



**OECD
Economic Surveys
Greece**

ECONOMICS



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**OECD
ECONOMIC
SURVEYS
2000-2001**

Greece



ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

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BASIC STATISTICS OF GREECE (1999)

THE LAND

Area (sq. km)	131 957	Major urban areas, 1991 census (thousand inhabitants)	
Cultivated area (sq. km)	39 290	Greater Athens (including Piraeus)	3 073
		Greater Thessaloniki	978

THE PEOPLE

Population (thousands)	10 534	Total employment (thousands), 1998	3 921.1
Number of inhabitants per sq. km	79.8	by sector (per cent):	
Net natural increase (thousands)	-1.0	Agriculture	18.5
		Industry and construction	24.2
		Other activities, mainly services	57.3

PRODUCTION

Gross national product, GNP (billion Dr)	39 157.1	Gross fixed investment	
GNP per head (US\$)	12 159.7	Per cent of GNP	21.9
		Per head (US\$)	2 660.3

THE GOVERNMENT

General government (per cent of GNP)		Composition of Parliament (number of seats):	300
Current expenditures	39.1	Panhellenic Socialist Movement (PASOK)	158
Current revenue	41.0	New Democracy (ND)	125
		Communist Party (KKE)	11
		Others	6
		Last general elections: April 2000	

THE CURRENCY

Monetary unit: Drachma		Currency units per US\$, average of daily figures:	
		Year 1999	305.7
		November 2000	397.9

This Survey is based on the Secretariat's study prepared for the annual review of Greece by the Economic and Development Review Committee on 29 November 2000.

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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 13 December 2000.

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The previous Survey of Greece was issued in December 1998.

Assessment and recommendations

Better macroeconomic performance has allowed Greece to enter monetary union

Over the last decade, the macroeconomic fundamentals of the Greek economy have improved remarkably. In the first half of the 1990s, growth had been among the lowest in the OECD and living standards fell relative to the OECD average. Activity was hampered by rampant inflation, fed by the largest government deficit in the OECD area and by serious structural problems in many sectors of the economy. With policy makers setting their sight on entering monetary union, a substantial policy effort has been sustained over several years and the large macroeconomic imbalances have been brought under control. This has boosted the overall performance of the economy and the goal of joining the European Economic and Monetary Union (EMU) as of January 2001 has been achieved.

Strong activity continued in 2000 and headline inflation is up

Output growth has outstripped the euro area average since 1996. Despite the slowdown in export market growth in 1999, activity did not decelerate and is likely to expand by 4 per cent in 2000, due to strong growth of investment and exports. Meanwhile, despite the waning effects of the car sales tax cuts, moderate wage settlements, and higher oil prices, other factors such as the autumn 1999 tax and benefit package and lower interest rates have resulted again in brisk private consumption. Strong growth during 2000 should allow some decline in the high unemployment rate to 11½ per cent. Headline inflation reached a low point in September 1999, when consumer price index (CPI) inflation fell to 2 per cent. Since then, inflation has moved up to close to 4 per cent, because of the decline in the effective exchange rate and soaring oil prices. Underlying inflation has remained subdued so far, even though it has drifted up in recent months to 2.7 per cent in October 2000.

***Robust growth
is projected
for 2001
and 2002...***

Short-term growth prospects are very favourable. Exports should remain buoyant, because of strong market growth and gains in competitiveness. And domestic demand should remain strong. Household consumption should be boosted by job creation, low interest rates and brimming consumer confidence that should outweigh the negative effects of the oil price hike. Capital spending is also likely to rise substantially. Hence, output growth could be around 4½ per cent in 2001, the strongest rise in a decade, before edging down but remaining above 4 per cent in 2002. This should allow a decline in the unemployment rate to 10 per cent in 2002. Headline inflation is projected to peak at the end of 2000, but could remain close to 2¾ per cent in 2001 due to carry-over and the waning price level effects of the indirect tax cuts that have helped to ensure the Maastricht inflation criterion. Inflation may recede somewhat in 2002. However, underlying inflation is likely to drift up further over the projection period.

***... with higher
inflation the
major risk***

In recent years, the disinflation process has been largely shaped by tight macroeconomic policies and by incomes policies geared to ensuring wage moderation. Looking ahead, however, these factors may operate differently:

- First, while the two-year wage agreement of May 2000 again implies another moderate central wage increase, it does include a catch-up clause for 2002, if average inflation is higher than anticipated in 2001. Moreover, wage drift has become sizeable in some fast-growing sectors.
- Second, fiscal policy was restrictive until 1999, but then shifted into neutral gear in 2000. The fiscal stance is likely to remain broadly neutral in 2001 and 2002, even though strong growth should ensure a further significant improvement in the budget balance.
- Third, while the hard drachma policy and the maintenance of high interest rates in recent years were clearly instrumental in taming inflationary pressures, monetary policy has eased substantially. The Bank of Greece started to relax monetary policy already in Autumn 1999. Since then, the key policy rate has declined from 12.0 to 6.5 per cent in November 2000,

the exchange rate has moved down to the central rate and the long-term interest rate differential *vis-à-vis* the euro area average has become small. Monetary policy has eased further before January 2001, as the short-term interest rate had to decline by around another 175 basis points prior to joining the euro area. Moreover, liquidity of the banking system will rise between January 2001 and July 2002, when the Bank of Greece will gradually release banks' required reserve holdings that are in excess of their current reserve requirements, following the reduction in the ratio from 12 to 2 per cent as from July 2000.

The short-run effect of the monetary policy easing could be smaller than in Ireland, Portugal or Spain prior to joining the EMU, because Greek households are large net creditors. But with indebtedness low and financial markets evolving quickly, there is considerable room for leverage for both households and enterprises. Demand could thus receive a sizeable boost over an extended period. The relatively rapid expansion of credit, which is currently running at a rate close to 17 per cent, the upward drift in underlying inflation and a widening current account deficit highlight overheating risks.

Fiscal policy should be tight...

The OECD's assessment is that the fiscal stance has become neutral in 2000, with faster than expected revenue growth offsetting the 1999 tax and benefit package and slippage on the expenditure side. The 2001 draft budget again includes tax cuts. The proposed tax measures amount to ½ per cent of gross domestic product (GDP) and further tax reductions have been announced for 2002. Despite the tax package, the budget balance is projected to improve through 2002 due to cyclical gains and flat interest payments with the structural primary balance suggesting that the fiscal stance will remain broadly neutral. However, in the context of continuing strong momentum, fiscal policy should tighten to stem overheating risks. Moreover, the temptation to use revenue windfalls for additional spending should be resisted and further tax cuts should only be contemplated if accompanied by spending cuts. The primary surplus of 6 per cent of GDP is already very high. However, a move towards a larger primary surplus would allow a more rapid reduction of

public debt, which is still above 100 per cent of GDP. It would thereby provide greater scope for fiscal easing during cyclical downturns and ensure a lower country risk premium. The government's projections paint a more optimistic outlook with a target of a small general government surplus in 2001 rising to 1½ per cent of GDP in 2002. At close to 5 per cent, GDP growth is above the OECD estimates, while inflation is somewhat lower at the end of the projection period, reflecting an even more favourable assessment of the growth of potential output. In such a scenario, the slightly restrictive fiscal stance, as embedded in the official projections, would appear appropriate. The acceleration in potential output underlying the government's assessment is very rapid, however, reflecting a more optimistic view of future employment and productivity growth. A more cautious view, such as that underlying the OECD's projections, might provide a better basis for setting fiscal policy in the coming years.

*... focusing on
health and
pension reforms
and greater public
sector efficiency*

Over the longer term, severe spending pressures are building up and maintaining a sizeable primary surplus will be a challenge. In order to contain spending pressures over the medium term deep pension, health and public management reforms would need to be implemented quickly.

- *Pensions.* While the 1992 and 1998 reforms have ensured the viability of the pension system until 2005, they have not tackled its long-term financial sustainability. Adverse demographics, a low effective retirement age and benefits that are generous compared to contributions imply that, in the absence of deep pension reform, a substantial hike in the tax burden will be needed to cover future pension expenditure; the integration of economic immigrants into the social security system, as well as employment gains, will offset part of the effect of adverse demographics in the short term. The government has commissioned a wide-ranging study that will assess various options in this area to ensure the long-term viability of the system. Concrete measures could be in place by September 2001.
- *Health.* Reforms in the health sector have progressed only a little: virtually none of the measures of the 1997 health reform bill is effectively in place, other than a few pilot projects concerning primary care. The

government is now committed to take up again hospital management reforms and improvements in primary care. Moreover, a single Unified Health Fund is to be created to promote a more uniform provision of health care and establish better control over costs. The latter is urgently needed as sizeable cost overruns have occurred in recent years.

- *Public management.* The management of the public administration needs to be urgently improved: human resource management is indeed rigid, as is remuneration, and service is often poor, leading to high transaction costs. The government has acknowledged the need to upgrade public services.

Bold labour market reforms are needed to raise employment

Measures to tackle the existing labour market rigidities and to raise the low employment rate would help to reduce overheating risks. The government, following a social dialogue on labour market reform, has submitted a draft bill to parliament. The proposals to lower employment protection legislation (EPL) somewhat and tackle the few remaining impediments to part-time employment are steps in the right direction. However, the government has also proposed to raise the mandatory premium for overtime work. Alternatively, the government proposal allows for the annualisation of working time, if the employer and employees agree, while at the same time cutting the effective average work week from 40 to 38 hours. This approach would tend to raise labour cost and could reduce labour supply, if not offset by additional hirings and the other labour market measures. Concerning the other key rigidities, EPL will remain fairly restrictive mainly in the broader public sector and for white-collar workers. The recent government proposal is, however, a step in the right direction. The minimum wage is likely to constitute a barrier to labour market entry for young people and women, unemployment of both being especially high. This is why employment subsidy programmes and proposed cuts in employers' social security contributions rates target both of these groups, thus lowering the labour cost to the employer. From 2000 onwards, the government is paying a part of employee contributions to the social security system for minimum wage earners. This measure is largely redistributive, but it will stimulate labour supply and also improve

incentives to work in the formal economy. The same is true for the “making work pay” proposals concerning part-time employment. To some extent, labour market rigidities can also be addressed by active labour market policies (ALMPs). In the context of the National Action Plan, the government has started to upgrade the public employment service (PES) and a large number of Employment Promotion Centres (EPCs) are now in place. Moreover, the activation rate has increased, though it still falls short of the 20 per cent target. The effectiveness of the new set-up should be closely monitored. Overall, government actions and proposals go some way to improving labour market performance, but the still high structural unemployment and low participation rate imply that efforts in this direction need to continue.

Product market reform should focus on speeding up privatisation, raising competition...

Product market reforms are required to foster strong medium-term growth and, thus, a more rapid reduction in the still sizeable productivity gap with the other EU countries. Greece has made quite some progress in privatising the large number of state-owned enterprises. While slowing in 2000, new legislation has been introduced to facilitate and speed up privatisations and a new privatisation plan for 2001 has been drawn up. To complete the privatisation agenda, the restructuring of ailing enterprises will need to be accelerated. Taking a broader view of the operation of product markets, competition policy has been relatively ineffective so far, due to staff shortages at the competition authority and the large number of small mergers that have had to be vetted. The size threshold for the investigation of mergers has been raised recently, which will ease this problem. The competition authority should now focus closely on horizontal issues and on establishing close links with the sector regulators in telecommunications and electricity. It should also seek a role in the privatisation process to ensure that appropriate competition-enhancing is made prior to each sale. At the same time, the large amount of subsidisation for industry and agriculture, which are largely co-financed with EU funds, should be scrutinised. In particular, the large national subsidies to agriculture should be lowered and better geared towards releasing resources from the low-productivity agricultural sector.

... and stepping up the liberalisation of network industries

The liberalisation of the telecommunications sector has progressed well. The privatisation limit for the public operator has been lifted and the telecommunications sector is fully open to competition since early 2001. Liberalisation has led to a steep decline in telephone charges. Much less progress has been made in freeing up the energy sector, although the electricity sector will be partly liberalised as of February 2001. While Greek legislation has been brought into line with the relevant EU directives, competitive pressures are likely to remain low in the electricity sector. For geographic and technical reasons, foreign competition is virtually ruled out over the medium term and domestic competition is unlikely because of the public monopoly's access to cheap lignite. To foster competition, the public operator should be split into a network company and several independently-owned competing generating companies, and full privatisation of the company should be on the agenda. In addition, despite the derogation from the EU directives until 2006, liberalisation of the gas market should be speeded up. Regarding the water industry, a regulatory framework should be established prior to the full privatisation of the water companies and water pricing should be brought closer to social cost.

Financial market developments need close monitoring

The financial markets have changed rapidly. Restructuring and consolidation of private banks has reduced cost, even though overstaffing due to the strict EPL is still of concern. The restructuring of the state-controlled commercial banks has also progressed. In the current environment of fierce competition and rapid credit growth, supervision of banking has been stepped up. There remains scope, however, to improve the frequency of reporting and the quality of disclosed information, especially concerning investments in the transition economies in the Balkans.

While tax evasion is being tackled,...

A comprehensive tax reform is also needed to support strong trend growth. In this respect, the government has indicated that it plans to introduce wide-ranging measures in 2002 and this *Survey* reviews tax policy issues. Over the years, numerous tax changes have been implemented in a piecemeal fashion, leading to a complex and non-transparent tax system. As a result, the tax system has performed poorly.

However, the introduction of VAT brought a major improvement to the tax system and successful steps in recent years to raise tax compliance have been reflected in strong revenue growth. The government should build on this progress and pursue its current efforts vigorously. In this context, bank secrecy should be lifted for tax purposes, and the practice of offering periodic tax amnesties abandoned. Moreover, the large number of third-party taxes should be registered, re-assessed and eventually phased out.

... it is essential to broaden the tax bases and lower tax rates on labour...

Though the Greek tax burden is not very high by international comparison, its distribution is very uneven. Revenue from the personal income tax (PIT) is low relative to other countries, while social security contribution rates are very high. Moreover, taxation of the self-employed is low, which partly explains the very high number of self-employed in Greece. There are numerous options to widen the various tax bases and reduce the higher and more distortive tax rates.

- The taxation of the various forms of income from financial capital is uneven and distorts saving decisions. The overall tax rate on income from financial capital should be equalised, while the current practice of using easy-to-administer withholding taxes should probably be continued.
- The use of the presumptive criteria system for assessing the self-employed has meant that they have paid little tax. Reliable book-keeping appears to be a *sine qua non* for a more accurate income assessment and auditing.
- Concerning the PIT base, the generosity of tax breaks, including owner-occupied housing, should be reconsidered.

A base broadening of this sort would allow a reduction in the strong progressivity of the PIT, which in turn would help to reduce incentives for tax evasion. It would also allow a reduction in the high social security rates paid on labour income that are likely to have adverse labour-demand effects and provide incentives to work in the underground economy.

