection between salary size and productivity does not encourage efficiency and effectiveness in the public sector. *Finally*, the tenure and job stability of civil servants reduce incentives to raise productivity and intensifies inefficiency in the provision of public services. This is significantly exacerbated by the fact that the existing system for evaluation of public servants' performance in Greece does not respond to current needs. The absence of such a system and the limited incentives to improve performance are important factors leading to low efficiency and lack of accountability. All of these factors suggest that the incentive structure in the Greek administration has militated against efficient allocation of existing resources, while encouraging the accumulation of excessive resources. Recent reforms, and others under way or under consideration, address the issues of recruitment, career structure and development, performance management system and training, but it will take many years for all of them to have their full effect. Ensuring high performance of public servants in active service still leaves much to be desired.

Building on the reforms of the past decade, a consistent effort has been made during recent years to promote transparency and accountability in the Greek political-administrative system. This has involved the introduction of special bodies of inspectors (such as the Administrative Inspectors, the Financial Inspectors and the Financial Crime Confrontation Body) targeted to increase public control on bureaucracy, to combat corruption and to improve the effectiveness of specific policies. More particularly, the Administrative Inspectors, placed under the authority of the Minister of the Interior, Public Administration and Decentralization, undertake regular and *ad hoc* controls to ensure sound and efficient administration, quality of service and transparency. Their scope of competence encompasses all public services including local government.

Reforms attempt to provide a framework allowing for the best use of the existing personnel and encouraging civil servants to best utilise their talents and skills. At the same time, the rights and obligations of civil servants are under review with an emphasis on simplifying disciplinary procedures and ensuring standards of conduct. Selection now takes place through comprehensive examination or a form of points system, depending on the skills and qualifications required. A High Council for the Selection of Personnel (ASEP), established in 1994, is an independent authority overseeing the selection process and now ensuring that principles of merit, impartiality and transparency are respected. Contract appointments complete the career system. This possibility is used mainly for scientific, occasional, and seasonal personnel. Successive laws have tightened up recruitment procedures in order to prevent over-staffing and guarantee impartiality and merit, at least for the future. The High Council for the Selection of Personnel closely monitors recruitment and selection.[47]

In 1983 the National Centre of Public Administration was founded for the training of civil servants. The Centre has been in operation since 1985. Pre-entry training is more particularly the mission of the National School of Public Administration, meant to produce high level cadres for the civil service. Graduates of the 2-year programme of the School are then incorporated into the normal career pattern, benefiting from some initial acceleration of their career. The Institute for In-service Training is a second unit of the Centre, ensuring continuous professional training. In 1991, the Institute for Introductory Training was created as part of the National Centre, to provide but also to assist ministries in providing initial training for newly-recruited staff.

There is also a widely acknowledged need to reshape a rather heavy administrative machine. In times of prolonged budgetary constraints, an equally important objective is to contain and if possible reduce the number of public employees. Apart from rationalising the distribution of personnel among government agencies, a freeze on recruitment – with the exception of few priority sectors (health, education and local government – and a quota of one new recruitment for every five departures, were recent tools, though blunt ones, to this effect.[48] One measure of success is the public sector wage bill relative to GDP which, though high in international comparison, has declined somewhat in recent years.

Defence

Defence absorbs substantial public resources and helps to explain the relatively high size of the public sector in comparison with other countries. Defence expenditures as a share of GDP are more than twice as high as in the other European countries belonging to NATO and double the average percentage of all NATO countries (Table 9). Furthermore the share of defence expenditures in

Table 9. **Defence expenditures in Greece and NATO**

Per cent of GDP

	Greece	NATO Europe	NATO total
1990-94	4.4	2.6	3.5
1995	n.a.	n.a.	n.a.
1996	4.5	2.2	2.8
1997	4.6	2.2	2.7
1998	4.8	2.1	2.6
1999	4.8	2.1	2.6
2000	4.9	2.1	2.5

Source: Ministry of National Economy and Finance, Budget.

Greece has increased over the 1990s, whereas that in the other OECD countries has fallen. The high levels of defence expenditures result in part from the long-standing tense relations with Turkey, now much improved, but also from the need to guard a very long coastline, and land borders with non-EU countries. No attempt is made here to analyse the efficiency of defence spending.

Social protection expenditures

Social protection expenditures comprise four major insurance schemes (Box 5): *i*) health insurance; *ii*) pensions; *iii*) occupational injuries insurance, and *iv*) unemployment insurance. Family allowances, social assistance and transfer benefits to war victims and civil servants are also included. Old-age benefits constitute the largest component of social protection expenditures, followed by health and occupational injury benefits. Unemployment benefits take the lowest share (Figure 12).

Social expenditures as a share of GDP increased by 2 percentage points in the last ten years and are now at the same average level as for the EU countries (Table 10). However, the efficiency of the health and social systems, and the effectiveness of the latter as an income redistribution mechanism, leave much to be desired.

The health care system

Greece's total health care expenditure is slightly above the OECD average (Table 11). In 1998, the overall spending on health accounted for 8½ per cent of GDP, with public spending accounting for around 5 per cent. The system of state medical care is funded through compulsory health insurance, provided by the various Social Insurance Funds (see below), whereas private health care is funded by both private payments and payments by social insurance funds. The National Health System (NHS) provides a large range of public health care services, but delivery is generally considered to have remained unsatisfactory, although health outcomes have improved (Box 6). Long waiting lists for public hospitals (especially in Athens and Salonica) still exist and the infrastructure has remained poor and inadequate. Moreover, primary care is still underdeveloped, and – though improving – the provision and coverage of services remains unequal between rural and urban areas. Structural weaknesses arise from a multitude of factors including the fragmentation of the health insurance funds, lack of management flexibility in the hospitals, an inefficient system of doctors' remuneration, absence of effective financial control and lack of effective measures to control demand for pharmaceuticals. Private insurance coverage is growing fast, not only because of higher incomes, but also because of the high level of dissatisfaction with the public system, inducing a sizeable demand for privately-provided services (the highest in the EU area).[49] Access to private hospitals (which are mostly smaller in size than public hospitals) is rationed by price, whereas for public hospitals it is rationed by queuing.

Box 5. The social security system

The Greek social security system is administered through a complex system of public and private institutions. According to the 1998 Social Budget there are more than 239 social security funds and institutions under the supervision of six Ministries. The Ministry of Labour and Social Insurance is responsible for the organisation and administration of Social Insurance services. The Ministry of Health and Welfare deals with the primary health centres, the hospitals, the social centres for the children and the elderly as well as with the regional distribution of health and welfare services. The Ministry of Defence supervises the army health services, the Ministry of Agriculture deals with the provision of health care to the rural population, the Ministry of Merchant Marine covers the seamen and their dependants, and finally the Ministry of Finance finances the above services. Approximately one hundred of the above institutions provide medical health care benefits and the remaining offer varying forms of pension plans, unemployment benefits and other types of insurance.

The largest welfare agencies, which provide various forms of insurance benefits, are the following:

- Social Security Organisation (IKA). This fund covers compulsorily the majority of private sector employees although some of them have their own fund. About one third of the population is covered under a unifying scheme for sickness and medical benefits as well as unemployment and pension. Funding is *via* employer and employee contributions.
- Organisation of Agricultural Insurance (OGA). This fund covers all those with more than half of their income from agricultural activities. The State covers the total budget out of direct transfer or earmarked taxes.
- Fund for Professionals, Merchants and Craftsmen's (OAEE). It covers a large number of self-employed people, but there is also a large number of other funds covering professionals (*e.g.* doctors, lawyers, engineers, etc.). Funding is *via* employer and employee contributions.
- Fund for Civil Servants. Civil servants are insured by the State for pension and health care while they have special funds for supplementary and lump sum benefits.
- Independent Insurance Units for those employed in banks and other public enterprises like the Telecommunication and Electricity Organisations. These insurance agencies provide full coverage and a high quality of services. However, no more than 3 per cent of the total population were registered under these units.

The rest of the population was compulsorily insured in one or even more insurance units. Moreover, the financial crisis of the major insurance organisations in the past twenty years forced those who could afford it to seek complementary insurance. This type of complementary insurance has taken the form of either private or semi-private insurance.

Box 5. **The social security system** (*cont.*)

Benefits from the various funds differ widely, with some of them, *e.g.* the various funds for bank employees, the fund for the employees of the Electricity Company etc, providing quite generous benefits relative to contribution histories. The size and structure of contributions to these funds also differ widely. Some of them receive substantial assistance from the public sector, *via* either transfers from the Central Government or independent taxes levied on their behalf, whereas others depend only on the employers' and the employees' contributions, the division between the two also differing substantially among the various funds.

There have thus been increasing pressures on the budgets of most social insurance schemes, combined with a reluctance to raise contribution rates, leading to increased deficits (financed by transfers from central government) and lower quality of services.*

For the first two decades of its existence, revenues from social security revenues exceeded outlays for benefits. But since the early 1980s, there has been a reversal. Legislative changes at the beginning of the 1990s attempted to put Social Security back on a sound financial funding. Despite the measures taken since then, the existing pension system is not sustainable either in the medium or in the long term, because of demographic development and the generosity of insurance benefits.

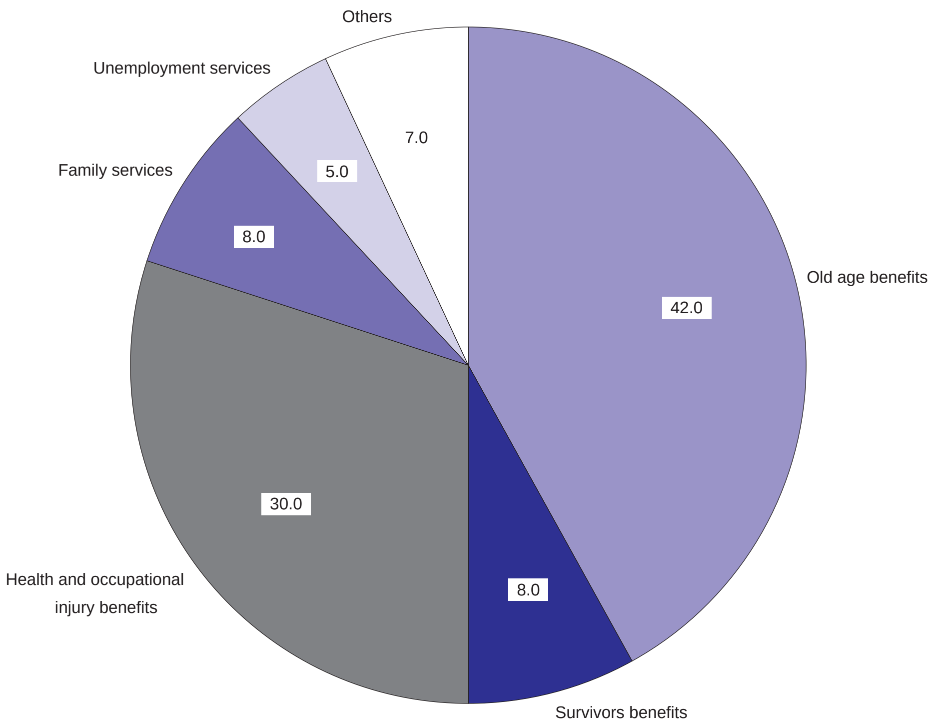
* In 2001, central government's grants to social security funds amounted to around € 3.3 billion or 2.6 per cent of GDP.

- Recent reforms

The 1997 law on health care reform, discussed in previous *Surveys*, was an important step towards addressing fundamental shortcomings of the health care system. It aimed at introducing a network of primary care, increasing the efficiency of public hospitals and containing expenditure on pharmaceuticals. However, the implementation of the 1997 reforms has been slow, or even lacking, leaving unresolved many of the deep-seated problems of the health care system.

In 2001, the government initiated a new health care reform programme with an implementation horizon of 6 years. The objective of the reform process is to reorganise services and establish new mechanisms, which will bring into the system the rational and efficient use of resources and ensure a high quality of health care provision. The "first wave" of reforms – legislated in March 2001[50] – included a significant decentralisation of decision-making authority through the

Figure 12. **Social expenditure by function**
As a percentage of total expenditure in 1998



Source: National Statistical Service of Greece, Expenditures on Social Protection.

establishment of 17 Regional Health Systems (PESY), which creates the conditions for a rational and manageable administration. The regional centres – operational since June 2001 – are run by professional managers (with qualifications and fees compatible to those in the private sector) and have full responsibility for financial management, recruitment of personnel and the supplies of regional units. PESYs are also allowed to establish state-owned public corporations to deal with hospitals' support functions.

In addition to regionalising the provision of services and resources, the "first wave" of the health care reforms introduced organisational and managerial innovations in hospitals and amended the working status of medical personnel.

Table 10. **Social transfers in Greece and the EU**
Per cent of GDP

	Greece	EU (15)
1990-1994	14.6	16.5
1995	15.1	17.3
1996	15.4	17.4
1997	15.6	17.2
1998	15.7	16.7
1999	16.0	16.6
2000	16.3	16.4
2001	16.5	16.4
2002	16.7	16.2

Source: Ministry of National Economy and Finance, Budget Speech for 2002, Athens, November 2001.

Regarding the latter, the 2001 law imposes restrictions on tenure for National Health System (NHS) doctors,[51] and bans university doctors from working in the private sector through the introduction of the entitlement to "full-time exclusive" occupation in the NHS.[52] Instead, the new provisions grant doctors the right to maintain "afternoon private outpatient clinics" in the hospitals, permitting them to keep the 60 per cent of the consultation fee with the rest going to the hospital, as a contribution towards hospital overheads and running costs. Besides providing hospitals, as well as doctors, with a considerable income, this measure permits a more efficient utilisation of hospital resources and shortens waiting lists. The first indications regarding this new service were positive in terms of patient satisfaction.

As concerns public hospitals, the reform process has made headway over the past 18 months, most visibly through the appointment of professional managers (directors) in the majority of the hospitals and the introduction in 2001 of a new procurement law which radically modifies the existing system. The new law endeavours to increase transparency and reduce the excess cost arising from current procedures by establishing flexible implementation mechanisms and ensuring competition. Progress was also made towards the introduction of modern accounting techniques in the hospitals, with the implementation of double-entry book keeping being underway in around 40 hospitals, while in others a special training of personnel is taking place. Moreover, the government has proceeded to the establishment of a body of Health Care Services Inspectors, in a further attempt to reduce the degree of mismanagement. All these innovations should improve the management and efficiency of the public hospitals. Nevertheless, efforts in this direction should continue, mainly through the rapid introduction of global budgeting and diagnostic related groups payments[53] – as proposed in previous reform packages.

Table 11. **Characteristics of health care systems: an international comparison**

In 1999 or latest available year

	Total expenditure on health as a percentage of GDP	Public expenditure on health as a percentage of GDP	Doctors[1] per 10 000 inhabitants	Pharmacists per 10 000 inhabitants	Average bed[2] occupancy (%)	Nurses per available hospital bed[3]
United States	12.9	5.7	26.8	7.0	66.0	1.3
Germany	10.3	7.8	35.5	5.8	79.4	0.6
France	9.3	7.1	30.0	10.6	83.4	0.5
Italy	7.9	5.7	58.9	9.6	73.7	0.8
United Kingdom	6.9	5.8	17.6	6.3	82.0	1.0
Belgium	8.8	6.3	37.9	13.7	81.1	0.8
Greece (1998)	**8.4**	**4.7**	**41.0**	**8.4**	**69.4**	**0.7**
Ireland	6.8	5.2	22.6	7.7	83.6	1.3
Netherlands	8.7	6.0	31.0	1.9	86.7	n.a.
Portugal	7.7	5.1	31.8	7.8	74.0	1.0
Spain	7.0	5.4	30.8	6.6	79.9	0.8
Turkey	4.8	3.5	12.5	3.4	59.4	0.3
EU unweighted average	7.9	6.0	32.9	7.8	77.0	0.8
OECD unweighted average	7.9	5.8	28.6	7.0	77.7	0.8

1. Practising physicians.
2. In-patient care occupany ratio.
3. Acute care nurses ratio.

Source: OECD Health Data 2001.

Box 6. Health outturns

Mortality

The overall standardised (age and sex) crude mortality rate of the Greek population is one of the lowest among western European countries, but the infant mortality rates are one of the highest, despite falling (especially in urban areas), from 40 per thousand births in 1960 to around 6½ per thousand today. There seems to be a need for better maternity services, and maternity advice is urgently needed in rural areas, where district nurses, health visitors and midwives hardly exist. The level of mortality among people below 45 years of age is much higher in the rural than in the urban population, whereas the opposite holds for people over 45 years of age. There is thus a need for increasing resources in the rural areas.

Life expectancy

One of the greatest achievements in Greece during the last century has been the impressive increase in life expectancy. Among the EU Member States Greece has the highest female life expectancy at birth. Life expectancy at birth has been constantly increasing since the early 1930s, providing an overall gain of 30.1 years for males and 34.4 years for females. Today, life expectancy at birth has reached 75.1 years for men and 81.4 for women (Yfantopoulos, 2000). Life expectancy for men at age 60 is one of the highest among OECD countries. That for women is below average.

This spectacular improvement can be attributed to a large number of factors. On the medical side, improved therapies, new drugs and medical technological advances have all contributed to a decline in age-specific mortality. On the social side, improvements in sanitation and living conditions, more nutritious diet habits (the so-called Mediterranean diet), better life style, less stress and better housing conditions have also contributed to a better quality of living. The great success in prolonging life has gradually led to an ageing population, which is further exacerbated by a substantial drop in fertility rates.

The "second wave" of health care reforms envisages addressing two fundamental weaknesses of the health care system in Greece noted in previous *Surveys*, namely the dearth of primary care and the fragmentation of the social health insurance system. The development of a well functioning network of primary care should reduce geographic inequalities of the system and provide a gatekeeper to specialists and outpatient departments. In addition, the establishment of a single Unified Health Fund will promote a more uniform provision of health care and establish better control over costs. The latter is urgently needed in light of the forth-coming budgetary pressures on the health system arising from an ageing population (see below). The government is also considering the introduction of changes in the incentive schemes for general practitioners and other medical personnel – a critical component for realising the proposed network of primary care.

At the heart of the reform of primary care is the establishment of an independent Organisation for the Management of Health Economic Resources (ODIPY) and the introduction of a family doctor network for beneficiaries of ODIPY. Under the draft bill on primary care reform ODIPY will be entitled to: *i*) collect the health insurance contributions from the five largest social security funds (covering around 90 per cent of total population);[54] *ii*) "purchase" services from the NHS and the private medical sector based on quality and cost criteria; and *iii*) pay pharmacies for prescription drugs. The bill also envisages a unified system of primary health care services,[55] the realisation of which is closely linked to the ongoing reorganisation and modernisation of the health care services of the Social Security Foundation (IKA).

The comprehensive healthcare reform programme currently underway[56] is expected to yield both qualitative and quantitative benefits to the system. The full implementation of the envisaged measures, however, will be of critical importance in this respect. As an important step forward, the government has established a Task Force to monitor and promote the implementation of the reforms. Primary estimates of the possible financial benefits from the regionalisation of the system and the reorganisation of the hospital sector (mainly through the rationalisation of the supply system for hospital capital equipment and others) indicate financial savings of € 0.35 billion over the period 2002-06. The potential financial benefits from the implementation of the other two major reforms, namely the establishment of a Unified Health Fund and the development of the primary care measures, are under assessment. Savings are expected from a more rational allocation of funds across the system and the efficient use of resources (particularly at the level of primary care).

The pension system

Pensions are provided in Greece by a large number of social security agencies of which the most important are IKA, covering mainly private sector employees, OAEE, covering professionals, merchants and entrepreneurs or craftsmen, and OGA, offering means-tested pensions to farmers and their agricultural employees. Public employees are covered under their own insurance scheme (see Box 5).

After a slow rise from 5 per cent of GDP in the 1960s to around 8 per cent in the early 1980s, expenditure on old-age and disability pensions almost doubled during the 1980s to around 15 per cent in 1989, reflecting the substantial increase of the number of pensioners, and the rise in per capita pensions. Generosity rose both because of higher replacement rates, and higher disability and old age benefits to those in (loosely-defined) dangerous and unhealthy occupations.

Eligibility criteria were tightened up in 1990 *via* an increase in the pensionable age and the introduction of a somewhat closer relationship between replacement rates and the years in service. In 1992, new legislation introduced uniform pension rules used by the different insurance organisations. The retirement age was standardised to 65 years for men and women and the maximum replacement rate was defined at 80 per cent of the last five (rather than two) years of salaries. The minimum contribution period was set at least 15 years. Several other measures were introduced to correct long-term imbalances. According to the most recent statistics, old-age pensions constitute 50 per cent of social expenditures and 12 per cent of GDP in 1998, percentages broadly the same as those ten years ago.

The public pension system in Greece is comparatively generous as regards both the replacement rate and the "ease" with which the right to receive a pension is established, as defined by the following parameters of the system:

- The replacement rate at 80 per cent of earnings (excluding benefits from complementary insurance funds), is high compared with most other countries (60 to 65 per cent). Furthermore, the basis on which this rate is calculated is (at worst) the average of salaries received in the last five years of active service (formerly two years, or the last month) which are usually the highest earning years. Thus, the basic public pension for most pensioners in Greece (in relation to earnings in active service) is among the highest of the OECD countries.[57]
- The right to a "full pension" is relatively easy to establish, at most after 35 years of service, compared with 38 in France, 40 in Germany and 49 in the Netherlands. Retirement preconditions are particularly favourable for women in Greece, especially those with minors.
- Because the replacement rate (80 per cent) is high and the required years of service are few, the rate of accumulation of insurance rights (*i.e.* the 80 per cent/35 years ratio), ranges from 2.3 to 3 per cent annually in Greece, while in the other OECD countries it typically ranges from 0.5 to 1.5 per cent.
- The existence of a "lump-sum" retirement allowance for many categories of insured, which effectively leads to an increase in pensions.
- As many as 40 per cent of those insured by the Social Security Fund fall into the category of "arduous and unhygienic" occupations. This confers a right to a 5-year reduction in the age of receiving a full pension (*i.e.* to 60 years in the standard case).
- Finally, the right to a "minimum pension" can be established very easily (13.5 years of service, recently raised to 15 years) and the amount is very high relative to the contributions paid over the qualifying period. This also encourages contribution evasion for much of working life.

• Future trends in pension expenditure

According to OECD data, the ageing population problem in Greece is already more acute than in most other countries. The number of pensioners is equivalent to 60 per cent of the active population, and the dependency ratio doubled between 1960 and 2000. As in almost all OECD countries, it is expected to rise substantially after 2005, and to continue rising for several decades thereafter. Life expectancy is expected to rise by 4-5 years over the next 5 decades.[58] Female participation rates, currently well below the EU average, are projected to rise substantially. This will raise total contributions for a time, but exacerbate pension spending subsequently.

In the absence of reforms, public expenditure on old-age pensions in Greece, which is currently about 2 percentage points higher than the EU average at 12-13 per cent of GDP, is projected to virtually double by 2050 on the basis of demographic and labour force trends, and to be nearly twice as high as the EU average by then and by far the highest in the OECD area (Table 12).

Such a huge increase in public pension expenditure would entail some combination of: massively distorting tax increases; crowding-out of a substantial proportion of spending in other areas (health, education etc); running chronic fiscal deficits and building up public debt from its already-high level; or running substantial primary surpluses for the next 25 years.[59] One reason, but not the

Table 12. **Public pension expenditures in EU countries**[1]

Per cent of GDP

	2000	2010	2020 level	2030	2040	2050	Peak change
Austria	14.5	14.9	16.0	18.1	18.3	17.0	4.2
Belgium	10.0	9.9	11.4	13.3	13.7	13.3	3.7
Denmark[2]	10.5	12.5	13.8	14.5	14.0	13.3	4.1
Finland	11.3	11.6	12.9	14.9	16.0	15.9	4.7
France	12.1	13.1	15.0	16.0	15.8	. .	4.0
Germany	11.8	11.2	12.6	15.5	16.6	16.9	5.0
Greece	**12.6**	**12.6**	**15.4**	**19.6**	**23.8**	**24.8**	**12.2**
Ireland[3]	4.6	5.0	6.7	7.6	8.3	9.0	4.4
Italy	13.8	13.9	14.8	15.7	15.7	14.1	2.1
Luxembourg	7.4	7.5	8.2	9.2	9.5	9.3	2.2
Netherlands	7.9	9.1	11.1	13.1	14.1	13.6	6.2
Portugal	9.8	11.8	13.1	13.6	13.8	13.2	4.1
Spain	9.4	8.9	9.9	12.6	16.0	17.3	7.9
Sweden	9.0	9.6	10.7	11.4	11.4	10.7	2.6
United Kingdom	5.5	5.1	4.9	5.2	5.0	4.4	–1.1
European Union	10.4	10.4	11.5	13.0	13.6	13.3	3.2

1. Including most public replacement revenues to people aged 55 or over, before taxes.
2. The figure for pensions includes the semi-funded labour market pension (ATP). Excluding ATP, the peak increase would be 27 per cent of GDP.
3. Results are expressed as a percentage of GNP and not GDP.

Source: Economic Policy Committee, Budgetary Challenges Posed by Ageing Population (2001).

major one, for the increase in pension spending is the relative generosity of Greek pensions in real terms. Whereas in an increasing number of OECD countries, recent reforms have resulted in public pensions being indexed only, or mainly, to prices, in Greece the first tranche of pensions has in recent years been *de facto* indexed to prices plus 1 per cent. If indexed only to prices, the increase in expenditure to 2050 would be "only" 8.5 percentage points of GDP, still the highest for any EU country. Hence it is not simply the generosity of the system in real terms that threatens to make it unacceptably expensive. Nor do the evolution of the dependency ratio or employment trends explain the major increase in pension expenditure (as opposed to the high starting level; Table 13), as demographic changes in Greece are not expected to be more serious than elsewhere on average, while employment is projected to rise substantially. On the other hand, the benefit ratio (average pension as a percentage of GDP per employed person) is both relatively high and will rise significantly further, absent reforms. In addition, whereas currently a relatively small proportion of the elderly population qualifies for a public pension, the proportion is set to increase.

As well as putting pressure on public pension expenditure, the ageing of the Greek population will also raise public spending on health and long-term care for the elderly. The EU study found that health care provision could rise by about 1.7 percentage points of GDP by 2050 from its current level of 4.8 per cent. Both the current level, and the increase, are lower than on average in the EU (no projections are available regarding long-term care). Including these elements, total age-related expenditure is thus equivalent to some 17 per cent of GDP currently, and could rise to over 30 per cent of GDP by 2050.

From the above, it is obvious that very substantial reforms are required both in the medium and long term. I*nter alia*, these reforms would necessarily be oriented towards reducing benefits and introducing stricter eligibility criteria. Because those approaching the last years of their working life will need time to adjust, and because of the considerable time lags before the various can take effect, the sooner these reforms are made the more effective and less painful they will be. As in other OECD countries, demographic pressures will start to rise significantly in a few years time, and will continue to mount for several decades. Reforms should therefore be implemented urgently. An obvious reform is to index pensions only to prices, as is increasingly the case in other OECD countries. Consideration also needs to be given to bringing pensions closer to actuarial fairness, *i.e.* imposing a much closer relationship between contribution histories and potential benefits. At present, older workers are actuarially better off if they retire before the statutory retirement age, even if they do not have a full contribution history and hence have an incentive to retire early. Changing the incentive structure so as to encourage older workers to stay longer in the workforce is therefore a key to any major reform programme. Discussions have taken place with the social partners and the government submitted a draft law to Parliament in June 2002.

Table 13. **Public pension expenditure: four key rates**

	Dependency ratio[1]			Inverse of employment ratio[2]		
	2000	2050	% change	2000	2050	% change
Austria	40	77	93	157	138	–12
Belgium	41	67	62	170	157	–7
Denmark	41	57	39	130	129	0
Finland	38	64	70	146	145	–1
France	39	67	73	160	151	–6
Germany	43	71	65	146	138	–6
Greece	**43**	**76**	**76**	**174**	**142**	**–18**
Ireland	30	60	100	149	133	–11
Italy	44	84	91	185	150	–19
Luxembourg	37	57	56	110	52	–53
Netherlands	35	61	75	153	143	–6
Portugal	38	66	71	139	127	–8
Spain	39	82	109	179	142	–21
Sweden	45	65	46	137	131	–5
United Kingdom	40	65	60	134	135	1
European Union	41	71	73	157	142	–10
	Benefit ratio[3]			Eligibility ratio[4]		
	2000	2050	% change	2000	2050	% change
Austria	22	19	–16	104	86	–17
Belgium	16	14	–16	88	94	7
Denmark	23	21	–12	84	88	4
Finland	22	22	–1	93	85	–9
France	24	16	–34	82	85	4
Germany	19	15	–20	99	113	14
Greece	**25**	**32**	**29**	**68**	**72**	**7**
Ireland	20	19	–4	64	76	18
Italy	16	12	–27	107	97	–9
Luxembourg						
Netherlands	17	18	3	86	88	2
Portugal	17	18	7	107	87	–19
Spain	17	16	–5	79	92	16
Sweden	24	19	–21	60	65	8
United Kingdom	14	7	–49	73	72	–2
European Union	19	15	–21	88	90	2

1. Population aged 55+ as % of population aged 15 to 64.
2. Population aged 15 to 64 as % of number of persons employed.
3. Average pension as % GDP per person employed.
4. Number of pension beneficiaries as % of persons aged 55+.

Source: Commission calculations based on the projections of the EPC working group on ageing populations.

The main elements of the draft law are the following:

– the reorganisation of the structure of the pension system through the drastic consolidation of primary funds;
– a reduction in the replacement rate of earnings (excluding benefits from complementary insurance funds) over the 10 years from January 2008, from 80 per cent to 70 per cent, for those who were insured before 1993. The replacement rate is calculated on the basis of the average of salaries of five out of the past 10 years of active service (chosen by the pensioner). The general retirement age remains 65 for men and 60 for women (with 15 years of insurance). For those who were insured after 1 January 1983, the full pension is granted after 35 years of active service and as from the 58th birthday. For those who were insured from 1 January 1993, the full pension may be granted after 37 years of active service (independently from age);
– the establishment of an independent Actuarial Authority for the continuous monitoring of the pension system;
– the introduction of a defined-contribution function instead of defined benefits in the auxiliary funds;
– the establishment of a relevant framework for the creation of occupational funds;
– the establishment of a financing scheme which would guarantee the financial stability of the pension system until 2030.

Effectiveness of transfers in alleviating poverty

The ostensible *raison d'être* of certain social transfer programmes is to alleviate poverty, *via* income redistribution. It is therefore relevant to examine if they in fact do so. Förster and Pellizari (2000) in an extensive study on the trends in income distribution and poverty in the OECD area found that, in the case of Greece, over the period from the late 1980s to the mid-1990s, non-pension transfers going to the working-age population became increasingly targeted to middle-income earners while lower and higher income groups lost shares. Reflecting the relatively high replacement rate and absence of ceilings on benefits, public pensions among the retirement-age population were distributed regressively, but this effect was more pronounced in the mid-1970s than in later years.