... as well as on capital

There is also a wide range of tax incentives for the business sector that should be re-assessed and streamlined. Such incentives complicate tax administration and increase compliance costs. Moreover, they are difficult to target, which can lead to a waste of resources, while an inadequate dosage may be ineffective. Tax incentives should only be provided in the few areas where market failures are likely to exist. Additional revenues from base broadening could be used to harmonise the corporate income tax (CIT) rate at a single relatively low rate. This would eliminate the current bias in favour of unincorporated businesses. Concerning tax incentives, the special regimes for shipping and offshore companies are currently reviewed in the context of the OECD initiative on harmful tax practices.

Scope for reform also exists for other aspects of taxation

The taxation of environmental pollutants should provide the right signals for abatement. In this respect, the taxation of lignite, a major input into electricity production, should be raised. Such a move should be accompanied by a wider reflection on the use of taxes to reduce greenhouse gas emissions and pollution more generally. For instance, water charges should reflect environmental pressures and scarcity, and provide the right incentives for industry and agriculture to use water efficiently. The taxation of property should also be overhauled. In particular, the implementation of the National Land Registry should be accelerated. This would provide for a more accurate basis for assessing property. Greater flexibility in setting property taxes could be given to local governments, such taxes being 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.

Summing up

Since the early 1990s, the Greek authorities have made great strides in bringing macroeconomic imbalances under control. The sustained effort has been crowned by Greece joining the euro area in 2001. While the growth and inflation performance has improved considerably, major policy challenges lie ahead. Furthermore, following this extraordinary effort, monetary policy had to ease in 2000 prior to joining EMU, thus fuelling demand. With rapid growth projected to

continue in 2001 and 2002, underlying inflationary pressures could rise. Fiscal policy should thus tighten and tax cuts only be implemented if accompanied by spending cuts. There has been expenditure slippage in recent years, largely due to the failure to implement wide-ranging health, pension and administrative reforms. In all three areas deep reforms are needed not only to improve the efficiency of the public sector but also to keep a sufficient primary surplus to ensure a rapid reduction in debt. Structural reform has also been slow in many other areas. There has not yet been a comprehensive tax reform and, except for better tax compliance, the tax system has performed poorly in various respects. The authorities have indicated that a wide-ranging tax reform will be on the agenda in 2002. Various options to broaden tax bases and lower tax rates exist. Moreover, lowering non-wage labour cost by reducing social security contributions would improve job prospects. A step in this direction is included in the recent bill submitted to Parliament. Overall, labour market performance has been poor and labour market rigidities still need to be tackled. Concerning product markets, the privatisation agenda has progressed and liberalisation of the telecommunications sector is largely a success. On the other hand, liberalisation of the energy sector and the restructuring of ailing enterprises should have progressed more rapidly and competition policy needs stronger teeth. Additional structural reforms, together with continued macroeconomic discipline, would raise potential output growth further and support a more rapid convergence of per-capita incomes to the level of other EU countries.

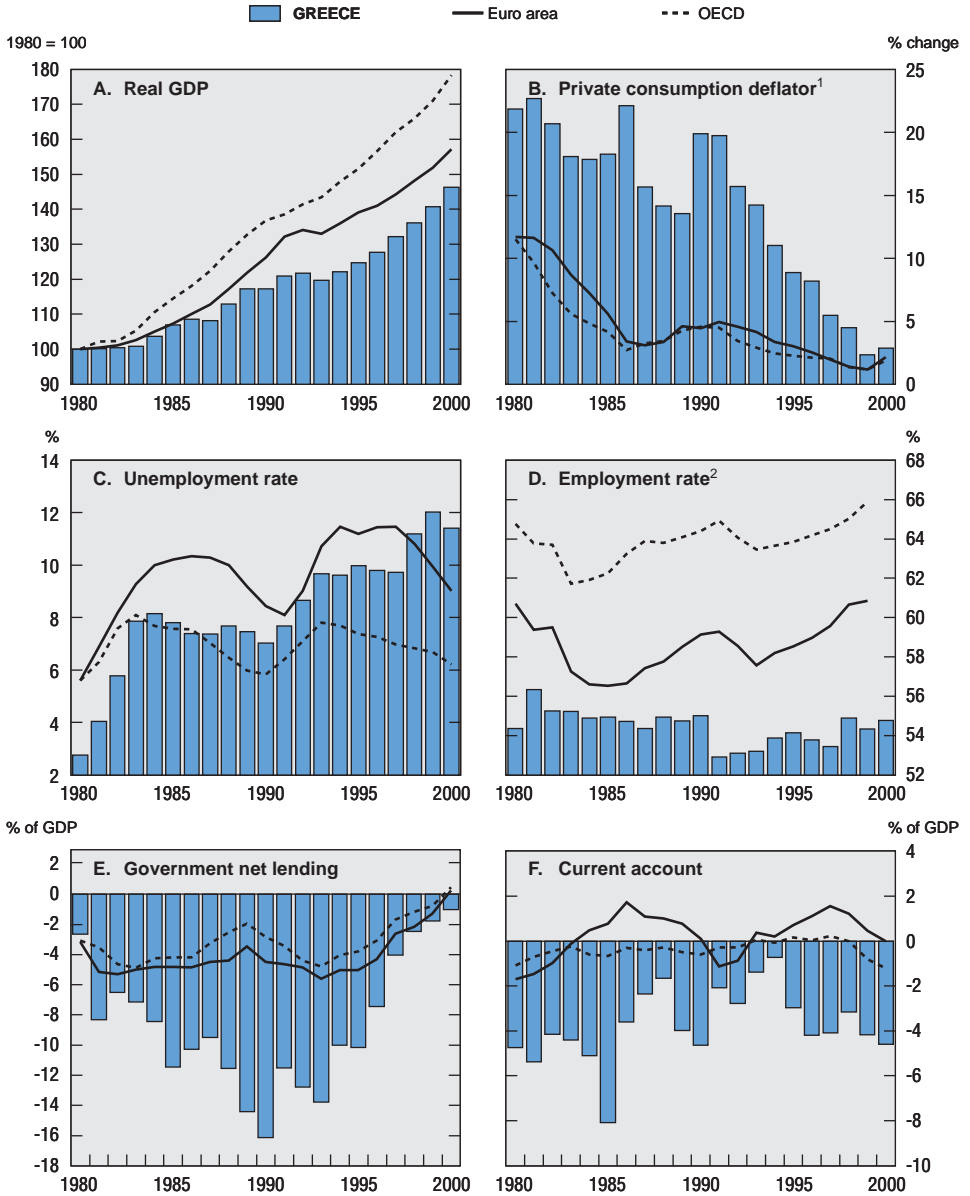
I. Recent trends and short-term prospects

Strong overall performance, but the labour market situation remains unsatisfactory

Macroeconomic conditions have improved markedly in recent years (Figure 1). Output growth has been strong and has outstripped the euro area average since 1996 by a considerable margin. Despite the sharp deceleration in export market growth in the wake of the Russian debt moratorium and the Kosovo crisis, activity did not slow in 1999 and is likely to have accelerated to 4 per cent in 2000, reflecting strong investment and export growth. At the same time, inflation has come down to a level that allowed Greece to satisfy the Maastricht inflation criterion in early 2000. The strict overall monetary policy stance, an incomes policy that has damped labour cost increases and cuts in indirect taxes were instrumental in achieving this major policy goal. Despite the increase in inflation since autumn 1999, largely due to higher oil prices, the differential with the euro area has remained close to 1 percentage point and inflation is currently higher in three euro area countries. On the other hand, the disinflation process appears to be over. The output gap has narrowed and output is likely to grow by more than 4 per cent in both 2001 and 2002. Nevertheless, labour cost pressures seem likely to remain subdued, at least until 2001, due to the moderate two-year wage settlement. In this bright picture, there is one dark spot: despite brisk activity, unemployment has drifted up, at least until recently, as labour force growth outstripped job creation. This increase in labour supply, which has been strongest amongst women, was stimulated by brisk activity and the legalisation of a large number of immigrants. The unemployment rate of close to 12 per cent in 1999 was the second highest in the euro area.

In a longer-term perspective, the macroeconomic fundamentals of the Greek economy have strengthened remarkably. In the early to the mid-1990s, growth was among the lowest in the OECD and Greek living standards deteriorated in relative terms. Activity was hampered by rampant inflation, fed by the largest government deficit in the OECD. With EMU entry becoming the major policy goal, a substantial policy effort was sustained over several years and the macroeconomic imbalances were gradually brought under control. This has not only

Figure 1. Key indicators in long-term and international perspective



1. OECD excludes high inflation countries.

2. Total employment as a per cent of working-age population (aged 16-64).

Source: OECD.

allowed Greece to join the monetary union, but has also boosted business confidence, investment and both actual and potential output growth. The cumulated output gain relative to the euro area has amounted to 4 per cent since 1996, and strong investment and a better productivity performance have raised potential output growth to 3 per cent in 2000, as compared to 2½ per cent in the euro area.

Economic developments in 1999 and 2000

Domestic demand has remained strong

Household spending has remained brisk in 1999, with private consumption expanding by 3 per cent (Table 1). Car sales were especially buoyant, new passenger car registrations rising by nearly 50 per cent. Car sales were boosted by the reductions of the car sales tax in late 1998 and in September 1999 that were

Table 1. **Demand and output**
Percentage changes, volume

	1999 Current prices, trillion GRD	1998	1999	2000 ¹
Private consumption	27.1	3.1	2.9	2.9
Government consumption	5.7	1.7	-0.1	0.8
Gross fixed investment	8.6	11.8	7.3	7.8
Private investment				
Residential	2.1	9.8	6.9	4.7
Non-residential	4.9	13.1	5.4	8.9
Government investment	1.6	10.5	14.7	8.3
Final domestic demand	41.4	4.9	3.4	3.6
Stockbuilding ²	-0.1	-0.2	-0.5	0.0
Total domestic demand	41.3	4.7	2.9	3.7
Exports of goods and services	7.7	5.9	6.5	12.5
Imports of goods and services	10.9	11.3	3.9	8.7
Foreign balance ²	-3.2	-2.1	0.2	0.0
GDP at constant prices	38.1	3.1	3.4	4.0
<i>Memorandum items:</i>				
Industrial production		4.2	0.7	5.4
Potential output		4.0 ³	2.9	3.1
Output gap		-2.2	-1.7	-0.8

1. OECD estimates.

2. Contribution to GDP growth.

3. The 1998 data include one-off effects from immigration and a change in the labour force sample.

Source: Ministry of National Economy.

aimed at restraining inflation. With the effects of the tax cuts waning, the growth of car sales has slowed down during 2000, but overall retail sales volume has grown at a higher annual rate than in 1999. In the absence of a household account it is difficult to judge income developments and movements in the saving ratio. Wage moderation has slowed real income gains and social security receipts and payments had a neutral effect on household incomes in 1999. The surge in consumer credit indicates that the saving ratio is likely to have fallen due to lower inflation and lower interest rates, with wealth effects from the stock market boom also contributing to lower savings.¹ In addition, in 2000, wage increases have remained moderate. However, a tax and benefit package, part of which came into effect already in autumn 1999, is only partly offset by the higher stock exchange transactions tax. It will boost household income by almost 1 per cent. Also take home pay for 370 000 low-paid workers has been lifted by 8 per cent in 2000 by reducing social security contributions although this measure is expected to have an effect of the order of only 0.2 per cent on the aggregate take home pay in 2000. Overall, consumption is estimated to rise again by 3 per cent in 2000.

Residential construction, after rising sharply in 1998, expanded at a slower pace in 1999 and is likely to have slowed further in 2000. The slowdown in 1999 has come against the background of falling interest rates, which had, nevertheless, still remained fairly high in real terms until recently. A wait-and-see attitude of investors in the expectation of a sharp further decline in interest rates during 2000 has probably contributed to slower investment activity.

Construction activity, overall, has, nevertheless been brisk, benefiting from public investment growth of nearly 15 per cent in 1999. After expanding strongly for several years, public investment (excluding state-owned enterprises) accounted for nearly a fifth of total investment and represented 4 per cent of GDP. The sharp rise in 1999 is due to the maturing of a number of large projects under the EU's Second Community Support Framework (CSF II), as well as to the desire to take advantage of all the funds available under the CSF II. Public Investment Programme disbursements surged in the run-up to the April 2000 elections, but slowed significantly thereafter. For 2000 as a whole, the growth in the public investment programme is expected to slow, as CSF II programmes wind down and CSF III programmes are still in their initial phase.

Business investment has remained robust. Capacity utilisation in manufacturing has risen throughout 1999 and up to the third quarter of 2000 to its highest level in five years. Investment has also been stimulated by the falling cost of capital, at least until the stock market downturn in late 1999. However, even after the sharp decline since then, the stock market index is currently still above its level in early 1999. Businesses have raised nearly GRD 2 trillion in the stock market in the first half of 2000, nearly double the amount raised in the first half of 1999. Meanwhile, profitability has improved due to wage moderation and the

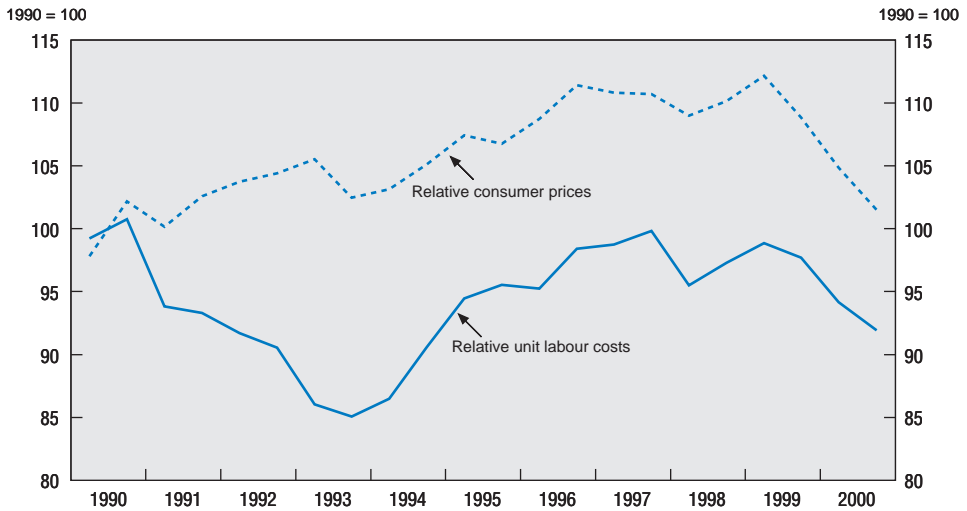
support of public funds through various channels and interest rates have followed a gradually declining path. Given these favourable conditions, business investment is likely to expand by close to 9 per cent in 2000, following a rise of 5½ per cent in 1999.

Both exports and imports have picked up since mid-1999

In the first half of 1999, market growth for goods exports slowed significantly due to slackening demand from the European Union, and as a result in particular of the Kosovo crisis and the sharp recessions in Russia and Turkey. However, foreign demand has picked up again since mid-1999 and strengthened considerably in 2000, thus boosting Greek exports. Moreover, competitiveness has improved because the effective exchange rate has weakened since early 1999, in tandem with the softening euro, and foreign markets have been regained (Figure 2). Market gains probably also reflect new business opportunities that have been created in neighbouring countries and improved product quality due to strong investment activity. Given subdued goods export developments in early 1999, foreign sales expanded by only 2 per cent for the year as a whole, but are likely to rise by close to 12 per cent in 2000. Service exports, to a large extent tourism, were very dynamic in 1999 and have also recorded sizeable increases in the first three quarters of 2000. The prices of exported goods have started to rise since early 1999. This largely reflects pricing to market following the depreciation of the exchange rate and points to healthy profit margins in the traded goods sector.

Import developments have mirrored domestic demand developments, with imports expanding more rapidly in 2000 than in 1999. However, the acceleration in import growth was less sharp than for exports. Meanwhile, import prices started to rise in early 1999, due to the depreciation of the exchange rate and accelerated further as a result of the surge in the oil price. However, the terms-of-trade loss due to the oil price hike has been partly offset by the concomitant acceleration of export prices.

Estimates based on a settlements basis suggest that the current account deficit of the balance of payments has risen to just over 4 per cent of GDP in 1999 (Table 2).² The large deficit on goods trade has increased somewhat, offset partly by a widening services surplus, while the sizeable amount of transfers, mainly from the European Union, has helped to limit the current account deficit. Portfolio investment, while still very large in 1999, has fallen considerably, reflecting a shift away from Greek bonds as yields have become less attractive. It was still sufficient to keep the financial account in surplus. The current account deficit is likely to rise to 4½ per cent in 2000, because of the higher oil bill as well as increased imports of investment goods, due to the acceleration of investment in equipment, and of passenger cars, spurred by faster growth of real disposable income and consumer credit. Recent data suggest that the current account deficit could widen more

Figure 2. Competitiveness¹

1. Real effective exchange rates in manufacturing.
Source: OECD.

Table 2. The balance of payments
Per cent of GDP

	1998	1999	2000 ¹
1. Balance of payments			
Trade balance			
Goods	-13.7	-14.4	-16.8
Services	5.6	5.8	6.6
Income	-1.3	-0.5	-0.4
Transfers	6.3	4.9	6.0
Current account	-3.2	-4.1	-4.6
2. National accounts			
Current external balance	-3.9	-3.2	-3.7 ²
Net capital transactions	2.3	2.2	2.1 ²
National net lending	-1.7	-1.0	-1.6 ²

1. OECD estimates.

2. Official estimates.

Sources: Bank of Greece and Ministry of Finance.

sharply in 2000. National accounts data, on the other hand, suggest that the deficit has shrunk to close to 3 per cent of GDP in 1999. Both exports and imports are higher in the national accounts, as they are based on customs data, though imports by much less so than exports, in part reflecting the ESA95 changes. These have led to an upward revision of exports by 12 per cent, while imports were only raised by 2 per cent. Foreign net borrowing (after allowing for the sizeable net capital transfers) was fairly limited in recent years, suggesting that foreign indebtedness has changed little, despite the large current account deficit.

Despite stronger growth of potential, the output gap is shrinking rapidly

Although output growth had been subdued until the mid-1990s, it has been above 3 per cent since 1997. Slow growth implied not only the emergence of a sizeable output gap, but also a sharp deceleration in potential output growth, reflecting a lower rate of capital accumulation and the upward drift in structural unemployment. As a result, the trend output growth rate declined to only 2 per cent by the mid-1990s and Greece made no head way in narrowing the wide income gap with the other EU countries. The situation has improved considerably since then. Strong capital accumulation has by far outweighed the further upward creep in the structural unemployment rate and also underlying total factor productivity appears to have improved to some extent. This has led to a recovery in the growth of potential output to 3 per cent in 2000. With domestic demand expanding by around 3 per cent in 1999 and 3½ per cent in 2000, and exports contributing positively to output growth in both years, GDP growth is likely to have accelerated from 3½ per cent in 1999 to close to 4 per cent in 2000. Hence, the output gap has been closing and by 2000 it has become rather small.

Unemployment has continued to rise until recently

Despite strong output growth, unemployment has risen sharply in 1998 and 1999. Indeed, the labour force grew faster than employment mainly reflecting the rising participation of women in the labour market and the reversal of the “discouraged worker effect” of earlier years. As a result of the 1998 legalisation programme for a large number of illegal immigrants up till the April 1999 deadline 373 000 residence permits (“white cards”) had been requested and 225 000 immigrants had also asked for an employment permit (“green card”), with 167 000 having been approved up till mid-2000 and 3000 having been turned down. In mid-2000, 55 000 requests were still under examination. Legalised immigrants do not seem to have displaced Greek workers, but have rather helped prevent or alleviate bottlenecks in certain geographical areas or sectors (agriculture, construction, household services) thus contributing to both GDP growth and to labour cost restraint. As overall employment declined somewhat in 1999, following the sharp increase in 1998,³ the unemployment rate rose to 12.0 per cent in 1999 (11.7 per

cent for the second quarter of 1999 on the basis of the Labour Force Survey), and was the second highest in the European Union. Unemployment is concentrated among women and young persons, both groups with rising participation rates. This points not only to labour market segmentation, but also to weaknesses in the system of education and training (skills mismatch for young job seekers) and, as witnessed by the low incidence of part-time, to inadequacies in the social infrastructure and the working-hour schemes available for female workers with family responsibilities. While private sector job creation in the non-agricultural sector has been strong, government employment has grown little due to recruitment restraints and job opportunities in the primary sector are declining rapidly.

Recent labour market indicators are very sparse, so that little can be said about developments in 2000. Strong growth is likely to have helped improve labour market performance, as are the various labour market programmes introduced recently. Moreover, the legalisation of immigrants has largely run its course. Judged by the numbers on registered unemployment, the unemployment rate may have reached a plateau in early 2000 and is likely to have declined during the remainder of 2000.

The most recent OECD estimates of the structural unemployment rate suggest that it has drifted up during the 1990s to close to 10 per cent. Estimates by the Bank of Greece (Zonzilos, 2000) yield very similar results. There may, thus, not be much labour market slack left, despite the high rate of unemployment. Business survey data, however, suggest that firms are not yet constrained by lack of labour.⁴ The view that labour market slack may not be great any more is corroborated by the fact that wage inflation, though moderate by Greek standards, no longer decelerates. Moreover, labour market rigidities exist that have led to a high degree of labour market segmentation and differences in regional unemployment rates are large and persistent.

Wage settlements have remained moderate, but inflation has veered up

Wage inflation has come down sharply during the 1990s. Since 1998, it has been shaped by an incomes policy focusing on public sector wage restraint, while attempting to forge moderate central wage agreements between the social partners. The wages for civil servants have risen by 2½ per cent in 1998 and 2 per cent in 1999. The two-year wage settlement for the private sector set minimum collective wage rises at 4½ per cent in 1998 and 2.8 per cent in 1999 compared to 6.5 per cent in 1997. Average annual increases including catch-up clauses amounted to 8 per cent in 1997, 5.4 per cent in 1998 and 3.5 per cent in 1999.

Another two-year wage agreement was signed in May 2000. It provides for minimum collective wage increases of 3½ per cent in 2000 and 3¼ per cent in 2001 leading to average annual increases of 4¼ per cent and 3¼ per cent in 2000 and 2001, respectively. The agreement provides for a catch-up clause in the event of

an unforeseen increase in inflation in 2001. Specifically, there will be compensation in 2002, if inflation is higher than 2.3 per cent in 2001. At the same time provisions for annual and maternity leave have become somewhat more generous and leave for marriage and childbirth has been introduced. Basic wages of public sector employees were again raised by 2½ per cent in 2000. With some categories receiving a sharper pay rise and including higher pay due to seniority, promotions and more generous benefits and allowances, wages per public sector employee will rise by more than 7 per cent.⁵ Moreover, take-home pay for 370 000 low-paid workers has been raised by 8 per cent as of September 2000, as the government will fund a part of the employee's social security contributions.⁶ Including wage drift, which can be substantial in some sectors, such as banking, overall wages per employee are set to rise by close to 5 per cent in nominal terms in 2000 and real wages by 2 per cent (Table 3). Wage moderation in recent years has led to very moderate nominal wage

Table 3. **Wages and prices**
Percentage changes

	1998	1999	2000 ¹
Wages			
Wage rate			
Private sector	6.4	4.9	5.1
Public sector	9.0	4.8	8.5
Manufacturing, blue collar	4.6	4.4	5.0
Banks	4.0	13.1	8.5
Public enterprises	5.7	4.8	9.7
Minimum wage, blue collar	5.4	3.5	4.2
Unit labour cost, business sector	8.8	-0.4	1.8
Prices			
Price deflators			
GDP deflator	5.2	2.9	3.0
Private consumption deflator	4.5	2.4	2.9
Consumer prices	4.8	2.6	4.0 ²
Underlying inflation ³	5.3	2.9	2.7 ²
Wholesale prices, total (period average)	3.9	2.1	7.6 ⁴
<i>of which:</i>			
Exports	3.0	-0.1	10.1 ⁴
Imports	5.4	0.5	5.7 ⁴
Industry (for domestic consumption)	2.8	3.7	8.3 ⁴
Memorandum items:			
Effective exchange rate	-4.7	-0.3	-6.2

1. OECD or official estimates for annual average estimates.

2. The period average covers the 12-month period to October 2000.

3. Excluding energy and fresh food products.

4. January-September 2000/January-September 1999.

Source: Bank of Greece and Greek National Statistical Service.

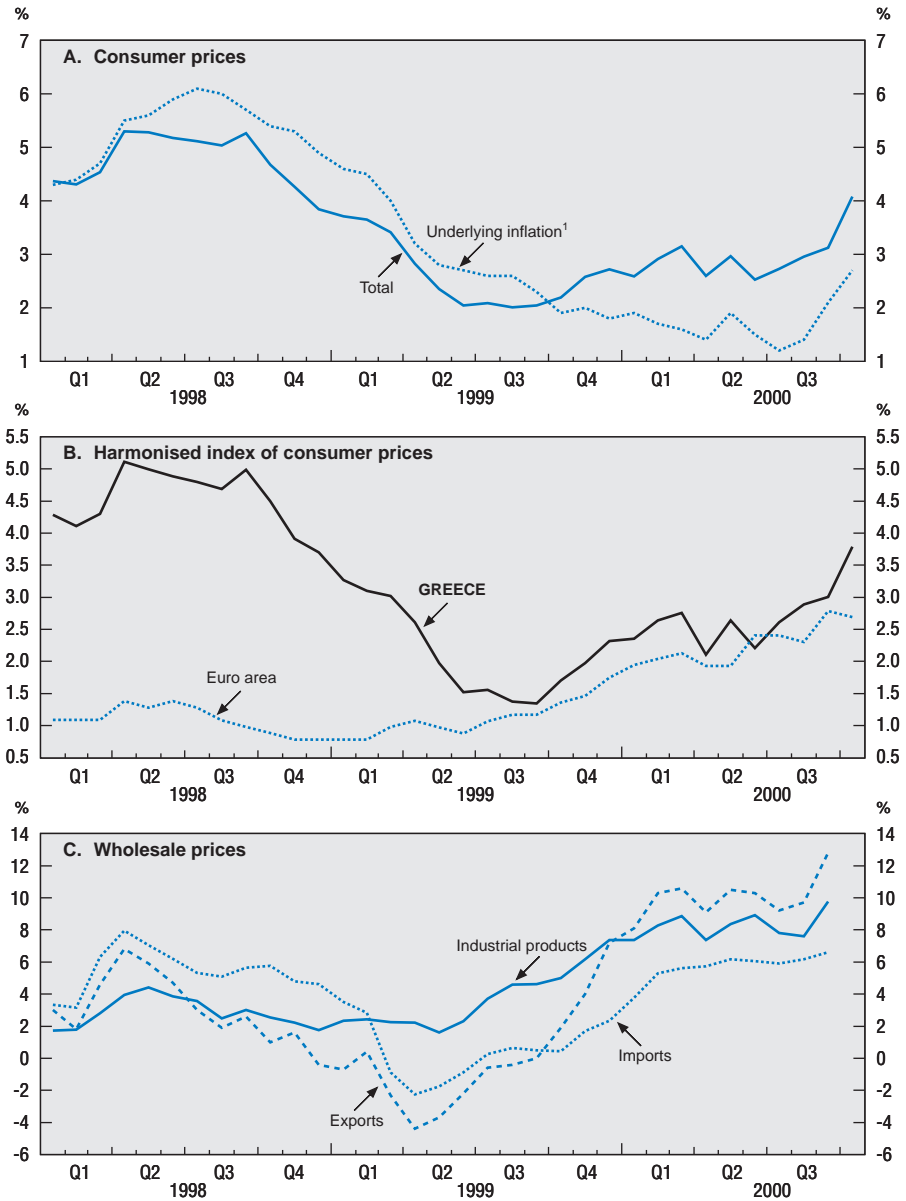
increases by Greek standards and sharply declining unit labour costs. The latter still rose at a rate of 9.3 per cent in 1997, but have come down to an estimated 2 per cent in 2000. Yet, wage moderation has gone even further in many other euro area countries. Unit labour cost in the business sector are projected by the OECD to rise by only 0.3 per cent in 2000 in the euro area on average.

Inflation has fallen substantially over the 1990s. Consumer price inflation, as measured by the CPI, has fallen steadily from 20½ per cent in 1990 to 2½ per cent in 1999 (Figure 3). The disinflation process was underpinned by various important policy choices. Probably most important was the progressive tightening of monetary policy, which implied a prolonged period of high real interest rates as well as a trend appreciation of the real exchange rate. The reduction in inflation has also been supported by fiscal consolidation and in recent years by moderate wage agreements. Between April 1999 and March 2000, the reference period for assessing the Maastricht inflation criterion, the Harmonised Index of Consumer Prices (HICP) rose by an average rate of 2.0 per cent, 0.4 percentage points below the criterion, thus qualifying Greece for entry to the euro area.