Similarly, Heady, Mitrakos and Tsakloglou (2001) examined the distributional effects of social transfers in Greece, as well as in the other member states of the European Union. Their results show that social transfers help to reduce inequality as well as poverty in all EU countries. However, the impact on inequality and poverty is generally most significant in countries which spend a high proportion of GDP on social transfers, like Belgium, Denmark and the Netherlands, and least so in low spending countries, like Portugal and Greece. As could be expected they found that, in the case of Greece, non-pension social transfers are concentrated towards the bottom of the distribution to a larger extent than pensions. The transfer programmes in Greece of the past two decades have reduced the number of individuals in poverty, but many of those who did receive transfers did not obtain enough to lift their households above the poverty line. Given the dead-weight costs of poverty-relief programmes, there seems to be a strong case in Greece for ensuring better targeting, and tipping the balance in favour of households living in poverty, rather than individuals with very low incomes (who may well be living in middle-or even high-income households).

Education

Recent OECD research[60] confirms the view that formal education (especially) and training promote economic growth *via* enhancing productivity. They also contribute to personal and social development and thus help children from disadvantaged backgrounds to surmount their disadvantages. The effectiveness of public expenditure on education and the length of time people remain in education, are therefore of importance.

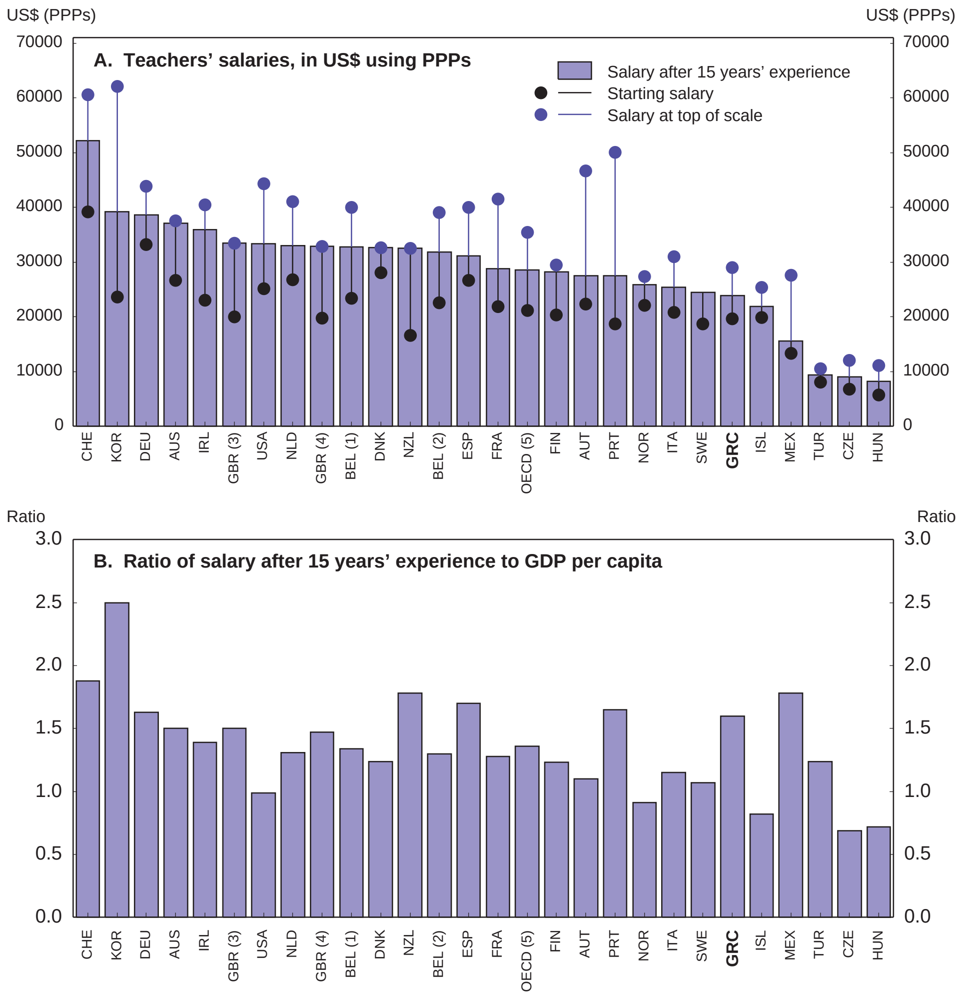
Formal education

Total government expenditure on formal education in Greece, is only 3½ per cent of GDP, compared with an OECD average of 5 per cent. But the total resources including private expenditures, at 4.9 per cent of GDP, are nearer the OECD average (5.8 per cent). Public expenditure on primary education as a share of GDP is lower than the OECD average, whereas government expenditure on tertiary education is more than 10 per cent higher than the OECD average. A striking feature of the Greek educational system is that expenditure per pupil in the primary and secondary sectors is broadly comparable: the usual pattern is for expenditure on secondary school students to be significantly higher. Teachers' salaries[61] are relatively high: relative to per capita GDP, they exceed these in most OECD countries (Figure 13). The ratio of numbers of pupils to teaching staff is relatively low at the primary and secondary level (13.5 and 10.6, compared with 18 and 14.6 for the OECD average), but very poor at the tertiary level (70 per cent larger than the OECD average).

The share of public resources devoted to education in Greece has increased substantially in recent years, by more than 15 per cent between 1995 and 1998. This mainly reflects an extremely sharp rise in expenditure on tertiary education. By contrast, expenditure on primary and secondary education has increased only slightly, the rise being about the same as GDP growth. In the three-year period to 1998, for which the latest data are available, expenditure on tertiary

Figure 13. **Teachers' salaries: international comparison**

Lower secondary education, 1999



1. Belgium: Flemish community.
2. Belgium: French community.
3. England.
4. Scotland.
5. Country mean.

Source: OECD, *Education at a Glance*, 2001.

education increased by 78 per cent in real terms, whereas expenditure on primary and secondary education increased by 12 per cent. Demographic factors have resulted in a very slow growth in the numbers of children of school age. The proportion of pre-school age children attending kindergarten is below the OECD average, at around 50 per cent; despite the fact that, children of this age benefit extensively from the existence of the family "support net" (*i.e.* mainly grand-parents, who substitute for kindergarten), the rate of increase is substantial: between 2000 and 2002 the rate of growth in coverage was of the order of 15 per cent, while the planned new day-care facilities by 2003 will exceed 6 per cent.

The size of expenditures on education is an inadequate measure of the level and quality of educational services, since the efficiency with which resources are used in the educational sector must be taken into account. Only indirect measures of efficiency are available, namely the quantity of teaching inputs and the quality of outputs. Additional indirect evidence comes from the lack of serious efficiency and control mechanisms, and the consequent lack of incentives to match supply and demand for staff, supplies and infrastructure, implying that inefficiencies probably exist.

Average class sizes are low by international comparison, and this in part reflects the geographically-dispersed nature of the Greek population (small islands, dispersed rural communities). Despite this, there is a lack of teaching positions, and large numbers of newly-qualified primary and secondary teaching staff do not find employment in the profession, and seek employment in areas for which their training has not fitted them. It is likely, though difficult to prove, that the oversupply of graduate teachers is linked to the comparatively high salaries earned by established teachers. This, in combination with relatively small class sizes, clearly puts pressure on spending, without clear benefits in terms of educational outcomes. Indeed, the results for Greece in the recent OECD PISA study of literacy skills (ability to read, understand and utilise written information) were well below the OECD average (OECD 2001d). The educational services provided at the secondary level are not generally sufficient to allow students to succeed in the highly competitive university entrance examinations, encouraging students to attend private preparatory courses, with substantial costs and inefficient allocation of time. Serious problems are also present at the tertiary level. Besides the insufficiency of supply to meet the high and rapidly increasing demand, especially for university services, the efficient provision of services is hindered by the lack of appropriate methods of evaluation and quality control. Yet another problem encountered is the possibility for students to take courses and exams indefinitely at no cost, other than of their own time. This reduces the capacity of the system to take on more new entrants, and thus satisfy part of the existing excess demand. The constitutional prohibition of private universities also puts high pressure on government provision and government expenditures on tertiary education.

The rapid increase in education expenditure at the tertiary level partly reflects an improvement in the salaries of existing staff, but also a genuine increase in the supply of, and a considerable improvement in educational services at the tertiary level. Demand however is increasing even more rapidly, because of rising incomes. High and rising unemployment among the young also encourages them to spend some more years in education. As a result, a large number of university students, perhaps of the order of forty thousand (25 per cent of the total) are studying abroad.

Public subsidies to households for educational purposes are not substantial and most of them are targeted social expenditures, to support low-income students.[62] Most of the support is in kind and results in high inefficiencies. Important in this respect is the free distribution of books to students by the government, which is wasteful, as these books are used only once, or sometimes not at all, when students prefer books other than those distributed by the Ministry. Major inefficiencies are also present in the case of free meals to students. Scholarships and students' loans, which are a more efficient means of supporting students, are relatively limited. Indirect benefits from tax allowances and tax credits provided in the tax law for students are also limited.

Training

Training activity has increased considerably over the last twenty years, after entry into the European Union.[63] Resources grew substantially in the late 1980s and the early 1990s, with the reform of the Community Structural Funds and the introduction of the special Support Programs to speed up Community convergence and cohesion. Total expenditure for labour force training increased considerably over the period 1985-1991 from only 0.06 per cent of GDP to 0.47 per cent, falling back to 0.20 per cent in 1995 (Table 14). The structure of training expenditures has also changed, the emphasis being shifted from training of

Table 14. **Public expenditure for training measures**
As per cent of total

Type of training	1985	1991	1995
Training for unemployed adults	28.1	2.9	3.6
Training for employed adults	19.9	91.7	86.8
Training for unemployed youth	46.7	3.3	7.3
Training for disabled		2.1	2.3
Total	**100.0**	**100.0**	**100.0**
Percentage of GDP	0.06	0.47	0.20

Source: Labour Force Employment Organisation (unpublished data).

unemployed to training of employed people. Training now takes place mostly within special Training Centres, run by both public and private bodies, where monitoring and control is easier. The combination of EU funding and better management is helping to make the Greek labour force better adaptable to changing technologies and demand patterns, though evaluation is not possible in the absence of detailed comparative studies.[64]

Reforming public expenditure management

The budget process

The budgetary practices (Box 7) followed in Greece have not been very successful in the past in ensuring value for money. The criterion used for evaluating results in relation to needs has often been measuring inputs, *i.e.* the share of expenditure allocated to the various programmes with no real evaluation of benefits.

The two main problems of the Greek system of public expenditure audit and control are the relatively large number of fairly independent auditing and control bodies, and the fact that audits deal with legal requirements and not purpose, substance and effectiveness. Because of their numbers, the audit bodies cannot easily be co-ordinated, so that their overall effectiveness is reduced. Two or more bodies audit certain expenditures simultaneously and this increases administrative costs substantially, without an equivalent increase in the effectiveness of auditing. An example is the *ex ante* auditing of non-periodic expenditures, which is conducted by the Auditing and Control Offices of the Ministry of Finance and the Court of Auditors. Other expenditures however, are not audited at all, increasing the risk of inefficiency in spending. The lack of an efficiency-based auditing and control system is the major problem in public expenditure auditing and control, and indeed of the Greek public sector in general, which needs to be addressed urgently.

The Ministry of Economy and Finance is beginning to address these issues. For example, a special committee dealing with efficiency in government spending in the country has recently proposed (and the Minister of Economy and Finance has accepted, and is about to bring a law to the parliament), the creation of six regional Centres of Financial Audits, to be increased later to thirteen. These Centres will audit and evaluate the systems of handling money and internal control of all bodies that deal with public money directly or indirectly.[65] They will also conduct audits of specific expenditures of each public body, dealing with legal requirements, normality and administrative processes. Expenditures to be audited will be selected by sampling, though all expenditures may be audited if the danger of anomalies is wide. Finally, they will conduct audits on various expenditure programmes, specific activities, or the whole of a public body on the

Box 7. The Greek budget process*

A. Preparation, approval and execution

The central government Budget is drafted by the Ministry of Finance, in collaboration with the spending Ministries; it is voted by the Parliament and is executed by the competent Ministries and other public bodies. The Ministry of Finance plays a leading role in drafting a top-down overall budget. Once total spending has been decided, it is allocated among spending ministries, the budgeted amount being distributed into four general categories (excluding wages and salaries which are determined in accordance with wage policies). The spending ministries allocate the given resources by category among programmes, so that new programmes compete with old ones (formerly, the expenditure budgets were prepared on a marginal budget basis, and submitted to the Ministry of Finance, for consolidation). The ministries send in their proposals by the end of June, and the final budget is determined after negotiations during July between the Ministry of Finance and the competent Ministers. A preliminary draft budget is introduced by the Ministry of Economy and Finance in early October to the permanent Economic Committee of Parliament for discussion and modifications. The final draft budget is submitted to Parliament at least forty days before the beginning of the fiscal year. The budget is discussed in Parliament for five consecutive days, after which voting takes place. It must be approved as a whole, and requires an absolute majority. Starting with the 2002 Budget, projections for the two out-years regarding main revenue and expenditure items are also included.

Supplementary budgets are possible if spending overruns exceed a certain percentage, and must be approved by Parliament. The law governing supplementary budgets was introduced in 1995 and has not so far been used. Contingency reserves are noted in the budget for natural disasters and other unforeseen events.

Lower levels of government (prefecture and local) prepare their budgets and submit them to regional authorities for approval, whereas the supervising Ministries approve the budgets of other public bodies. All taxes are levied by the Parliament, whereas local authorities and other public bodies can only levy rates. Lower levels of government can finance deficits, subject to the approval of the Ministry of Economy and Finance. No financial sanctions exist for overspending by lower level governments and other public bodies.

Budgeting of expenditures is in cash terms, which tends to lead to a misleading picture of commitments, when payments are accelerated or deferred. By contrast, accrual accounting would recognise the financial implications of transactions at the time they occur, irrespective of when cash is paid or received.

Box 7. **The Greek budget process*** (*cont.*)

B. Auditing and control

Internal auditing and control takes place in various units in the Auditing and Control Offices of the Ministry of Economy and Finance. They employ about 900 people and are responsible for monitoring overall budget expenditure, as well as the ex-ante audit of a relatively small percentage (less than 10 per cent) of total public expenditures, since wages and salaries, pensions, as well as all other periodic expenditures are excluded. The expenditures of all municipalities are also excluded, (with the exception of the Athens Municipality), as well as Social Security Funds.

Final external auditing is carried out by the Court of Auditors, which makes both *ex ante* and *ex post* auditing of government expenditures. *ex ante* auditing covers the same expenditures that are covered by the Auditing and Control Offices of the Ministry of Finance, whereas *ex post* auditing covers all government expenditures but is based on sampling.

The Directorate of Clearance, Audit and Payment of Wages and Salaries of the General Accounts Office of the Ministry of Economy and Finance also makes spot checks of wage and salary payments. The Economic Inspection Department of the same ministry can, among other things, make spot audits of all public handlings of money. The Special Fiscal Audit Commission conducts audits on projects co-financed by the European Union. Furthermore, the Special Corps for the Detection of Economic Crime may investigate economic crimes against public sector interests, especially tax fraud cases.

* See also "Budgetary reforms and outcomes in Greece", Liverakos (2000).

basis of economic efficiency and effectiveness criteria. These audits will in general be conducted by officials of the General Accounting Office of the Ministry of Economy and Finance, which can, where necessary, be assisted by specialists from the government or the private sector.

The above auditing and control centres, if approved by Parliament, could substantially increase accountability and efficiency in government spending.[66] However, the ability of these centres to actually carry out the tasks assigned to them remains to be seen. Nevertheless, although clearly a step in the right direction, this policy initiative will entail a further proliferation in the number of auditing units.

Conclusions and recommendations (see also Box 8)

Improving the efficiency of the public sector

From the above, it appears that excessive size of the Greek public sector is not *a priori* a major policy issue at present. This could change, though, if major reforms to the public pension system are not implemented in the near future. Even if they are, it is nevertheless probable that spending in this area will rise as a share of GDP, as in other countries. This underscores the need to scrutinise spending in other areas, to ensure both that individual spending programmes are run more efficiently and that the relative importance in terms of spending of the individual programmes responds better to important social and economic goals (see Annex II for an overview of possible future spending trends).

The reduction in debt servicing in recent years is a welcome development in this context, but further gains from lower interest rates are now limited, and lower interest payments will require a brisk reduction in debt levels, which at present are one of the highest among OECD countries and well above the 60 per cent Maastricht target (see Chapter II). Reduction of debt at the desired rate will require running substantial primary surpluses for several years and/or continued privatisation of the large Greek publicly-owned enterprise sector. Provided that privatisation is flanked by measures to ensure conformity with competitive market forces in the privatised sectors, there will be both efficiency gains for the economy as a whole, and a reduction in public expenditure, as many enterprises are loss-making.

Administration is an area where international comparisons, difficult though they may be, suggest an excessive level of employment and spending. Furthermore, an important factor influencing the effectiveness of public spending as a whole is how efficient the public administration itself is. Human resource management is a key ingredient for management policies and practices have been under review in the context of an overall public sector reform strategy. In spite of the significant progress made in the past few years in improving the quality, and reducing the quantity of new entrants, reform efforts are still at an initial stage. Incentive mechanisms for the promotion of good performance, honesty, loyalty, effort and creativeness among existing staff remain inadequate. It is still too difficult to reallocate employees from functions of diminished priority, where overstaffing is endemic, to meet increased needs in certain growing functions (*e.g.* health, education, lower levels of government). This may require the granting of incentives to overcome the resistance of staff to move from one function to another, or from one level of government to another. Special training programmes for existing employees should also take place in order to adapt their skills to new needs. Additional savings, possibly substantial, could be achieved if incentives for managers were devised so as to encourage more efficient working. What is needed is a comprehensive reform strategy for the modernisation of administrative and budgetary processes.

Box 8. Recommendations for reforming public expenditure in Greece

Based on the analysis presented in the chapter, reforms are needed to ensure more effective allocation and use of public resources. In the interests of strong sustained growth over the long term, a transfer of resources among programmes is indicated, and better value for money within individual programmes is desirable.

Press ahead with reforms to the public pension system

Already announced reforms will prevent public expenditure on pensions doubling over the next few decades and crowding out other programmes. Nevertheless, even with reforms, the Greek system remains relatively generous, and expenditure will likely continue to rise significantly. There still remains scope for bringing benefits more into line with contributions:

- gradually extend the number of years of contributions required to qualify for a full pension;
- raise the retirement age for women closer to that for men;
- tighten the conditions for qualifying for an early pension because of arduous or unhygienic work.

Reform the public health system

Health outturns are comparatively good, but the ratio of doctors to other health workers (*e.g.* nurses) is unusually high, and public health provision is widely regarded as inefficient and not responding well to the needs of the community:

- press ahead with the managerial reforms announced in 2001;
- continue to address the unsatisfactory primary care facilities *via* the establishment of the Organisation for the Management of Health Economics (ODIPY). Also strengthen the network of general practitioners by appropriate incentives.

Reforming the educational and training system

Despite relatively small class sizes (to some extent a reflection of geographic factors) at the primary and secondary levels, there is an oversupply of qualified staff, while educational outturns are below the OECD average. Tertiary education is constitutionally a state monopoly, and many young people pursue their tertiary education abroad. Unemployment among school leavers is high, and adult training facilities are weak:

- to the extent possible, address the incentives structure in primary and secondary education so as to raise standards and better match supply and demand for staff;

Box 8. Recommendations for reforming public expenditure in Greece (*cont.*)

– re-think educational curricula so as to ease both the school-to-work transition, and the passage to tertiary education;

– consider the introduction of "user fees" and student loans for tertiary education, so as to help finance the growing demand for university places, while increasing the incentives for students to complete their university studies expeditiously;

– continue to improve access for adult workers to Training Centres, and monitor and evaluate results.

Reforming human resource management in the Administration

Because of their secure nature, and favourable social coverage, the demand for public sector jobs has traditionally been high in Greece. Rigidities within the system, and lack of relevant incentives have no doubt contributed to an inefficient use of human capital, and to overmanning, of public sector employees. Recent reforms have addressed the inefficient use of manpower, but mostly at the recruitment stage:

– improve incentives for efficiency among existing staff, for example by continuing efforts to ensure that promotion reflects performance and potential rather than seniority;

– adjust the system of incentives to encourage staff to move between posts within and between both ministries and different levels of government.

Reforming the budget process

Budget preparation and expenditure monitoring have been hobbled by both the absence of overall comparative value-for-money estimates for various programmes, and a plethora of smaller units that mainly ensure that the purely legal aspects of the budget process are respected. The authorities propose to create regional audit centres that would monitor better the cost/benefit aspects of spending programmes. The government needs to:

– scrutinise existing programmes, and proposed changes to them, to ensure better value for money, and to equalise returns, broadly defined, at the margin;

– continue to supply spending estimates/projections for individual programmes over a medium term horizon as part of the annual budget process;

– ensure that the new regional audit centres are adequately staffed with people with the appropriate analytic skills.

Compared with other OECD countries, Greece has little resort to user fees, or to outsourcing of functions that could be more cheaply and efficiently provided by the private sector. Although it is likely that privatisation in itself will result in more outsourcing as private owners pursue cost savings more strenuously, there will remain central and local government functions where cost savings could be made, and where market testing will provide useful information about the perceived value of services to the community.

Two areas where efficiency gains are most urgent are education and health. The recent reforms that have overhauled and modernised the Technological Institutes are a step in a good direction. But despite substantial extra spending in recent years, the perceived quality of the tertiary education system does not respond to students' requirements, there are no major incentives for students to work hard and complete their studies quickly, and there is no private sector alternative. Competition comes mainly from studying abroad. Reforms need to address these issues, for example permitting private institutions to admit students, conditional on standards and curriculae receiving approval. "User fees" for tuition would both give students an incentive to obtain their qualifications more quickly and permit easier comparison between public and private suppliers. Fees, and student loans for tertiary education are in any case desirable on equity grounds. Lower interest rates will help here, by making the cost of servicing student loans lower in the earlier years. As regards primary and secondary education, the combination of relatively small class sizes (on average) and high salaries (relative to average earnings) has not led to above-average educational results. Setting more ambitious achievement targets is desirable. Despite the fast increase in the number of students from immigrant families, the population of school age is expected to shrink in coming years, and thus it should be possible to gradually improve standards without substantial extra expenditure.

The public health system is widely regarded as being unresponsive to patients' requirements, and inefficiently run. Total expenditure on health is not high, relative to GDP, compared with other EU countries, and by some measures outcomes are good: life expectancy and the number of doctors per 1 000 population are both above average, though infant mortality remains high. But the public component is low and public expenditure on health accounts for a comparatively low proportion of total public expenditure. Such evidence as exists suggests that this is not so much because public health delivery is "lean and mean" as much as it is perceived as being cumbersome, inefficient and of low quality. The ongoing reforms that are designed to enhance efficiency and incentives will help. Substantial progress has been made in recent years in developing the supply of medical services and improving the quality of care dispensed in public hospitals through the National Health System (Ethniko Sistima Igias). In the long run, as per capita incomes increase and the population continues to age, health care demand will inevitably rise. If the reforms prove successful, efficiency improves, and public health services become to be regarded as an acceptable substitute for (or complement to) private health delivery, then the case for expanded spending on health care, as a share of total expenditure, should be reviewed.

Improving efficiency in the budget process

Irrespective of any expenditure cuts or expenditure restructuring, a priority in any case is to improve the budget process and expenditure monitoring, because of the high inefficiencies that are present in the government sector. The creation of the Regional Centres of Financial Audits which the government seems ready to promote, clearly point in the right direction. But three important issues need to be confronted. *First*, the number of these centres should soon increase to at least thirteen, one for each administrative region. *Second*, the staffing of these centres should be made by new appointees having the qualifications to evaluate government expenditures and not simply dealing with expenditure legality and normality for which the employees in the existing auditing and control offices of the Ministry of Finance are competent. In case, however, some of them should be transferred to these centres they should undergo special and very intensive training courses at the Ministry's school. *Third*, the responsibilities of existing auditing bodies need to be scrutinised, both to eliminate overlap and to fill in holes.

In addition, internal auditing and control offices should be created in each government department, which would deal with the evaluation of government programmes within that department. Their mandate would be to build up a climate of competence and constitute a first line of surveillance. These evaluations should constitute valuable inputs for the work of the Ministries' audit and control offices and lead over time to greater efficiency in public expenditure.

IV. Progress in structural reform

This chapter looks at structural impediments to better economic performance, and structural policies that could lessen or remove them. It focuses on a limited number of key areas that seem, in the Greek context, to be particularly important for faster growth, to wit, the quantity and quality of labour inputs, and the efficiency of product and financial markets. The areas discussed below are: the improvement of labour market flexibility; the upgrading of training and education; competition policy reform; the liberalisation of product markets, in particular the energy, telecommunication and transport sectors; and the reform of financial markets. The chapter concludes with a box (Box 11) summarising recent progress in structural reforms more generally.

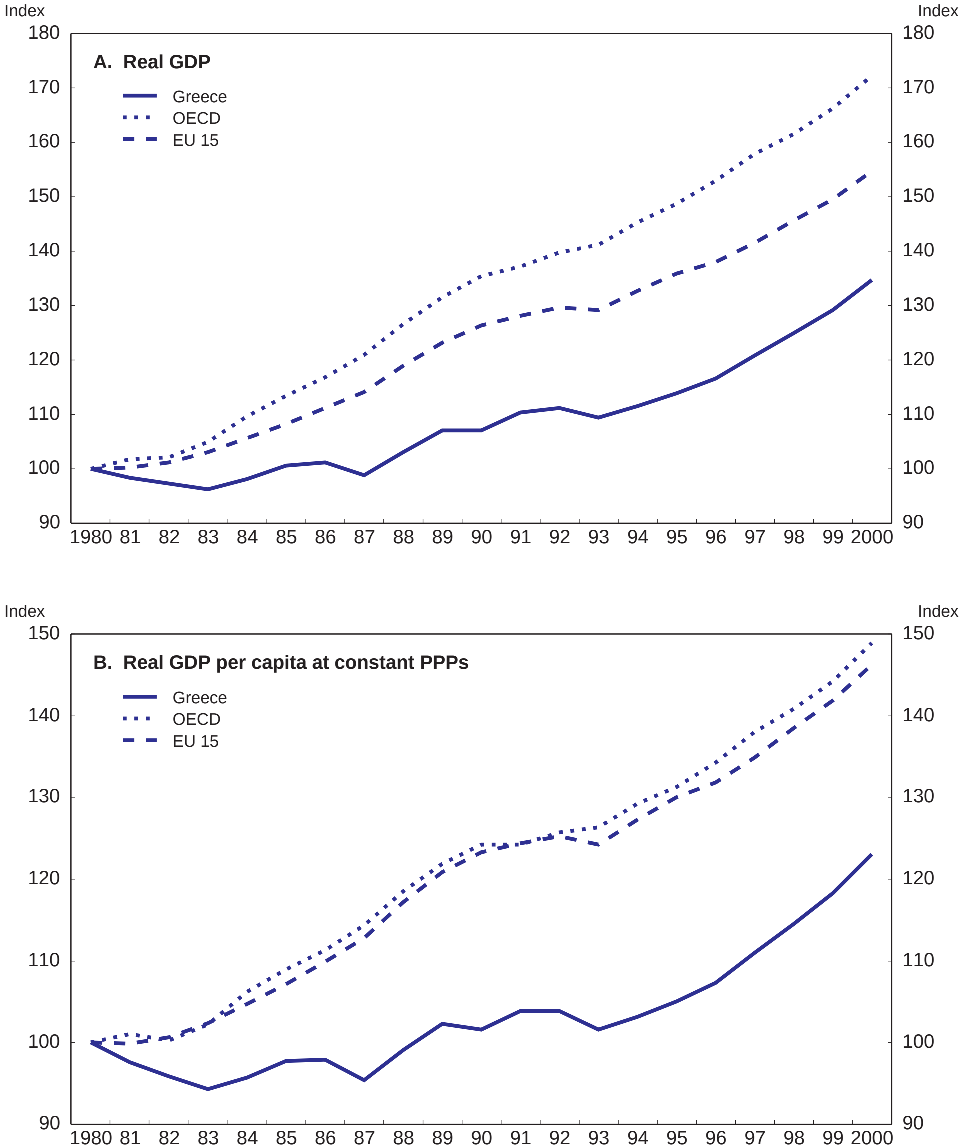
Greece's longer-term performance in an international perspective

Now that a substantial degree of macroeconomic stability has been achieved, the next major macroeconomic goal is to achieve convergence with other EU countries in terms of real per capita income. This can be neither quick nor easy. For most of the past 30 years, Greek per capita income has hovered at under ⅔ the EU average, and the gap actually widened between the mid-1970s and late 1980s. Output per person employed is closer to the EU average, as a lower proportion of the Greek population is in the labour force than in the rest of the EU.

Nevertheless, Greece's economic performance has improved substantially since the middle of the 1990s (Figure 14). GDP growth averaged 3½ per cent in the 1996-2001 period, compared with 1¼ per cent during the first half of the 1990s. Undoubtedly, some of the improvement owes to cyclical forces, stimulated by the euro-related decline in interest rates, in line with experience of other first-round euro-area entrants (Ireland, Portugal and Spain). Economic activity was also assisted by sizeable transfers received from the EU in the context of successive *Community Support Frameworks* (CSF)[67] to promote Greece's integration in the European community. However, stronger output growth and the accompanying outstanding gains in labour productivity[68] estimates since 1996 are also likely to reflect the positive impact of a number of macro- and microeconomic reforms

Figure 14. **Long-term growth performance**

Index 1980 = 100



Source: OECD, *National Accounts*.

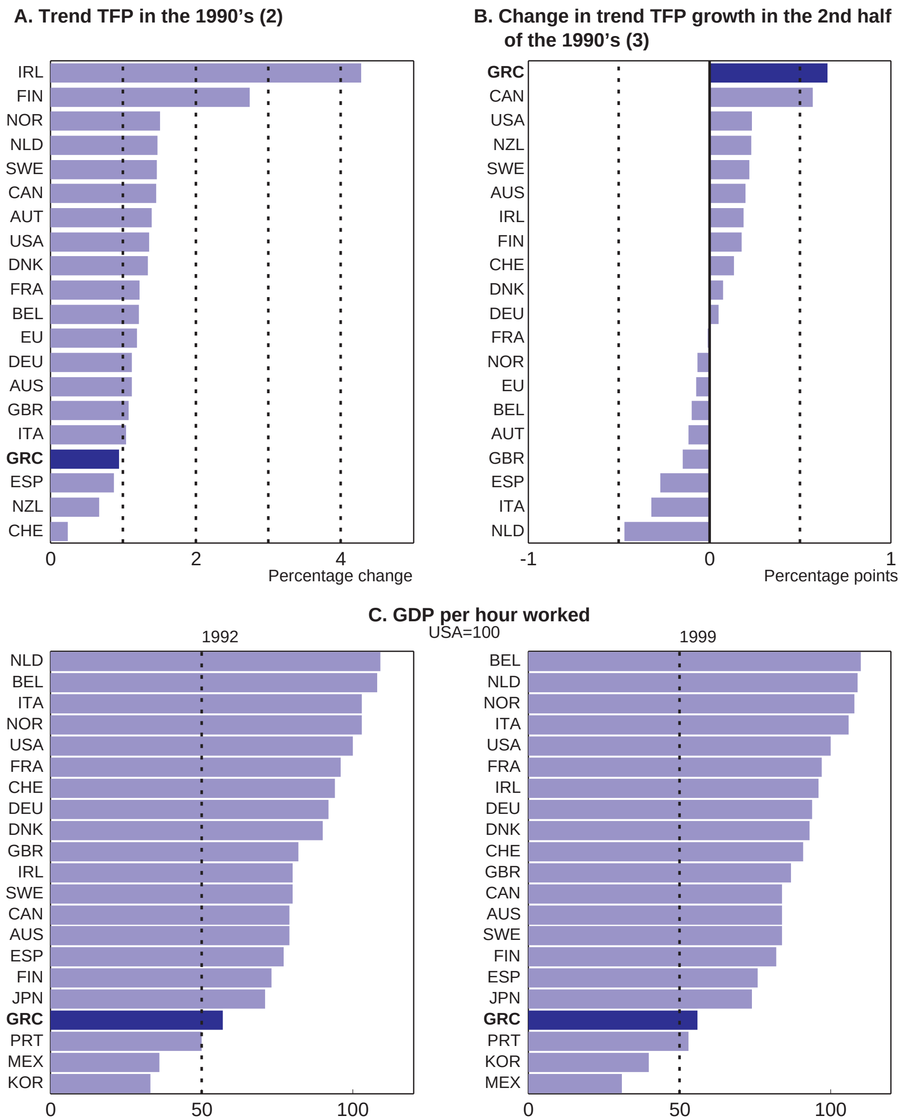
which have been undertaken in recent years. On the macroeconomic side, these reforms focussed at achieving greater fiscal and monetary discipline, which led to the admission of Greece in the European Economic and Monetary Union (EMU) on 1st January 2001. Microeconomic reforms so far have primarily addressed the much-needed liberalisation of product and financial markets. Conversely, the upward creep of estimates of the non-accelerating inflation rate of unemployment (NAIRU) during the 1990s to currently just under 10 per cent suggests that little progress has been achieved in making the Greek labour market more responsive to structural change and external shocks.

There is substantial scope for raising the efficiency of factor inputs. Although straightforward estimates of output per employee would suggest very large gains in labour productivity in recent years, these measures may be slightly biased upwards by under-recording of labour inputs, particularly of immigrant labour. Alternative estimates by the OECD confirm that labour productivity growth as measured by trend growth in GDP *per hour worked* has improved during the 1990s, although in a less spectacular manner, from an average of around 1 per cent in the first half of the 1990s to about 2 per cent in the second half.[69] In line with these estimates, tentative calculations of multi-factor productivity growth by the OECD suggest an improvement from distinctly below 1 per cent *per annum* in the earlier part of the 1990s to around 1½ per cent in more recent years[70] (Figure 15). However, this improvement in multi-factor productivity *growth* occurred from a low productivity *level*, leaving ample room for improvement in economic efficiency through catch-up with best practice in other OECD economies. The high country-specific negative residual in the OECD "Growth Study" regression analysis referred to earlier is also symptomatic of an economy that is a long way from its production possibility frontier, pointing to the need to improve the efficiency of product markets.

Potential growth rates have risen in Greece in recent years and OECD estimates put Greek potential GDP growth at about 3 per cent at present, slightly up from the second half of the 1990s (Figure 16).[71] The average for the EU is currently 2.1 per cent. On the assumption that both potential growth rates were to remain indefinitely at their current levels,[72] it would take Greece approximately 25 years to converge to the EU level of per capita incomes and eradicate the remaining 33 per cent gap. The ambitiousness of this challenge is all the more striking, when it is considered that in the past 30 years, there has been convergence of only about 10 percentage points.

Some reasons for the disappointing performance in past decade, and pointers to areas for reform which could help performance remain stronger in future were addressed in the course of the OECD "Growth Project".[73] Figure 17 shows that, relative to the EU average, Greek per capita income was not much higher in 1998 than in 1985, and that the EU average itself fell somewhat relative to

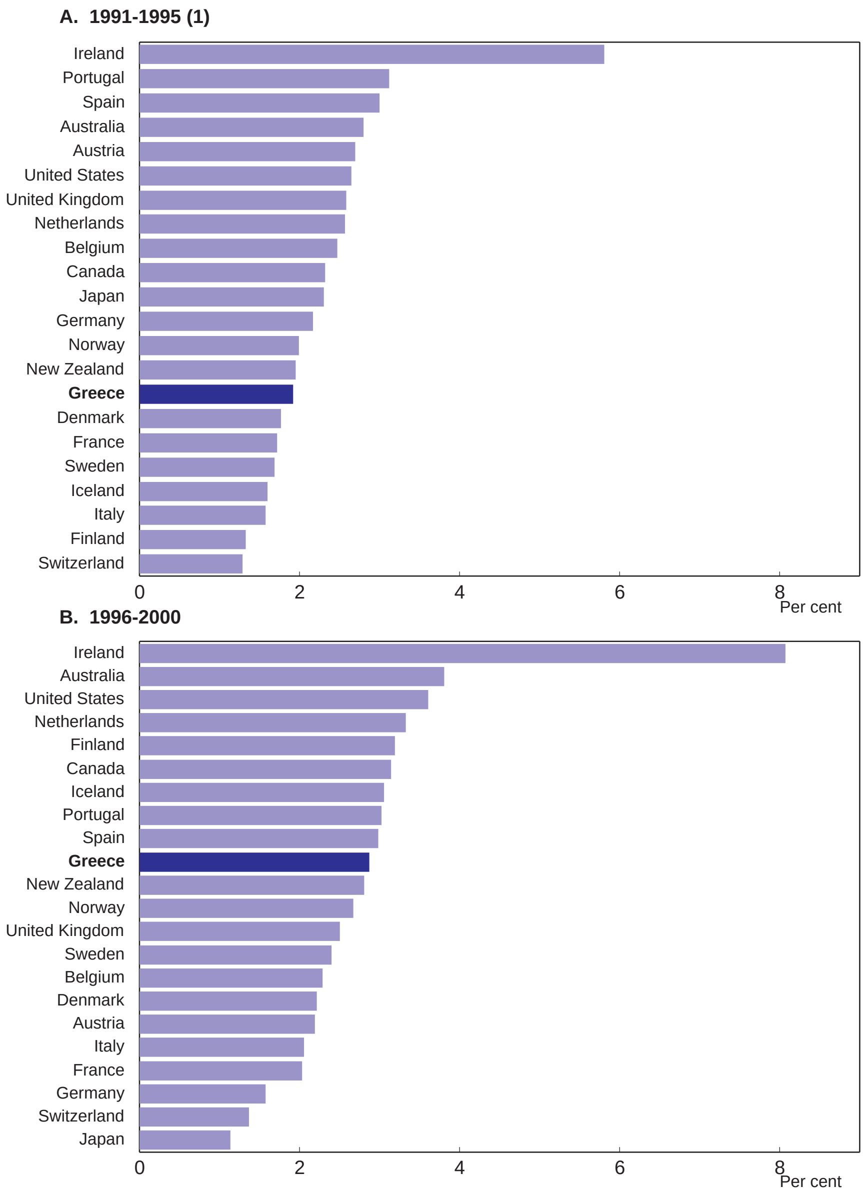
Figure 15. **Productivity**[1]



1. TFP is total factor productivity in the business sector.
2. Percentage change over 1991 to 2000, except for Germany, 1992 to 2000.
3. 1996-2000 compared with the first half of the 90s (1991-1995, except for Germany, 1992-1995).

Source: OECD, *Science, Technology and Industry: Scoreboard of indicators* (2001); OECD, database of the OECD, *Economic Outlook*, December 2001.

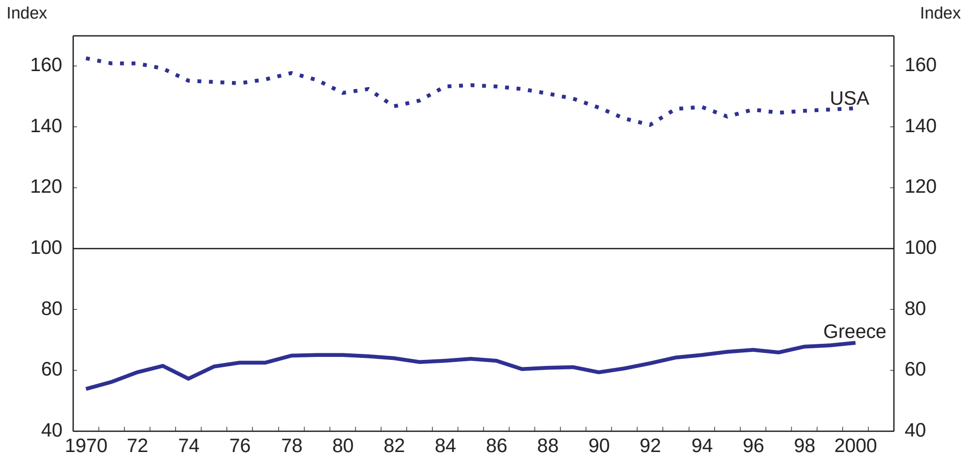
Figure 16. **Estimates of potential output growth**
Annual average percentage changes over period



1. For Germany 1992 to 1995.
Source: OECD.

Figure 17. **GDP per capita**[1]

Index EU = 100



1. In US dollars at current prices and constant PPPs.

Source: OECD, *National Accounts*.

the US in the 1990s. The gap between Greece and the EU results essentially from lower hourly labour productivity: participation rates are well below the EU average (and, *a fortiori* below US participation rates), but this was more than compensated (in 1998) by longer working hours (even longer than in the US), and not much higher unemployment. Table 15, also based on OECD work, analyses per capita growth rates in different OECD countries in the same regression framework. The first column gives the actual annual average per capita growth rate between the 1970s and the 1990s, and the second column shows how the country average differs from the country panel average of 1.55 per cent per year. The coefficients in the other columns allocate this differential among the various explanatory factors, plus an unexplained residual.

It is of interest that Greece registered the third lowest actual growth rate (after New Zealand and Switzerland), and had the second largest unexplained negative residual after Portugal, implying serious structural impediments to better performance. Given that Greece started the period with a comparatively low per capita income, the analysis implies that this factor alone, after taking into account all others, should have raised Greek growth by 2 percentage points *via* a (conditional) convergence mechanism. The other positive factors of relatively high

Table 15. **Decomposition of country per capita growth rates**[1]

1970s-1990s, annual percentage point growth rates

	Annual average growth rate	Growth differential	Initial conditions (real GDP/pop)	Investment share (Sk)	Human capital (H)	Population growth (Δlogp)	Variability of inflation (SDinfl)	Government consumption (Gov cons)	Trade exposure (Trade exp^{adj})	Residual country specific effect
Australia	1.68	**0.13**	–0.37	0.20	0.52	–0.25	0.03	0.01	–0.41	0.40
Austria	1.57	**0.02**	–0.41	0.07	0.26	0.01	0.05	0.00	0.03	0.01
Belgium	1.66	**0.11**	–0.53	0.02	–0.15	0.20	0.03	–0.05	0.53	0.06
Canada	1.32	**–0.23**	–0.90	–0.21	0.62	–0.18	0.04	–0.07	0.14	0.32
Denmark	1.69	**0.14**	–0.57	0.28	0.21	0.12	0.02	–0.14	–0.05	0.27
Finland	1.82	**0.27**	0.51	0.05	0.02	0.15	0.00	–0.06	–0.26	–0.14
France	1.35	**–0.20**	–0.59	–0.09	–0.10	0.07	0.07	–0.08	0.05	0.48
Greece	**1.15**	**–0.40**	**2.00**	**0.19**	**–0.56**	**–0.07**	**–0.16**	**0.17**	**–0.51**	**–1.48**
Ireland	3.02	**1.47**	1.54	–0.18	–0.32	–0.18	0.01	0.09	0.17	0.34
Italy	1.73	**0.18**	0.22	–0.13	–0.69	0.13	0.02	0.01	0.14	0.48
Netherlands	1.26	**–0.29**	–0.47	–0.03	0.25	0.01	0.06	–0.13	0.52	–0.50
New Zealand	0.53	**–1.02**	0.34	–0.17	0.31	–0.29	–0.07	0.10	–0.36	–0.87
Norway	1.72	**0.17**	–0.12	–0.05	0.35	0.07	0.03	–0.06	–0.04	–0.01
Portugal	2.15	**0.60**	2.56	0.58	–1.20	0.07	–0.10	0.10	0.11	–1.52
Spain	1.28	**–0.27**	0.73	0.04	–1.12	0.00	0.03	0.07	–0.14	0.11
Sweden	1.20	**–0.35**	–0.60	–0.10	0.21	0.11	–0.10	–0.17	0.01	0.30
Switzerland	0.81	**–0.74**	–1.75	0.08	0.59	–0.04	0.00	0.15	0.02	0.21
United Kingdom	1.63	**0.08**	0.05	–0.21	0.17	0.15	–0.03	–0.02	0.31	–0.34
United States	1.93	**0.38**	–1.62	–0.34	0.63	–0.09	0.07	0.09	–0.25	1.89

1. Decomposition of cross-country differences in annualised growth rate (in %) from the average output per capita of 1974-77 to the average output per capita of 1994-97. See Bassanini A. and S. Scarpetta (2001b) for details of the analytic approach behind these results.

Source: OECD.

investment and government consumption[74] would have further boosted growth above the average of the countries analysed. But performance was held back mainly because of the relatively low level of education in the workforce and relatively low foreign trade competition, and especially by the country-specific residual effect. Though this residual is unexplained, by definition, related work (Bassanini, Scarpetta and Hemmings, 2001) on the sources of multi-factor productivity growth (MFP) implies that changes in MFP growth are negatively related to product-market rigidities, especially public-sector involvement in business operations, and administrative barriers to entrepreneurship. On both counts, Greece scores poorly in the 1998 OECD regulation indicators database.[75]

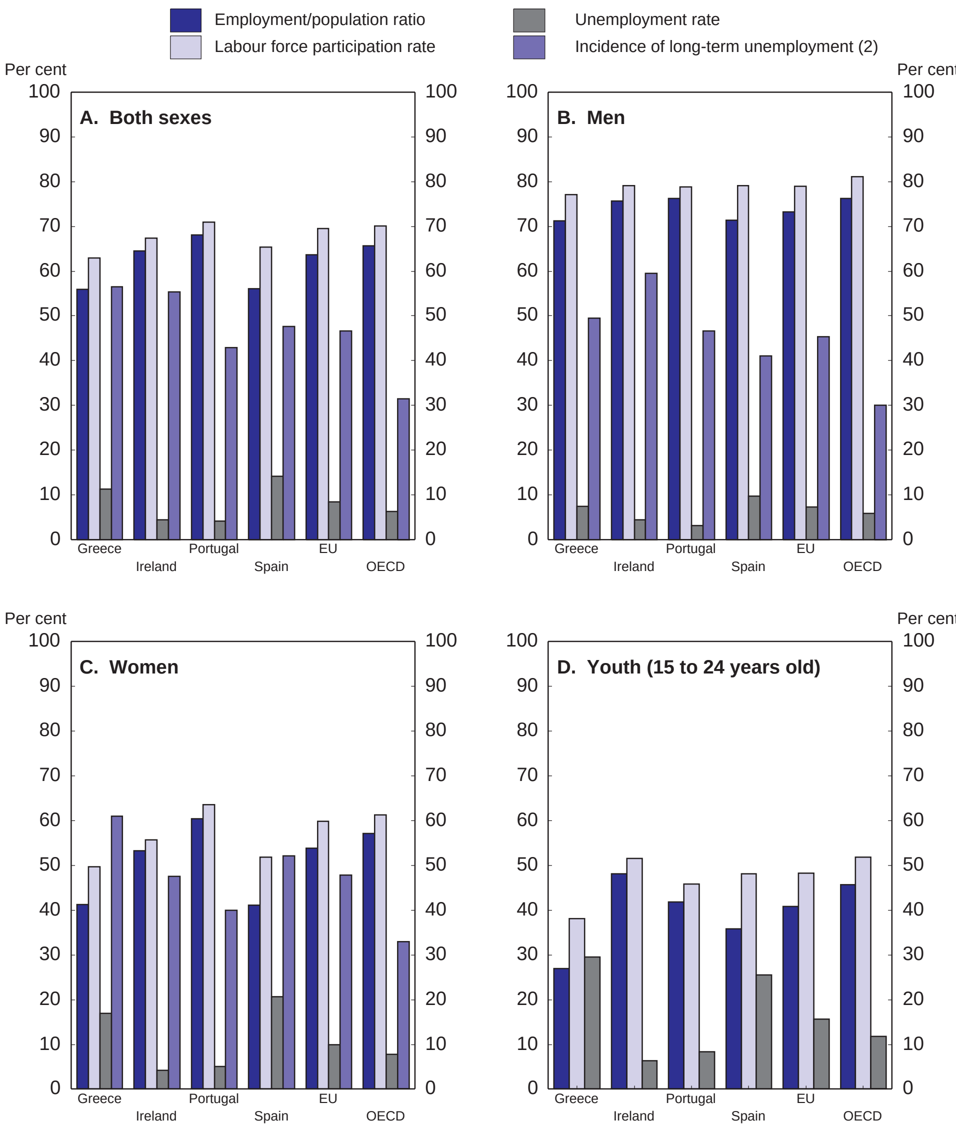
It follows from the above that if macroeconomic stability can be maintained, structural reforms in certain priority areas are desirable for convergence to be achieved within a generation. The most promising avenues appear to be: raising employment and the quality of the labour force; further efforts to improve the state of competition in product markets; enhancing the efficiency of capital markets; and modernising the public sector. Exposure to foreign competition is now a less important factor, with Greece firmly embedded in the EU. Trade (average of export and import flows) currently amounts to a quarter of GDP, not very different from the EU average, though lower than the average for smaller countries.

Raising employment rates

Despite some improvement in recent years, the Greek labour market is still characterised by a low labour force participation rate, a low employment rate, and, despite recent brisk economic growth, a high unemployment rate, notably among the young and females (Figure 18).[76] Furthermore, long-term unemployment is not negligible, accounting for more than half of total unemployed. After being comparatively low for much of the post-war period, Greek unemployment has been at the top end of the – high – EU average since the early 1980s. The persistence of high unemployment may partly be attributed to structural changes including a sizeable rise in labour force participation rate of women and immigrants, recruitment restraints in the public sector, industrial downsizing and the decline in rural employment. However, underlying rigidities in the labour market – reinforced by rigidities in the product market – and the inadequacy of the educational and training systems to produce the required skill mix play a key role. Tackling the causes of high unemployment calls for further reform efforts. There remains mostly the need to reduce the high degree of labour market segmentation, by facilitating entry to the labour market, improve the educational and training system in order to enhance the skills of the labour force, and remove the distortions in the system of taxation that adversely affect both demand for and supply of labour (see last year's *Survey*).

Figure 18. **Labour market characteristics**[1]

Per cent



1. In 2000.
2. Persons who are unemployed for 12 months and over as a percentage of total unemployment. The data for Ireland refer to 1999.

Source: OECD, *Employment Outlook* 2001.

Further improving labour market flexibility

Greece has gone some way in increasing labour market flexibility, through the reforms implemented since early 1990s. As discussed in the previous *Survey*, this process has also been assisted by the sizeable influx of immigrants. A new labour market initiative in late 2000 (Law 2874/2000) attempted to promote employment and boost labour supply through measures reforming important aspects of industrial relations, such as regulations on overtime, part-time work and collective redundancies (Box 9). To some extent, the 2000 package was introduced

Box 9. The provisions of the 2000 legislation for labour markets

The 2000 legislation (Law 2874/2000), which came into force in April 2001, provides for:

– a new "making-work-pay" measure to encourage part-time employment; the measure provides for payment of partial unemployment benefits (around one third of the minimum unemployment benefit) for a period of one year for the long-term unemployed obtaining part-time work (of at least 4 hours per day). In addition, part-timers working less than 4 hours per day are able to claim an hourly wage augmented by 7.5 per cent, if they are paid on the basis of the minimum wage;

– a reduction of the weekly overtime which is at the employers' discretion ("unregulated" overtime) from 8 to 3 hours per week (while the contractually agreed workweek of a full-time employee remains 40 hours), and an increase in the premia for overtime. The premium for "unregulated" and for "legal" overtime (exceeding 40 hours per week, up to 120 hour annually) is doubled (from 25 per cent to 50 per cent); the premium for "illegal" overtime exceeding maximum working hours is increased from 100 per cent to 150 per cent;

– the introduction of a scheme of working time annualisation while reducing the agreed workweek from 40 to 38 hours. This scheme is voluntary for firms and needs to be agreed with employees;

– changes in the thresholds of collective redundancies. For firms employing between 20 and 199 workers the upper limit is set at four persons per month; the "two- per cent" threshold of redundancies will continue to apply for firms with more than 200 employees;

– a 2 percentage points reduction of the employers' social security contributions for low-wage workers defined as those whose monthly wages do not exceed GRD 200 000 (around € 587).*

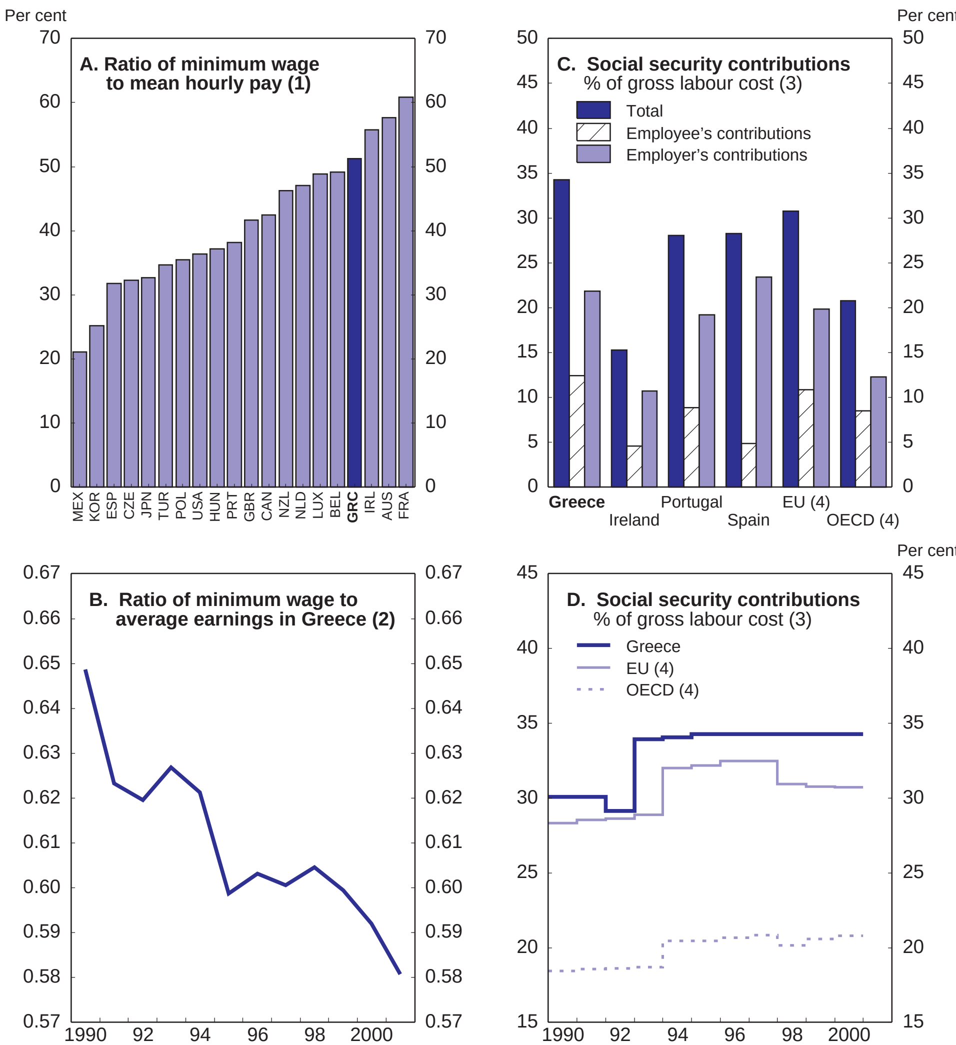
* This threshold is 25 per cent higher than the level of the minimum wage.

to address the limited impact of the 1998 package of reforms, which were dogged by administrative difficulties (European Commission, 2001a). The new measures constitute steps in the right direction. Additional, more ambitious, reforms would be needed, however, to achieve a significant improvement in labour market outcomes. Despite recent changes in the regime governing collective dismissals for enterprises, employment security provisions remain fairly restrictive, mainly for white-collar workers. At the same time, the 2000 legislation side-stepped provisions necessary to address insufficient wage differentiation, evident from the high concentration of unemployment among labour market entrants, while non-wage costs remain high, despite recent reductions. The following sections describe the main areas where labour market rigidities persist.

Wage differentiation should be increased and non-wage costs contained further

Unemployment in Greece is closely linked to the problem of initial integration in the labour market. Approximately half (45 per cent) of the unemployed in 2000 were people seeking employment for the first time. Around 61 per cent of the unemployed are women, and more than half are young people under 29 years of age. The 1998 labour market reforms provided opportunities for increased wage differentiation, through the introduction of the Territorial Employment Pacts (TEPs), which allowed an "opt out" from sectoral wage accords in pre-determined areas of high unemployment and industrial decline.[77] The wage flexibility clause has, nevertheless, remained largely unused in practice (with the exception of a single case), as it is subject to onerous consensus. The lack of tradition in this area has been an additional obstacle for the implementation of opt-out agreements. Unlike the 1998 labour market reforms, the 2000 legislation included no measures for wage flexibility. Efforts to ensure that wages better reflect productivity and local market conditions could improve labour market outcomes. Making the flexible wage clauses included in TEPs more easily applicable in practice would be a positive step towards reducing insufficient wage differentiation. In general, more wage differentiation at the local or enterprise level should be encouraged. Greater flexibility in setting minimum wages for less skilled workers would also make a contribution in addressing limited wage differentiation without, as pointed out in previous OECD *Surveys*, significantly increasing hardship.[78] At around 60 per cent of the average earnings in manufacturing,[79] the entry level of minimum wage for blue-collar workers is high by international comparison, despite the decline in the ratio since 1990 (Figure 19). This feature, in conjunction with high non-wage labour costs, depresses the labour market prospects of less experienced outsiders, although the employment subsidy programmes, along with the recently introduced measures (see below) to reduce the labour cost to employers of low-wage workers offset somewhat the negative employment impact arising from a relatively high wage floor.

Figure 19. **Wage and non-wage labour costs**



1. In manufacturing, in 2000.
2. For single individuals with no child, earning 100 per cent of the average production worker (APW) wage. Data refer to 2001.
3. Weighted average of available data using real GDP at 1995 PPPs.
4. For blue collars in the manufacturing sector. Data refer to end-year.

Source: Bank of Greece, *Bulletin of Conjunctural Indicators*; OECD, *Taxing Wages* (2002).

Social security contribution rates in Greece are among the highest in the EU area, accounting in 2001 for more than 34 per cent of total gross labour cost (excluding supplementary contributions for heavy and health hazardous work).[80] During the 1990s, the contribution rates increased by 4 percentage points, compared with a rise of 2.1 percentage points in the EU average.[81] The 2000 legislation provided for a reduction by 2 percentage points of the employers' social security contributions for low-paid workers, amounting to a 1.6 per cent cut in total labour costs for these workers. Moreover, from 2000 onwards the government is subsidising minimum-wage earners' own social security contributions by paying the part going to the pension account of IKA (*i.e.* 6.7 per cent of gross pay). This measure, the first "in-work-benefit" introduced in Greece in the context of policies aiming to "make work pay", is intended to stimulate supply and improve incentives to work in the formal economy. In a recent effort to promote employment, the government included in the 2002 Budget (as discussed in Chapter II) a new tax incentive which grants a reduction of corporation tax, from 35 per cent to 32.5 per cent, proportionate to an increase in employment.

Employment protection should be relaxed further

Employment protection legislation (EPL) in Greece is among the strictest in the OECD.[82] Tight rules in this area may explain the large imbalances in the gender and age distribution of unemployment, which are among the highest in the OECD area, as well as the high incidence of long-term unemployment (56.5 per cent of total unemployment in 2000), despite strong growth. The duality of the Greek labour market may be another telling sign of the strictness of EPL regulations. About 56 per cent of the employed population is in formal dependent employment, while the rest is self-employed, or in the underground economy. The 2000 legislation led to some easing in EPL by abolishing the "two per cent rule" on collective dismissals for firms employing between 50 and 199 workers, although it also tightened EPL for enterprises with fewer than 50 workers in order to remove counter-incentives to the increase in the size of enterprises.[83] However, no changes were introduced with respect to severance payments. Current legislation requires higher lay off costs for white collar workers than for blue collar workers. For both groups of workers the lay off costs increase with job tenure, reaching up to 24 monthly salaries in the case of white collar workers with employment longer than 28 years with the same employer.[84] Efforts to reduce further the strictness of the legal framework for job protection, through reducing severance payments for white collar workers and narrowing the difference with the corresponding payments for blue collar workers, could greatly benefit labour market outcomes.[85] Cross-country estimates suggest that comparatively stringent EPL and benefit regulations may have reduced employment rates in Greece by about 1½ percentage points compared to the OECD average over the 1982-1998 (OECD 2001c).