Apart from declining unit labour and capital costs, permanent cuts in indirect taxes on petrol, heating oil, electricity and cars have helped to restrain price increases. Such cuts were gradually introduced between October 1998 and December 1999. Official estimates suggest that they reduced average annual consumer price inflation by 0.9 percentage points in 1999.⁷ In principle, such reductions are of a “one-off” nature, as the effect on inflation vanishes after 12 months. However, there were also second-round effects as lower inflation has helped to avoid the triggering of wage catch-up clauses. Moreover, inflation expectations may have been lowered, thus helping to secure a moderate wage deal. Apart from the indirect tax cuts, the Greek government concluded a number of gentlemen’s agreements to restrain price increases of goods and services. In 1998, such agreements covered about 10 per cent of the CPI basket, rising to 30 per cent in 1999. The agreements expired in 2000. It is not possible to assess the effectiveness of these agreements, because the potential price increases in their absence are unknown. According to Bank of Greece estimates, the items covered by the agreements rose somewhat less than average inflation in 1998, but in line with headline inflation and above core inflation in 1999. On top of these measures, the liberalisation process has helped to contain inflation, with the communications component falling by more than 15 per cent (year-over-year) in mid-2000, reflecting fierce competition in the communications market.

Despite these measures and the beneficial effects of structural reforms, the disinflation process came to a halt in September 1999, when year-on-year CPI increases hit 2.0 per cent and HICP inflation 1.3 per cent.⁸ Since then, inflation has risen again, due in part to the decline in the effective exchange rate and soaring oil prices. The weight of the fuel component is higher in Greece than in most EU

Figure 3. Price developments
Change over corresponding period of previous year



1. Consumer price index, excluding energy and fresh food products.
Source: Bank of Greece and OECD Secretariat.

countries. Year-over-year increases in the CPI fluctuated around 2¾ per cent in the first half of 2000 and went up by 4.0 per cent in October, with the fuel component up by 33.9 per cent. The same factors pushed wholesale price inflation to 9.2 per cent in September (5.0 per cent if fuel prices are excluded). Underlying inflation, measured by the CPI excluding fuel, fresh fruits and vegetables, has remained subdued until mid-2000, but it has drifted up to 2.7 per cent in October 2000. Overall, and abstracting from temporary factors, the disinflation process appears to have come to an end.

The disinflation process has implied a dramatic drop in the inflation differential with the euro area average in recent years. While still close to 2½ percentage points in early 1999, it virtually disappeared in September 1999. It has increased since then, but has remained close to 1 percentage point. In October 2000, three euro area countries had a higher rate of inflation than Greece. In principle, an inflation differential of 1 percentage point with respect to the euro area average should not be of great concern during monetary union. The Balassa/Samuelson model suggests that productivity differentials between traded and non-traded goods would not only generate sectoral inflation differentials, but also differentials between countries at different stages of economic development. There is ample scope for Greek productivity to catch-up with the euro area average. Based on an extended Balassa/Samuelson model and historic trends in productivity and wages, Alberola and Tyrväinen (1998) estimate that sustained inflation differentials of 2 percentage points could exist between the more and less advanced euro area countries. Similarly, an IMF estimate (IMF, 2000) suggests that the Balassa-Samuelson effect accounted for 1.2 percentage points of the Greek inflation differential against a basket of EU countries between 1990 and 1996.

Prospects for 2001 and 2002

The projection presented here is the same as the one published in the OECD *Economic Outlook* 68. The projection is based on the assumption that oil prices will remain relatively high – at USD 30 per barrel until mid-2001 – and then fall back moderately to USD 27 per barrel at the end of 2002. Exchange rates are assumed unchanged as of 30 October 2000, implying a decline of the effective exchange rate of 6.2 per cent for 2000 as a whole and a further decline of 2.4 per cent in 2001 due to carry-over. Concerning macroeconomic policies, the OECD projects that the government deficit is likely to shrink further and move into a small surplus by 2002. This largely reflects favourable cyclical effects and flat interest payments, while the stance of fiscal policy is likely to be broadly neutral. Moreover, despite the gradual monetary tightening by the European Central Bank (ECB), monetary conditions will remain fairly easy in the light of the cyclical situation.

The short-term growth prospects are very favourable (Table 4). Exports should benefit from strong external demand and, at least in 2001, also from the previous competitiveness gains. Household consumption is expected to be

Table 4. **Short-term projections**
Percentage changes

	2000	2001	2002
A. Demand and output			
Private consumption	2.9	3.0	3.2
Government consumption	0.8	0.5	0.5
Gross fixed investment	7.8	9.1	9.7
Residential investment	4.7	6.4	6.1
Business investment	8.9	11.2	12.3
Government investment	8.3	5.5	5.2
Final domestic demand	3.6	4.0	4.4
Stockbuilding ¹	0.0	0.0	0.0
Total domestic demand	3.7	4.0	4.4
Exports of goods and services	12.4	11.9	9.0
Imports of goods and services	8.7	7.8	7.7
Net exports of goods and services ¹	0.0	0.2	-0.3
GDP at constant prices	4.0	4.6	4.4
GDP at current prices	7.0	6.7	7.0
B. Prices, costs and employment			
GDP deflator	3.0	2.4	2.6
Private consumption deflator	2.9	2.7	2.5
Private compensation per employee	5.0	5.1	5.5
Total employment	1.1	1.2	1.4
Unemployment rate	11.4	10.7	10.0
C. Financial variables			
Short-term interest rate	6.0	5.7	5.8
General government balance ²	-1.0	-0.4	0.3
D. Memorandum items			
Output gap ³	-0.8	0.3	0.9
Industrial production	5.4	6.1	6.0

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.

boosted by employment gains, low interest rates and brimming consumer confidence that should outweigh the negative effects of the oil price hike on disposable income. At the same time, strong consumption and export growth, coupled with the further boost to public investment, will spur business capital spending. As a result, GDP could grow by 4½ per cent in 2001, the strongest output gain in more than a decade, before easing slightly in 2002. Even though potential output growth is estimated to have strengthened considerably in recent years, growth of more than 4 per cent is bound to rapidly reduce any remaining slack in the economy. The OECD estimates suggest that the output gap has become negligible

by the end of 2000 and that it will become positive over the projection period. The output gap, although above the euro area average, should, however, remain considerably smaller in 2002 than in Ireland, Finland and the Netherlands.

Brisk output growth should lead to job creation and the unemployment rate is projected to fall to 10 per cent in 2002. At the same time, productivity growth is likely to remain strong, reflecting capital deepening and the ongoing restructuring of the economy. Despite the tightening labour market, wage pressures should remain subdued due to the two-year wage agreement signed in 2000. This, in conjunction with strong productivity gains, should keep down unit labour cost growth in the business sector to about 2 per cent per year. Inflation is likely to peak at the end of 2000, but could remain at close to 3 per cent in 2001, due to carry-over and the waning effects of the indirect tax cuts. It is likely to recede somewhat in 2002. Underlying inflation, however, is likely to drift up further during the projection period.

The major risk concerns the sustainability of strong growth at a low rate of inflation. Especially difficult in this context is the assessment of the impact of the monetary easing due to joining the euro area. As Greek households are net creditors, the income effect will be negative. This could imply that the overall effect of easing may be less strong than, for example, in Ireland, Portugal or Spain prior to joining monetary union. On the other hand, as indebtedness is low and financial markets becoming quickly more efficient, there is a lot of room for leverage for both households and enterprises. This would imply that demand could receive a sizeable boost for an extended period of time. This would militate, as argued in the next chapter, for a tight fiscal policy stance.

II. Macroeconomic policy

Greece has attained its major policy goal of joining monetary union. This is the fruit of steady progress in reducing the large fiscal deficit that existed at the beginning of the decade and in bringing down inflation from double digit rates. Monetary policy credibility has been strengthened in recent years by granting independence to the central bank and by the entry of the drachma into the exchange rate mechanism (ERM). With entry largely assured, the Bank of Greece had started to relax monetary policy already from autumn 1999. Since then, the policy rate has declined from 12.0 to 6.5 per cent in November 2000. At the same time, the exchange rate has converged to its central rate and the long-term interest rate differential *vis-à-vis* the euro area has declined to less than 60 basis points. Before joining monetary union in January 2001, the short-term interest rate had to be brought down by another 175 basis points. The lowering in July 2000 of the high minimum reserve requirements to the ECB-mandated level implies a considerable surge in the liquidity of the banking system which will, however, be released only gradually in a time span of 18 months after joining the monetary union.

The easing of monetary conditions has implications for the setting of fiscal policy, as budgetary policy will become the main instrument for demand management. While fiscal policy was tight for several years and the budget deficit has come down to only 1 per cent in 2000, or even less, the fiscal stance has now shifted into neutral gear due to a tax and benefit package and slippage on budgeted spending. Also in 2001 and 2002, fiscal policy is likely to remain broadly neutral, despite the risk of rising cost pressures as momentum in the economy is already strong. A tight fiscal stance is desirable in the next few years to hold back cost pressures and would also be necessary to bring down public debt rapidly. Monitoring of budget expenditures will be very important in this respect since the health care, pension system and public sector are long overdue for reform.

Monetary policy

The monetary policy framework

Since Parliament granted independence to the Bank of Greece in late 1997, the central bank has conducted monetary policy in a new framework.

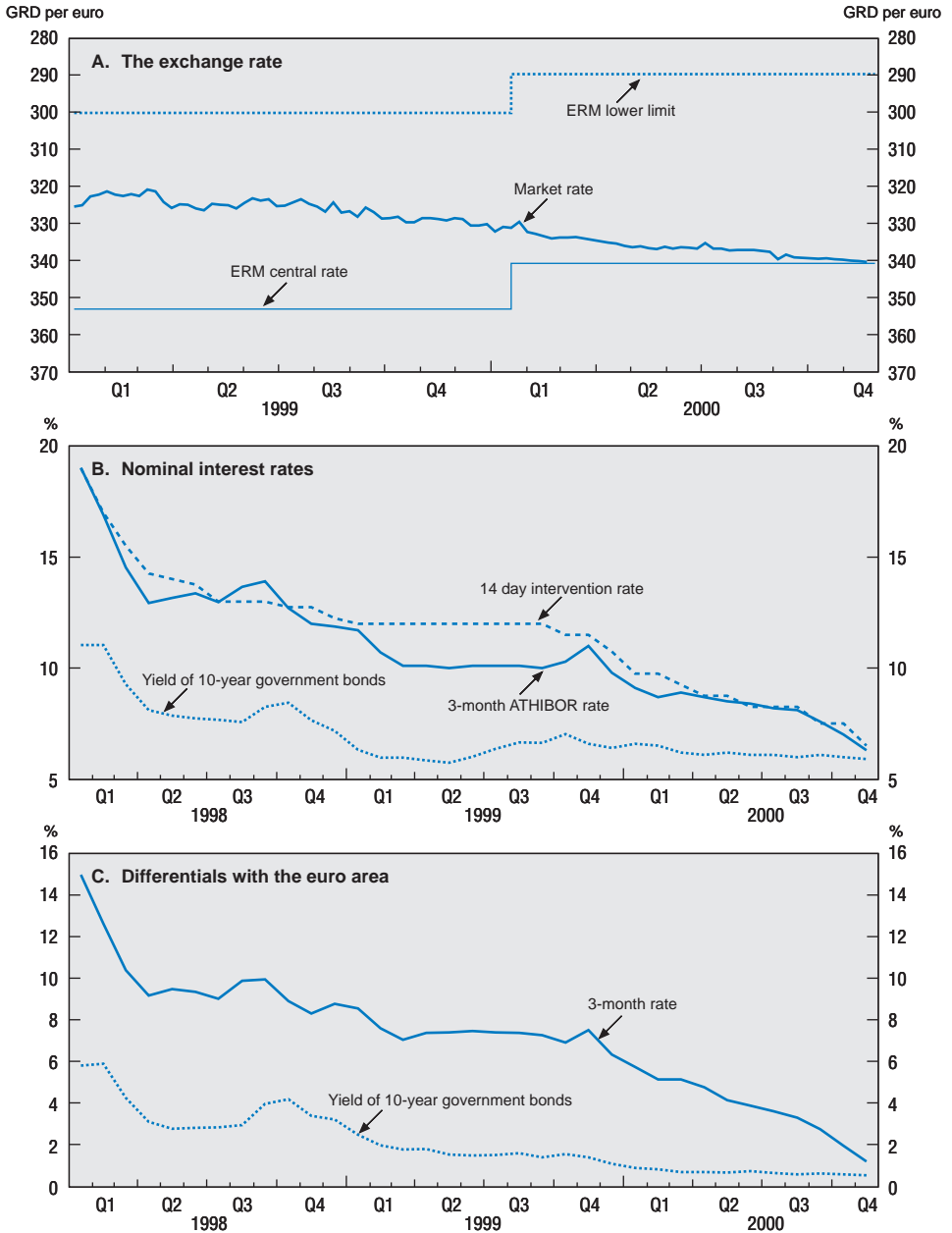
With this change, price stability has become the primary objective of the Bank. Though price stability was not defined by legislation, the Bank announced a target for CPI-inflation of below 2 per cent by the end of 1999. The Bank considered that this objective would be consistent with meeting the Maastricht inflation criterion for inflation in the first months of 2000. While the 2 per cent target was not quite met, inflation was sufficiently low to meet the criterion, because inflation elsewhere had picked up. Alongside central bank independence, the Bank of Greece was also granted control over the conduct of exchange rate policy within the framework agreed with the government.

The ERM entry of the drachma in mid-March 1998, while implying a devaluation, set the exchange rate at a credible level and helped Greece to observe the Maastricht Treaty clause on exchange rate stability prior to qualifying for EMU. While the normal ERM bands (+/-15 per cent) applied to the drachma, the Bank aimed at a narrow band of exchange rate fluctuations within 2½ per cent of the central rate. However, given the need to reduce inflation swiftly, the drachma was allowed to appreciate above the levels implied by the narrow band. At the start of the third stage of EMU in January 1999, the drachma joined ERM II, with the drachma central parity against the euro slightly lower than against the ECU in the former ERM regime for technical reasons. Eventually, the central ERM rate was revalued by 3½ per cent in January 2000, to avoid a sharp depreciation of the drachma prior to joining the single currency area. The main instruments of monetary policy were also changed when the Bank of Greece gained independence. The Bank of Greece has relied more heavily on auctions of short-term repos and forex interventions during the fixing session. The new monetary policy framework has facilitated the implementation of a tight monetary policy stance.

Monetary policy in the run-up to joining EMU

The policy to reach the Maastricht inflation criterion relied heavily on tight monetary conditions. The key 14-day repo rate was kept unchanged at 12 per cent between January and September 1999, more than 900 basis points above the ECB's refinancing rate (Figure 4). At the same time the drachma remained considerably above its central rate. However, the high interest rates led to large capital inflows that boosted bank liquidity, and the Bank of Greece had to intervene and absorb a significant amount of funds from the interbank market in order to maintain bank interest rates at a level consistent with the intended anti-inflationary monetary policy stance. As a result, bank lending rates remained almost unchanged during 1999. However, in an environment of fierce bank competition,⁹ consumer and mortgage credit expanded rapidly. In April 1999, the Bank of Greece introduced temporary reserve requirements in the form of non-remunerated deposits equivalent to the growth of credit above specified rates to mop up liquidity and delay cuts in bank lending rates. In the face of continuing rapid consumer lending, the penalty for excess lending in this category was doubled in July 1999.

Figure 4. Exchange rate and interest rate developments



Source: Bank of Greece and OECD Secretariat.

These measures were lifted in late March 2000. Overall, they seem to have damped credit demand and some disintermediation is likely to have occurred.

With HICP inflation falling to 1.3 per cent in September 1999 and the Maastricht qualification within reach, the Bank of Greece started to ease up and the 14-day repo rate declined gradually. It has been reduced in several steps to 6.5 per cent in November 2000, which is still considerably above the ECB's current refinancing rate of 4.75 per cent. At the same time, the drachma has slid gently towards its central rate and is currently very close to it. With expectations of joining the euro area firming, the convergence of the long-term interest rate has also proceeded. The 10-year government bond yield still hovered around 6¼ per cent in 1999, some 175 basis points above the euro area average. With long-term rates in the euro area rising, while being steady in Greece, the interest rate differential has shrunk to below 60 basis points in November 2000.

Overall, the monetary stance has been very tight in 1999, when judged by the steeply inverted yield curve, high real interest rates and the strength of the drachma. On the other hand, the tight stance had little effect on the rapid expansion of credit to the private sector. The easing of monetary policy since late 1999 has boosted credit demand even further. Credit to the private sector has been expanding by more than 20 per cent in mid-2000, following a 14 per cent rise in 1999 on average.¹⁰ This has prompted the supervisory authorities to step up the monitoring of the most rapidly expanding credit institutions. Monetary policy has eased significantly as the short-term interest rate differential had to decline rapidly, prior to joining EMU.

Already in July 2000, the Bank of Greece reduced the minimum reserve requirement for commercial banks from 12 to 2 per cent, the ECB's level. To avoid a surge in liquidity, only 10 per cent of the reserves will be returned to the banks in January 2001. The remainder will be converted into time deposits, maturing in 6 to 18 months. In addition, the Bank has reduced the mandatory foreign currency deposits of the commercial banks to some extent. They will also have to be brought down to 2 per cent in due course.

Fiscal policy

Policy developments in 1999 and 2000

Since the early 1990s, great strides have been made in correcting a major fiscal imbalance. The general government deficit has dropped by nearly 15 per cent of GDP since 1990, to only 1 per cent or even less in 2000. This impressive adjustment was achieved by sharply rising revenues, and since the mid-1990s, by lower debt interest payments, while primary spending has continued to drift up. On the other hand, public debt, though declining gently, has remained above 100 per cent. With the deficit falling below the 3 per cent of GDP Maastricht limit

and debt declining as a per cent of GDP, the EU Council abrogated its previous decision that an excessive deficit existed in November 1999.

In recent years, the sharp rise in revenues largely reflected the non-indexation of income tax brackets to inflation, the beneficial effects of the fight against tax evasion, and the introduction of new taxes, such as the stock market transaction tax, that was doubled in October 1999 (Box 1). On the other hand,

Box 1. **The implementation of the 1999 Budget**

Deficit reduction in 1999 was sharper than planned (Table 5). The overall deficit of the general government came down from 2.5 per cent of GDP in 1998 to 1.6 per cent in 1999, compared with a budget target of 1.9 per cent and the convergence programme's original target of 2.1 per cent. The reduction is due to a lower central government deficit, while the surplus of the social security funds remained stable.

Progress in fiscal consolidation in 1999 was achieved mainly by a better-than-expected revenue performance, which more than offset slippage on primary expenditure. Buoyant tax revenues (exceeding the initial target by 2.1 per cent of GDP) contributed to a rise in current revenues by 11.5 per cent, considerably above the rate projected in the budget. Of particular importance were the better-than-expected revenues from income taxes and taxes on capital transactions, reflecting progress in combating evasion, the collection of tax arrears, the strong activity on the Athens Stock Exchange, and the increase in the stock market transaction tax rate from 0.3 to 0.6 per cent in October 1999. Revenues from real estate transfer taxes also exceeded the budgeted amount by approximately 0.2 per cent of GDP, influenced mainly by the increase in housing loans by 25 per cent in 1999. Moreover, despite a reduction in the tax on new cars, aimed at containing inflation, tax receipts ballooned as a result of a rise in car sales of nearly 50 per cent in 1999. Value added tax (VAT) revenues undershot the budget target somewhat, though still rising considerably more than private consumption expenditure, despite the reduction in VAT on electricity.

The authorities failed to contain primary expenditures, partly as a result of unforeseen factors, including the crisis in Kosovo in Spring 1999 and the September earthquake in Athens. On the other hand, interest payments grew at a somewhat slower pace than budgeted, owing to the decline in Treasury bill yields and the significant substitution of bonds for 12-month Treasury bills. The main area of slippage in primary expenditures was personnel outlays. This development largely reflects the faster-than-budgeted increase in hiring in such sectors as education, health care, and security services, which are not covered by recruitment restraint, as well as an overrun in medical care and civil service pension expenditure. Rising levels of grants to cover the deficits in some primary social security funds have also contributed to the overrun in current primary expenditure, as did the higher mandated transfers to local authorities as a result of the substantially higher tax revenues.

Table 5. **Budget and outcomes**

	1999			2000		2001
	Budget	Estimate ¹	Outcome	Budget	Estimate ¹	Budget
Administrative basis						
Central government						
Current expenditure	11 050	11 215	11 276	11 620	11 995	12 580
(Per cent of GDP)	29.1	29.4	29.6	28.7	29.3	28.5
<i>of which:</i>						
Salaries and pensions	3 770	3 880	3 895	4 109	4 239	4 486
Goods and services	620	678	690	679	727	758
Grants and subsidies	1 559	1 587	1 605	1 757	1 782	1 927
Interest	3 350	3 320	3 303	3 220	3 400	3 310
Transfers to the EU	435	435	435	440	490	538
Current revenue	10 030	10 350	10 593	10 955	11 650	12 600
(Per cent of GDP)	26.5	27.2	27.8	27.1	28.5	28.5
Direct taxes	3 474	3 695	4 044	3 690	4 527	4 879
Indirect taxes	5 615	5 737	5 854	6 246	6 363	6 890
Non-tax revenue	942	919	696	1 019	760	831
Transfers from the EU	60	64	46	74	48	58
Investment budget balance	-1 135	-1 175	-1 225	-1 240	-1 320	-1 475
Budget balance (administrative basis)	-2 155	-2 040	-1 908	-1 905	-1 665	-1 455
(Per cent of GDP)	-5.7	-5.4	-5.0	-4.9	-4.1	-3.3
Equity acquisitions and misc. adjustments	620	620	480	670	640	630
National accounts balance	-1 535	-1 420	-1 428	-1 235	-1 025	-825
(Per cent of GDP)	-4.0	-3.7	-3.7	-3.1	-2.5	-1.7
<i>Memorandum items:</i>						
Surplus of other public entities	800	841	756	760	700	1 035
General government balance	-735	-579	-672	-475	-325	210
(Per cent of GDP)	-1.9	-1.5	-1.8	-1.2	-0.8	0.5

1. Estimate at the time of next year's budget.

Source: Ministry of Finance.

some indirect taxes were lowered to reduce inflation, without, however, seriously undermining the strong overall revenue gains. Fiscal consolidation focused much less on the spending side. While the public sector incomes policy helped to restrain government consumption, the hiring restrictions in place since 1997 only slowed the rise in government employment, but did not reverse it, and public pension payments have risen rapidly. Moreover, the recent health and pension reforms did not dent the rise in social spending and public investment has been very buoyant. Still, budgetary outcomes were close to target or even better since 1997, mainly due to positive surprises on the revenue side.

After the rapid consolidation in recent years, the fiscal strategy has shifted gear in 2000 (Box 2). While the deficit is estimated to have shrunk further, this is due to lower interest payments. After several years of a considerable tightening, the fiscal stance is likely to become neutral (Table 6). This largely reflects the implementation of a tax and benefit package, with a net cost of less than 1 per cent of GDP. Data on fiscal developments in the first ten months of 2000 show revenue and expenditure running above target, but since revenues have been exceeding the target by more than expenditure the borrowing requirement is below the initial target for 2000. Value added tax (VAT) receipts are especially buoyant. Concerning spending, there have been several spending initiatives since the 2000 budget was voted. Wages for the military have been raised, as well as minimum pensions and allowances for the handicapped, and health spending will be higher. Moreover, the decision to finance the social security payments of the lowest-paid, taken in April and implemented in September 2000, will cover payments for the full year although the payments for the period from January to August 2000 will be given in the form of a tax rebate to beneficiaries only in mid-2001. These initiatives are likely to boost primary spending by 2 to 3 per cent above target. In addition, public investment has been much stronger than budgeted, even though the pace has slowed significantly since mid-year. Taking into account the budget and fiscal developments in 2000, the OECD projections point to a general government deficit of 1 per cent of GDP in 2000. This is slightly lower than the initial deficit target of 1.2 per cent of GDP, but somewhat higher than the current official projection of 0.8 per cent of GDP.

Fiscal consolidation was accompanied by a reduction of the debt/GDP ratio from 111 per cent in 1996 to an estimated 103 per cent in 2000 (Table 6). Despite strong growth in recent years, falling interest rates, a primary surplus of more than 5 per cent of GDP since 1998 and sizeable privatisation receipts, the decline in the ratio has been very slow, owing to unfavourable "deficit-debt adjustments". These are mainly due to the revaluation of government debt in foreign currency and acquisitions of financial assets, such as capital injections into public enterprises. ECB estimates suggest that such adjustments stood at more than 3 per cent of GDP in 1999, and would have been considerably higher had there not been significant privatisation receipts (3.9 per cent of GDP). These adjustments are likely to be higher in 2000, than in 1999, due to lower privatisation receipts and the decline in the exchange rate against the dollar and the yen. Regarding the structure of the public debt, the share of debt with initial short-term (less than a year) maturity fell from 9.4 per cent of GDP in 1998 to 3.9 per cent in 1999, indicating a lower sensitivity of the budget to changes in short-term interest rates. This is mainly due to the policy aimed at lengthening the average debt maturity, through the substitution of bonds for Treasury bills, and the issue of 10-year and 15-year securities (Ministry of Finance, 2000). This development has been facilitated by the continuing interest of foreign investors in purchasing

Box 2. The 2000 Budget

The 2000 budget aims to reduce the general government deficit from 1.8 per cent of GDP in 1999 to 1.2 per cent of GDP in 2000. The budget takes into account the tax and benefit package (officially estimated to cost 1.1 per cent of GDP) announced in September 1999. Its expansionary effect is partly cushioned by a doubling of the tax rate on stock exchange transactions (estimated to generate revenues of around $\frac{1}{2}$ per cent of GDP). Some of these measures have already come into effect in autumn 1999. The main measures included in the package are:

Tax measures

- An increase in the annual tax free allowance for wage and salary earners and pensioners from GRD 1.4 million to GRD 1.9 million on 1999 incomes, and from GRD 1.9 million to GRD 2.3 million on 2000 incomes. For the self-employed, the annual tax free allowance has increased from GRD 1.1 million to GRD 1.6 million on 1999 incomes, and from GRD 1.6 million to GRD 2 million on 2000 incomes.
- An increase in the tax credit for taxpayers with children.
- Changes for the self-employed to the presumptive criteria for assessing income.
- A reduction in the tax on partnerships and civil law associations from 35 per cent to 30 per cent on 1999 profits, and from 30 per cent to 25 per cent on 2000 profits.
- A reduction of employers' taxable profits by an amount equal to 50 per cent of the employers' social security contribution for each new hire, on the condition that nobody is laid-off.
- An increase in the tax rate on stock exchange transactions from 0.3 per cent to 0.6 per cent.
- A reduction of between 30 per cent and 56 per cent in the special consumption tax on motor vehicles, depending on engine power.
- A reduction of GRD 5 per litre in the special consumption tax on petrol products.
- A reduction in the special consumption tax on heating oil (winter season), from GRD 20 000 to GRD 6 100 per 1000 litres.

Benefits

- A 10 per cent increase in the unemployment benefit and provision of free medical care to all registered unemployed.
- Old-age pensions: a GRD 10 000 per month increase in the farmers' pensions; a GRD 3 000 per month increase in the supplementary allowance for pensioners receiving the minimum pension; and a 4 per cent increase for public sector pensioners receiving up to GRD 250 000 per month.

Box 2. The 2000 Budget (cont.)

The 2000 budget projects an increase in current revenues of 5.8 per cent,* close to nominal output growth. Revenue enhancement due to continued gains from better tax collection largely outweigh the tax cuts of the tax and benefit package. As a result of the tax alleviation measures, direct tax revenue is projected to decline. Lower income tax revenues are partly offset by increased revenue from the collection of arrears. Indirect tax revenue are budgeted to increase strongly again, mainly due to the VAT, and the raising of the tax rate on stock-exchange transactions, while excise tax revenues are budgeted to fall, pulled down by the reduction in taxes on cars and fuels.

Current expenditure is projected to increase by 3.6 per cent in 2000. While the interest bill is budgeted to decline by 3.0 per cent, primary expenditure is projected to rise by 6.7 per cent. Despite a tight incomes policy (holding basic wage increases to 2½ per cent), the wage bill (including pensions) is budgeted to increase by 5.9 per cent. This mainly reflects new hirings, promotions and seniority payments, together with increases in pensions and other allowances. Other operational expenses were budgeted to increase strongly, led by transfers to primary social security funds. Regarding the public investment budget, revenue is forecast to rise by 9.4 per cent, largely reflecting EU transfers (equivalent to 2.8 per cent of GDP), while expenditure are budgeted to rise by 7.4 per cent. The borrowing requirement is estimated to be 4.9 per cent of GDP.

* The comparison is between the 2000 budget numbers and the estimates at budget time.

Table 6. The fiscal stance and public debt developments

Per cent of GDP

	1998	1999	2000 ¹	2001 ¹	2002 ¹
I. Fiscal stance					
Net lending	-2.5	-1.8	-1.0	-0.4	0.3
Net primary balance	5.4	5.8	6.2	6.4	6.7
Cyclically-adjusted net lending ²	-1.5	-1.0	-0.6	-0.5	-0.1
Cyclically-adjusted net primary balance²	6.2	6.5	6.5	6.3	6.3
2. Debt developments					
Gross debt	105.5	104.6	102.7	99.7	96.3
Change in general government debt	5.5	5.4	4.9	4.0	3.5
General government surplus (+)/deficit (-)	-2.5	-1.8	-1.0	-0.4	0.3
Deficit-debt adjustment	3.0	3.6	3.9	3.6	3.8

1. OECD projections.

2. Per cent of potential output.

Source: ECB, Convergence Report 2000 and OECD.

long-term fixed-interest government securities, in order to realise capital gains. Nevertheless, the fiscal balance remains sensitive to changes in the exchange rate, as one-third of total debt in 1999 was still denominated in foreign currency.