Part-time employment should be encouraged further

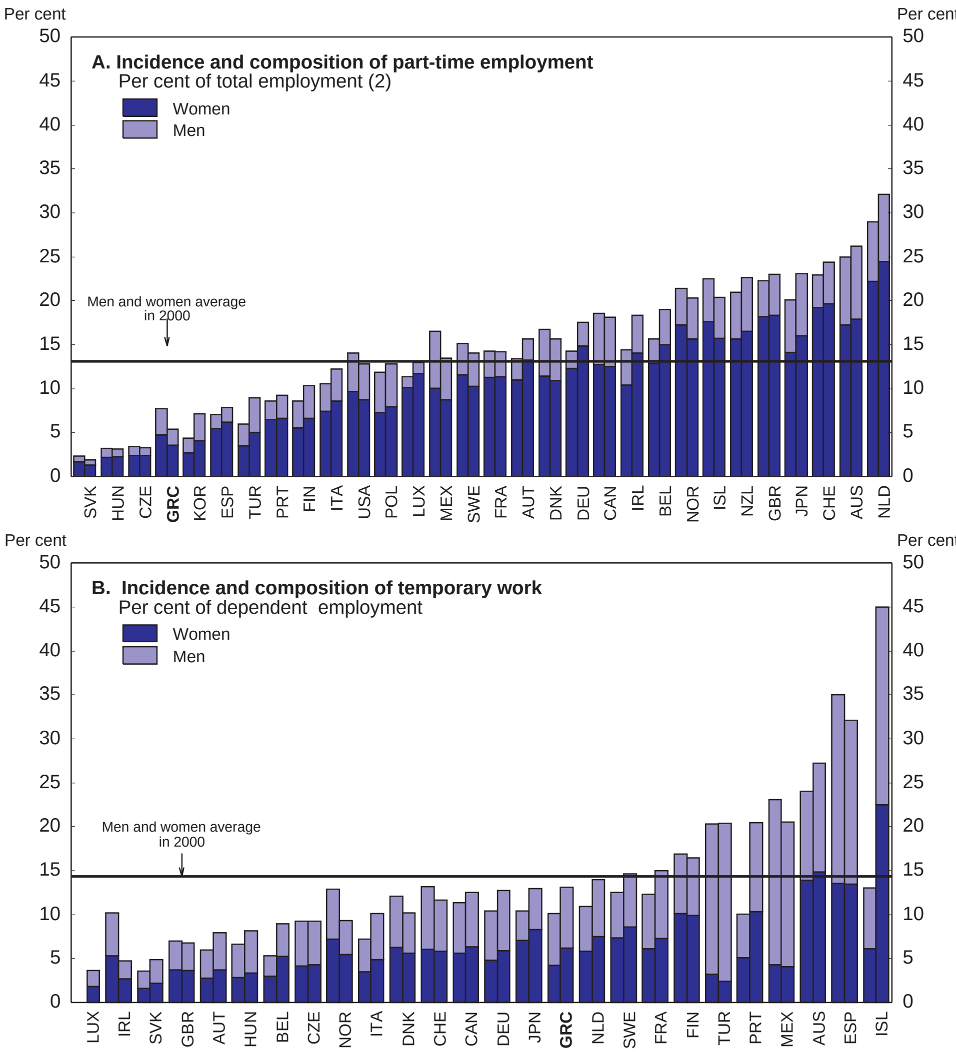
Low participation rates in Greece overall reflect low female participation rates particularly, but also comparatively low rates for younger males.[86] The latter has been falling over time, because of rising trends in post-compulsory education attendance, while female participation rates experienced an upward trend, perhaps because of smaller family sizes (the rise has been sharpest in age groups likely to have young children), and perhaps also because of the growing importance of service sector jobs. The improved level of women's education and the introduction of public-day care are also likely to have contributed. Experience in other OECD countries suggests that female participation rates could be raised further, if part-time work were more common.[87] Such work only accounts for around 5½ per cent of total employment in Greece, compared with an average of 16 per cent in the EU (OECD, 2001h), and despite efforts since early 1990s (especially the 1998 reforms), it does not appear to be on a rising trend (Figure 20).[88]

Both demand and supply factors combine to reduce the attractiveness of part-time work. For such work exceeding four hours per day, employers' social security contributions are high. Working practices are very much organised around full-time work of (at least) 8 hours per day. Part-time jobs are concentrated in the low end of the market as regards skill requirements, pay and career opportunities. Both employers and employees prefer overtime work to cope with seasonal peaks, or have recourse to unrecorded or informal work. Moving towards part-time work towards the end of working life is also unattractive, as pension benefits are normally based on average earnings in the last five years. Nevertheless, as Greek incomes grow, and the economy becomes more service-oriented,[89] the demand for part-time work, especially for women, is likely to expand as in other OECD countries. It will be important, if supply is to meet demand for work, part-time jobs to become more attractive and social security regulations to be scrutinised and amended where necessary, especially as regards part-time work amounting to four or fewer hours per day. The introduction of financial incentives for part-time work under the 2000 labour market package is a positive step towards this direction. In addition, the new law abolishes the possibility of overtime for part-time workers.

While the Greek labour market is still characterised by a relatively low incidence of part-time employment, the share of temporary employment in dependent employment (13.1 per cent) is slightly above the EU average (12.7 per cent). The use of temporary contracts is particularly widespread in services (25 per cent *versus* 9 per cent in EU), reflecting the seasonal nature of the employment in the sector, especially in tourism. A recently introduced law contains provisions on temporary employment agencies,[90] according to which such agencies will be permitted to contract temporary employees out to companies for a maximum period of 18 months (unless the contract is converted to an open-ended one).[91]

Figure 20. **Part-time and temporary employment in 1995 and 2000**[1]

Per cent



1. The first bar refers to 1995 data and the second to 2000 data.
2. Part-time employment refers to persons who usually work less than 30 hours per week in their main job. Data are expressed as a proportion of total employment, apart from the case of the United States where the data refer to wage and salary workers.

Source: OECD, *Employment Outlook* (2001); OECD, "Definition of part-time work for the purpose of international comparison", *Labour Market and Social Policy Occasional Paper* No. 22.

The 2000 law amends overtime regulations, to encourage new hires and move away from the extensive use of overtime work – evident from the remarkable rise in operating hours in industry over the 1990s.[92] The legislation includes a decrease in maximum weekly overtime which is at the employer's discretion, and a rise in overtime premia (aiming to compensate workers for the reduction in their overtime work). Alternatively – and subject to consensus among a firm's employer and employees – the legislation permits an annualisation of working hours, while at the same time reducing the effective average workweek from 40 to 38 hours.[93] The annualisation scheme enhances flexibility in working time. It is expected to be implemented mainly by large and well-organised firms because of the presumed difficulties of reaching an agreement with the labour unions on annualisation, as well as the administrative cost of new recruitment and the cost of re-organising work in the enterprise (Sabethai 2000). It is too early to assess whether the new provisions on overtime work – in force since April 2001 – are bringing about the expected shift in business strategy towards new hires. Such an assessment becomes even more difficult when taking into account the presence of an extensive "informal" and unincorporated sector in Greece, which probably reduces the degree to which legislation is in fact abided by. However, evidence from the Purchasing Managers' Index (PMI) Survey of Greek manufacturing suggests that, since June 2001, firms have responded to the new overtime provisions by raising employment in order to maintain production. In addition, the Labour Inspectorate has been notified of three agreements (in effect as of July 2001) providing for an annualisation of working time and an effective average workweek of 38 hours.[94]

The mobility of labour should be facilitated

Data limitations inhibit a conclusive analysis of the degree of labour mobility in Greece, and the existing evidence is partial and mixed. On balance, the large – though declining[95] – disparities in unemployment across regions (ranging, in 2000, between 7 per cent and 15 per cent) imply only limited geographical mobility.[96] Recent data on job-turnover of high-skilled employees also point to low mobility, although the trend has been upwards over the past years (European Commission, 2001b). Hindrances to mobility arise partly from the housing market characteristics in Greece, and in particular the structure of housing tenure. Transportation costs could also work towards this direction, by discouraging commuting. Concerning the former, the high degree of owner occupation (standing at 80 per cent of all households, on the basis of the 1999 Household Budget Survey), discourages moving to an area where rented housing would become necessary and living expenses would rise. Prevailing labour market rigidities – including an insufficiently decentralised wage bargaining system and employment protection rights – also impede labour mobility. The weak incentives for regional mobility could be further explained by cultural factors. The unemployment system in

Greece, for example, is not generous enough to create incentives to remain unemployed.[97] However, the extended family network supports the unemployed thereby weakening the incentives for regional mobility. The 2001 National Action Plan for Employment (NAPE) aims to achieve a balanced regional development by using, among others, measures to stimulate the mobility of the labour force. Another factor which adversely affects inter-sectoral mobility is the large number of social security funds, with different rules for contributions, retirement ages and replacement rates. It is important that the pension system reform under way adopts the proposals for the unification of a large number of social security funds and the harmonisation of rules for contributions and retirement age (see Chapter III).

Improving the efficiency of active labour market policies

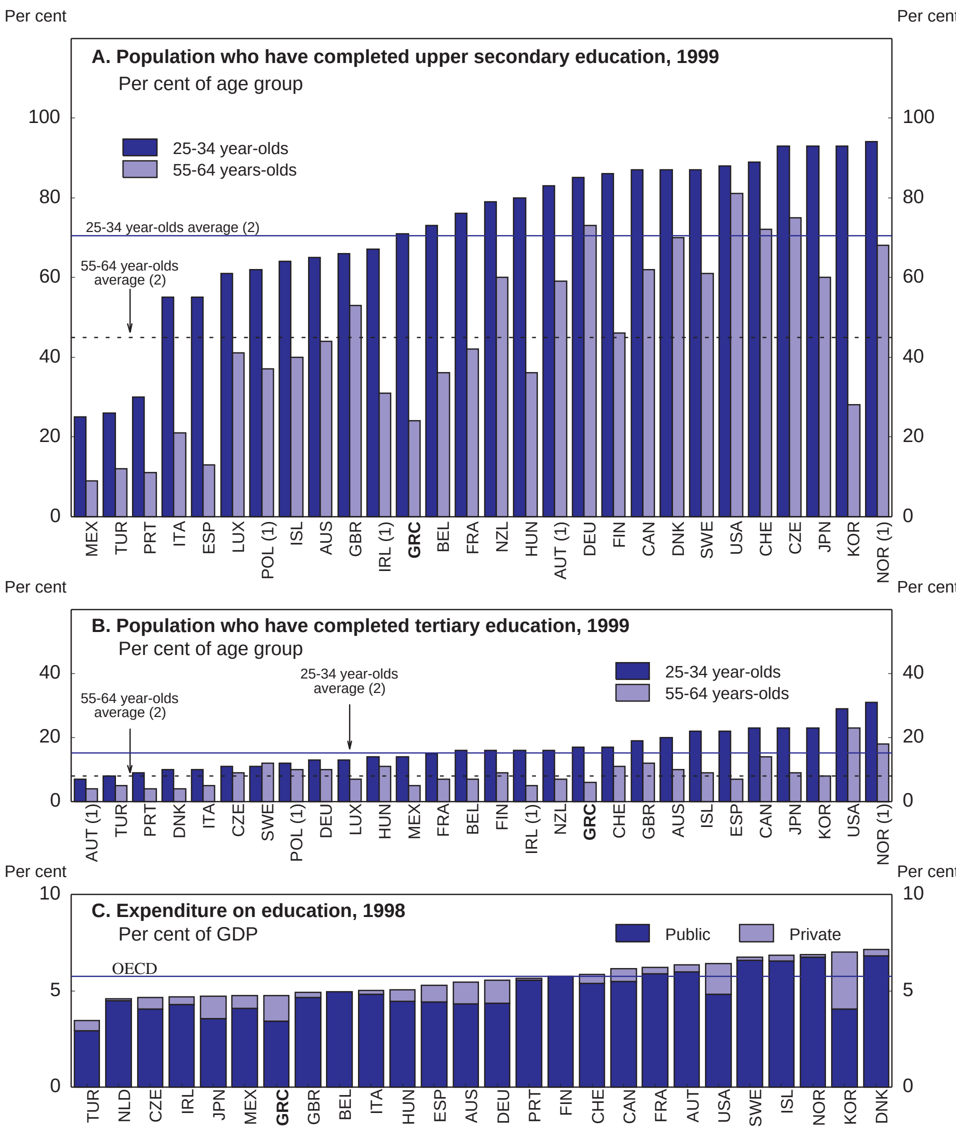
Labour market policy has changed in recent years under the National Action Plans for Employment, in favour of more training, a better job placement system, enhanced professional orientation for new entrants in the labour market, tax incentives to enterprises, encouragement of local pacts and others.[98] However, the persisting high rates of unemployment indicate the need for further improvements in the efficiency of the Public Employment Service (PES) in terms of job matching. The restructuring of the Greek PES (OAED) is proceeding, and approximately 50 Employment Promotion Centres (EPCs)[99] are now in place and operational. Efforts in this direction should continue, and even accelerate, as progress towards the full implementation or effectiveness of the "individualised" approach[100] to combat unemployment is contingent on the restructuring of OAED and the establishment of EPCs. Experience from other countries suggests that the provision of individual support at an early stage of unemployment constitutes an important element for the success of active labour market policies (ALMPs). A bill regarding the administrative restructuring of OAED was passed by Parliament in October 2001.[101] The restructuring of OAED is expected to enhance the administrative, and hence, operational, flexibility of the Agency. The reorganisation plan envisages that the new PES will be gradually restructured and become operational mainly by the end 2003, while complementary measures will continue until the end 2005. A faster than planned completion of the OAED reform should improve the effectiveness in implementing the active employment policies. Efforts should also continue towards enhancing the exposition of the PES to market forces, as the majority of the job placement and training activities still remains under the competence of the public organisations.[102] The quality and efficiency of actions would further be improved by the timely development of a comprehensive system of monitoring flows in and out of registered unemployment, which would enable a proper assessment and evaluation of ALMPs.[103] Improvements in this area are apparent as indicated by the more prompt and extensive use of labour market indicators in the 2001 NAPE.

Improving the human capital of the labour force

Upgrading the skill level of the labour force and improving school to work transition are crucial to achieving higher productivity levels. Over the past 25 years, the educational system in Greece has made great strides. Illiteracy has been basically eliminated among young people and the level of educational attainment has improved significantly, as shown by the rise in upper secondary completion rates and increasing attainment of tertiary qualifications (Figure 21). However, further progress can be achieved. A recent OECD survey on schooling world-wide gives a poor rating overall to Greece's education system.[104] Steps should also be taken to address the infrastructure deficiencies in educational institutions and reduce the wide dispersal in the educational system (with 40 per cent of the primary schools being one/teacher post or two/post units). Benefits would further arise from a better developed system of evaluating the educational standards and a closer monitoring of the outcomes of the implemented measures. Meeting such goals may imply raising public expenditure on education in Greece closer to the OECD average.

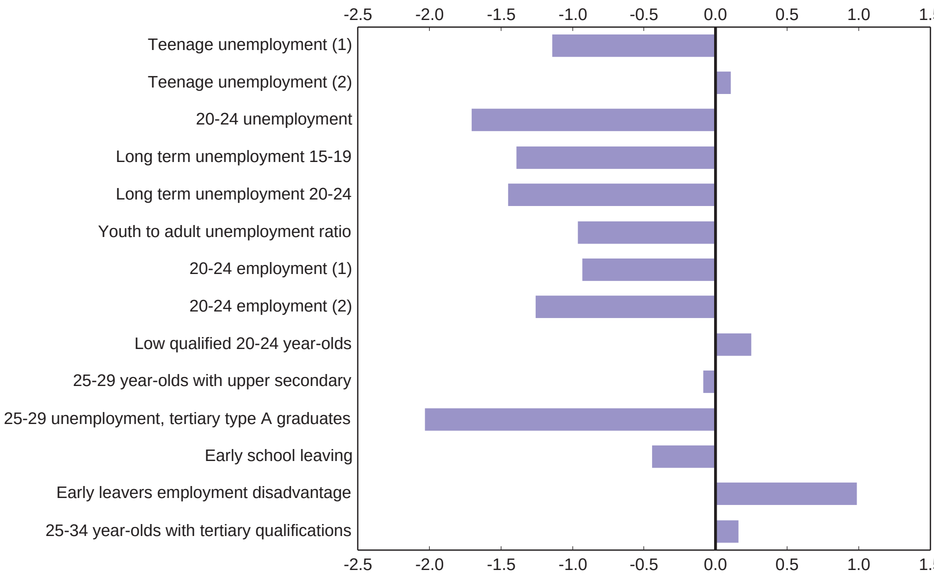
Ample scope also remains to improve the relevance of the educational and training system to working life. Despite improvements in attainment levels, the effectiveness of transition of young people from initial education to working life – as measured by a set of key indicators spanning both educational and labour outcomes – remains low by international standards, thereby hindering the process of human resource development (Figure 22). The only transition indicator based on which Greece is appreciably better than the OECD average is that of the comparative employment advantage of poorly-qualified school leavers. This can be explained by the relatively high incidence of early school leavers, and the low skill base of the Greek labour market, which provides more opportunities for the poorly qualified than do other OECD economies. But Greece compares unfavourably with the other OECD countries in terms of labour market outcomes for both teenagers and young adults. The high incidence of unemployment among young job-seekers, especially among university graduates, though in part indicative of some of the above-mentioned labour market rigidities, signals a potential problem in the skill-mix supplied by the educational and training system compared to the economy's needs. This view is also supported by the findings of several *ad hoc* studies on labour market mismatches, indicating shortages in the supply of certain skills, including those associated with the new technologies and business management.[105] A problem at upper levels of education in Greece has been the traditional bias in favour of general education, rather than occupationally-specific streams.[106] The high probability of the public sector as an eventual employer, along with the fact that the enrolment in vocational or technical studies represents usually a second choice for students, relative to general studies, constitute two important factors in explaining such a bias.

Figure 21. **Education indicators in comparison**
Per cent



1. Data refer to 1998.
2. Unweighted average.
Source: OECD, *Education at a Glance* (2001).

Figure 22. **Transition indicators: Greece compared with OECD average**[1]



1. For each indicator country values have been converted to a common mean (one) and a common standard deviation (zero). The sign of the resulting standard scores has been adjusted so that negative values indicate outcomes that are worse than the OECD average and positive values indicate outcomes that are better than the OECD average.

Key:

Teenage unemployment (1): 15-19 year-old unemployed non-students as a percentage of all 15-19 year-olds, 1999.
Teenage unemployment (2): 15-19 unemployment, 2000.
20-24 unemployment: 20-24 unemployment to population ratio, 2000.
Long term unemployment 15-19: Per cent of unemployed 15-19 year-olds unemployed for six months or more, 2000.
Long term unemployment 20-24: Per cent of unemployed 20-24 year-olds unemployed for six months or more, 2000.
Youth to adult unemployment ratio: Ratio of unemployment rate among 15-14 year-olds to unemployment rate among 25-54 year-olds, 2000.
20-24 employment (1): Per cent of 20-24 year-old non-students employed, 1999.
20-24 employment (2): Employed 20-24 year-olds as a per cent of all 20-24 year-olds, 2000.
Low qualified 20-24 year-olds: Per cent of 20-24 year-olds who have completed no more than lower secondary education, 1999.
25-29 unemployment tertiary type A graduates: Unemployment rates among 25-29 year-old graduates (Type A ISCED-97), 1998.
25-29 year-olds with upper secondary: Per cent of 25-29 year-olds with at least upper secondary education, 1999.
Early school leaving: Per cent not in education one year after the end of compulsory education, 1999.
Early leavers employment disadvantage: Share of total 20-24 year-old employment represented by those with no more than lower secondary education divided by the share of total 20-24 year-old unemployment represented by those with no more than lower secondary education.
25-34 year-olds with tertiary qualifications: Per cent of 25-34 year-olds with tertiary education (ISCED-97 Type A or advanced research programme), 1999.
Source: OECD.

Recent reforms in the educational system paid special attention to measures improving the link between education, initial vocational and continuing training, and labour market needs.[107] The still relatively poor school-to-work transition outcomes imply, however, that efforts in this direction need to continue. The general education curriculum should be enriched so as to impart flexibility in the acquisition of new skills and ensure sound foundations for lifelong learning. At the same time, training programmes should correspond to productive needs of business, making technical education more effective as a gateway to employment. The modernisation of the training services, envisaged by the 2001 NAPE, through measures focusing on both the educational mechanism itself and the method of selecting the educational content, is a positive step towards further improvement of the quality and job-relevance of training. Measures are also being taken to tackle shortages in skills through the development of training programmes ("Alternating Vocational Training Programmes") outside the basic training planning, whenever a "demand" arises on the basis of the needs of business and unemployed. The majority of such programmes aim to adjust skills to the requirements of ICT. Efforts should also continue towards further improving the functioning of Career Liaison Offices at universities and technological education institutes (TEI).

Regarding lifelong learning, Greece is making progress towards formulating a coherent strategy. The current efforts of linking the initial and on-going training, as well as establishing the *Institutes of Ongoing Education* in universities are positive steps. However, Greece still ranks low in terms of the population aged 25 years and over which participates in training programmes (1.1 per cent compared to an EU average of 8.4 per cent in 2001).[108] Promoting better access to learning for adults through increased training opportunities, targeted funding mechanisms and advice/guidance services on learning would be beneficial in this regard. Fast progress towards combating "digital illiteracy" in schools is desirable in the context of a comprehensive strategy for lifelong learning, requiring not only equipping schools with information and communication technologies but also new pedagogic strategies and the training of the teachers.[109] The *Operational Programme for the Information Society* (OPIS)[110] – if fully implemented – should provide the basis for a coherent and integrated promotion of information economy.

Product market reforms

Reform of competition legislation

In Greece, recognition of effective competition as a key mechanism for achieving efficient resource allocation and high output growth has been slow to emerge. Long-standing social values and expectations about the proper role of government have until recently remained obstacles to a rule-based system of competition policy. Accordingly, extensive state regulation, direct control of prices,[111] and the prevalence of substantial state-owned enterprises were important features of business and policy culture well into the 1990s. This made it harder than necessary to reap the benefits of market liberalisation which had been implemented since the early 1990s.

Although formal competition policy has been in place since 1977, it did not respond to any domestic pressure nor was it based on pre-existing Greek laws or institutions. The legislation transposed European models directly into Greek law in order to conform with EU guidelines. It based Greek competition law and practice on the principle of prohibition of unilateral abusive behaviour and vertical and horizontal restraints. Although these rules appeared adequate, they were rarely enforced, largely because of lack of resources of the competition authorities. This is confirmed by reports that overt agreements among firms about their prices, operating hours, and services are quite common, in spite of the competition law's prohibitions.

In 1995, merger notification and control were added to antitrust law, with low thresholds for notification. This compelled the Competition Committee to devote most of its scarce resources to merger review,[112] although Greek industry and services are characterised by a large number of small scale enterprises. It exacerbated the Competition Committee's scarcity of skills and resources and weakened enforcement against other non-competitive behaviour further. Moreover, non-notified concentrations were rarely caught by the Competition Committee. In addition, resort to the law's clause which permitted in exceptional cases the implementation of a merger agreement prior to clearance became the rule.

The law of 1995 also made the Competition Committee nominally independent in its decision-making function, but left it *de facto* largely dependent on a ministry that was not committed to market competition. The law allowed the Competition Committee to offer opinions about the implications of government actions on competition. But at the same time it implied that the Competition Committee had to be asked for its opinion, which virtually never occurred. Accordingly, competition policy has had little impact on policy-making. Altogether, the legal changes of the 1990s weakened rather than strengthened competition policy.[113] As a consequence, the Competition Committee lost credit in the eyes of both businesses and consumers.

In the late 1990s it was recognised that the law's emphasis on merger control was misplaced and that instead there was a need to promote corporate consolidation to improve efficiency and international competitiveness. Accordingly, anti-trust legislation was amended and came into force in August 2000.[114] The main changes are:

- the threshold for the joint market share of the products or services above which the Competition Committee must be informed in advance of a planned merger has been raised from 25 per cent to 35 per cent;

– firms which breach anti-trust legislation can be fined by the Competition Committee up to 15 per cent of the offending firm's annual gross turnover, and prison sentences may be imposed on persons impeding investigations of the Committee;
– the Competition Committee has become fully independent of the Government; it will be funded through a levy of 0.1 per cent imposed on the capital of newly established companies or their respective increment;[115]
– the Committee has been authorised a doubling of its staff positions to 80; and
– the Competition Committee may on its own initiative issue opinions on competition matters addressed to ministers, trade associations and chambers of commerce, expressing a view on the impact on competition of the conduct of governmental and semi-governmental bodies.

The new legislation has clearly moved the focus of the Competition Committee in the right direction, although it is too early to tell whether it will attain the stature of similar anti-trust agencies in other countries. The Committee now can choose the markets and sectors for which it can issue opinions regarding the appropriateness of competitive conditions. Hence, it no longer needs a request from other bodies (such as Parliament, ministries, social partners etc.) before it can proceed on a specific inquiry. This strengthened the Committee's advocacy role and should allow it to shift its attention to competition problems that are arising in the process of establishing competition in previously-monopolised sectors. Indeed, since the amended law came into effect, the Committee has been more active than ever in issuing opinions on government action that affects competitive conditions on the market.[116]

However, even if the Competition Committee eventually doubled the number of its staff, it would remain among the smallest of comparable OECD countries.[117] Moreover, the staff problem is not just one of numbers, but also of approach and expertise.[118] In particular, there is a need for more economic expertise as the Committee's decisions depend strongly on an analysis of market facts and conditions. Staff salaries may still not be sufficient to attract adequate qualifications and compare very poorly with those offered to staff in the telecommunications sector regulator.[119]

A challenge that the Competition Committee faces is the interaction with the newly created sectoral regulators (such as the National Telecommunications and Post Commission (EETT) and the Regulatory Authority of Energy). Relations of the Committee with other Regulatory Authorities are addressed in the new law (Article 8e). The Competition Committee has the final say on issues referred to it by the sector regulators. It is unclear, however, how the Committee and the regulators will deal with competition issues in sectors for which they share jurisdiction. A solution to the problem would be to subsume the anti-trust responsibilities of the sectoral regulators into the Competition Committee. One important benefit of having only one economy-wide anti-trust authority is that it can perceive cross-sector issues more clearly, although sector regulators can specialise in the technical issues relevant to the specific sector. So far, the Competition Committee has invited the other regulators to join efforts in creating a permanent committee in antitrust matters and to define the competence of each authority when overlaps occur. Ensuring competitive solutions in formerly state-owned or state-run sectors, and especially in network industries, is an important issue in Greece, as in many other OECD countries. The following section indicates that although much has been accomplished, a great deal remains.

Progress in privatisation and sectoral reforms

Until comparatively recently, state involvement in industry (and finance) was well above the OECD and EU average. However, Greece has advanced considerably in recent years in privatising the large number of state-owned enterprises. There has also been some opening up of network industries. While the liberalisation of the telecommunication sector is well advanced, with tangible benefits – for both consumers and producers – evident in a number of areas, much less progress has been made in opening up the energy sector, despite the partial liberalisation of the electricity sector in February 2001. Following two years of rapid pace, the privatisation of state-owned enterprises slowed in 2000, because of elections, adverse market conditions, and preparatory measures for deeper reforms, but gained some momentum in the course of 2001. During the period 2000-01 the government raised around € 6 billion (when also taking into account the issuance of Privatisation Certificates), bringing the total amount since 1998 to around € 11.8 billion. Companies still on the privatisation agenda include Olympic Airways (OA), Hellenic Petroleum (HP), the Public Natural Gas Corporation (DEPA), Pireas Port Authority and others, for the majority of which the government seeks strategic partners (Table 16).[120]

As an important development, the government has decided to lift the upper privatisation limit in some key utilities. To this end, legislation was passed in late 2000 permitting the sale of more than 49 per cent of Hellenic Telecommunications Organisation (OTE), followed by similar company-specific legislation, in 2001, for Olympic Airways and Hellenic Petroleum. The government has recently announced its intention to abrogate the current privatisation law banning private majority ownership, on an *ad hoc* basis. This issue is dealt in conjunction with the introduction of the "golden share" right for the government, in specific circumstances, and within the ambit permitted by the EU. Provided that the markets themselves are competitive, proceeding with the sale of the government's majority stake in several enterprises should enhance corporate efficiency and strengthen competition.

Table 16. **Privatisation programme of public enterprises**
1998-2002

Company	Date	% share	Method of privatisation	Amount raised by the State (billion euros)
			Privatisations that have taken place	
Duty Free shops	February 1998	20	Initial Public Offering	0.07
Macedonia Thrace Bank	April 1998	33	Block trade through the stock exchange	0.08[1]
General Bank	April 1998	33	Private placement and listing	0.04[1]
National Bank of Greece	May 1998	1.54	Private Placement	0.19
Bank of Crete	June 1998	97	Block trade through the stock exchange	0.07
Public Petroleum Corporation I	June 1998	23	Initial public offering	0.10
Athens Stock Exchange	November 1998	10	Private placement	0.09
Bank of Central Greece	July 1998	51	Block trade through the stock exchange	0.05[1]
Hellenic Telecommunications Organisation (OTE III)	November 1998	10	Additional secondary offering	1.26
Issuance of Privatisation Certificates ("prometoxa")				1.00
Total amount raised in 1998				2.76
Ionian Bank and Popular Bank	March 1999	51	Block trade through the stock exchange (sold by Commercial Bank of Greece)	0.80[1]
OTE IV	July 1999	14	Additional secondary offering	1.00
National Bank of Greece	July 1999	6.4	Exchangeable bonds	0.82
Public Gas Corporation (DEPA)	December 1999	22.5	Exercise of Hellenic Petroleum Option	0.10
Athens Water and Sewage	December 1999	30	Break up into two entities: land and plants and operations management/concession agreement/privatisation through the stock exchange of the services entity	0.18
Olympic Catering I	April 1999	25	Primary and secondary offering in the stock exchange	0.01[1]
Duty Free Shops	August 1999	67	Block trade through the stock exchange to the Agricultural Bank	0.37
National Bank of Greece	October. 1999	1.23	Listing in the NYSE and additional secondary offering	0.07
Olympic Catering II	December 1999	25	Offering on the stock exchange	0.01[1]
Hellenic Bank for Industrial Development (ETBA)	December 1999	30	Initial Public offering	0.09
Athens Water and Sewage	December 1999	30	Initial Public Offering	0.18
Trade sales to Agricultural Bank	–	–	–	0.23
Total amount raised in 1999				3.07

Table 16. **Privatisation programme of public enterprises** (*cont.*)

1998-2002

Company	Date	% share	Method of privatisation	Amount raised by the State (billion euros)
Hellenic Petroleum II	February 2000	12.9	Additional secondary offering	0.36
Hellenic Petroleum		9	Exchangeable bonds	0.38
Commercial Bank	June 2000	7	Strategic alliance	0.28[1]
Hellenic Stock Exchange	July 2000	10	Initial public offering	0.02
Hellenic Vehicles Industry	August 2000	43 per cent and management	Strategic Investor	0.00
COSMOTE	September 2000	15	Initial public offering	0.42[1]
Agricultural Bank	December 2000	13	Initial public offering	0.13
Issuance of Privatisation Certificates ("prometoxa")				0.67
Total amount raised in 2000				1.57
Licensing for second and third generation mobile telephony	July 2001			0.50
Football Prognostics Organisation	April 2001	5.4	Initial public offering	0.09
Corinth Canal	May 2001	. .	Concession agreement	0.03
OTE IV	August 2001	10.68	Exchangeable bonds	1.00
Salonica Port Authority	August 2001	25	Initial public offering	0.02
Salonica Water and Sewage Company	August 2001	25.5	Initial public offering	0.01
Hellenic Bank for Industrial Development (ETBA)	October 2001	57.7	Trade sale and merger	0.51
Skaramagas Shipyards	October 2001	100	Trade sale	0.01[1] + 0.04 increase of share capital of the company
Public Power Corporation (PPC)	December 2001	15.3	Initial public offering	0.31
Issuance of Privatisation Certificates ("prometoxa")				1.94
Total amount raised in 2001				4.40

Table 16. **Privatisation programme of public enterprises** (*cont.*)

1998-2002

Company	Date	% share	Method of privatisation	Amount raised by the State (billion euros)
Privatisations currently under way				
Pireas Port Authority		25.5	Initial public offering	
Olympic Airways		51	Strategic investor	
Athens Water and Sewage Company		10	To be determined	
Public Gas Corporation (DEPA)		To be determined	Strategic ally	
Hellenic Petroleum		23	Strategic investor	
Postal Services (ELTA)		10 + joint venture in the express delivery mail services	Minority stake to strategic investor and strategic ally in the field of the express delivery mail service	
Postal Savings Bank		To be determined	Initial public offering	
General Bank		15	Minority stake to a strategic investor	
Hellenic Stock Exchange		33.4	Private placement to institutional investors	
Football Stock Exchanges		To be determined	Additional secondary offering/issuance of exchangeable bonds/merger with Horse Racing Organisation	
Hellenic Tourist Properties		To be determined	Initial public offering	
Hellenic Casino of "Mont Parnes" SA		To be determined	Strategic ally	
HELLEXPO		To be determined	Initial public offering	

1. The privatisation amount was raised solely by the corresponding public enterprises.

Source: Ministry of National Economy.