Are the fiscal objectives ambitious enough?

The 2001 budget projects a surplus of $\frac{1}{2}$ per cent of GDP for the general government balance (Box 3).¹¹ As in 2000, the budget includes a tax reduction package. The reduction in personal income and company taxation is estimated to cost GRD 270 billion ($\frac{3}{4}$ per cent of GDP). Despite the tax cut overall revenues are

Box 3. **The 2001 Budget**

The budget aims to realise a general government surplus of $\frac{1}{2}$ per cent of GDP in 2001. Revenues are projected to rise in line with nominal GDP, despite the tax reduction package and slower spending growth mainly owes to a decline in interest payments in absolute terms and to a less rapid increase in the public wage bill. The main budgetary measures include:

- A reduction in the highest PIT rate from 45 per cent to 42.5 per cent, accompanied by an adjustment of all tax brackets by 5 per cent and an increase in the income tax allowance by GRD 100 000.
- An increase in tax credits for families with three or more children. Moreover, expenses for the purchase of personal computers and internet subscriptions will become partly deductible from the tax base.
- The CIT for non-listed companies will be reduced from 40 per cent to 37.5 per cent and that for general and limited partnerships from 30 to 25 per cent.
- The special tax on banking activities (EFTE) will be abolished.
- Tax allowances for the transfer of agricultural property will be increased.
- About a hundred “third-party” taxes will be abolished.
- About a thousand small stamp duties will be abolished.
- The “social solidarity allowance for pensioners” (EKAS), which supplements low pensions, will be raised by 30 per cent, the agricultural workers’ pension by GRD 5 000 and IKA’s minimum pension from GRD 150 000 to 152 000.
- A heating allowance will be granted to people with a low income in two instalments, varying from GRD 30 000 to 50 000 depending on the region. Nearly 2 million people will be covered by the allowance.

The government has foreshadowed further tax reductions for 2002 and 2003, worth GRD 75 billion.

estimated to rise in line with GDP. The budget also includes various spending initiatives. The sizeable swing in the budget balance, from a deficit of $\frac{3}{4}$ per cent of GDP in 2000 to a surplus of $\frac{1}{2}$ per cent of GDP in 2001,¹² largely owes to the strong growth underlying the projections (5 per cent in real terms and 8 per cent in nominal terms) and the projected decline in interest payments in nominal terms. Given the lower interest payments the change in the primary balance between 2000 and 2001 would only amount to $\frac{1}{2}$ per cent of GDP and after cyclical adjustment, the change in the net primary balance would suggest a mildly restrictive fiscal stance at best. The OECD's projections are less favourable: GDP growth is $\frac{1}{2}$ a percentage point lower than in the official projections, interest payments are flat rather than falling and the tax revenue projection is based on a lower underlying PIT elasticity. Rather than a surplus the OECD's projection shows a deficit of $\frac{1}{2}$ per cent of GDP in 2001 (after a 1 per cent deficit in 2000) and the fiscal stance is broadly neutral.¹³

Given the strong momentum of the economy fiscal policy should be tight, however. Concerning the short run, underlying inflation has been fairly subdued until recently, but this is partly due to one-off measures. Moreover, average headline inflation of above 2.3 per cent in 2001 will trigger the catch-up clause for 2002 in the national collective agreement. Cost and price pressures are, thus, latent, while the output gap is likely to rise over the next two years. In addition, with the entry into monetary union, control over monetary policy had already weakened, with long-term interest rates already down to close to the euro area level, while short-term interest rates were falling steeply. The effects of the monetary stimulus are uncertain for private consumption, as the income effect of lower interest rates could outweigh the substitution effect and Greek households are large net creditors. But the impact could be sizeable on business and residential investment. Moreover, despite the strong rise in credit demand in recent years, the credit to GDP ratio is still low in Greece. Low interest rates and the major changes underway in financial markets could lay the ground for an unsustainable credit boom. Such a development is not a foregone conclusion. Long-term interest rates have converged towards the euro area, expectations concerning lower future short-term interest rates have already been incorporated into demand for short-term credit and the Bank of Greece has intensified prudential supervision by on-site inspections of the fastest growing banks. On the other hand, a number of OECD countries experienced unsustainable credit booms in the late 1980s, and eventually suffered severe consequences. Erring on the side of fiscal caution is, therefore, called for.

Medium-term policy issues would also suggest that a move to a large budget surplus would be advisable, while spending pressures will remain severe in several areas:

- First, the debt/GDP ratio is still very high and a resolute consolidation effort is needed to bring it down to 60 per cent of GDP in a limited

period of time. Calculations in the previous survey and in the ECB's 2000 convergence report (ECB, 2000) suggest that, with growth close to potential, interest rates at the euro area average, and a primary surplus, which is maintained at close to its current level, it would take about another decade to reduce the debt/GDP ratio to 60 per cent.¹⁴ In a somewhat more pessimistic scenario (growth and the primary surplus 1 percentage point lower and the real interest rate 100 basis points higher), the time required to bring the ratio to 60 per cent would be extended to 40 years, as the small short-run differences cumulate over time. These calculations do not allow for any of the sizeable deficit-debt adjustments of recent years. Despite the continuation of the privatisation programme, such adjustments could be large. Moreover, there is likely to be a portfolio shift in social security funds' assets from bonds to equities.¹⁵ In addition, any slippage in fiscal performance could raise the credit risk of public debt and prolong further the adjustment period.

- Second, Greece will have to comply with the provisions of the Stability and Growth Pact. Given the deficit constraint of 3 per cent of GDP, euro area member countries have to provide for a cushion for revenue shortfalls and higher spending (the automatic fiscal stabilisers) during a cyclical downturn. OECD estimates suggest that the cyclical sensitivity of the Greek budget is lower than in many other EU countries (Van den Noord, 2000). In conjunction with a comparatively low variance in output around trend growth in the past, estimates by Artis and Buti (2000) suggest that a medium-term deficit target of 1½ per cent of GDP would suffice to comply with the Pact's requirements. For other EU countries a better medium-term outcome is necessary to satisfy the Pact's requirements. However, such a deficit target would leave little room for discretionary fiscal stimulus in future downturns. There are several reasons why a greater cushion may be desirable. While the budget shows a relatively low sensitivity to the cycle, also the economy is relatively less affected by the automatic stabilisers. Recourse to discretionary fiscal policy may thus be more desirable than in most other euro area member countries. Moreover, the desirability to use discretionary policy would largely depend on the size of future economic shocks. Unfortunately, it is impossible to pin down the size of the shocks that may hit the Greek economy. A high degree of trade integration with the other euro area countries would lower the likelihood of cyclical divergence, while differences in economic structure would raise it. Trade integration of Greece with the rest of the euro area is lower than in any other euro area country. Moreover, the size of the agricultural sector is still the highest in the European Union and the financial market structure, while evolving quickly, still very different. These factors would argue for fiscal ambition

now that would pay off over the medium term. If the more optimistic official scenario, with a projected surplus of 1½ per cent of GDP in 2002 were to unfold, this would already provide a cushion during downturns.

- Third, over the longer term, severe spending pressures are building up. Maintaining a sizeable primary surplus for a decade will, thus, be a major challenge. In addition to adjustment fatigue and the government's desire to redistribute income, pension and health expenditure are set to rise rapidly in the absence of deep reforms. This is discussed below as well as issues relating to the reform of the public sector administration.

Medium-term public sector issues

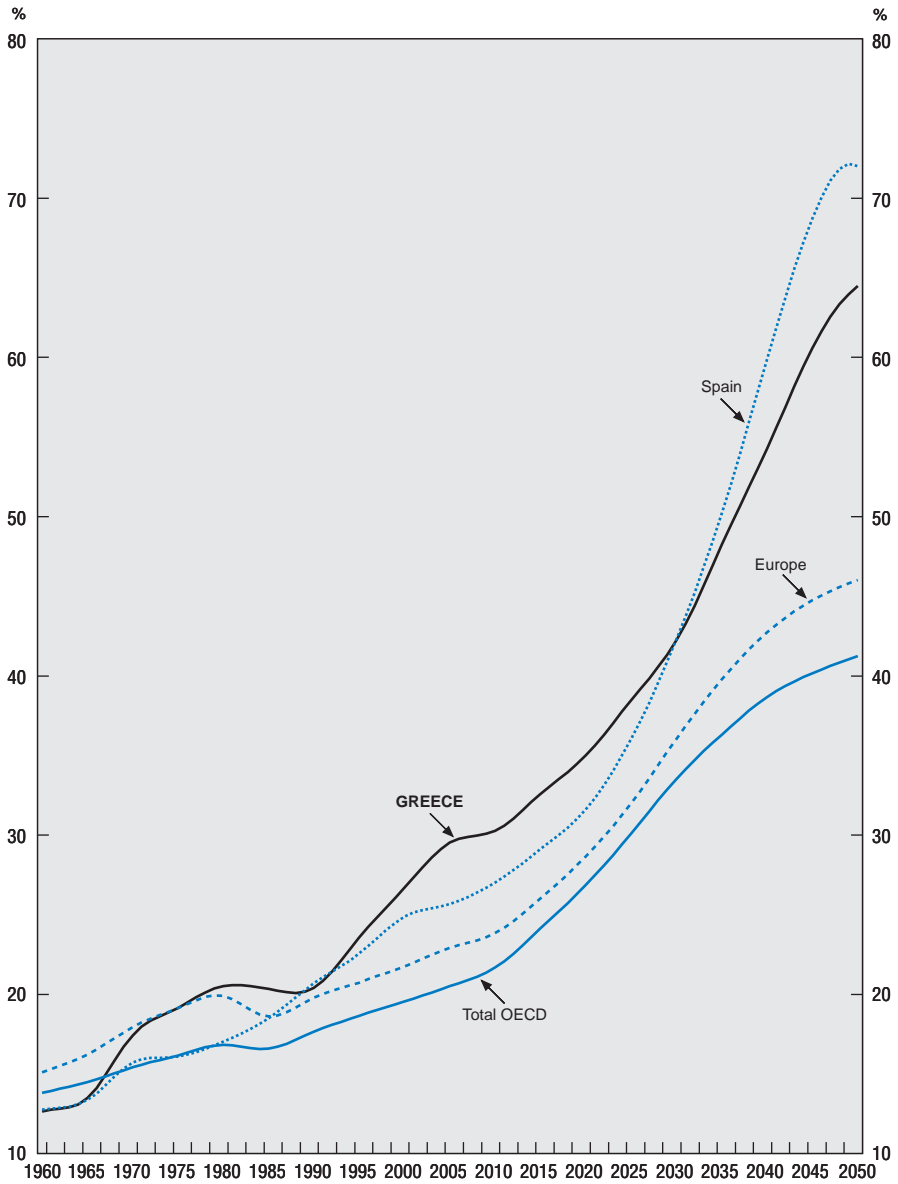
Pension reform needs to proceed

The viability of the pension system will come under increasing pressure in the medium term...

The 1998 pension reform ("small reform package") has improved the organisation of the pension system, raised revenues and set the scene for a more wide-ranging reform package. In January 1999, a bill was voted that has led to the consolidation, unification or abolition of more than 60 funds.¹⁶ The law also enhanced the autonomy of the social security funds to manage their portfolios, of both financial assets and real estate, by permitting them to invest 20 per cent of these assets, with this percentage rising to 23 per cent from January 2001. Including various other measures, the package should improve the financial viability of the funds through: *i*) lower administrative costs; *ii*) higher yields on the funds' assets; and *iii*) the larger contribution base resulting from a tighter control of contribution evasion and a reduction of incentives towards early retirement.¹⁷ The reforms already introduced in the early 1990s and the 1998 small reform package have largely succeeded in ensuring the viability of the pension system until 2005, but its sustainability will come under heavy pressure thereafter. The OECD's long-term projections – included in the 1997 *Survey* – suggest that the present net value of the unfunded liabilities is among the highest in OECD area.

As elsewhere, pension expenditure will be driven mainly by population ageing. The elderly dependency ratio (population over 65 years divided by the population 15-64) is projected to increase significantly (Figure 5), with demographics in Greece being less favourable than elsewhere due to the relative longevity of the population and the low birth rate. Additional pressures on the long-term viability of the pension system stem from its generosity. Easy eligibility conditions, in conjunction with individual benefits well in excess of contributions, provide incentives for early retirement and contribution evasion. Generosity arises, *inter alia*, from the short earnings period for determining pension rights.

Figure 5. **Elderly dependency ratios¹**
Per cent



1. Population aged 65 and over as a per cent of population aged 15-64.
Source: United Nations.

Despite its prolongation in 1992 – from two to five years – the pensions' base for private sector employees is still the shortest in the OECD. Also replacement rates are high for old-age pensions. The gross statutory rate for primary pensions, in the case of private sector wage earners insured by IKA, ranges between 70 and 90 per cent for 35 years of contributions. Supplementary pensions add another 20 per cent. Moreover, a relatively high minimum primary pension in the private sector, in combination with a short eligibility period of 15 years, encourages early retirement. Finally, numerous benefits and exceptions are granted to specific groups of workers. Examples include the early retirement opportunities for workers in an "arduous and unhealthy activity", who are eligible for a retirement five years earlier, the privileged treatment of mothers of under-age children, and relatively easy access to invalidity pensions (although a lot of progress has been made towards tightening eligibility). On the other hand, the on-going integration of economic immigrants into the pension system, as well as the expected increase in employment will go some way towards offsetting the effects of adverse demographics in the short-term. On the basis of conservative estimates, social security contributions paid by the 225 000 "Green Card" applicants and their employers amount, on an annual basis, to more than 5 per cent of IKAs' annual revenues from contributions.

... highlighting the need for decisive reforms

It is widely recognised that decisive reforms are needed urgently to secure the long-term viability of the pension system. A second phase of social security reforms that will address the system's sustainability in a decisive way is on the government's agenda. Given the high current debt/GDP ratio, the absence of a deep pension reform would imply a substantial hike in the tax burden to cover future unfunded liabilities. Prolonging the working life would be among the most effective measures to ensure the future viability of the system. Combating contribution evasion would also help a lot. The main reform options regarding the basic parameters of the system – discussed in detail in the 1997 *Survey* – include: i) an increase in the effective retirement age to its current statutory level of 65 years, especially through tighter controls for early retirement in the "arduous and unhealthy activities" and access to disability pensions; ii) a closer link between contributions and the value of acquired pension by gradually extending the reference period for a pension closer to earnings over a whole career; iii) the reduction of replacement rates; iv) the extension of the period required to accumulate benefit rights for a full pension beyond 35 years; v) the gradual reduction of the pension accrual rate; vi) the gradual replacement of the minimum pension by a means-tested minimum income in order to reduce contribution evasion; and vii) the back-loading of the accumulation of pension rights. Finally, more fundamental changes of the underlying architecture of the system could involve a gradual shift of the current defined-benefit pay-as-you-go system into a mixed system, in which the pay-as-you-go part would be complemented by a fully-funded

compulsory part. The slow development of funded pension schemes reflects mainly the generosity of the public social security system, rather than tax treatment, although the absence of deductibility for contributions to funded schemes above a certain level has also hampered their emergence (Leandros and Loufir, 1998). The authorities have commissioned a major study, to be submitted in January 2001 that will examine the financial prospects of the system and evaluate the various options for reforms. This will be followed by a dialogue with the social partners. The government expects that the pension reform will be in place in September 2001.