A more proactive approach is also needed with regards to the opening up of network industries, seeking to accelerate the pace of the announced liberalisation in key sectors (such as gas and transport sectors) and enhance competition in those that have already been freed up. OECD estimates[121] suggest that the potential long-run effects at the macroeconomic level of restructuring the main public enterprises, and introducing competition into sectors they currently dominate, would result in an increase in total output of 9-11 per cent of GDP. With the arrival of new players and many complex issues likely to arise, the role of the Competition Committee, as well as specific sector regulators, becomes increasingly important. This is all the more in cases that the regulatory and institutional framework of liberalisation leaves the incumbents as vertically integrated firms. The enhanced role of the National Telecommunications and Post Commission is to be acknowledged in this respect (see below).

Energy sector

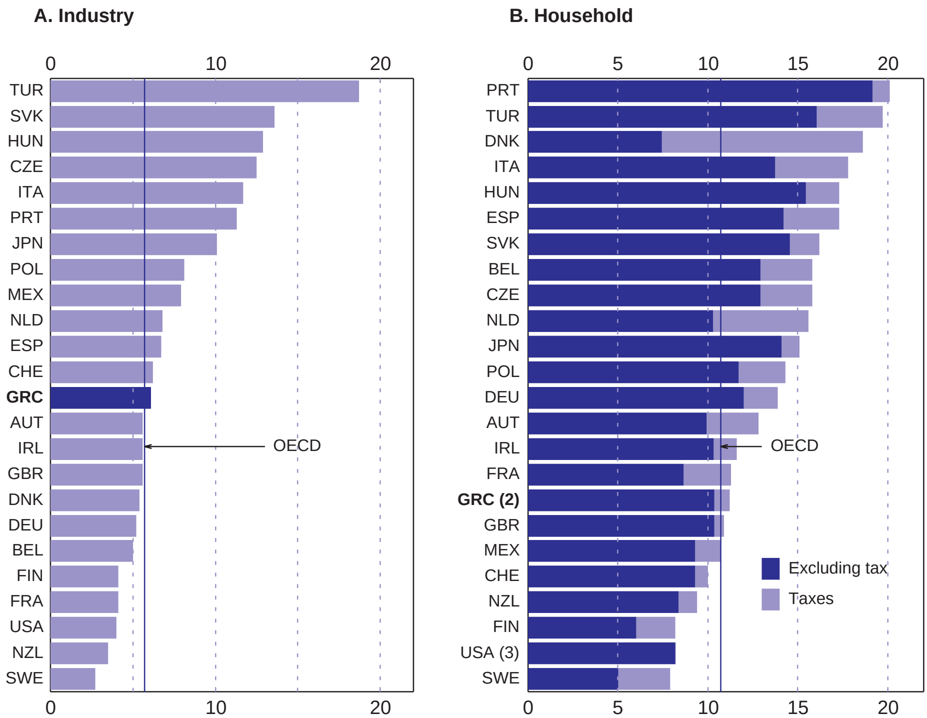
The structure of the electricity sector remains integrated

The electricity market has been partly privatised in February 2001,[122] and the state-owned Public Power Corporation (PPC) has been transformed to a *societé anonyme* (Annex III). However, as pointed in previous OECD reports,[123] the privatised entity largely retains the integrated structure of the sector, and in fact, though licenses have been issued, there have been no serious moves by potential competitors to construct new generating capacity as yet. Under the new regime, and despite accounting separability,[124] PPC remains vertically integrated in all aspects of the electricity sector and retains control over important access issues. In particular, the system's operator (Greek Electricity Transmission System Operator SA) – set up to operate the high voltage system – is jointly owned by the state and PPC, with the later holding initially 49 per cent, before the connection of other generators to the system. In addition, PPC owns – and will continue to operate – the low voltage distribution system. Moreover, the new regime leaves PPC as the sole supplier of the small consumer market, which is the most profitable segment. Access conditions for fuel (natural gas and lignite),[125] and electricity prices which do not reflect the cost of supply (and which are subject to government control), constitute further barriers to entry. Although both industrial and household electricity prices are close to the OECD average (and lower than in most EU countries), these prices are not entirely indicative of PPC's efficiency: input prices are distorted and PPC has significant non-commercial obligations (Figure 23). The price discrimination in favour of large industrial customers, in this context, discourages entry as it makes it unprofitable for new participants to match those prices.[126]

Privatisation is not an end in itself. Incentives to efficient production and investment also require that market forces operate in sectors, particularly

Figure 23. **Electricity prices in selected OECD countries**

In US dollars per 100 kWh (using PPPs) in 2000 or closest year available[1]



1. 1999 for Greece, Germany, Japan and Spain; 1998 for France and OECD.
2. The tax declined from 15.3% in 1998 to 7.4% in 1999.
3. Price excluding tax for the United States.

Source: IEA (2001), *Energy Prices and Taxes*, Third Quarter 2001.

generation, where there is no "natural monopoly" phenomenon. Additional steps towards enhancing effective competition are laid out in detail in the 2001 OECD *Report on Regulatory Reform in Greece*. As a first step, the generation capacity of PPC could be split up into several independent and competing companies[127] in order to create immediate competition at the generation level. By contrast, under current arrangements, pressures to increase the economic efficiency of PPC are only likely to arise through partial privatisation. Following a major restructuring operation,[128] the government has floated about 15 per cent of PPC's share capital in an initial public offering in December 2001, intending to sell a further stake to a strategic investor. This is a step in the right direction. However, to reap the benefits of liberalisation, a competitive market is a necessary pre-condition, and failing that, strong regulation by an independent body with authority to impose tariffs and the right to obtain accurate information on operating costs in the long and short run. The existing tariff structure is quite distorting and the usage-varying part of the tariff needs to be aligned more closely with long-run marginal costs for market pressures to operate efficiently (this is the announced intention of the authorities). Aluminium and nickel producers enjoy below-cost electricity prices on long-term contracts, household tariffs are somewhat below full cost, while commercial and small industrial users pay comparatively high prices. Average tariffs are low by European standards, and perhaps too low to induce new entry, because of the cost structure of generation. PPC has a quasi-monopoly of exploitable lignite deposits. New entrants would need to rely on higher-cost alternatives, and thus find it difficult to compete. In the longer term, higher tariffs would in any case be required to induce the PPC to substantially increase capacity, as low-cost lignite deposits are finite in size, and their continued exploitation using actual technology undesirable on environmental grounds. The determination of the price of natural gas for the newly licensed electric power producers is an issue of major importance for the liberalisation of the energy sector. The new pricing system (discussed below) is envisaged to replace eventually the existing dual system for natural gas,[129] which could hinder competition in the electricity sector.

The fact that the government will remain the majority owner of the integrated PPC, in accordance with the provisions of the 1999 liberalisation law, and set most of the key decisions (instead of the sector's regulator) is also unlikely to foster a competitive environment in the sector. Although it is a necessary first step, spinning off several competing generating companies from PPC would not alone create effective competition in the electricity sector in Greece. Competition requires non-discriminatory access, at efficient prices and terms, to transmission and distribution. "Fair" access to customers would also attract private-sector players to generation. Effective competition would further require the newly established Regulatory Authority of Energy (RAE) to have adequate capabilities, in line with those recently bestowed on the telecommunication authority. RAE was given financial independence in 2000, and is able to set grid access and use tariffs for firms participating in the energy sector. Its responsibilities, however, concentrate on issues of monitoring, advisory and referral, while the "true" regulatory responsibilities (provision of generation licenses, end-user and network tariff-setting, and responsibility for the public service obligation) rest with the Ministry of Development.

The need for a more competitive energy sector is further reinforced by the relative isolation of the Greek network, both geographically and technically, which almost precludes competition from imports,[130] while new entrants in the domestic market are unlikely to start operating before 2004-05. The long-term objective of creating a south-east European electricity pool could enhance competition when new entrants' gas-fired plants come on stream. However, this will not occur for another 3-4 years at least. At the same time, competition between domestic energy sources seems to be put on risk by the financial links between the natural gas, lignite, petroleum and electricity sectors.[131] Separating the ownership of oil and gas distribution would be an important step towards promoting competition between those two sources. Consideration should also be given to separating the ownership of municipal electricity, as well as gas, distribution grids.

The Ministry of Development, after proposals by the Regulatory Authority of Energy and public consultation, is preparing new legislation for the electricity market aimed at enhancing market competition and removing barriers to new entrants. The electricity market reform includes phasing in a market for generation capacity certificates, a spot and futures market for electricity, a transition period in which incentives will be provided to new generators and suppliers, and the redefinition of the role of the Independent Transmission System Operator and RAE. In parallel, legislation is under preparation to accelerate the liberalisation of the wholesale market of natural gas.

The deadline for liberalising the natural gas sector has been brought forward

Greece was granted a derogation for liberalising the natural gas market until November 2006, on the grounds of the late introduction of the commercial gas supply in the country and the lack of interconnection to the gas network of any other EU member state. However, the opening up of the sector is planned to take place well before the end of the derogation period, even in the course of 2002. Liberalisation of the wholesale market is likely to occur as from 2004. In preparation, a new pricing framework has been constructed by the Public Natural Gas Corporation (DEPA) and submitted to RAE for deliberation and assessment. In addition, progress has been made towards the evaluation of the various options for diversification of gas supplies *via* the interconnection of the Greek natural gas system. The new pricing system for gas is in full compliance with the provisions of the EU directives. It involves unbundling of the selling price between the commodity charge and the transportation charge, which is the regulated part applicable to any third party without discrimination.

The government has announced its plan to proceed with the privatisation of DEPA, in which the Hellenic Petroleum holds a stake of 35 per cent. An international tender for the sale of a strategic share in DEPA is envisaged to take place in the course of 2002. The management of PPC has decided to exercise the option to purchase up to 30 per cent of the equity capital of the company. At present, DEPA has the exclusive right to import, transport and supply large customers with gas. Private sector entities are expected, under the 1995 natural gas law, to shoulder all of the cost (net of EU contributions) for the construction of the low-pressure distribution network, in exchange for a 49 per cent ownership stake and the management of the Gas Supply Companies, which are majority owned by DEPA's distribution subsidiaries. The process of constructing the low-pressure distribution network is under way.[132] The timely establishment of new gas supply companies for the development of the gas industry at a regional level is key to speeding up the introduction of natural gas. Allowing private participants to take a majority holding in gas distribution would encourage entry into the natural gas sector. Regulatory arrangements will also be critical to enhance competition in the sector. In view of the prospective liberalisation of the gas sector, the role of RAE as an independent body and with strong enforcement capacities, becomes increasingly important, as is the need to co-ordinate policies among energy markets.

Reforms are needed to enhance competition at the refining level in the oil sector

With respect to the oil sector, the benefits of liberalisation are evident in the retail market. Competition needs to be enhanced, however, at the level of refining. The refining sector is dominated by three companies, the largest of which, Hellenic Petroleum (HP) with a share of 52 per cent in the total quantity of oil refined in Greece during 2000, is majority owned by the state, while Motor Oil (26 per cent) and Petrola (22 per cent) are privately owned. The government has decided to reduce its participation in HP, retaining a stake of 35 per cent and the management control of the company. Statutory regulations constitute barriers to competition in the refining sector. The current legislation prohibits retailers to have direct access to refineries, requiring them to buy fuel through trading companies. Another impediment to domestic competition arises from the HP's exclusive right to supply the army and other public enterprises (PPC), although to some extent this could be justified by the fact that HP is the only domestic supplier that can meet the logistic requirements set by these customers. At the same time, there is little competition from refined fuel imports. Despite the fact that trading (wholesale distribution) companies have been free to import refined oil since 1992, storage requirements constrain imports by essentially forcing trading companies to buy exclusively from domestic refineries as part of the "supply-for-storage" contracts.[133] A new law on the deregulation of the fuel market is under elaboration by the Ministry of Development. The law is intended to deal, among others, with the issue of the retailers' possibility to buy fuel directly from refiners, as well as that of the maintenance of oil reserves. It would make steps towards enhancing competition in the refining sector by shifting the bulk of the burden of 90-day reserve stock to the refiners and importers and allow trading companies to maintain their stocks abroad under certain conditions. A more lenient licensing procedure for the construction of storage facilities, currently constrained by environmental considerations, would also provide more room for competition from imported refined contracts.

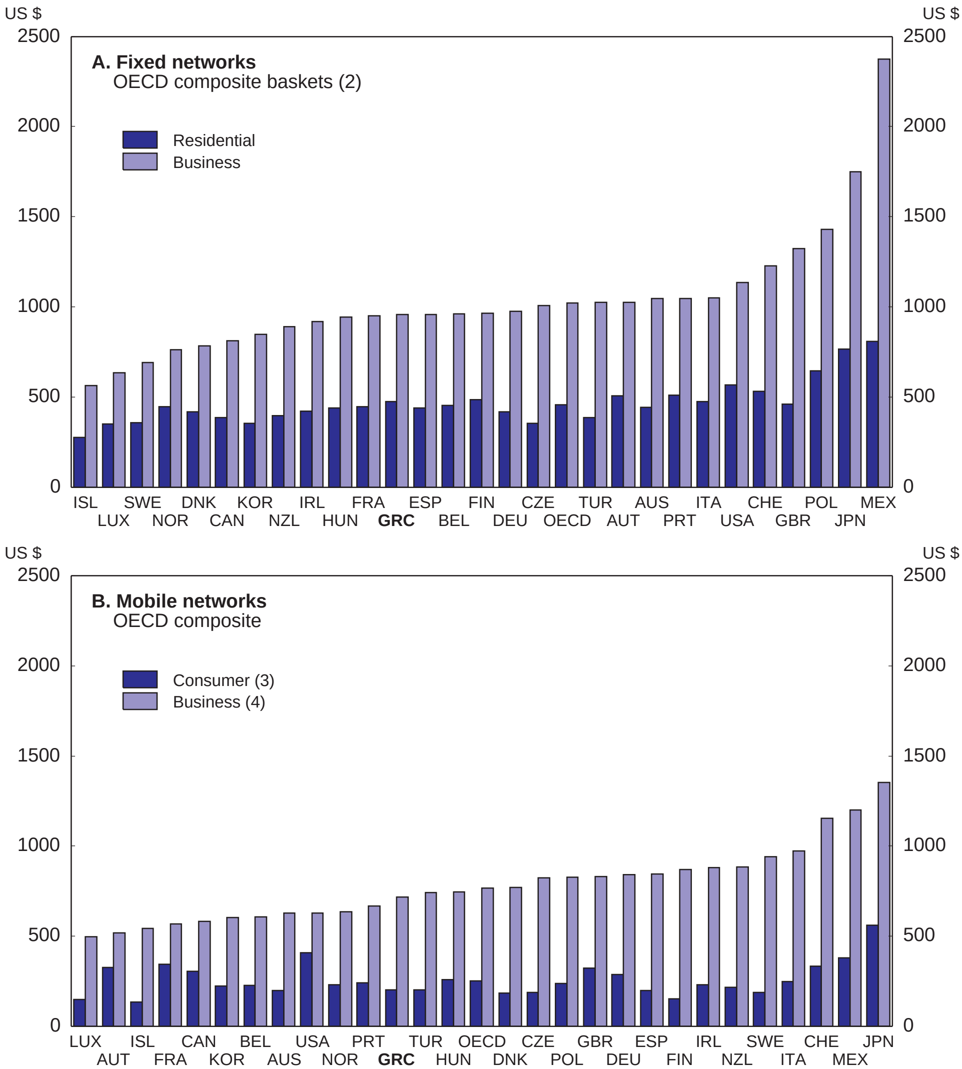
Telecommunications

The liberalisation of the telecommunication sector has progressed satisfactory

The Greek telecommunication market was fully opened to competition in January 1 2001, when the market for fixed-voice telephony – previously a monopoly of the Hellenic Telecommunications Organisation (OTE) – was liberalised, after a three-year derogation from the relevant EU directive. Nevertheless, the late licensing that occurred in December 2000 delayed the entrance of new operators to the market, effectively extending the period of OTE's monopoly in fixed-voice telephony.[134] Following the sale of an additional equity stake of 10 per cent in mid-2001 – through the issue of an exchangeable bond – OTE became the first public enterprise in Greece to have a majority private ownership (with the state's participation reduced to 41 per cent), although the government retains a blocking minority shareholding. The gradual privatisation of the company, which started in 1996, resulted in significant efficiency gains. Not only have prices declined (for long distance calls) but the quality of the provided services has improved markedly – although, to become competitive, OTE still requires significant changes in corporate culture, focusing on customer requirements and marketing (OECD 2001b) (Figure 24). Taking advantage of the derogation period, OTE has also progressively re-balanced prices of local and distant calls.

The new telecommunications law (Law 2867/2000) that came in force in January 2001 offers a timely opportunity to foster competition. For this to be achieved, however, the regulatory framework must be promptly and effectively implemented by the regulator of the sector, the National Telecommunications and Post Commission (EETT). The enhanced role (especially with respect to licensing) and independence given to EETT under the new law is an important step. Looking ahead, the main challenge for EETT will be to ensure an effective interconnection regime in order to promote competition in the sector. To this end, interconnection charges need to be based on forward-looking costs and accounting separation introduced. The recently issued *Regulation on Costing and Pricing Principles* by the EETT – requiring OTE to apply the long run average incremental cost methodology (LRAIC+) for interconnection charges – is an important step in the right direction.[135] A major initiative has also been taken in the context of local loop unbundling.[136] OTE is required to provide unbundled access to its local loop to other operators on reasonable terms (following the LRAIC+ methodology).[137] To maintain incentives for new entrants to develop their own infrastructure, rather than depend indefinitely on OTE's, the 2000 law provides for a limited period of compulsory unbundling of four years. These are positive steps towards enhancing competition in the local loop. To be effective however, such policies need to be supplemented by the guarantee of fair prices for unbundled local loop elements. Access to the local loop is key for the transmission of Internet services. The use of

Figure 24. **Telephone charges in selected OECD countries**[1]
November 2001, in US$



1. Fixed and usage charges.
2. Domestic and international services plus calls from fixed to mobile communication networks.
3. The basket includes 50 minutes per month and excludes international calls.
4. The basket includes 300 minutes of which 60 are international.

Source: OECD, Communications database.

Internet in Greece is below the OECD average, although it has expanded rapidly in the recent years. The fast-transmission ADSL is not yet available in Greece. The EETT introduced a new numbering scheme (*10-digit closed numbering scheme*), effective as of July 8, 2001, which replaced the former *9-digit open scheme*. The new scheme has significant implications for the development of competition as it expands numbering capacity and enables the operation of alternative networks. The arrival of the new entrants to the market may, however, be slowed by several potential drawbacks in the new framework liberalising the market, including the fact that the introduction of the number portability, and carrier pre-selection have to be in place by no later than January 1, 2003 (as demanded by the relevant EU and National law).[138]

Greece has a competitive mobile phone market with a steadily increasing penetration rate (reaching 72.8 per cent by the end of 2001). Prices have fallen and services increased. There are currently three mobile telecom operators serving the market, two of which, Panafon-Vodafon (market share 37 per cent in 2001) and STET Hellas (with a market share of 27 per cent) are privately owned, while the third one, COSMOTE, a subsidiary of OTE, has been partly privatised. In July 2001 the government announced the completion of two auction processes: The first one concerned the awarding of three licences of operating UMTS (third generation mobile telephone systems). The second auction, regarded second generation licences. During this auction, a fourth GSM license was awarded to "Info Quest". The introduction of the fourth operator (announced to offer services in June 2002) is expected to strengthen further competition in the mobile phone market.

Transport

A clear timetable is needed for the privatisation of Olympic Airways

Competition has been introduced in the air transport sector since early 1990s. The domestic market was liberalised in 1992, while Olympic Airway's (OA) monopoly of air services to the Greek islands was abolished in 1998. The push for liberalisation has resulted into lower prices and better services. Regarding the privatisation of OA,[139] the announced sale of the indebted company is still in the balance. With airlines world-wide facing difficulties after September 11, finding buyers has not been easy. Following the termination of the negotiations, in mid-February 2002, with the Integrated Airline Solutions Consortium (IASC) for the sale of a majority stake of OA, the government has decided to proceed to the adoption of a "fallback plan" (subject to the approval of the EU Commission), with the view of launching a viable, new regional airline using the "Olympic Airways" brand name. The plan envisages the establishment of a new company (New Co) in tandem with Olympic Airways Group ceasing all air carrier operations. New Co will be established either with private capital or by state funds. The new company will enjoy complete commercial freedom and flexibility in choosing the routes it operates, the assets and the number of employees it requires, as well as the conditions for the recruitment of its personnel. International experience suggests that few viable options exist for OA, other than to reduce the number of its routes, focusing on niche markets.

Looking ahead, the relocation of activities to the new Spata airport at Athens, since March 2001, facilitates access of the Greek airlines to larger markets, through international alliances and the strengthening of links to the other operators. The fair allocation of the increased number of slots in the new airport, on the basis of the relevant the EU directive (Council Regulation 95/93), could enhance competition in this sector, increasing the need for a more active and independent role from the Hellenic Civil Aviation Organisation (YPA), both in the area of regulation and that of service provisions. At present the air transport market is regulated by the Ministry of Transportation, while the main role of YPA – in terms of regulatory powers – is an advisory one to the Ministry,[140] with the liberalisation of the market proceeding according to the relevant EU Directive. The splitting of the two current operations of YPA (that of the service provider and regulator) into two separate entities, is currently under way.

Reforms are needed in road freight sector[141]

A new initiative is under way to reform road freight transport sector, which accounts for over 98 per cent of total freight transport. The current framework for trucking services has been judged as "unsustainable" by the OECD *Report on Regulatory Reform in Greece*, as liberalised foreign truckers are competing against Greek truckers who are constrained by national restrictions on entry and prices.[142] To this end, the OECD report calls for a liberalisation of entry for domestic trucks, whether for transport on their own account or for third parties, through the abolition of quotas and other numerical restrictions, as well as for a deregulation of prices, in order to enable Greek truckers to compete fairly and subject to the same rules as truckers from other member states. A number of restrictions concerning prices have been gradually eliminated. At present, price regulation (under which prices may fluctuate within a pre-determined range) for trucking services applies only to transport at inter-prefecture level, while in all other cases (namely, international transport, transport at intra-prefecture level, as well as transport by lorries under 3.5 tonnes permitted payload) prices are negotiated freely. The particular geography of Greece, and the risk of isolation because of it, is advanced as a reason for price control on road transport. However, a system of transfers might achieve the same social goals with more transparency and less distortion. A joint Committee for road freight reform, established by the Minister, has completed an action plan,[143] which comprises 16 main topics covering areas of interest for the modernisation of the trucking sector and transition to a liberalised regime. Concerning the restrictions on entry, the Committee has decided to assign a study for the estimation of the real needs of the road haulage market, the findings of which will guide the future reforms in the sector. In this context, it should be noted that other countries have liberalised their road haulage sectors, while retaining safety standards, and have experienced lower prices. Overall, the government is aiming for a progressive removal of restrictions, rather than an immediate and unconditional liberalisation of the sector, as it is judged that the latter would create disruptions in the market.

Regulatory steps have been taken towards the liberalisation of the domestic ferry sector

Regarding sea transport, Greece has a derogation period for the opening up of the domestic ferry sector until end-2004.[144] However, the government has decided to liberalise the sector, as of November 2002, well before the derogation period expires. The ferry transport market is, at present, highly regulated by the state. The Maritime Ministry regulates, in particular, market entry, licensing, pricing, route scheduling, manning, public service obligations, tendering for unprofitable routes enforcement and inspection of ferries for safety. An advisory body, the Coastal Transport Advisory Committee (CTAC), makes non-binding recommendations about licences and pricing, which, in practice, the Minister has always followed. The issuance of new licenses is based on the needs and current level of service rather than on a review of economic criteria which would enhance competition in the sector. The licenses have an indefinite duration and are issued to a specific vessel for a specific itinerary, which must be followed. They impose a number of economic conditions to licensees, with regard to the frequency of service, the fares to be charged, service to unprofitable islands and employment practices. Service to islands with low demand is subsidised. Service to "public service" islands (*i.e.* islands that are served as intermediate stops in a licensed itinerary to or from a mainland port) is cross-subsidised by other passengers, while that for islands on "unprofitable routes" (that is, inter-islands routes) are subsidised directly by the state, and perhaps other passengers. The 2001 OECD *Report on Regulatory Reform* highlighted the urgency for a comprehensive reform to the regulation of the domestic ferry sector in Greece, pointing to the need to modernise the regulatory institutions, ease the economic regulation and to devise criteria to enhance competition in the sector. Several regulatory reforms would increase efficiency and reduce costs of ferry service, such as a focus on service to islands rather than routes, extending competitive tendering for unprofitable routes, and liberalising fares over competitive routes. In mid-2000, the government made the first steps toward reforming the domestic ferry sector by expanding the membership in the Coastal Transport Advisory Committee to include more consumer groups (both commercial and island residents), and by assembling law-drafting committees. This was followed by the introduction, in mid-2001, of a law concerning the liberalisation of the coastal shipping (cabotage) and sea transport,

Box 10. A new regulatory framework for the domestic ferry sector

The new law (Law 2932/2001), setting the framework for coastal shipping after Greece allows foreign competition on local routes from November 1 2002, aims to create non-discriminatory competition and protect public interest in the domestic ferry sector. Under its provisions, the Minister for Merchant Marine, in consultation with the Domestic Maritime Transport Council, will be able to impose public service obligations, including ports served, capacity to provide transport services, freight rates and manning. For routes of diminished business interest, a Europe-wide tender for a contract to provide service will be issued. These routes will be subsidised through a Special Internal Transport Fund, funded by deposits for free entries and fines from infringements of Law 2932/2001 as well as by passengers and shippers through a three per cent fee on all domestic fares. An independent Regulatory Authority for Domestic Maritime Transport will be established, to monitor the sector, impose fines, and submit its opinion to the Minister on issues falling within competence. Transparent assessment procedures and proposals will be introduced. Licensing procedures will be abolished, and controls limited to ship safety, capacity and reliability of the ship owner and quality of service. The law envisages the creation of a *Coastal Shipping Transport Network*, a schedule of shipping routes that covers the whole country, within which operators will be able to select freely the routes they consider more profitable and determine fares.* Ferries will have to be decommissioned after 30 years instead of 35, gradually from 2006 to 2008.

* A recently proposed network contains 285 routes. Passenger shippers must submit routing declarations, specifying which routes they will serve, the maximum fare for the economy class services and the vehicles, and the ships they will use. Each ship can serve more than one route; conversely, each route can be served by several ships belonging to the same shipper. There are minimum scheduling requirements for each route in order to ensure adequate transport between the designated ports (*Kathimerini* 15 November 2001).

which goes a long way towards full harmonisation to EU directives (Box 10). The recently introduced law (Law 2932/2001), depending on the details of its implementation, provides a framework for more competition in the domestic ferry sector.[145] For such a pro-competitive environment to be effective, however, the sector's regulator, the Regulatory Authority for Domestic Maritime Transport, should ensure transparent and non-discriminatory regulations aimed at the maximisation of consumer welfare through a market-oriented regime.

Enhancing the efficiency of financial markets

Financial systems play an important role in the provision of funding for capital accumulation and for the diffusion of new technologies, and efficient ones can improve growth prospects through their influence on saving and investment behaviour.[146] It is therefore quite likely that the heavily regulated Greek financial system, which prevailed until the early 1990s, was a contributory factor to Greece's substandard economic performance in the 1980s and the first half of the 1990s. The restrictions imposed on the financial system were intended to facilitate the financing of large fiscal deficits and the provision of low-interest loans to state enterprises and sectors which the government considered to be of (high) national interest. As a consequence, (nominal and real) interest rates for non-preferential private borrowing were high. In all probability, many economically viable projects could not obtain funding, as their access to bank financing was not allowed. This had a discouraging effect on business investment and acted as a drag on the development of the overall economy.

A *process of far-reaching restructuring*

Recognition of this, and the need to comply with directives of the European Community, led to financial market reforms starting in 1987 and which progressed rapidly in the 1990s. During this process, control on capital movements were removed and most of the regulations restricting financial institutions' activities were lifted. Interest rates on loans and deposits were, with few exceptions,[147] liberalised already in the late 1980s and rules that compelled banks to invest in treasury bills and to lend to state enterprises and other preferential sectors were abolished in 1993. In the course of the 1990s, financial market supervision was strengthened according to international practice, including EU directives. At the same time, the portfolios of state-controlled commercial banks were cleaned to a large extent of non-performing loans and from most of their equity holdings in loss-making firms. Banks are now in general free from state interference and design their credit allocation subject only to prudential rules by the Bank of Greece. Consumers can now earn market returns on their financial assets and choose from a broader range of financial instruments and services. The reform of the financial markets also gave the monetary authorities the means to keep liquidity effectively under control in the run-up to EMU membership on January 2001.

The state has been withdrawing gradually from commercial banking through privatisation of state-owned banks in recent years (see Table 16 above). Among major privatisation initiatives in 2001 was the agreement to sell to the private Piraeus Bank 57.7 per cent of the state-owned Hellenic Bank for Industrial Development (ETBA), which in the past was a perennial loss-making institution and a vehicle for state intervention. Prior to the government's agreement with Piraeus Bank, a major restructuring programme of ETBA was carried out, with an estimated cost of some 2½ per cent of GDP in 2000 prices. It resulted in a sound balance sheet, satisfactory liquidity and capital adequacy ratios for ETBA.

The government has also announced plans to reduce its stake in the Agricultural Bank from 85 per cent in 2001 to a minimum of 35 per cent.[148] To this end, 13 per cent of the share capital was already floated on the Athens Stock Exchange (ASE) in an initial public offering in late 2000. A further stake of 8 per cent of the bank is planned to be offered in block sales to institutional investors, farm co-operatives and unions in 2002. An additional 10 per cent of shares is intended to be sold in a public offering in the second half of 2002; and an alliance of the Agricultural Bank with a major credit institution as strategic investor[149] would be sought in 2002 in Greece or abroad. To prepare the bank for the privatisation, a new risk management system has recently been introduced which seeks to lower the (high) level of non-performing loans of the Agricultural Bank. Another privatisation project is that of the Postal and Saving Bank, which is also planned to take place in the course of 2002, although no concrete steps seem to have been undertaken as yet. In part, the implementation of privatisation plans has been slowed by the unfavourable stock market conditions both domestically and internationally in 2000 and 2001, but also by social considerations and political resistance.

In 2001, the government eventually terminated its control over the National Bank[150] and the Commercial Bank, respectively the first and third largest banking groups. The new regime should prevent any political interference in the process of appointing the governors of the two banking institutes and bring to an end the special employment protection rules imposed on the two banks, allowing them to recruit and dismiss staff like any other corporation. However, the two banks are still owned by quasi-public entities, which leaves open the question how their governance regime will function.