Health care reform has progressed little

Total health care spending differs little from the OECD average, after taking into account differences in per capita income. In 1997, total health spending accounted for 8.6 per cent of GDP, with the public share equivalent to 5 per cent of GDP (Table 7). While the National Health System provides an ample supply of public health care services, delivery is generally considered to have remained unsatisfactory. Long waiting lists for public hospital services still exist, mainly in Athens and Thessaloniki, and the infrastructure has remained poor and inadequate. Moreover, primary care is underdeveloped, and – despite improving – the provision and coverage of services remains very uneven between urban and rural

Table 7. **Health expenditure**
1997

	Total expenditure on health	Public expenditure on health		Private expenditure on health	
	% of GDP	% of GDP	% of total expenditure on health	% of GDP	% of total expenditure on health
United States	13.9	6.5	46.4	7.5	53.6
Japan	7.2	5.7	79.9	1.4	20.1
Germany	10.7	8.3	77.1	2.5	22.9
France	9.6	7.1	74.2	2.5	25.8
United Kingdom	6.9	5.8	83.4	1.1	16.6
Italy	7.6	5.3	69.9	2.3	30.1
Canada	9.1	6.4	69.7	2.8	30.3
Greece	8.6	5.0	57.7	3.6	42.3
Ireland	6.3	4.9	76.7	1.5	23.3
Portugal	7.9	4.7	60.0	3.2	40.0
Spain	7.4	5.6	76.1	1.8	23.9
European Union	8.7	6.7	76.2	2.1	23.8
OECD	10.0	6.2	61.8	3.8	38.2

Source: OECD, Health database.

areas, even though the number of doctors per inhabitant is higher than the OECD average. The dissatisfaction with the public health services has resulted in a sizeable demand for privately provided services (the highest in the European Union).¹⁸ A step towards addressing the fundamental shortcomings of the health system was made by the adoption of the 1997 reform bill. It aimed at improving primary care, enhancing the efficiency of public hospitals, and controlling spending on pharmaceuticals. However, its implementation has been slow or even lacking, with several of its key provisions still pending.

Little progress has been made towards the development of a well functioning country-wide network of primary care providers – including the establishment of family doctors – which was the cornerstone of the reform. So far, the main changes have focused on the upgrading of primary health care services in the Aegean Islands, through the introduction of telemedicine, the improvement of emergency care, and incentives to attract specialised doctors and nursing staff to the 31 newly-established multifunctional health centres in this region. In general, however, the rural health centres remain short of equipment and medical staff, and little progress has been made towards the better organisation of the primary health services in urban areas, where health centres have not yet been established.¹⁹ No progress has been made towards the development of a referral system, as an integrated network of family doctors was not established. As a result, patients' access to secondary care is still on a self-referral basis or involves a visit to an outpatient department of a hospital. The realisation of a well-functioning primary care system would also depend critically on a change to the remuneration system for primary care doctors. Currently, they are civil servants and paid on a monthly basis. The wide difference in incomes between generalists and specialists in large city hospitals results in an unwillingness among doctors to work in health centres. A change to the remuneration package (for instance, capitation fee in combination with fee-for-service pay) would encourage doctors to move from specialised practices at hospitals to primary care positions.

Regarding public hospitals, the selection process for the appointment of professional managers has been seriously delayed and is now planned to start in 2001. The plan to hire professional managers would help to overcome the traditional political nature of management appointments in public hospitals. On the other hand, an extensive training programme aimed at the development of managerial skills has been introduced.²⁰ Also accounting has changed, including the pilot implementation of double-entry book keeping in 15 hospitals,²¹ and the possibility for hospitals to contract out some services on cost accounting. In the near future the government plans to proceed with the computerisation of hospital functions and services, and to establish a national institute for health service evaluation. It will collect and analyse pathological outcomes and project future health care needs. These initiatives, however, fall short of what is needed. Most importantly, hospital managers should be granted greater flexibility to foster

change. For instance, the planned introduction of global budgeting has not yet started and the uniform fee-per-patient payments in public hospitals still exist.²² Moreover, management has only limited room for manoeuvre in the allocation of resources and little say on remuneration.

Pharmaceutical expenditure decreased in 1998 following the introduction of a range of measures that reduced prices and restricted demand.²³ The official savings target was, however, missed, reflecting mainly a substitution towards other, more expensive, drugs. For 1998, the Government expected a reduction in expenditure of GRD 147.8 billion, while the actual decline was only GRD 97.8 billion (Table 8). The difference between the planned and actual increase in expenditure is estimated to have increased in 1999 and is expected to have risen even further in 2000. This is largely due to the failure of the positive drug list, introduced in April 1998, to cover all drugs and enforcement problems. To prevent abuses, a computerised follow-up of prescription practices was introduced in 1999. These measures, combined with the computerisation of the system, are expected to lead to significant savings.

Overall, three years after the 1997 health care reform, the health system still faces deep-seated problems. The Government has pledged to reform the system through the implementation, over the next six years, of a new health care reform plan ("Health for the Citizen"). The main pillars of the new programme are: i) the regionalisation of the health care system; ii) the establishment of a single unified health fund; and iii) the effective implementation of the primary health care measures, proposed in 1997. It also includes the introduction of managerial and operational innovations in hospitals, and special incentives for general practitioners and for specialists in short supply. Moreover, young doctors will be hired on fixed-term contracts, which may become permanent if specific requirements are met and financial incentives will be granted to attract staff to remote regions. The single Unified Health Fund will be created in 2001 including, in a first step, the five largest social security funds. This would allow health policy to be unified across the various funds and in particular allow for better cost control. In 1999, GRD 144 billion were budgeted for health care in the central government budget and GRD 212 billion were spent (an overrun equivalent to ½ per cent of central government current spending). A similar overrun is expected in 2000.

Public sector management needs improving

Between 1981 and 1990 public sector employment increased at an average annual rate of about 4 per cent – around four times as fast as in the private sector. This partly reflected the government's attempt to act as the employer of last resort during an era of sluggish growth. In the 1990s, government employment has risen less rapidly (Figure 6). Public sector employment accounted for 12.5 per cent of total employment in 1999;²⁴ this is still below the OECD and EU averages.

Table 8. **Spending on pharmaceuticals**

	1995	1996	1997	1998 ¹	1999	2000 ²
Drug sales and prices						
Sales of drug packages (in thousands)	292 073	317 868	330 321	341 625	370 056	384 858
Change %	5.7	8.8	4.0	3.4	8.3	4.0
Average price of drug package (in GRD)	1 693	1 840	1 929	1 759	1 953	2 073
Change %	9.2	8.6	4.8	-8.8	1.0	6.1
Expenditure (billion GRD)						
Actual expenditure	495	585	637	601	723	798
Expected expenditure without a reduction in prices				699	765	831
Expected expenditure after a reduction in prices by 21%				551	603	656
Expected decline in expenditure after the reduction in prices				148	162	176
Achieved reduction in expenditure on pharmaceuticals				98	42	33
Discrepancy ³ (%)				-33.8	-74.0	-81.2

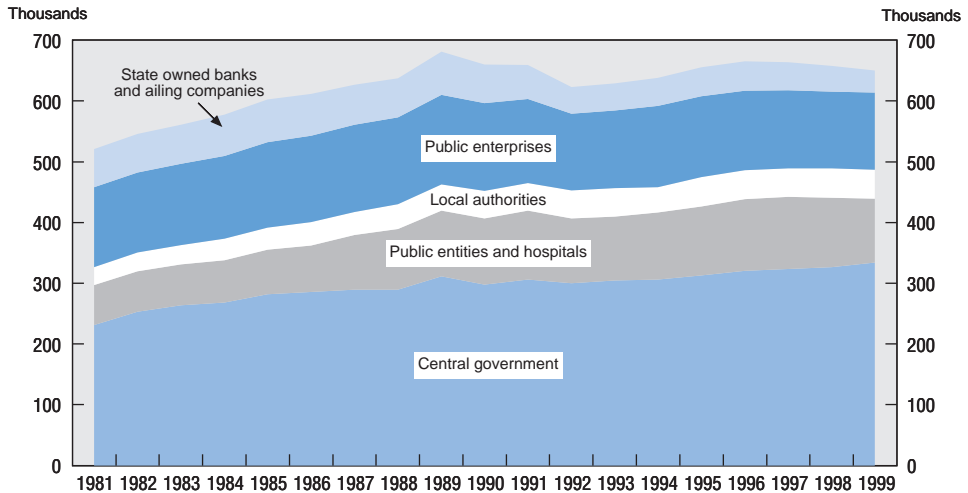
1. Year of implementation of government measures.

2. Projections by FARMETRICA.

3. The discrepancy refers to the deviation from the expected reduction in expenditure on pharmaceuticals achieved through the abolishment of the charges applied to drug prices to support the social security funds for doctors and pharmacists and the National Drug Institute.

Source: FARMETRICA.

Figure 6. Public employment
 Thousand persons



Source: Ministry of National Economy.

However, the numbers do not include the sizeable Greek military staff and the number of local government employees (1.2 per cent of total employment) is certainly underestimated.

Being employed by government is attractive in various ways, even though public sector pay is relatively low. Generous civil service pension benefits, as well as complete job security and pay increases which are not based on performance, have resulted in people queuing for public sector jobs. A compressed pay scale and rigid labour regulations, in conjunction with the *de facto* job security and automatic promotion, have weakened the incentives for good performance in the public sector leading to poor quality in the delivery of public services. The inefficiency of the public administration translates into high transaction costs for citizens and private sector enterprises in the form of over-regulation and extensive administrative formalities. Moreover, the heavy administrative burden invites corruption, as some firms try to find ways to speed up the procedures and/or to avoid regulations altogether. The low capacity of the public administration to control the ever-expanding set of laws and regulations and to produce regulations of higher quality exacerbates compliance costs without raising the compliance rate in line with regulatory objectives. This is reflected, for instance, in the rules and regulations governing licences and permits, which present a significant barrier to entrepreneurial activity (OECD, 2001).

A number of measures were taken in the 1990s to modernise the public administration and improve the quality of public sector services. In 1994, the Government introduced a new hiring and promotion policy for public sector workers, which reduced discretion in recruitment and raised the skill requirements, when entering the civil service.²⁵ In order to restrain public outlays and meet the Maastricht convergence criteria, the government introduced a partial hiring freeze in 1998. Since then, only one out of five positions is replaced. This policy, however, has had only a limited impact on overall employment, as it only applies to less than half of the public sector employees.²⁶ Along with the introduction of new recruitment systems, a legal framework was enacted in the late 1990s aimed at modernising and restructuring local government. These measures comprise a clearer assignment of powers to local authorities, the merging of municipalities, new financing arrangements for the delivery of services (including water supply, sewage and roads) and specific monitoring and enforcement mechanisms.²⁷ The programme is not yet fully implemented and Greece has remained among the most centralised countries in the OECD. As an additional public sector reform initiative, the Government introduced a new programme in 1998, called "Quality for the Citizen", which aims at improving the services provided by the public administration.²⁸ It has led to the creation of one-stop shops. Finally, in 1999, two new codes were adopted: a Code of Administrative Procedures, to streamline administrative procedures and introduce client-oriented services, and a Civil Service Code, to upgrade recruitment and anti-corruption mechanisms. The full implementation of these codes should increase the accountability and transparency of the civil service.

Despite these measures, the performance of the public administration still suffers from poor management practices and low-quality services, requiring additional changes especially with respect to human resources. The government is committed to proceed with further reforms of the public administration, which will focus on the upgrading of skills, the strengthening of the decentralisation process, and better quality in the delivery of public services. The main measures proposed include the improvement of the educational level of civil servants, through the reduction of the number of new entrants with a secondary school degree (from 2002, this measure will be combined with the introduction of incentives for voluntary leave from the public sector); an increase in the use of information technology; the introduction of performance-based remuneration; the acceleration of hiring procedures in order to reduce the span between the approval of a post and the time it is filled (currently ranging from 1½ to 2 years); the establishment of a regularly reviewed charter of obligations for every public service; and the improvement of the administration's relations with citizens by simplifying the transactions with the public sector, by introducing afternoon hours for certain key offices and improving the provisions included in the "Quality for the Citizen" programme. It would be important that changes are made to provide a modern and more efficient administration.