So far, the number of directly and indirectly state-controlled banks has been reduced from ten in 1995 to three (Agricultural Bank, General Bank and the Postal and Saving Bank) in 2001. The fall of the market share of (directly and indirectly) state-controlled banks in total assets of commercial banks from 60 per cent in 1995 to above 40 per cent in 2001 was less impressive. It is an indication that the process of consolidation and privatisation has established larger financial groups, but that it has also led to a higher degree of concentration in the Greek banking sector. Nevertheless, the downsizing of public ownership of commercial banks has induced an intensive battle among banks for market share, including an increased merger and take-over activity and strategic partnerships. Large foreign financial groups have stepped in and have formed alliances with Greek banks, allowing them to benefit from foreign expertise in risk management and new financial products and services. The share of the five biggest banks[151] in total assets of the banking sector increased from 58 per cent in 1995 to currently around 66 per cent.

Seven new banking licences have been granted by the Bank of Greece since the beginning of 2000 and three new branch licences were granted to foreign banks. Altogether, the number of bank branches has increased by about 4 per cent per annum in recent years. Moreover, in 2001 the hitherto exclusive right of banks to grant loans to the public was extended to special purpose companies subject to licensing and other requirements set by the Bank of Greece. Indeed, one licence has already been granted to a such special purpose finance company. Internet banking services started operations in 2000 and were provided by nine credit institutions in 2001 – seven of them being private, including the largest Greek private bank. Some of them even provide services over mobile phones based on the WAP (Wireless Applications Protocol) technology. There are, however, no reliable data available on volumes and values of transactions either over the Internet or mobile phone. In July 2001 the Bank of Greece approved the participation of two major credit institutions in the development of an e-money scheme, which is planned to be implemented gradually on a nation-wide basis, using the technology of major European e-money schemes. In addition, as of the beginning of 2003, all listed companies, including banks and other financial institutions, are required to publish their financial statements in accordance with international accounting standards, which is expected to improve the quality of financial reporting and to enhance transparency of banking operations. All of these reform steps should help to foster competition between credit institutions, thus enhancing the efficiency and sophistication of the financial system as a whole.

Improved financial health of the banking system

As a consequence of financial market reforms, Greek financial intermediaries have been able to lend increasingly to the private sector, with lending to households having been particularly buoyant in recent years (see Chapter I). The strong rise in credit demand was stimulated by declining interest rates induced by their convergence to EU interest rate levels in the run-up to EMU participation. Borrowers benefited in addition from narrowing bank interest margins since the early 1990s and a decline in banking fees and commissions ensuing from intensified competition in the banking sector. However, higher risk premiums associated with particular categories of credit, such as consumer lending, and perhaps the fact that competition is less intense than in more mature markets are in part responsible for average spreads between lending and deposit interest rates still being significantly higher than in other EU countries. These spreads have however been reduced considerably in the last two years, as a result of the intensified competition between banks, in particular in certain market segments such as lending to prime corporate borrowers and housing finance, where the relative margins have become very narrow.

Rapid credit expansion has offset much of the effect of narrowing interest margins, and bank profitability has improved substantially in recent years, and compares very favourably with a number of other EU countries (Table 17). This is

Table 17. **International comparison of bank profitability**

As a per cent of average balance sheet total

	Greece				Austria	Finland	France	Germany	Italy	Netherlands	Portugal[1]	Spain
	1997	1998	1999	2000	1999[2]							
Net interest income	2.25	2.42	2.70	2.69	1.4	1.9	0.8	1.5	2.2	1.7	2.1	2.2
Non-interest income (net)	2.21	1.92	3.74	2.21	1.2	1.9	1.0	0.6	1.3	1.3	0.9	1.0
Gross income	4.46	4.34	6.44	4.90	2.6	3.8	1.8	2.1	3.6	3.0	3.0	3.3
Operating expenses	2.82	2.57	2.68	2.56	1.8	3.3	1.2	1.4	2.2	2.0	1.7	2.1
of which: Staff costs	1.87	1.68	1.64	1.52	0.9	0.8	0.7	0.8	1.3	1.1	0.9	1.3
Net income	1.64	1.77	3.76	2.34	0.8	0.5	0.6	0.7	1.4	1.0	1.2	1.2
Provisions (net)	0.65	0.57	0.72	0.43	0.4	0.0	0.1	0.3	0.4	0.2	0.4	0.2
Profit before tax	0.99	1.20	3.04	1.91	0.5	0.5	0.5	0.4	1.0	0.8	0.8	1.0
Inhabitants per bank branch	4 055[3]	3 784[3]	3 696[3]	3 515	1 767	4 078	2 264	2 005	2 398	2 327[4]	2 114	1 011
Number of employees per branch	22[3]	21[3]	21[3]	20	15	19	15	18	13	19[4]	12	6

1. Commercial banks.
2. Data for Austria and Finland refer to 1998.
3. Data cover the entire banking system.
4. 1998.

Source: Bank of Greece; OECD, *Bank Profitability – Financial Statements of Banks* (2001).

so in spite of comparatively high operating expenses and provisions on loans. Much of high operating expenses are due to personnel expenditures, which reflect, *inter alia*, a larger number of employees per bank branch than elsewhere. It should be noted however that as a percentage of the average total assets, personnel expenditures have been in a declining trend in recent years and were reduced to 1.4 per cent in 2001 from 1.7 per cent in 1998, indicating the importance assigned by banks to the appropriate management of these particular expenditures as a means to maintain and improve their competitiveness. An important positive contribution to bank profitability in recent years came from significant capital gains from banks' government bond holdings, when Greek interest rates fell towards EMU interest rates.

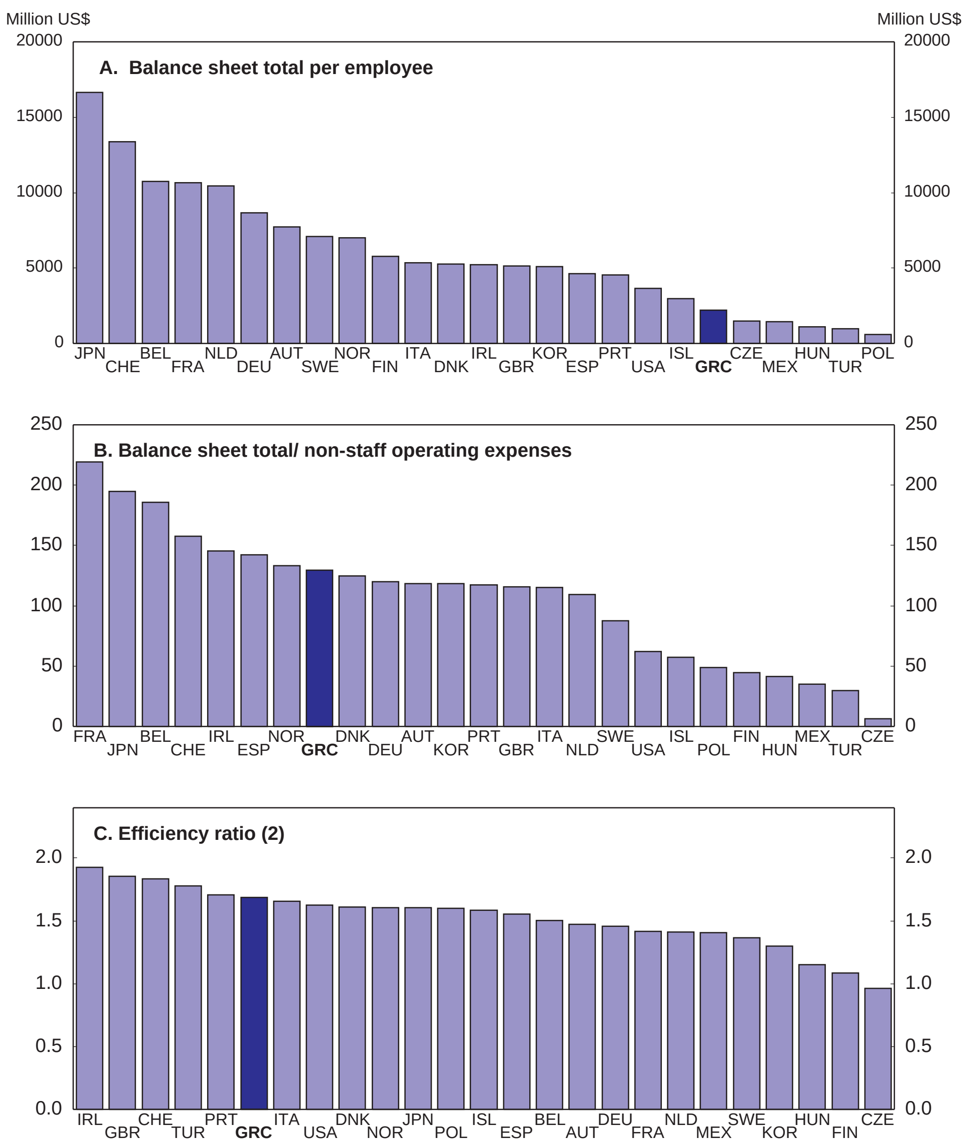
Altogether, the financial strength of the Greek banking system has improved after the liberalisation of the sector (Figure 25). Consolidation and privatisation have created larger and more cost-conscious financial groups and banks have expanded into new financial services. Bank capitalisation has improved substantially in recent years and most Greek banks are reported to satisfy the eight per cent minimum capital adequacy ratio,[152] even after the strong decline in stock prices since the second half of 1999.[153] Until recently, a particularly weak spot in the picture was the high share of non-performing loans – estimated to have amounted on average to some 13 per cent of total loans in the late 1990s – which is very high by international standards and which largely reflects the legacy of earlier state interference in bank lending. Mainly as a result of balance sheet restructuring, but also of increased new lending, Standard and Poor's (conservatively) estimates that the bad loan ratio may have come down on average[154] to about 7 per cent of total loans. The burden of non-performing loans also has required stricter provisioning rules in Greece than in many other countries: banks usually make general provisions up to one-per-cent on all loans. Additional provisions are made for loans that have not been serviced for more than three months; these range from 7 per cent to 65 per cent of the amount of the overdue loan, depending on the loan category (lower ratios apply to housing loans and higher ratios to consumer loans) and the time period for which the loan is not performing (Figure 26).

Fiercer competition is encouraging the banking sector to focus more on cost control, especially to contain relatively high staff costs. Unlike in most other EU countries, the liberalisation of financial services and the privatisation of a number of state-owned banks, and the creation of the Euro have not yet led to a major consolidation of credit institutions.[155] However, the number of bank branches[156] per capita in Greece is among the lowest in Europe (Figure 27).

Capital markets

Greece's capital markets have developed rapidly in recent years and the equity market is now an important source of funds (Figure 28). Despite a massive

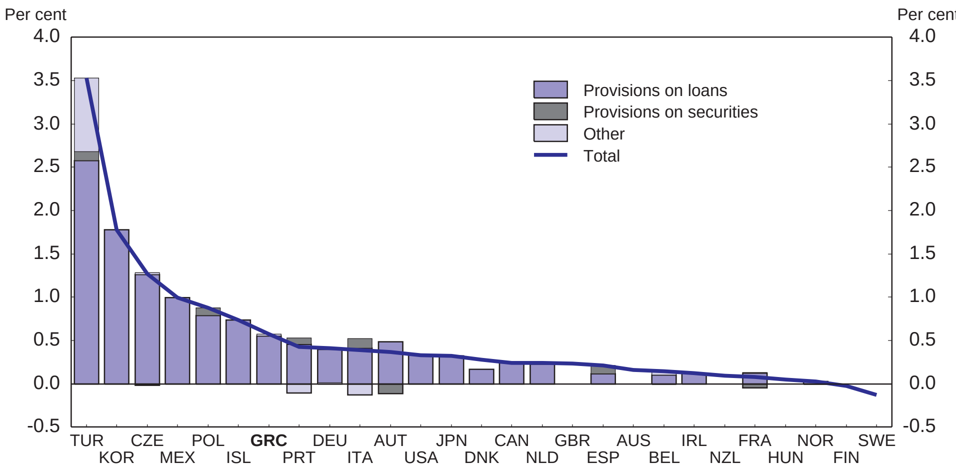
Figure 25. Productivity and efficiency indicators of banks: an international comparison[1]



1. Commercial banks. 2000 or latest year available.
2. Net interest income plus fee and commissions income divided by operating expenses.

Source: OECD, *Bank Profitability – Financial Statements of Banks* (2001).

Figure 26. **Bank provisions**[1]

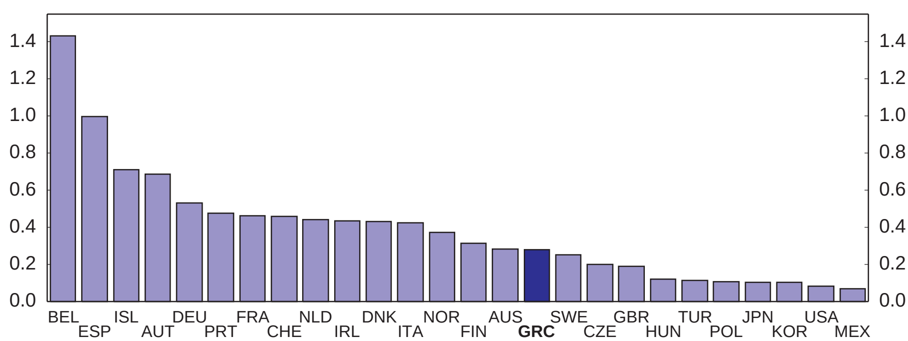


1. 2000 or latest year available.

Source: OECD, *Bank Profitability – Financial Statements of Banks* (2001).

Figure 27. **International comparison of bank branch density**

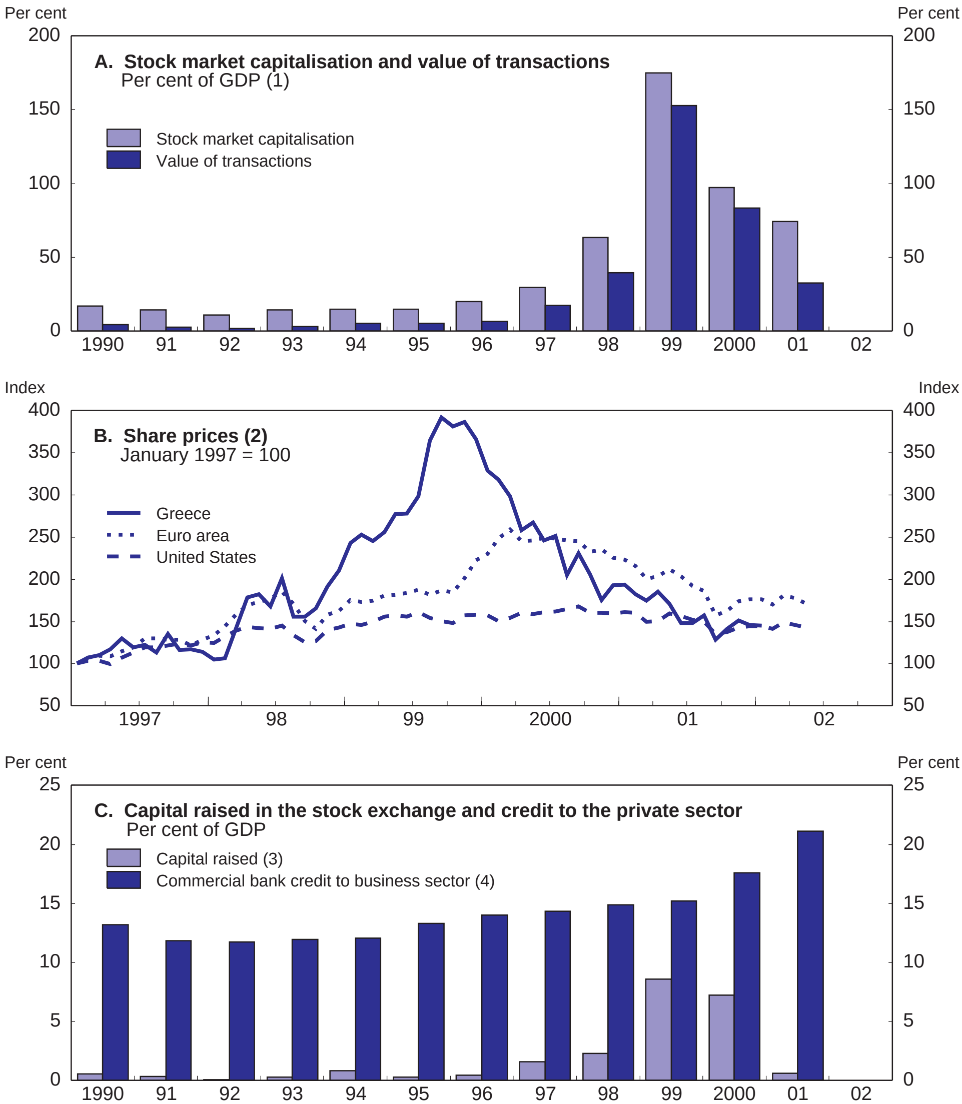
Branches per 1 000 inhabitants, 1999[1]



1. 2000 data for Greece; 1998 for Austria, Finland, Ireland and the Netherlands. All banks except for the following: commercial banks for Greece, Hungary, Japan, Mexico, Portugal, Turkey and United Kingdom; commercial banks and foreign commercial banks for Korea; commercial banks and savings banks for Iceland and the United States; commercial banks, foreign commercial banks and savings banks for Sweden.

Source: OECD, *Bank Profitability – Financial Statements of Banks* (2001).

Figure 28. **Share prices and stock market capitalisation**



1. 2001 provisional.
2. Euro area: Dow Jones EURO STOXX Broad; United States: NYSE Common Stocks, composite index.
3. Excluding share flotations of public enterprises.
4. Credit to industry, mining and trade.

Source: Bank of Greece, Capital Market Commission and OECD.

decline in share prices and in the stock market capitalisation relative to GDP since their peak in September 1999, this appears an unavoidable correction from unsustainable levels far in excess of what has been seen in other OECD economies. Stock prices and the transactions levels remained rather subdued in 2001 in spite of the upgrading of the Athens Stock Exchange (ASE) in late May 2001 from emerging market to developed market status by Morgan Stanley Capital International. The departure of emerging market funds may not have been offset by commensurate capital inflows from developed market funds, because of Greece's small weight in developed market indices.[157]

The admission of Greece into the Euro-zone paved the way for the upgrading (to A from A–) of the government debt in domestic currency (until the end of 2000, Euro thereafter) by the international rating agencies Moody's, Standard and Poor's and Fitch IBCA in 2001. However, the use of corporate bonds has not taken off as expected, probably because of the relatively small size of even larger Greek companies, and banks continue to be the main buyers.

Improvements to the regulatory framework of capital markets were introduced in 2000 and 2001 mainly aimed at increasing investor protection. This comprised the introduction of a distinction between criminal breaches and offences subject to administrative sanctions; introduction of regular reports to parliament by supervisory authorities; and enhancing the capacity of the judiciary to try cases of market abuse and fraud; a code of conduct for listed companies and a takeover-bids code were also introduced. The minimum initial share capital required for equity market listing was increased and the disclosure requirements of listed firms were strengthened. The minimum initial share capital for setting up a mutual fund management firm has also been raised and minimum professional credentials have been established for those employed in brokerage firms. Procedures for obtaining a listing on the equity market have been rationalised *via* the introduction of time limits for approving companies' information prospectuses. In addition, the existing integrated electronic trading system and the clearing and settlement system for dematerialised securities are being expanded to accommodate corporate bonds. The role of the Capital Market Commission (CMC), which is entrusted with the supervision of the capital market and the non-bank capital market firms, has been strengthened. The system of transactions, the clearing and settlement as well as the market transparency have been upgraded. A new code of corporate governance for the listed companies was established aiming at the protection of minority shareholders and the enhancement of transparency. Regulatory powers have been transferred from the Ministry of National Economy (MNE) to the Capital Market Commission in 2001. A review is now under way in order to simplify listing procedures and demarcate the role of the Commission *vis-à-vis* the Stock Exchange.

With a view to ensuring the safety of the financial system, changes in the financial supervisory framework are currently under consideration. A committee of

Box 11. Implementing structural reform: an overview

Proposal	Action taken	OECD assessment/ recommendation
I. Increase wage and labour cost flexibility		
Lower the minimum wage for "vulnerable workers" (low-skilled, youth)		Increase flexibility of setting minimum wages for less skilled and younger workers
Simplify and decentralise the wage bargaining process	The opt out clause from sectoral collective agreements in high unemployment areas is only seldom used	Make the flexible wage clauses more easily applicable in practice Encourage more wage differentiation at the local and the enterprise level.
Reduce non-wage costs	Reduction by 2 percentage points of employers' social security contribution for low paid workers under the 2000 legislation Payment by the government of a part of employee contributions to the social security system for minimum wage workers	Reduce non-wage labour cost further and abolish also the ceilings on social security contributions for the pre-1993 labour market entrants
II. Promote labour market flexibility and mobility		
Ease employment protection legislation	Legislation of 2000 abolished "2 per cent rule" on collective dismissals for firms employing 50 to 199 workers. For firms between 20 and 199 employees the upper limit is set to four persons	Reduce severance costs for white collar workers and narrow the difference with the corresponding payments for blue collar workers
Increase flexibility in working time	The 2000 legislation introduced: – a reduction in weekly overtime hours at the discretion of the employer and an increase in the overtime premium – the annualisation of overtime work on a voluntary basis and cut in effective working hours – financial incentives to encourage part-time employment	These measures would raise labour costs if not offset by additional hirings and other labour market measures Further encourage the taking up of part-time work by reducing remaining disincentives
Enhance labour mobility	Actions taken under the NAPEs to achieve a balanced regional employment (including Local Actions Plans for Employment)	Continue with implementation

Box 11. **Implementing structural reform: an overview** (*cont.*)

Proposal	Action taken	OECD assessment/ recommendation
III. Improve the efficiency of active labour market policies		
Develop training programmes	Progress in integrating vocational programmes into co-ordinated employment strategy (*e.g.* certification of training centres; introduction of work experience programmes)	More emphasis of ALMP on training, rather than on employment subsidies Improve further the quality and the job-linkage of vocational training
Improve further the job-matching efficiency of PES	Establishment of Employment Promotion Centres providing individualised services to the unemployed New law (2956 of 2001) regarding the administrative restructuring of PES Steps towards development of evaluation indicators for policies	Step up the completion of the reform of the PES Speed up the establishment of a comprehensive system of assessing and evaluating the ALMPs
Allow for the creation of for-profit job placement agencies	Some progress towards the establishment of private job placement agencies; temporary employment agencies can now operate legally, according to Law 2956 of 2001	Continue with implementation
IV. Improve labour force skills and competencies		
Enhance transition from initial school to working life	Implementation of a wide-range educational reform programme with various measures specifically targeted on tailoring education and training (vocational and continuing) to the labour market needs	Continue with the implementation of reforms. Revise school curriculum. Improve evaluation of outcomes
	Modernisation of the training services and development of training programmes outside the basic training planning	Encourage training and re-training of those already in the labour force
	Steps towards formulating a strategy of lifelong learning (*e.g.* Institutes of Ongoing Education in universities)	
Raise the quality of formal education	Some progress towards the development of information technology in schooling and professional training	Increase investment in human capital. Step up progress towards combating "digital illiteracy"

Box 11. **Implementing structural reform: an overview** (*cont.*)

Proposal	Action taken	OECD assessment/ recommendation
V. Promote technology and innovation		
Improve support to R&D and innovation programmes	Some progress towards strengthening the links between universities and enterprises through initiatives supporting the establishment of spin-off firms	Increase further R&D spending Timely Implementation of the *Operational Programme for the Information Society*
VI. Enhance product market competition		
Enhance the effectiveness of anti-trust policies	The reform of anti-trust legislation of August 2000 made the Competition Committee independent of the government, enhanced its resources, freed it of the obligation to survey a great number of minor merger cases, and improved its legal instruments to combat anti-competitive behaviour of firms, including the imposition of severe sanctions	Enable the Competition Committee to offer salaries which attract highly qualified staff; clarify the Committee's interaction with sectoral regulators
Foster liberalisation in sectors dominated by the public sector	Abolition of the upper limit on private ownership of the Hellenic Telecommunications Organisation (OTE), Olympic Airways, and Hellenic Petroleum	Abolish the privatisation limits for all public enterprises
	Envisaged abrogation of the current privatisation law banning private majority ownership	
	Liberalisation of the telecommunication and electricity markets in early 2001.	Enhance competition in the electricity market
	The liberalisation of the gas market and domestic ferry sector before the expiration of the relevant derogation periods has also been announced	Speed up the announced liberalisation in gas market and domestic ferry sector
	Completion of an action plan for the modernisation and liberalisation of the trucking sector	Timely implementation
Continue the privatisation process	Progress in privatising public enterprises	Accelerate the privatisation process
Lower subsidies		Step up restructuring of the agricultural sector, rein in subsidies and evaluate programmes

Box 11. Implementing structural reform: an overview (*cont.*)

Proposal	Action taken	OECD assessment/ recommendation
VII. Enhance the efficiency of financial markets		
Privatise remaining state-controlled banks and "special institutions" and stay vigilant on supervision	Progress in the restructuring and privatisation of state-controlled banks	Privatise remaining state-controlled banks (National Bank; Commercial Bank) and "special institutes" (Agricultural Bank; Postal and Saving Bank); refrain from interest arrears amnesties and debt rescheduling; stay vigilant on prudential supervision
Continue modernisation of capital market regulations	Steps to modernise the regulatory framework, supervisory process and transparency	Review regulations on margin requirements in the derivatives markets, along with the introduction of new futures contracts, to ensure an adequate depth of the market
	Measures to support the development of financial markets (venture capital, regulatory framework for real estate mutual funds and investment companies, legal framework for securitisation of assets)	Privatise Athens Stock Exchange
VIII. Reform the tax system		
Simplify the highly complex tax system, broaden the tax base, reduce the progressiveness of the personal income tax and the high social security contributions paid on labour incomes, and tackle the uneven distribution of the tax burden	The government has announced comprehensive tax reform in 2002. As a first step to reform, a number of tax measures were included in the Budget for 2002 and came into effect on 1 January 2002, which seeks to address some problems of the current system	Speed up the implementation of reform; reverse recent piecemeal measures which introduce new distortions and complicate tax administration further

Source: OECD.

experts was established in June 2001 with a mandate to examine the regulations covering the creation and distribution of various financial products and services, the business conduct of new financial conglomerates, and current trends in European countries. Furthermore, the Capital Market Commission was asked to carry out a study on the cost from the creation on a unified regulator and a capital market Ombudsman. This work is close to completion.

Altogether, financial market reform has progressed rapidly in recent years. Restructuring and consolidation of private as well as state-controlled banks has reduced cost and has markedly improved bank profitability. In the current environment of fierce competition and rapid credit growth, supervision of banking has been stepped up. However, overstaffing due to the strict employment protection legislation, and the high ratio of non-performing loans are still of concern. Moreover, state-control over a large part of the banking system should be reduced further. The remaining issues facing the Greek financial system are similar to those of several other OECD countries. In particular, there remains scope to improve the frequency of reporting of financial intermediaries and the quality of disclosed information, which are prerequisites for bringing prudential supervision and regulatory frameworks to world best practice.

Notes

1. Quarterly GDP data have been published only as from 2001. Year-on-year changes of these estimates are based on quarterly figures for 2000 which have been derived from interpolation of annual data and are thus not very informative.
2. Consumer confidence dropped noticeably in October 2001, probably reflecting the effect of the terrorist attacks in the United States on September 11th, but it recovered already in November and December 2001 to levels last seen at the beginning of the year.
3. Official estimates of a household appropriations account are not yet available. The Statistical Office produces income and expenditure accounts only for the entire private sector, including public enterprises. Gross nominal disposable income of this sector is estimated to have increased by 4¾ per cent in 2001, while the saving ratio has decreased by about 1¼ percentage point, to 16¾ per cent in 2001.
4. The fall in housing investment in 2000 was preceded by a sharp decline in the volume of construction permits in 1999, which is not well understood. It may be related to household expectations of future decreases in mortgage interest rates.
5. Consumer credit increased by some 42 per cent both in 2000 and 2001. Most of household debt are loans for dwelling investment, with consumer borrowing being a relatively new phenomenon in Greece.
6. Estimates of the National Bank of Greece, based on a sample of 254 non-financial companies listed on the Athens Stock Exchange and representing 87 per cent of total market capitalisation.
7. The share of business investment in real GDP rose from 10½ per cent in 1995 to slightly above 15 per cent in 2001.
8. Estimates by the Greek authorities point to a potential output growth rate in 2001 of 3¾ per cent.
9. For evidence that Greek merchandise exports are concentrated in goods which compete on price rather than on quality see the 1998 OECD *Economic Survey of Greece*, Box 1 and Annex I.
10. The Secretariat's analysis uses the method outlined in Fagerberg and Sollie (1987). The loss in market shares in manufacturing export values from 1995 to 2000 is explained largely by a an unfavourable "market share effect", which is the effect of changes in micro market shares, and both unfavourable commodity and country composition effects. The commodity adaptation and market adaptation effects are both positive, but not big enough to compensate for the mentioned negative factors.
11. Albania, Bulgaria, Romania and countries of former Yugoslavia.
12. Poland, Hungary, Czech Republic and Slovak Republic.

13. A new, more detailed quarterly Labour Force Survey with an enlarged sample size has been used since the autumn of 1998. It generates data in line with Eurostat rules. However, the data are available only with significant reporting delays, which limits its usefulness.

14. A sharp increase in both labour force and employment was recorded in 1998, two-thirds of which may be attributed to a change in the Labour Force Survey methodology which aligned it with Eurostat rules. The remaining part was the effect of a new policy adopted by the government in 1998 to grant residence and work permits to those immigrants – mostly from Balkan countries – who find employers who are ready to register them with the labour authorities and to pay a minimum of social security contributions.

15. Estimates based on the 2001 population census arrive at up to one million immigrants who have entered the country since the early 1990s, making up about 10 per cent of the population.

16. The unemployment rate for women fell from 16.7 per cent in 2000 to 15.4 per cent in 2001 and that for the young from 23.3 to 21.6 per cent.

17. The wage agreement of April 2000 also included a catch-up clause in the event that inflation were higher than 2.3 per cent in 2001. Since this turned out to be the case, compensation for the inflation overrun (1.1 per cent) was paid as of January 2002.

18. This has been analysed by Demekas and Kontolemis (1999) and resulted in empirical support of the hypothesis that in Greece government wages have driven up wages in the private sector, which has contributed to high unemployment.

19. If measured by the Greek Statistical Services' consumer price index (CPI), inflation was somewhat higher, at 2.6 per cent in 1999.

20. Official estimates suggest that these tax cuts reduced consumer price inflation by 0.9 percentage points in 1999 so that "genuine" inflation was at 3 (HICP) to 3½ (CPI) per cent in 1999. It could be argued that the cuts in indirect tax rates may also have helped to reduce inflation expectations. But if this had been the case at all, it seems to have been only temporary, if judged by available survey measures of consumers' inflation expectations.

21. The Balassa-Samuelson model suggests that countries which are experiencing higher productivity growth in the tradables sector than in the non-tradables sector will have higher inflation rates for non-traded goods and services. This is based on the assumption that wages set in the tradables sector will be followed by wages in the non-tradables sector and raise the latter above productivity. This will result in an increase in price inflation in the sheltered sector relative to the exposed sector. With overall inflation being the average of inflation in the two sectors, the average price level relative to other countries will increase in such a scenario. Given the highly centralised system of wage setting in Greece, a crucial assumption of the model seems satisfied. However, there is also evidence that wages in Greece's sheltered sector lead wages in the exposed sector instead of following them. Quantitative estimates of the Balassa-Samuelson effect for Greece can be found in IMF (1999).

22. It should be noted that the faster increase of contractual private sector pay in 2002 may be partly offset by lower wage drift, resulting from the slowdown in average annual GDP growth; thus, average earnings will accelerate to a lesser degree. Further, unit labour cost in the business sector, although growing somewhat faster than in 2001, will be damped by the abolition – as of January 2002 – of "stamp duty" paid by employers (which was a component of non-wage labour cost and was equal to 0.6 per cent of wage outlays).

23. For a description of the tax reduction package and the spending initiatives embodied in the 2001 Budget (presented to Parliament in November 2000), see OECD (2001a).
24. In line with Eurostat conventions, capital transfers to public enterprises are classified as acquisition of assets on a national account basis. Specifically, the state undertakes a capital increase in a public enterprise, and thus obtains an asset (equity) equivalent in value to the resources injected into the enterprise. Another adjustment beneficial to the budget outcomes is the assignment of the payments made not of the government's volition (mainly court-awarded pay) to the year in which the obligations took place, and not in the year they are actually paid. The 2001 and 2002 budgets included no such payments.
25. The 2001 Update of the Hellenic Stability and Growth Programme: 2001-2004. The December 2001 version of the Programme has been revised subsequently by the Ministry of National Economy in light of revisions to data for the years 2000 and 2001. The latter is used as a basis for the present analysis.
26. Output growth projections were revised down to 3.8 per cent at the time of the 2002 Budget (presented to Parliament on November 22nd 2001), from an estimate of 5.2 per cent at end December 2000, included in the 2000 Stability and Growth Programme, and 4.6 per cent at the time of the first draft of the budget in October 2001.
27. The OECD expects a surplus of 1 per cent in 2003, with the structural overall balance moving to a surplus of 0.6 per cent of potential GDP.
28. An important question in this context relates to the extent that Greece could allow automatic stabilisers to work, without endangering the specified deficit ceiling. As noted in the previous *Survey*, estimates by Artis and Buti (2000) suggest that a medium-term target deficit of 1½ per cent of GDP would suffice to comply with the Pact's requirements. A greater cushion is desirable, however, as recourse to discretionary fiscal policy may be more desirable than in most Euro area member countries. This is due to the relatively low sensitivity of the budget to the economy (van den Noord, 2000), which implies, in turn, that the economy is also relatively less affected by automatic stabilisers.
29. EPC/ECFIN/655/01-EN.
30. For a discussion see Manessiotis and Reischauer (2001).
31. To this end, a major project is under way which is expected to take some time to be implemented.
32. According to the Eurostat, the general government consolidated gross debt figures for Greece (and some other European countries) are likely to be revised upwards, as they do not incorporate share convertible bonds and privatisation certificates issued by the Greek state. The accounting treatment of securitisation is due to be decided by Eurostat by the beginning of July 2002 (Euro-Indicators, *News Release*, No. 35/2002, 21 March 2002, Eurostat).
33. The calling of debt guarantees also inhibits the adjustment of public debt in line with changes in general government's fiscal balance.
34. In the past social security funds had to hold a large portfolio of government bonds. They are netted out in the calculation of the consolidated Maastricht gross debt data. Pension reforms in late 1990s enhanced the autonomy of the social security contribution funds to manage their portfolios, of both financial assets and real estate, by permitting them to invest 23 per cent of these assets. The portion of the social security surpluses used to acquire assets other than government bonds amounted, on the basis of IMF calculations, to around 1 per cent of GDP in recent years.

35. In 2000, the Ministry of Finance raised € 740 million (around 0.6 per cent of GDP) from the securitisation of future dividends from Consignment Deposits and Loans Funds, and € 650 million (around ½ per cent of GDP) from the State Lotteries, with the corresponding proceeds used to reduce public debt. The government raised in 2001 the amount of € 2 000 million (around 1½ per cent of GDP) from the securitisation of future flows from the EU from the financing of CSFIII.
36. IMF independent estimates also point to the need of a primary surplus of around 9 per cent of GDP to meet the 60 per cent debt target by 2010 (IMF 2002).
37. In 2000 (end-year) the share of debt with maturity of less than a year comprised only around 11½ per cent of the domestic tradable debt, while the corresponding share with a maturity of over five years stood at 38 per cent.
38. The largest volume of floating rate bonds will be redeemed in 2003.
39. For example, in the December 2001 Update of the Hellenic Stability and Growth Programme: 2001-2004.
40. For an empirical support of this result see Andrikopoulos, Loizides and Prodromidis (2001). See also Georgakopoulos, Kintis and Loizides (1992).
41. General government includes Central government, Social Security Funds and Local Governments.
42. By "social protection" is usually understood health care, sickness benefits, disability pensions (and support in kind), old age and survivors pensions, family and maternity allowances, housing benefits, unemployment compensation, and all other transfers designed to support the needy.
43. Evidence in support of this assertion is provided by the low-income elasticity of government expenditures and especially of income transfers during this period. See Georgakopoulos and Loizides (1994).
44. These so-called "problematic enterprises" were a group of 36 enterprises, totally or partly belonging to the private sector which were nevertheless supported by the government.
45. Public employment data in Greece are poor and not altogether comparable with other OECD countries, and the Public Management Service (PUMA) of the OECD (1994) does not include Greece in its study.
46. A civil service career is most likely to start and finish within the same ministry. There is no inter-ministerial corps, though this possibility has often been envisaged and the relevant legal provisions are already in place. There is a widely shared belief among specialists that inter-ministerial corps would enhance flexibility and work against compartmentalisation.
47. Moreover, the Ministry is taking steps to establish a long-term planning for recruitment: a new draft law on Personnel Recruitment is being prepared and will be submitted to the Parliament by the end of June 2002. The main provisions of the draft law are: the revision of selection system based on objective criteria (for example, education level, knowledge of foreign languages, experience in the position field, general working experience, use of information technology and others), point system for recruitment, enhancement of the role of the High Council of the Selection of Personnel, along with the simplification acceleration and decentralisation of recruitment procedures.
48. The "1 in 5" policy has recently been abandoned.

49. As noted in the previous *Survey*, the estimates for private expenditure included in total outlays are subject to large margins of error, as they also attempt to capture unofficial payments. Another source of uncertainty regarding the amount of health spending arises from the poor accounts of hospital and social security funds, as well as the existence of long arrears to suppliers. They are cleared with a long delay by the government.
50. Law 2889/2001.
51. On the basis of the new law, a permanent contract will be granted to new recruits after 10 years (instead of 2 years) of service, on the condition that they have met successfully three consecutive evaluations.
52. The entitlement to "full-time exclusive" occupation in NHS refers solely to the university-status medical personnel, as the rest of NHS doctors are not entitled to operate private offices. The university doctors reacted negatively with strikes to the provision of the new law. However after a Supreme Court decision, the situation has calmed down.
53. The introduction of global budgeting – proposed in the 1997 reforms – has been postponed to the year 2002. The implementation of this measure is currently under the responsibility of PESYs' management. Moreover, the introduction of new methods of payments in public hospitals, including the diagnostic related groups payment (as distinct from uniform fees-per-patient), will be considered after the implementation of the planned reforms of the primary health care system and the establishment of a single Unified Health Fund. The diagnostic related groups payments (a measure not envisaged in the 1997 reforms) would allow for a differentiation between surgical and pathological services (including separate rates for specific cost services).
54. These include the social security funds for salaried workers (IKA), agricultural sector (OGA), civil servants (OPAD), entrepreneurs (OAEE) and Nautical employees. It is estimated that the primary health care reform, especially the establishment of ODIPY and the effective management of economic resources, will generate cost savings that will finance the implementation of family doctor.
55. The unification of primary health care foresees that all the medical services (mainly the IKA polyclinics and their staff) that currently belong to the above mentioned five largest health insurance funds, will be integrated into the PESYs/NHS under the responsibility of the Minister of Health and Social Welfare, and administrated by ODIPY.
56. A new package of measures to control the fast rising demand for pharmaceuticals is also under preparation. This includes a catalogue of the "over-the-counter drugs" (OTCs) – that is, drugs which will neither be prescribed nor be covered by the insurance funds. Between 1998 and 2000, expenditure on pharmaceuticals rose by over 30 per cent in real terms. See previous OECD *Surveys* for a discussion of the measures taken since 1997 to control pharmaceutical expenditure.
57. Those who joined the labour force after January 1993 will have lower replacement rates on retirement.
58. Data presented in the EU EPC report "Budgetary challenges posed by ageing populations" EPC/ECFIN/655/01-EN final, October 2001.
59. EU EPC, *ibid*.
60. Bassanini and Scarpetta (2001a); and Bassanini, Scarpetta and Hemmings (2001).

61. Lower secondary school teachers with 15 years experiences.

62. Antoninis and Tsakloglou (2001) examined the distributional impact of public education in Greece using the micro-data of the 1993/94 Household Budget Surveys. The aggregate distributional impact of public education is found to be progressive although the incidence varies according to the level of education under examination. In kind-transfers of education services in the fields of primary and secondary education lead to a considerable decline in inequality, whereas the distributional impact of tertiary education transfers is found to be regressive. Moreover, the overall progressivity of public education transfers declined between 1988 and 1994, and almost the entire decline is driven by changes in the progressivity of tertiary education transfers.

63. Greece received large amounts of resources for training from the EU Social Fund after entry, and implemented co-financed training activities.

64. Greece is not in the sample of OECD countries for which detailed data and analysis are available in the OECD publication "*Education at a Glance*".

65. These include: *i*) all central government departments (*e.g.* the various Ministries, the General Secretariats, etc.); *ii*) all independent Administrative Bodies; *iii*) all other decentralised public authorities having their own budget (*e.g.* Post Office Savings Bank); *iv*) all Public Law Legal Bodies (Universities, Regional Health Councils, Public Libraries, Social Insurance Bodies, Research Centers, Hospitals, etc.), as well as all public bodies established by them; *v*) local and Prefecture governments, as well as all public bodies established by these authorities; *vi*) all private law legal bodies, enterprises and every body that is subsidised by public money, including subsidies from the EU or any other International Institution, as well as all bodies that get loans under the government guarantee; *vii*) all specials account operating outside the government budget.

66. Another important recent development is the setting up of a new Committee composed of academic and government official experts in accounting and control methods which will look at the question of government expenditure evaluation and control in an attempt to improve efficiency in the public sector and restraint in government expenditure.

67. CSF include both structural and cohesion funding. Structural funds have been in place since the creation of the European Community (EC) to reduce the gaps between more and less advanced regions. The Cohesion Fund was introduced in 1993 to support specifically the least prosperous member countries (Greece, Ireland, Portugal and Spain) by funding investment projects for environment and transport infrastructure.

68. In the definition of value added per employee.

69. Latest estimates for most OECD countries can be found in the OECD (2001) *Science, Technology and Industry Scoreboard*, Table D.3.1. For details on the calculation method see Scarpetta, Bassanini, Pilat and Schreyer (2000), "Economic growth in the OECD area: recent trends at the aggregate and sectoral level", OECD *Economics Department Working Paper* No. 248, May.

70. The positive differential between the growth of labour productivity and multi-factor productivity is attributable to increased capital deepening, *i.e.* an increase in the capital/labour ratio.

71. Greek authorities estimate that potential GDP growth rates are higher by approximately half a percentage point.

72. The Greek population is rising significantly at present, largely because of the substantial influx of immigrants. They tend to have high participation rates, and are in part responsible for the comparatively high rate of growth of potential GDP. Arguably, if this influx is reduced in future, and as convergence to EU average income levels occurs, Greek potential GDP growth would fall.
73. See, for example, OECD Growth Project Background Papers Vol. I-III, OECD (2001g).
74. In the regression analysis, government consumption is found to have a positive impact on growth (possibly reflecting the high importance of educational and health expenditure in most countries). Other things are not equal, however, as consumption has to financed. Allowing for this, a larger size of government is found to have a negative impact on growth.
75. See Figure 8 of last year's OECD *Economic Survey of Greece*.
76. It should be noted that full recording of migrant workers employed in Greece would result in a higher employment rate and a lower unemployment rate.
77. Persons hired under regional employment contracts can be paid at the "general" minimum wage, instead of the higher wage set by sectoral or occupational wage agreements ("sectoral" minimum wages).
78. Empirical evidence reveals a link, though not a very strong one, between low pay and low household income in Greece (OECD 1998b). A recent study by Eurostat indicates that, in all EU countries, the proportion of workers living in low wage households is smaller than the proportion of low-wage workers. The specific findings for Greece indicate that 14 per cent of all employees live in a household with a low wage rate (compared to 9 per cent in the EU area). This proportion stands at 73 per cent for low wage employees (compared to 51 per cent in the EU area) and may suggest that there is some link between low pay and low income (Marlier and Ponthieux, 2000).
79. Minimum wages in Greece are graded by the years of work experience and marital status. In consequence, the differential between average earnings in manufacturing (for blue collar workers) and the national minimum is low on average. According to a recent Eurostat study, drawing on the European Community Household data, low wage workers comprise 17 per cent of employees (corresponding to approximately 380 000 persons) in Greece, compared to an EU average of 15 per cent. (Marlier and Ponthieux, 2000).
80. The new national collective wage agreement for 2002-03 provides for an increase of 0.1 percentage point of wage outlays (0.05 percentage point for each year) in the employers' social security contributions to "Ergatiki Estia" (a Workers' Fund that finances cultural activities – *e.g.* by providing free or low-cost theatre tickets to workers). Workers' and employers' current contribution rate to "Ergatiki Estia" is 0.25 per cent (each).
81. Cross-country empirical evidence suggests that increasing tax wedges on labour income may partly account for the increase in structural unemployment observed in many OECD countries (Elmeskov, Martin and Scarpetta 1998).
82. See Nicoletti, Scarpetta and Boylaud 1999.
83. For firms with fewer than 50 employees the limit becomes 4, instead of 5 workers, and for firms between 50 and 199 employees the limit becomes also 4, instead of between 1 and 4.
84. Dismissal costs for white collar workers range from one-month salary (for employment between two months and one year) to 24 months' salary for employment longer than 28 years with the same employer. Severance payments are less generous, however, for

blue-collar workers as they amount to only 150 daily wages for workers with employment longer than 30 years (in line with the provisions of the new national collective wage agreement for 2002-03). For blue-collar workers with short tenure (two months to one year), such payment is much lower amounting to 5 daily wages, therefore facilitating short-term flexibility of employment.

85. The findings of the EU *ad hoc* Labour Market Surveys reveal that limitations to hiring temporary workers and reluctance to hire personnel with permanent contracts, due to stringent severance payment provisions and legal procedures, inhibit labour utilisation flexibility in the services sector (with the assigned coefficients to these two factors exceeding the ones for the EU– and the Euro-areas). On the contrary, strict EPL rules were not found to be important obstacles to output adjustments in the case of industry and retail trade (Politis 2000).

86. The participation rates in Figure 17 probably underestimate underlying rates, because immigrants, particularly those working in the informal sector, are substantially under-represented. Immigrants are now equivalent to 10-15 per cent of the Greek-born labour force, and actively seek employment.

87. On the basis of a recent Eurostat study, 14 per cent of women working part-time in Greece stated that they did so from choice, while 13 per cent referred to family commitments. However, in 55 per cent of the cases, women worked part-time because they could not find full-time employment (Marlier and Ponthieux, 2000).

88. The share of part-time employees in retail sales is comparable to the EU average (33 per cent of employees compared to an EU average of 37 per cent), while in industry this type of employment accounts for only 1 per cent of the employees in the sector, compared to 5 per cent in the EU area. Finally, part-time work accounts for 9 per cent of all employees in the services sector, compared to an EU average of 17 per cent (Politis, 2000).

89. At present, the service sector (including government) employs less than 60 per cent of the workforce, compared with an EU average of around 70 per cent. More strikingly, agriculture and fisheries employ 16 per cent of the workforce, 5 to 6 times higher than in the rest of the EU.

90. The new Law 2956 of 2001 on employment services, passed by Parliament in October 2001, contains provisions regulating temporary agency work and the operation of temporary employment agencies (TEAs). On the basis of the law, TEAs are companies whose scope of activity includes the provision of labour by their employees to another employer ("indirect employer") in the form of temporary employment. The levels of wages and social contributions cannot be below that set in collective agreements. A TEA may be set up only in the form of a public limited company with share capital of at least € 176 000. Its establishment also requires a special license from the Ministry of Labour, following an opinion from the Temporary Employment Control Commission.

91. Workers can be contracted out for eight months, and then for another eight months; if more than two months elapse after the second eight-month period is over, the contract is immediately converted into an *ipso facto* open-ended contract.

92. Operating hours in industry increased from 64 hours per week in 1989 to 94 hours per week in 1999. This reflects an increase in overtime work, shift work and the recruitment of temporary workers – at a time of declining employment (as measured by the number of persons) and increasing productivity (Sabethai 2000). The proportion of employees working outside standard hours exceeds the aggregate EU average.

93. In the case of the more flexible arrangement, the workers would agree to work 138 hours of overtime per year during the production peaks (to be offset by shorter hours or longer leave during troughs), in return for a 90 to 92 hours net reduction in working time over the year (resulting in an average working week of 38 hours), while no overtime payment is granted by the firm. As a result, the annual contractual working time is reduced to 1 750 hours per year, from 1 840 hours.
94. In all three cases the more flexible arrangement has been implemented by firms employing between 100 and 320 persons. The new overtime provisions, however, generated demands on the part of certain firms (such as, construction companies involved in the preparation of the 2004 Olympic Games, firm accountants in the run-up to the Euro, and banks) for special treatment. The government has increased in late June 2001, for the majority of the industries, the 15 hours ceiling of "legal" overtime per semester (*i.e.* that goes beyond the 3 hours of "unregulated" weekly overtime) per semester raising it to 25 hours (for the "heavy" industries the corresponding limit was raised from 20 to 30 hours).
95. The index of regional cohesion (the rate of standard deviation in unemployment rates for each NUTS3 region) for 1999 shows that regional differences in unemployment in Greece are only a third of those in Italy, less than a half of those in Spain and just over a half of those in Germany (Ministry of Labour and Social Affairs, 2001). Also see the ECB structural issues report L*abour market mismatches in* E*uro area countries* (March 2002).
96. Cross-country evidence suggests a negative relationship between the net internal migration and regional unemployment rates. Besides labour mobility, regional disparities in unemployment may reflect other factors, including labour force characteristics, regional earnings differentials, as well as demand factors also play a role. For a detailed discussion see OECD (2000b).
97. On the basis of current legislation, the duration of compensated unemployment ranges between 5 and 12 months, depending on the length of previous employment. This implies that, first-time job seekers who cannot find a job (with the exception of persons in the 20-29 age group, for whom, however, very rigid conditions and reduced benefits apply) and the long-term unemployed (some of whom are also first-time job seekers) are not covered by definition. The level of daily unemployment benefit is also low, amounting to about half the minimum wage (Sabethai, 2000).
98. The progress achieved so far in implementing active labour market policies is evident by the improvement of the unemployment prevention indicators, constructed by the Greek Public Employment Service. In particular, monthly data on registered unemployment flows suggest that, the percentage of young people who remained unemployed six months after their registration fell from 63 per cent in January 1999 to 37 per cent in June 2000.
99. The Public Employment Services are under the administrative responsibility of OAED and they are provided across four different levels: *i*) 50 EPCs, providing personalised services to the unemployed *ii*) 16 electronically-linked departments, connected to EPCs network, 48 Local Departments; *iii*) all OAED services are organised into seven Regional Administrations (Ministry of Labour and Social Affairs 2001). The 2001 NAPE envisaged the operation of 14 new EPCs, 11 of which are in the stage of installing the hardware and equipment, while the remaining three are still in search of headquarters. 150 additional EPCs are being envisaged for the end-2006.
100. The methodology of the individualised approach for unemployment prevention has been finalised and fully worked out. The remaining task involves its diffusion to all EPCs. The implementation of the individualised approach has been faster, so far, in the major urban areas, with the process being already completed in Athens, Salonica and Patras.

101. According to the new bill, the reorganised OAED will remain a "public entity" setting government policies on employment and combating unemployment, as well as providing unemployment insurance. Alongside this, three flexible subsidiaries, operating as "sociétés anonymes", will be established in order to undertake: *i*) personalised support to the unemployed; *ii*) initial and continuing training and lifelong learning programs; and *iii*) data collection and analysis concerning unemployment and skill shortages. These three subsidiary public limited companies are owned by OAED, running on separate budgets, and are administrated by independent board of directors in which social partners participate.

102. The 1998 law on industrial relations authorised the operation of private employment offices (for ten different categories of workers), and the 2000 legislation speeded up this process. There are currently four large private employment agencies in the country. On the basis of the new law on employment services, passed by Parliament in October 2001, temporary employment agencies may obtain a special permission to mediate in job placements, as well as to carry human resource evaluation and/or training.

103. In addition to actions for employment subsidisation and training, the 2001 NAPE involves a number of initiatives aiming to support SMEs, technological modernisation, upgrading infrastructure, simplification and rationalisation of business environment, as well as measures to improve the adaptability of business and their employees, and to increase female participation in the labour market. The NAPE 2001 is expected to benefit 770 000 persons, some 3 000 persons more than previously.

104. The survey was conducted in the framework of the OECD's Programme for International Student Assessment (PISA), during 1999-2000. PISA seeks to assess how well 15-year-olds are prepared for life's challenges. The findings showed that Greece's mean achievement in "reading literacy" was 25th out of 31 countries and significantly lower (in a statistical sense) than 19 of them. In addition, the extent of between-school variation – a composite of geographical, systemic and institutional factors – in student performance in reading in Greece was the 6th highest of the 31 countries. PISA defines reading literacy as the ability to understand, use and reflect texts in order to participate effectively in life (OECD 2001d).

105. A study by the Federation of Greek Industries (SEV), conducted in Autumn-Winter 2000, concludes that 57 per cent of the firms in the sample could not find (or had difficulties in finding) persons with the required skills and university-level education. This rate dropped to 46 per cent for persons with a lower educational level. The most difficult skills to find were associated with ICT, accounting and marketing. Informal estimates by the Association of Greek ICT Companies suggest, in fact, that the current labour shortages in ICT field amount to between 30 000 and 50 000 persons. On the basis of a recent research, conducted by the Ministry of Labour in February-April 2001, around one-third of all firms in the sample declared that they faced immediate skill shortages, with this rate edging to 46 per cent for firms with more than 100 employees. Occupations most in demand were those of salesmen, unskilled manufacturing workers, truck and bus drivers; as well as, accountants, civil engineers and construction technicians, analyst operators. A recent research by the Center for Economic Planning and Research discusses the links between education and labour market needs in Greece (Kanellopoulos, Mavromaras and Mitrakos 2001).

106. Around 67.5 per cent of students, in 1998, were enrolled in general upper secondary schools.

107. Such measures, supported to a large extent by EU funds, include further development of the Institutes for Vocational Training (IEK); the establishment of the Greek Open University; Life-Long Learning Institutions, operating within tertiary education institutions; Second Chance Schools; upper secondary stage Technical and Vocational Education Schools; Adult General Education; Counselling and School Vocational Guidance; practical work experience for higher education students; daylong Kindergarten and Elementary schools, and other. Many of these initiatives are part of the wide-ranging 1998 educational reform programme.

108. See *Press Note* 11 February 2002, Eurostat.

109. In an effort to comply with the Lisbon conclusions, Greece has engaged in an ambitious programme to combat digital illiteracy in schools, combining the setting up of IT laboratories, the development of educational software and the training of a large number of teachers. The target is that all schools will be connected to Internet by the end of 2002 and all teachers trained in IT by 2003. It is estimated that by 2006 there will be an average of one computer available for every ten students (Ministry of Labour and Social Affairs, 2001).

110. The OPIS has been incorporated in the context of CSF III, with a total cost of € 2.8 billion over the period 2000-06. It is an innovative horizontal programme, including actions which fall in four broad areas: education and culture; citizens and quality of life; employment and social inclusion; and actions related to the new economy. The programme aims, among others, to equip and network schools and universities; support entrepreneurship and job creation related to the application of ITC, in established and emerging sectors of the economy and upgrade the IT skills and employability; and promote the digital economy, through for example, the strengthening of the infrastructure support for e-business.

111. A recent example of government intervention was the support of the government of "gentlemen's agreements" among firms to constrain price increases in the run-up to EMU to meet the Maastricht inflation criterion.

112. During the five-year period from June 1995 to June 2000, hence after merger control became mandatory, the Competition Committee adopted around 300 decisions, *i.e.* five times as many as during the five-year period 1990-1995, the vast majority of which concerned merger cases.

113. In 2000, the Parliament's Transparency and Institutions Committee found that the Competition Committee had been unable to handle its responsibilities because of lack of resources, traceable ultimately to lack of financial independence, and because of insufficient staff and expertise.

114. The Law No. 2837/00 (FEK 178/A of 3 August 2000) amended the main antitrust instrument in Greece, Law No. 703/77 (Law on the Control of Monopolies and Oligopolies and the Protection of Free Competition).

115. Up to 2000, the government has consistently rejected the Competition Committee's requests for additional resources.

116. The Competition Committee recently used its increased scope for manoeuvre to propose further legislative amendments with a view to abolishing market share criteria in merger control. According to the Committee, turnover thresholds alone would be sufficient, transparent and in line with the EC Merger Control Regulation 4064/89 and the European Commission's practice.

117. Other OECD countries with populations about the same as Greece have competition policy agencies that are from 50 per cent larger (Austria, Belgium) to four to six times larger (Czech Republic, Hungary, Sweden). See Wise (2001), Section 3.4.
118. Since 1995, the Committee has requested in vain exemption from general hiring rules so it could recruit directly and pay higher salaries than the basic levels. The hiring process has also been painfully slow: for example, in 1997, the Committee ask the public sector recruitment office to hire 7 expert staff. The positions were posted in 1998; applicants were interviewed in 1999; and hiring did not happen until 2000.
119. The Competition Committee estimates that its salaries would have to be raised by 50 per cent to attract the right people.
120. The state currently controls no companies involved in the production of goods, apart from three defence companies: Hellenic Aerospace Industry (EAV), munitions factory Pyrkal, and Hellenic Armaments Industry (EVO). The government is currently exploring the possibility of merging Pyrkal with EVO, while reflecting upon the method to be used for the privatisation of the new entity. The privatisation of EAV is also under consideration. In addition, the Industrial Reconstruction Organisation (IRO), that controlled public enterprises involved in goods production, has been liquidated. The liquidation of some subsidiaries, however, has not yet been completed because of legal reasons.
121. See Mylonas and Joumard 1999.
122. Greece was granted a two-year derogation period for implementing the EU Directive on the liberalisation of the electricity sector.
123. For a discussion see, the 1998 and 2001 OECD *Economic Survey of Greece* and OECD Regulatory *Reform in Greece* (2001), as well as Mylonas and Papakonstantinou (2001). See also Greek Energy Policy in-depth Review 2002 [IEA/SLT/CERT(2002)8].
124. There is as yet no accounting separability between distribution and retailing.
125. Gas is sold on negotiated terms by DEPA (see below), an integrated monopolist, while no framework has been developed so far with regards the access to lignite, with PPC exploiting, under license, and without payment of royalties, the lignite deposits owned by the state. The natural gas transportation costs, along with the ability of DEPA to meet the projected demand of the planned units, and the levies which the PPC will charge for connecting the producers to national grid, are among the main concerns of the newly licensed investors the production of electricity with natural gas (*Kathimerini*, 4 October 2001).
126. PPC supplies large quantities of electricity at about half price to the aluminium and nickel smelting firms. These subsidies are due to be phased out in 2006 and 2003, respectively.
127. The breaking up of PPC's generation capacity should not result in inefficient productivity since the optimal operating size for generation is not large, as evidenced by the persistence of small generating companies, or their deliberate creation, elsewhere. In Italy, for instance, ENEL is required to divest 15 GW of generating capacity by 2002 in order to meet the requirements that no company controls more than 50 per cent of the generation market (Mylonas and Papakonstantinou 2001).
128. In July 2000, PPC started its restructuring programme and created a new organisation compatible to the new energy legislation, and in the view of the energy market liberalisation. The business plan targeted operating cost reduction at 10 per cent per year though to 2003, and personnel reduction from 31 000 to 25 000 persons by 2005,

through natural attrition. It also envisaged a reduction of capital expenditure by 20 per cent by 2004. To this end, a number of measures were implemented which have contributed to the remarkable improvement of financial results in 2001. In particular, profits before taxes increased from € 5.5 million in 2000 to over € 350 million in 2001, and PPC's debt burden was reduced, for the first time in the past six years, to € 4 880 million at the end of 2001 (from € 5 135 million at the end of 2000). The company's business plan provides for further improvements in the coming years. For the year 2002 the budget targets profit before taxes of € 432 million and further reduction of debt down to € 4 710 million.

129. As discussed in the 1998 OECD *Economic Survey*, for industrial users, prices can be negotiated based on a reference price that reflects the cost of alternative fuels plus a fixed margin. The resulting reference price appears to be in line with industrial prices in other EU countries, though the end-user price is higher due to the relatively high tax on heavy fuels in Greece. A few large public corporations, however, notably PPC, have signed long-term take-or-pay contracts with prices determined on the basis of costs, *i.e.* import prices from Russia plus a mark-up reflecting transport costs and DEPA's return on investments. The mark-up paid by PPC appears to be high compared with prices in the European Union. Nonetheless, as noted earlier, PPC has been granted compensation in the form of a profit-sharing agreement with DEPA.

130. Imports are also precluded because of low interconnection capacity. Demanding conditions for authorisation also raise barriers to competition from imports, as discussed in the previous OECD *Survey*.

131. For example, PPC had exclusive concessions to exploit the state-owned lignite mines, while there is a profit sharing agreement between PPC and DEPA on natural gas operation. A bidding process exists since recently to lease access to lignite mines, but so far there have been no bidders. In addition Hellenic Petroleum has a call option to re-purchase 35 per cent of DEPA.

132. Several foreign and domestic firms have tendered to participate in the low-pressure natural gas distribution companies. At this stage, DEPA is in the process of selecting a financial advisor, among those already pre-qualified, to undertake the task of the overall planning and bringing into completion the relative ventures. DEPA is due to launch international tenders asking for investors to participate in joint gas distribution companies for the eastern mainland and Evia, and for Eastern Macedonia and Thrace. This follows the creation of equivalent companies for Salonica, Thessaly and Athens last year.

133. See OECD (1998a) and Mylonas and Papakonstantinou (2001).

134. During 2001, the National Telecommunications and Post Commission (EETT) granted 38 individual licenses, following the granting of five such licenses in 2000. These individual licenses include: five licenses for Fixed Wireless Access; seven for Satellite Networks; 13 for Voice Telephony with use of Numbers from National Numbering System; three for Wireless Networks; four for Wired Network Infrastructure; three 2G licenses; and three 3G licenses. A number of new providers are expected to become operational during 2002, including three of the companies that have been granted individual licenses for Fixed Wireless Access. Finally, during 2000 EETT granted 32 General Authorisations, while 68 were granted during 2001 (National Telecommunications and Post Commission, 2002).

135. In April 2001, EETT published a regulation regarding the costing and pricing principles, on the basis of which, OTE has to apply the LRAIC+ methodology for interconnection and unbundled access to the local loop, and the Full Distributed Cost

methodology with Historic Costs (FDC-HC) for leased lines. EETT has approved OTE's proposed LRAIC+ methodology principles for interconnection and unbundled access to the local loop, and an independent auditor has been assigned in order to audit the implementation of the OTE's approved LRAIC+ methodology.

136. Until mid-November 2001, eleven beneficiaries had expressed interest for and/or requested unbundled access to OTE's local loops at 103 of its Main Distribution Frame (MDF) sites. Two agreements have been concluded, with an equal number of beneficiaries, for the provision of 92 local loops. At least 76 of the requested loops are operational (National Telecommunications and Post Commission 2002).

137. Currently, the prices required by OTE for full unbundled access to its local loop are comparable to the EU average prices for similar services. In December 2001, EETT issued its decision approving (subject to changes) OTE's Reference Offer for shared access to its local loops, following a Public Consultation exercise during the period 20 September 2001 to 19 October 2001. The suggested prices for shared access to local loop are close to the EU average, although they are still provisional, as EETT is examining their cost orientation (National Telecommunications and Post Commission, 2002).

138. EETT issued two decisions referring to number portability and carrier pre-selection. As of May 2002, there were 13 interconnection agreements between OTE and fixed network operators and 4 agreements between OTE and mobile operators.

139. It should be noted that the market penetration of OA improved in 2001, with its domestic market share rising to 62 per cent from 50 per cent in 2000. Average per client revenue increased by 22 per cent and the passenger capacity was raised from 55.2 per cent to 60.5 per cent (National Bank of Greece, December 2001-January 2002).

140. YPA is a public service supervised by the Minister of Transport and Communications, and is delegated, according to Law 1340/83, with the governmental authority for the regulatory, operational and monitoring functions of the air transport system in Greece. In particular, the main responsibilities of YPA include: to act on behalf of the relevant Minister as the sate authority of aviation; promote, regulate, co-ordinate and monitor the Air Transport System in Greece; set rules and regulations/requirements for matters such as aviation safety, security, training, licensing/certifications and others; execute regulatory, legal and functional oversight over the airport services; operate the airport and air navigation services; and execute auditing and monitoring functions of airport and air navigation services.

141. As concerns railways, the reorganisation of the National Railroad Company (OSE) is proceeding, despite difficulties. OSE envisages that the cumulated debt will start declining from 2004 onwards. As for public transport, the operation of Athens metro since 1999, led to a rise in the number of passengers using public transports by 12 per cent, and resulted in the restructuring of the bus and trolley networks, thereby enhancing the quality of the service provided (Ministry of National Economy, 2001b).

142. Under EU rules, other European truckers can, provided they have an authorisation to operate internationally from any member state, unrestrictedly enter the Greek domestic market. There is a considerable degree of competition from liberalised non-Greek registered trucks, accounting in 1997 for almost 16 per cent of national and international hauling.

143. The following topics, included in the action plan, may provide an indication of the direction of the forthcoming reform: economic gains from possible mergers in the sector; possible economic incentives for mergers; recruitment for the fleet renewal; use of new technologies in transport undertakings operations; third party logistics and relevant legislative proposals; transport undertakings in the stock market.

144. European level legislation also governs the Greek domestic ferries sector. The European Union Regulation 3577/92 on maritime cabotage, removed cabotage restrictions for EU Member States for any ship flying the flag of an EU Member State. This Regulation includes a derogation period for Greece, until 1 January 1999 for cruise ships and vehicle ferries over 650 tons sailing between mainland ports, and until 1 January 2004 for regular passenger and ferry services and services under 650 tons (OECD, 2001b).

145. Regarding the implementation of the new regulatory framework for the domestic passenger-shipping sector, companies submitted 273 applications for new sea route licensing with final decisions to be announced by May 31st 2002 (*Athens News Agency*, 7 February 2002).

146. Empirical evidence for the contribution of financial development to economic growth through its effect on the level of investment – even in the case of countries with relatively high income levels – can be found in Pelgrin, Schich and de Serres (2002). For evidence on the links between financial development and growth over and above the links *via* investment, indicating impacts *via* overall economic efficiency see, for example, Leahy *et al.* (2001) and the references therein. Research by Rajan, and Zingales (2000) emphasises the particular importance of efficient financial systems for economic growth in countries which are less open to international trade and capital flows.

147. The regulation concerning the interest rate on saving deposits was abolished in 1993 and the regulation concerning the bank financing of small-scale industry was abolished as of end of June 2002).

148. The government *inter alia* justifies the holding of a substantial stake in the Agricultural Bank by its plans to promote the growth of the farm sector.

149. Strategic investors are also being sought for stakes in the Agricultural Bank's subsidiaries including Hellenic Duty Free Shops and Hellenic Sugar Industry. A recent example of a strategic alliance with a foreign bank is the partnership of the (state-controlled) Commercial Bank with Credit Agricole Indo Suez of France in 2000, which purchased 6.7 per cent of the Commercial Bank's share capital and is expected to increase its stake further.

150. Plans to merge the state-controlled National Bank and the private Alpha Bank, the country's two largest banks *via* a share swap, announced in November 2001 and welcomed by the government as well as the Federation of Bank Employee Union of Greece, failed in January 2002. The planned merger was believed to strengthen the Greek banking system without raising barriers to entry the Greek banking sector to other companies. The merged banking group would have accounted for about 40 per cent of the entire banking sector's assets. It would have been classed as medium-sized among European credit institutions, ranking among the top 25 in Europe based banks in terms of market capitalisation. The state's (indirect) stake in the new bank would have amounted to around 17 per cent, hence about half of its shareholding in the National Bank.

151. These are the National Bank of Greece, Alpha Bank, Agricultural Bank of Greece, Commercial Bank, and EFG Eurobank-Ergasias.

152. See the data given by K. Hope (2001) which suggest that Greece's larger banks exceed the BIS minimum capital adequacy ratio by a wide margin.

153. It is noted that in May 2002 the regulations concerning credit institutions' capital adequacy were amended and the provisions regarding the calculation of the amount of capital necessary for covering certain market risks were fully harmonised with those

of the relevant EU legislation; at the same time, a more efficient use of capital is achieved. More specifically, capital requirements for covering market risks deriving from credit institutions' positions on commodities and on financial derivatives on commodities, which were previously subject to the highest (*i.e.* 100 per cent) coefficient, are now calculated in such a way so as to take more precisely into account changing conditons in commodity markets. Furthermore, credit institutions' positions in gold are henceforth treated in a way analogous to their positions in foreign exchange. In addition, credit institutions were allowed to use, under specific terms and conditions, internal models to calculate with a better precision/accuracy their capital requirements for covering market risks. See the Bank of Greece Governor's Act 2494/27.5.2002.

154. Ratios of non-performing loans range from 3 to 9 per cent. See *www.standardandpoors.com* under Forum/Ratings/FinancialInstitutions. In this context, Standard and Poor's acknowledges the improvement in the transparency of the Greek banks' public disclosure of asset quality, but sees substantial room for improvement within the system.

155. According to Eurostat News Release No. 128/2001 – 6 December 2001, the number of banks in Greece increased on average by about 5 per cent per year from 1994 to 1999.

156. On the basis of the ratios to GDP of the level of loans, of assets and of deposits Standard and Poor's characterises the Greek financial market as "underbanked". *Ibid.*

157. The weight of the Greek stock market in the new index is only 0.5 per cent, compared with its former weight of nearly 20 per cent in the emerging-Europe category.

Glossary of acronyms

ALMPs	Active labour market policies
ASE	Athens Stock Exchange
ASEP	High Council for the Selection of Per
CMC	Capital Market Commission
CPI	Consumer Price Index
CSF	Community Support Framework
CTAC	Coastal Transport Advisory Committee
DEPA	Public Natural Gas Corporation
EAV	Hellenic Aerospace Industry
EC	European Community
EETT	National Telecommunications and Post Commission
EMU	Economic and Monetary Union
EOV	Hellenic Armaments Industry
EPCs	Employment Promotion Centres
EPL	Employment protection legislation
ERM	Exchange Rate Mechanism
ETBA	Hellenic Bank for Industrial Development
EU	European Union
FDCM-HC	Full Distributed Cost methodology with Historic Costs
GDP	Gross Domestic Product
GNP	Gross National Product
HICP	Harmonised Index of Consumer Prices
HP	Hellenic Petroleum
IASC	Integrated Airline Solutions Consortium
IEK	Institutes for Vocational Training
IKA	Social Insurance Institute
IRO	Industrial Reconstruction Organisation
MDF	Main Distribution Frame
MFP	Multi-factor productivity growth
NAPEs	National Action Plans for Employment
NAIRU	Non-accelerating inflation rate of unemployment
OA	Olympic Airways
OAED	Organisation for Manpower Development
OAEE	Social Security Fund for the self-employed
ODIPY	Organisation for the Management of Health Economic Resources
OPIS	Operational Programme for the Information Society
OSE	National Railroad Company
OTE	Hellenic Telecommunications Organisation
PES	Public Employment Service

PISA	Programme for International Student Assessment
PMI	Purchasing Managers' Index
PPC	Public Power Corporation
RAE	Regulatory Authority of Energy
SEV	Federation of Greek Industries
SMEs	Small and medium enterprises
TEI	Technological education institutes
TEPs	Territorial Employment Pacts
UMTS	Universal mobile telecommunications system (third generation mobile telephone systems)
VAT	Value Added Tax
YPA	Hellenic Civil Aviation Organisation

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Annex I

Supporting tables for Chapter III

Table A1. **General government total outlays in the Euro area, OECD and Greece**

In the Euro area, total OECD and Greece
Per cent of nominal GDP

	Euro area	Total OECD	**Greece**
1985	47.1	37.8	43.10
1986	47.0	37.9	42.59
1987	46.7	37.8	42.54
1988	46.2	37.1	41.80
1989	46.1	36.8	42.92
1990	46.8	37.9	47.49
1991	47.4	38.6	43.48
1992	48.0	39.5	45.36
1993	49.9	40.4	47.47
1994	48.8	39.5	45.50
1995	48.4	39.2	46.67
1996	48.6	39.0	44.34
1997	47.1	37.7	42.77
1998	46.4	37.3	42.71
1999	46.1	37.2	43.31
2000	44.2	36.5	43.35
2001	45.1	37.1	41.53

Source: OECD *Economic Outlook* 71, June 2002 and National Statistical Service of Greece.

Table A2. **Total expenditure of the General government (consolidated data)**

1960-2001 per cent of nominal GDP

	Final consumption	Total capital outlays		Social transfers other than in kind	Subsidies	Interest, net	Other current expenditure	Total expenditure
		Gross fixed capital formation	Other capital expenditure, net					
1960	10.56	2.60	0.63	6.45	0.09	–0.09	2.24	22.47
1961	10.09	2.82	0.70	6.49	0.31	0.00	1.96	22.38
1962	10.50	3.05	0.82	7.15	0.30	0.00	2.01	23.83
1963	10.01	2.37	0.59	7.37	0.46	0.13	1.84	22.78
1964	10.30	2.21	0.52	7.63	0.81	0.17	1.69	23.34
1965	10.30	1.92	0.40	8.08	1.01	0.25	1.31	23.27
1966	10.34	2.26	0.45	8.31	1.49	0.18	1.40	24.44
1967	11.46	2.13	0.38	9.12	1.63	0.21	1.26	26.19
1968	11.38	2.50	0.42	9.35	1.31	0.19	1.31	26.46
1969	11.03	2.54	0.43	8.92	0.80	0.20	1.50	25.43
1970	10.87	2.72	0.47	8.72	0.74	0.35	0.98	24.85
1971	10.70	2.82	0.48	8.81	1.06	0.45	0.85	25.17
1972	10.30	3.31	0.64	8.25	1.10	0.39	1.15	25.16
1973	9.54	3.01	0.69	7.32	1.57	0.40	1.16	23.68
1974	11.75	2.51	0.57	8.03	2.25	0.70	1.19	27.00
1975	12.79	2.91	0.60	8.16	2.16	0.79	1.29	28.70
1976	12.56	2.90	0.54	8.20	2.36	0.93	1.29	28.77
1977	13.29	2.77	0.44	8.90	2.49	0.87	1.30	30.07
1978	13.12	2.61	0.46	9.47	2.40	1.06	1.27	30.37
1979	13.47	2.61	0.53	9.19	1.91	1.28	1.23	30.21
1980	13.46	2.09	0.48	9.45	1.99	1.41	1.37	30.25
1981	14.80	2.55	0.54	10.88	3.06	2.02	1.58	35.42
1982	14.99	2.32	0.71	12.46	2.42	1.59	1.98	36.47
1983	15.50	2.97	0.78	12.99	1.77	2.24	2.25	38.51
1984	15.98	3.49	0.57	13.37	1.65	2.92	2.12	40.09
1985	16.61	3.65	0.56	14.23	2.43	3.58	2.05	43.10
1986	15.74	3.36	0.25	14.28	2.27	4.12	2.57	42.59
1987	16.04	2.64	0.49	14.69	1.99	5.16	1.53	42.54
1988	14.11	2.91	0.84	14.38	2.02	6.85	0.68	41.80
1989	14.98	2.86	1.16	14.66	1.49	6.77	1.00	42.92
1990	15.06	2.67	3.71	14.55	1.22	9.36	0.92	47.49
1991	14.20	3.04	1.84	14.38	0.61	8.37	1.03	43.48
1992	13.74	3.23	2.08	14.31	0.51	10.51	0.97	45.36
1993	14.30	3.02	2.32	14.59	0.50	11.36	1.37	47.47
1994	13.77	2.94	–0.30	14.87	0.40	12.58	1.24	45.50
1995	15.32	3.17	0.22	15.10	0.42	11.15	1.29	46.67
1996	14.52	3.17	–0.98	15.38	0.46	10.53	1.24	44.34
1997	15.13	3.40	–0.85	15.57	0.15	8.24	1.13	42.77
1998	15.28	3.55	–1.04	15.74	0.14	7.79	1.25	42.71
1999	15.29	3.69	–0.26	15.87	0.19	7.31	1.22	43.31
2000	15.40	3.74	–0.20	16.32	0.16	7.00	0.83	43.25
2001	15.45	3.83	–1.20	16.05	0.17	6.21	1.03	41.53

Source: Main national account aggregates of the Greek Economy, 1960-2001 (ESA-95), Ministry of National Economy, Directorate General for Economic Policy, January 2001.

Table A3. **General government expenditure by function**

Per cent of total government expenditure

	1995	1996	1997	1998	1999	2000
General public services	33.21	27.60	24.11	23.55	24.01	22.98
Defence	6.26	6.49	7.11	7.37	7.20	7.63
Public order and safety	2.32	2.27	2.54	2.56	2.59	2.62
Economic affairs	0.35	0.44	0.47	0.47	0.48	0.46
Environmental protection	1.10	1.28	1.17	1.17	1.26	1.20
Housing and community amenities	0.76	0.77	0.63	0.80	0.44	0.53
Health	8.14	8.12	8.95	9.36	9.08	8.97
Recreation, culture and religion	0.59	0.69	0.82	0.81	0.84	0.84
Education	7.66	8.11	9.47	9.45	9.54	9.59
Social protection	39.62	44.23	44.74	44.47	44.57	45.17
Total	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

Source: OECD, *National Accounts.*

Table A4. **Some government expenditures in OECD countries**[1]

Per cent of GDP

	Public services	Defence	Education	Health	Pensions	Disability and sickness	Unemployment benefits	Family cash benefits	Public debt interest
Australia									
1980	3.0	1.9	4.5	5.5	3.2	1.3	2.0	2.2	4.1
1995	3.0	2.0	5.9	4.4	3.8	0.9	0.7	0.9	3.1
Austria									
1980	3.6	0.9	5.3	5.7	13.1	1.9	1.8	1.9	4.4
1995	2.9	1.0	5.2	5.2	12.3	1.9	1.2	2.1	4.0
Canada									
1980	1.5	1.1	5.8	6.5	4.8	1.1	1.8	0.8	9.6
1995	2.4	1.6	5.0	5.4	3.1	0.7	1.6	0.7	5.4
Denmark									
1980	4.3	1.7	6.5	5.1	7.4	2.8	6.3	1.9	6.4
1995	4.1	2.5	7.7	5.7	6.0	0.9	5.3	1.1	3.9
Finland									
1980	1.6	1.6	6.6	5.6	8.9	4.4	5.5	2.7	4.0
1995	1.8	1.4	4.8	5.0	5.5	3.1	1.6	1.1	1.0
France									
1990	4.5	2.9	5.9	7.1	12.0	2.1	3.3	2.2	3.5
1993	3.9	3.1	5.1	6.5	10.9	2.0	2.6	2.1	2.9
Germany									
1991	3.9	1.4	4.5	8.0	10.7	1.9	3.7	1.2	3.7
1995	4.6	1.9	4.4	7.1	9.7	1.6	3.0	1.3	2.9
Greece									
1980	7.9	4.5	3.3	4.8	9.2	2.3	1.0	1.9	11.2
1995	6.0	4.8	2.0	2.7	5.5	1.6	0.3	0.4	1.4
Italy									
1980	4.5	1.7	4.5	5.3	13.5	1.9	2.0	0.4	11.5
1995	3.4	1.7	4.8	5.6	9.0	1.8	0.6	1.0	5.0

Table A4. **Some government expenditures in OECD countries**[1] (*cont.*)

Per cent of GDP

	Public services	Defence	Education	Health	Pensions	Disability and sickness	Unemployment benefits	Family cash benefits	Public debt interest
Japan									
1980	3.6	0.9	3.8	5.6	6.2	0.6	0.5	0.2	3.8
1995	3.3	0.9	4.9	4.6	4.0	0.5	0.0	0.2	3.2
Netherlands									
1980	9.8	1.8	4.6	6.5	7.5	5.8	4.0	1.0	5.9
1995	9.7	2.9	6.3	5.7	7.6	7.7	2.3	2.0	3.8
New Zealand									
1990	4.2	1.1	5.2	5.3	6.0	2.8	2.0	2.0	4.8
1994	4.7	1.8	5.5	5.8	7.6	2.9	2.8	2.6	8.5
Norway									
1980	3.1	2.6	6.8	6.6	6.2	3.9	2.4	2.3	2.8
1995	2.2	2.6	5.9	5.9	5.1	3.4	0.4	1.3	3.1
Portugal									
1990	2.0	2.2	5.4	4.7	7.3	2.3	1.7	0.7	6.3
1995	2.7	2.3	4.3	4.2	5.3	2.5	1.0	0.6	8.1
Spain									
1990	1.8	1.4	4.8	5.5	8.9	2.4	3.2	0.3	5.2
1995	1.7	1.5	4.2	5.2	7.8	2.2	3.0	0.2	3.8
Sweden									
1980	3.0	2.3	6.6	5.7	8.6	3.8	4.5	2.0	6.8
1995	2.9	3.3	7.6	8.4	7.2	4.4	1.6	1.7	3.9
United Kingdom									
1980	1.9	3.2	4.6	5.7	7.3	3.0	1.3	1.9	3.6
1995	1.9	5.0	4.6	5.1	7.1	1.4	1.7	1.8	4.7
United States									
1980	2.9	5.2	5.0	6.5	6.5	1.3	0.6	0.3	4.8
1995	2.5	7.1	5.3	4.0	6.3	1.2	0.9	0.5	3.2

1. SNA68/ESA79.

Source: OECD, *National Accounts*, Vol. II, and National Statistical Service of Greece.

Table A5. **Social Expenditure by function**

Per cent of GDP

	Old age benefits	Health and occupational injury benefits	Survivors benefits	Family services	Unemployment benefits	Other benefits	Total
1990	9.3	7.2	2.0	1.6	0.9	2.2	23.2
1991	8.8	6.7	1.9	1.7	1.0	1.7	21.8
1992	8.8	6.9	1.8	1.7	0.9	1.4	21.5
1993	9.0	7.1	1.9	1.7	0.8	1.8	22.3
1994	8.9	7.1	1.9	2.0	0.8	1.6	22.3
1995	9.2	7.1	1.8	1.9	1.0	1.6	22.6
1996	9.5	7.0	1.9	1.9	0.9	1.9	23.1
1997	9.8	7.1	1.9	1.9	1.0	1.9	23.6
1998	10.2	7.3	2.0	2.0	1.1	1.7	24.3

Source: National Statistical Service of Greece, *Expenditures on Social Protection*, 2001.

Annex II

Factors that will impact on budgetary outcomes in future

Better economic performance

Future developments in public expenditures in Greece will depend on a number of economic and political factors, as well as on the constraints set by the membership of the EU and the euro zone.

The basic scenario, contained in the 2001 Update of the Stability and Growth Program 2001-2004, submitted by the Greek government to the European Council in December 2001, assumes an average real GDP growth rate of 3.9 per cent, together with an alternative less optimistic scenario based on a poorer export performance and a weaker domestic demand and an average rate of 3.3 per cent real GDP growth. All international Organisations (EU, IMF and OECD) share the view that Greek economic performance will be above the Euro-area and the OECD countries average, thereby closing a part of the existing gap in *per capita* GDP. An average growth rate of above 4 per cent for the next 4-5 years is an achievable goal and would permit allocation of more resources to important goals (*e.g.* education, health) while reducing debt levels.

Privatisation

The Greek public enterprise sector is comparatively large, and makes losses.[1] Privatisation would permit lower expenditure on both subsidies and debt servicing freeing up resources for spending in areas yielding higher social and economic returns. A number of public enterprises in the banking and utilities sectors are now in the process of privatisation and the economic liberalisation that accompanied it (see Chapter IV) . In the banking sector, privatisations have progressed with an offering of 13 per cent of the Agricultural Bank share capital on the Athens Stock Exchange (ASE), in December 2000. In October 2001, the Hellenic Bank for Industrial Development (ETBA) was privatised through its acquisition by the Bank of Piraeus. The Public Power Corporation has been partly privatised, *via* a public offering in the ASE. A further 10 per cent the Hellenic Telecommunications Organisation has been offered in mid-2001, through the issue of an exchangable bond, while a strategic ally is sought for the privatisation of the postal services, with the main task of developing the express delivery mail services, *via* a 15-25 per cent offering. A strategic investor is sought for the Olympic Airways, *via* an offering of 51 per cent of its shares (the latest attempt to find such an investor finally failed) and a strategic partner for Hellenic Petroleum. A 25 per cent holding plus the management of Hellexpo has been offered to a strategic partner. The concession contract for the Corinth Canal was signed in May 2001. The Salonica Port Authorities, as well as the Football Prognostics Organisation have already been partly privatised. The Piraeus Port Authority is also in the process of privatisation.

Co-financing

By contrast, the absorption of the third Community Support Framework will lead to an increase in Government expenditure, especially on investment, both because most of these funds are spent by the government and also because new expenditures will be needed to co-finance the various projects. Over the 5-year period 2001-2005, Greece will receive about € 26 billion at 2000 prices, or as much as 30 per cent of GDP, while co-financing expenditures will reach € 12.5 billion or about 10 per cent of GDP.

Social programmes

Social expenditures, even excluding spending on public pensions are also expected to rise faster than GDP in order for the government to satisfy the rising demand for expansion and quality improvement in social services. An ageing population will put additional pressures for increases in social expenditures but a radical reform of social security, including a substantial improvement in its efficiency and effectiveness, which is now under consideration will be restraining factors. As noted, reforms to the public pension system are urgent and need to be comprehensive in scope, and large in size.

Education

The quality of public provision of education needs to improve, including at tertiary levels. This could entail higher spending 1 per student, although efficiency gains are possible. Demographic factors will play a major offsetting role, as the size of the school-age population is small and expected to fall. Between 1995 and 2010, the percentage of the population in the 5-14 age group, will fall by 12 per cent, that in 15-19 age group by 23 per cent and that in the 20-29 age group by 19 per cent (OECD, 2001). Despite the fall in the numbers of the youth population at the age of tertiary education however, pressure on expenditure at this level will likely remain high and rising. Demand for improved provision is likely to rise with income, as the benefits of longer and better quality formal education become more evident.

Re-orienting spending

The 2001 Updated Stability Programme[2] (see also Chapter II) plan submitted by the government to the European Council provides for a restraint in the overall size and a considerable restructuring of government spending towards more growth-enhancing activities. Government consumption is planned to increase by an average rate of around 0.7 per cent in the basic scenario (3.9 per cent real GDP growth) and 0.4 per cent in the alternative scenario (3.3 per cent GDP growth) and to fall from 13.6 per cent to 12.2 per cent of GDP at constant 1995 prices, over the period 2001-2004. General government investment expenditure (at constant 1995 prices) is projected to increase at an average rate of 7.7 per cent. Social transfers are planned to increase at an average rate of around 8 per cent, whereas interest payments are projected to fall at an average rate of 1.1 per cent, as a result of both falling interest rates and public debt size.[3]

Notes

1. In 2001, central government's operating subsidies to public enterprises amounted to 2.4 per cent of GDP and are estimated to increase to 2.7 per cent of GDP in the year 2002.
2. Incorporating subsequent revisions made by the Ministry of National Economy in the December 2001 version of the updated Stability and Growth Programme in light of revisions to data for the years 2000 and 2001.
3. The latter is planned to fall from 99.7 per cent of GDP in 2001 to 90 per cent in 2004.

Annex III

The main features of the law on the liberalisation of the electricity market

- The law establishes the objectives of the Minister of Development and the Energy Regulatory Authority in this sector.
- Provides for the establishment of an Energy Regulatory Authority, an administratively independent agency within the Ministry of Development, to advise and monitor the energy markets, and impose fines.
- Retains regulatory powers in the Minister of Development, notably with respect to authorisations for any electricity activities, tariffs, and public service obligations.
- Sets out regulatory principles, notably that tariffs must cover all costs, including public service obligations, and that Public Power Corporation (PPC) cannot cross-subsidise between liberalised and captive customers.
- Requires PPC to keep separate accounts for its generation, transmission, and distribution-supply activities.
- Removes PPC's legal monopoly on generation by introducing an authorisation regime for the mainland and interconnected islands and a tendering process for non-interconnected islands.
- Removes PPC's legal monopoly on supply by introducing an authorisation regime, but retains PPC as the unique supplier to captive consumers.
- Retains PPC as the exclusive owner of transmission, and exclusive owner and operator of distribution.
- Requires that a supplier owns adequate generation capacity in an EU Member state, and proves long-term access to the necessary transmission and distribution capacity.
- Provides for the establishment by June 2000 of a system operator, Greek Electricity Transmission System Operator, SA to operate, manage, secure the maintenance of, and plan the development of the transmission system. It also procures ancillary services. It will be owned 51 per cent by the state and 49 per cent by generators connected to the system, initially only PPC.
- Provides for access to the transmission and distribution grids at tariffs set by the System Operator and PPC, respectively.
- Provides that, on 19 February 2001, consumers totalling 30 per cent of demand, including all customers with annual consumption over 100 GWh, will become eligible to choose the supplier.
- Provides that the cost of commitments or guarantees of operation given before the entry into force of the Directive may be included by PPC in its tariffs. To do so, the Government applies a transitional ("stranded cost") regime.

Annex IV

Calendar of main economic events

2000

December

The Bank of Greece aligns its key interest rates with the respective rates of the European Central Bank (ECB), in view of Greece's entry into the Euro area as from 1 January 2001. Accordingly, the intervention rate on the 14-day main refinancing operations of the Bank of Greece is lowered from 5.75 per cent to 4.75 per cent.

Thirteen per cent of the share capital of the state-owned Agricultural Bank are floated on the Athens Stock Exchange (ASE).

2001

January

Greece becomes member of the European Economic and Monetary Union and adopts the Euro at the irrevocable conversion rate of 340.75 drachmas per Euro.

The telecommunication sector is being liberalised, following the opening up of the fixed-voice telephony market.

February

The electricity market is being partially liberalised.

March

The European Commission approves the targets of the Greek Government's 2000 Stability and Growth Programme for the 2000-04 period.

The government initiates a new health care reform programme with an implementation horizon of 6 years. The Law 2889/2001 legislates the "first wave" health care system reforms, which includes a significant decentralisation of decision-making authority through the establishment of seventeen Regional Health Systems, aimed at rational and manageable administrations. The regional systems are also allowed to establish state-owned public corporations to deal with hospitals' support functions.

April

The 2000 legislation for labour markets (Law 2874/2000) comes into force. *Inter alia*, it provides for new "making-work-pay" measures to encourage part-time employment; reduced ceilings for the weekly overtime at the employers' discretion; increased premia for overtime; a scheme of working time annualisation while reducing the agreed workweek from 40 to 38 hours; and a 2 percentage points reduction of the employers' social security contributions for low-wage workers.

May

The ECB lowers its key refinancing (repo) rate from 4.75 per cent to 4.50 per cent.

Morgan Stanley Capital International upgrades the Athens Stock Exchange (ASE) from emerging to mature-market status.

June

A new one-year collective agreement for the banking sector is being concluded which increases basic pay and allowances by 4.2 per cent.

The regional Health Systems become operational. They are run by professional managers (with qualifications and fees compatible to those in the private sector) and have full responsibility for financial management, recruitment of personnel and the supplies of regional units.

July

The Bank of Greece approves the participation of two major credit institutions in the development of an e-money scheme, which is planned to be implemented gradually on a nation-wide basis, using the technology of major European e-money schemes.

August

The ECB lowers its key refinancing rate from 4.5 per cent to 4.25 per cent.

September

The ECB lowers its key refinancing rate from 4.25 per cent 3.75 per cent.

October

The acquisition of the Hellenic Bank for Industrial Development (ETBA) by the Bank of Piraeus implies the privatisation of the ETBA.

November

The ECB lowers its key refinancing rate to from 3.75 per cent 3.25 per cent.

The Government presents to Parliament the 2002 Budget, which aims at a surplus of 0.8 per cent of GDP.

December

The Government submits to the European Commission the 2001 Hellenic Updated Stability and Growth Programme for 2001-04, revised in light of the adverse international developments.

15.3 per cent of the equity of the Public Power Corporation (PPC) is being floated on the Athens Stock Exchange.

2002

January

A package of tax measures comes into effect which may entail budgetary costs of around ½ per cent of GDP. The measures *inter alia* comprise tax relief for wage earners and businesses and elements which aim at the promotion of employment. The package also addresses the problems of the uneven taxation of capital income and the high cost of tax administration.

Euro banknotes and coins are introduced in Greece.

The European Commission approves the targets of the 2001 Update of Stability and Growth Programme for 2001-04.

April

The National General Collective Agreement for the period 2002-03 is being concluded, which provides for pay increases of 5.4 per cent in 2002 and 3.9 per cent in 2003, along with a variety of amendments to employment and social conditions.

A special Commission of Experts submits to the Government a far-reaching tax reform proposal which covers all taxes levied by the central government and local authorities, as well as all taxes levied on behalf of third parties, including the Social Security Funds. Social security contributions proper are in the planned reform of the social security system. Following discussions with social partners, a detailed draft reform is to be put before Parliament.

June

A new law on the "Reform of the Social Security System" is being approved by Parliament.

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