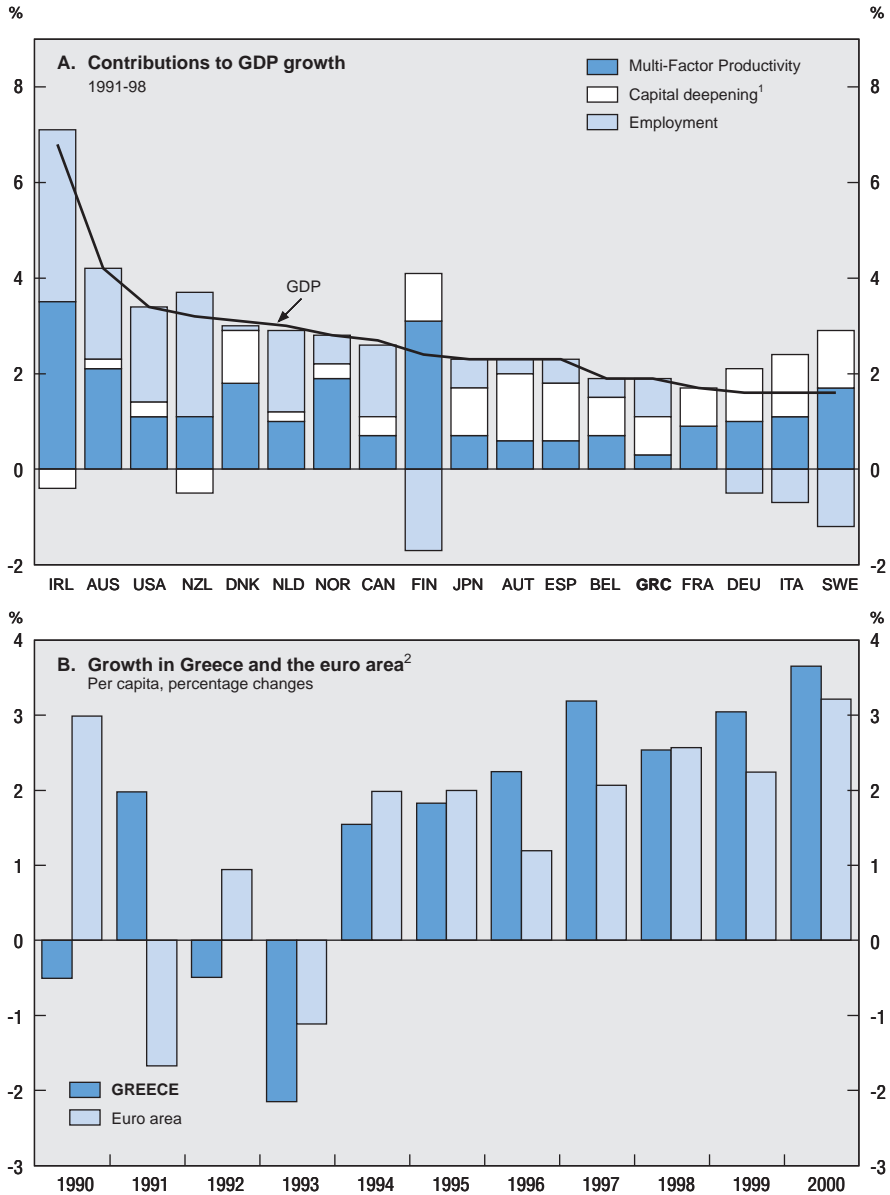
III. Progress in structural reform

In recent years economic performance has improved rapidly, with GDP growth surpassing the euro area average for five years in a row (Figure 7). Several structural policy initiatives taken in recent years, if broadened and deepened, should help to boost the economy's growth potential further. The sizeable gap in living standards with respect to the OECD average could thus be reduced. Sustained strong GDP growth in the years ahead is within reach thanks to a more stable and predictable macroeconomic environment following the greater fiscal and monetary policy discipline, which has culminated in euro area membership. Over the medium term, growth will be driven by investment, propped up by sizeable EU transfers, whose cumulative amount up to 2006 could reach 20 per cent of current GDP. Activity will also be stimulated by the preparations for the 2004 Olympics. But to secure sustainable high growth, the pace of structural reform in product and labour markets should be stepped up, while the ongoing financial sector reforms will need to be consolidated.

In the new policy environment, enhanced structural reform efforts will need to address at least three inter-related policy challenges:

- A swift response of supply to investment-driven growth is required to ensure the sustainability of strong growth. Though improved core infrastructure will boost productivity, enhanced competition in product and service markets is also critical. Faster liberalisation of network industries and services, coupled with privatisation and enhanced competition, along with the creation of strong independent regulators, would further spur efficiency and provide the business sector with better and lower-cost intermediate inputs. To forestall cost pressures, stepping up the pace of product and labour market reform will also be needed, together with tight fiscal control, because monetary policy in the single currency area may prove too expansionary for the Greek cyclical position in the short run.
- A higher employment content of growth will be needed to reduce unemployment, which has been drifting up until recently, despite healthy GDP growth. Though rising unemployment may partly reflect the increasing participation of women, and the influx of immigrant

Figure 7. Growth performance



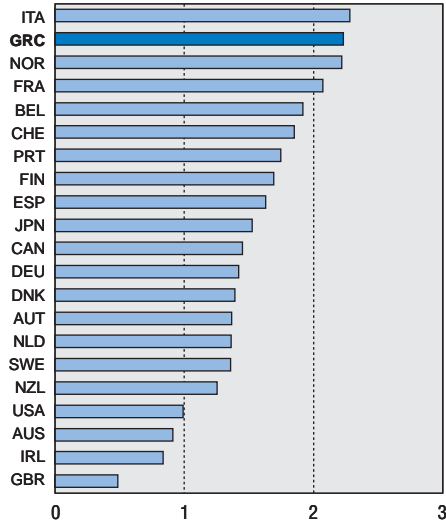
1. Contribution to GDP growth of changes in the capital-labour ratio.

2. At 1996 prices and PPPs.

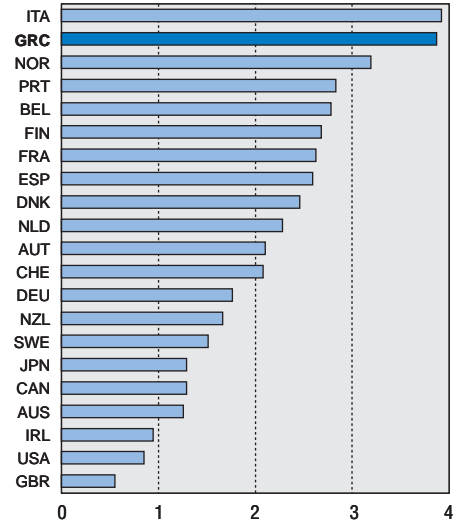
Source: OECD, National Accounts and OECD Secretariat.

Figure 8. Product market regulation¹
1997-98

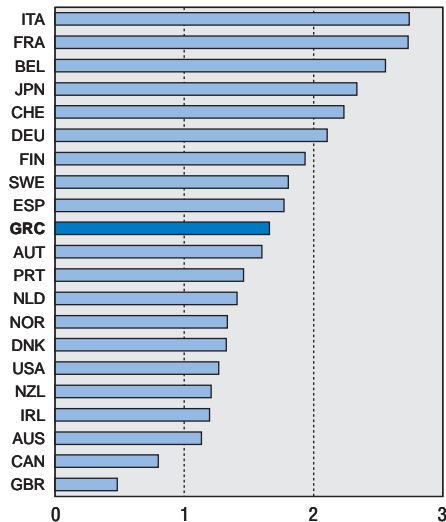
A. Overall indicator



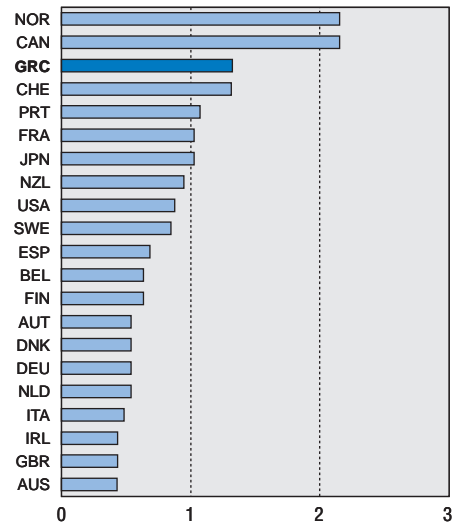
B. State control



C. Barriers to entrepreneurship



D. Barriers to trade and investment



1. Indicators of strictness of legislation. Scores can range from 0 to 6 with higher values representing stricter regulation.

Source: OECD Secretariat.

Table 9. Recommendations for further structural reform

Proposal	Action since last survey	OECD assessment/recommendation
I. Increase wage and labour cost flexibility		
Lower the minimum wage for vulnerable workers (low-skilled, youth)		Same as previous Survey
Simplify and decentralise the wage bargaining process	The opt out clause from sectoral collective agreements in high unemployment areas is only seldom used	Reduce further the role of the middle tier (sectoral) of collective agreements
Reduce non-wage costs	Reduction of non-wage labour cost for new hirings Bill under parliamentary scrutiny on the introduction of further reductions in non-wage costs for low-wage workers	Reduce non-wage labour cost further and abolish also the ceilings for the pre-1993 labour market entrants
Eliminate the explicit catch-up clause	Applies this time only to the second year of the two-year agreement	Same as previous Survey
II. Reform employment protection legislation		
Abolish administrative limits on dismissals	Proposal in the draft bill on the increase in the dismissal limits for enterprises employing between 50 and 199 workers	Timely implementation
Reduce mandated severance payments for white collar workers		Same as previous Survey
III. Increase working time flexibility		
Permit limit to, and payment premiums for, overtime hours to be determined in individual collective agreement	Draft bill includes: – the reduction in the overtime hours per week that were under the employers' discretion and increase in the overtime premium – the annualisation of overtime work on a voluntary basis and cut in effective working hours – the creation of incentives for taking up part-time employment	These measures would tend to increase labour costs and reduce labour supply if not offset by additional hirings and other labour market measures

Table 9. **Recommendations for further structural reform** (*cont.*)

Proposal	Action since last survey	OECD assessment/recommendation
IV. Expand and enhance active labour market policies		
Develop training programmes	Progress in integrating vocational programmes into co-ordinated employment strategy (<i>e.g.</i> certification of training centres)	More emphasis of ALMP on training, rather than on employment subsidies; evaluate programmes
	Introduction of work experience programme	Improve further the quality and the job-linkage of vocational training
	Establishment of Employment Promotion Centres	Step up the completion of the reform of the PES
Allow for the creation of for-profit job placement agencies	Some progress towards the establishment of private job placement agencies	
V. Improve labour force skills and competencies		
Tighten gradually time limits on students earning a university degree		Same as previous survey
Improve evaluation at pre-university levels		Same as previous survey
VI. Technology and innovation		
Strengthen the links between universities and enterprises		Improve support to R&D and innovation programmes
VII. Enhance product market competition		
Foster liberalisation in sectors dominated by the public sector	Legislative amendments to the 1991 privatisation law	
	The upper limit on private ownership of the Hellenic Telecommunications Organisation (OTE) has been abolished and 65 per cent of Olympic Airways will be sold	Abolish the privatisation limits for all public enterprises
	Preparation of the regulatory framework for the electricity and telecommunications market	Raise competition in the electricity market
Continue the privatisation process	Progress in privatising public enterprises	Accelerate the privatisation process

Table 9. **Recommendations for further structural reform** (*cont.*)

Proposal	Action since last survey	OECD assessment/recommendation
Strengthen competition	New law strengthens the role of the Competition Committee	Strengthen the Competition Committee further
Lower subsidies		Step up restructuring of the agricultural sector, rein in subsidies and monitor and evaluate programmes
VIII. Financial markets		
Privatise remaining state-owned banks and stay vigilant on supervision	Progress in the privatisation of state-owned banks. Completion of cleaning the balance sheet of ETVA	Privatise banks still in public hands; 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 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)	Further widen individual share price fluctuations, or alternatively, implement limits on fluctuations of the general index 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 Extend the regulatory framework for securitisation to the private sector

Source: OECD Secretariat.

workers, with low-skilled workers likely to suffer more from displacement effects, its main causes are underlying rigidities in the labour market. Tackling these rigidities would also create room to deal with further, possibly strong increases in labour supply over the medium term, as Greece has one of the lowest employment rates in the OECD.

- Finally, Greece has joined the euro area. In a single currency area there is a premium on greater flexibility as this will allow the economy to absorb asymmetric shocks more smoothly.

The government has already stepped up the pace of structural reform in recent years but, as argued in this chapter, there remains considerable scope for further improvement in many areas. This is highlighted by the OECD's synthetic indicators of product market regulations, which suggest that the regulatory framework is very restrictive by international comparison (Figure 8). As these indicators are based on information for 1998, however, they do not take into account improvements in the regulatory framework since then. This chapter monitors recent structural policy initiatives in product, labour and financial markets and reviews the scope for broadening and deepening reforms in these areas, to meet the upcoming policy challenges. Such moves should be accompanied by initiatives to reform the tax system, which are reviewed in Chapter IV. Table 9 provides a summary of recent reforms and a follow-up on the previous recommendations.

Labour market reform

Unlike in many other OECD countries, steady output growth has not been sufficient to improve labour market outcomes. The unemployment rate has been rising continuously throughout the 1990s, although employment has increased by more than the euro area on average. In 1999, the unemployment rate edged up to 12 per cent, while the OECD average fell to 6.6 per cent. Strong growth in 2000, however, should lead to a decline to 11.4 per cent. A major increase in the labour force participation of women and immigrants, which was partly induced by increased economic activity, significant industrial sector downsizing, recruitment restraint in the public sector and the decline of employment opportunities in the primary sector, are all factors which explain the rise in unemployment. While several policy initiatives with regards to the labour market have been undertaken during the 1990s, especially the 1998 reform,²⁹ the rise in unemployment and its concentration on vulnerable groups (young people and women) suggest that there remains ample scope for further labour market reform. The government's recent proposals, discussed below, have nevertheless run into strong resistance from the unions.

The flexibility of the labour market has improved somewhat

Labour market flexibility has somewhat improved due to past reforms. The 1998 law on industrial relations was a step towards liberalising the labour

market. The 1998 law introduced five major innovations: i) the calculation of working time over a longer period; ii) the introduction of an opt-out clause from sectoral collective agreements in areas of high unemployment or industrial decline; iii) the removal of disincentives to take up part-time work; iv) the authorisation of private job placement agencies; and v) the regulation of informal forms of employment (teleworking, piece work, work at home). Also the large inflow of immigrants has contributed to greater labour market flexibility, by holding back wage pressures. Before the legalisation of illegal immigrants that started in 1998, the majority of the illegal immigrants worked in the underground economy – mainly in construction, the textile industry, agriculture and services – and usually received wages below the wage of local workers for comparable types of work.³⁰ It is difficult to determine the extent to which illegal immigrants have crowded out legal employment, as the magnitude of the displacement effect depends on the substitutability of illegal for domestic workers.³¹ In some sectors, particularly in agriculture, the immigrants undertake jobs for which it would be difficult to find locals, while in others, such as construction, the scanty evidence suggests that there may be displacement effects (Kottis and Kottis, 1996).

While steps have been taken to increase labour market flexibility, structural rigidities remain. In an effort to reverse the rise in unemployment and boost the competitiveness of the Greek economy, the Government has recently submitted a draft bill to Parliament, which aims at boosting employment through: i) providing financial incentives to encourage part-time employment; ii) limiting overtime by reducing those weekly overtime hours that are in the employers' discretion (from 8 to 3 per week) and increasing the premium for overtime; iii) introducing a scheme of working time annualisation while reducing the work-week from 40 to 38 hours. This scheme is voluntary for firms and needs to be agreed with employees; iv) increasing the upper monthly limit for dismissals for firms employing between 50 and 199 workers; and v) reducing employers' social security contributions for low-wage workers whose monthly wages do not exceed GRD 200 000.³² The following sections assess the recent proposals and describe the main areas where labour market rigidities persist.

The wage formation system and minimum wages

The 1998 law on industrial relations made some progress towards reducing insufficient wage differentiation, by introducing the Territorial Employment Pacts (TEPs) in areas suffering from high unemployment or industrial decline. The regional employment contracts allow an opt out for a specified task and duration from sectoral accords. They are based, instead, on the wage determined by the TEPs, as long as it exceeds the national minimum wage. Firms are also allowed to hire new labour market entrants and the long-term unemployed at the national minimum wage. The implementation of the measures included in the TEPs only

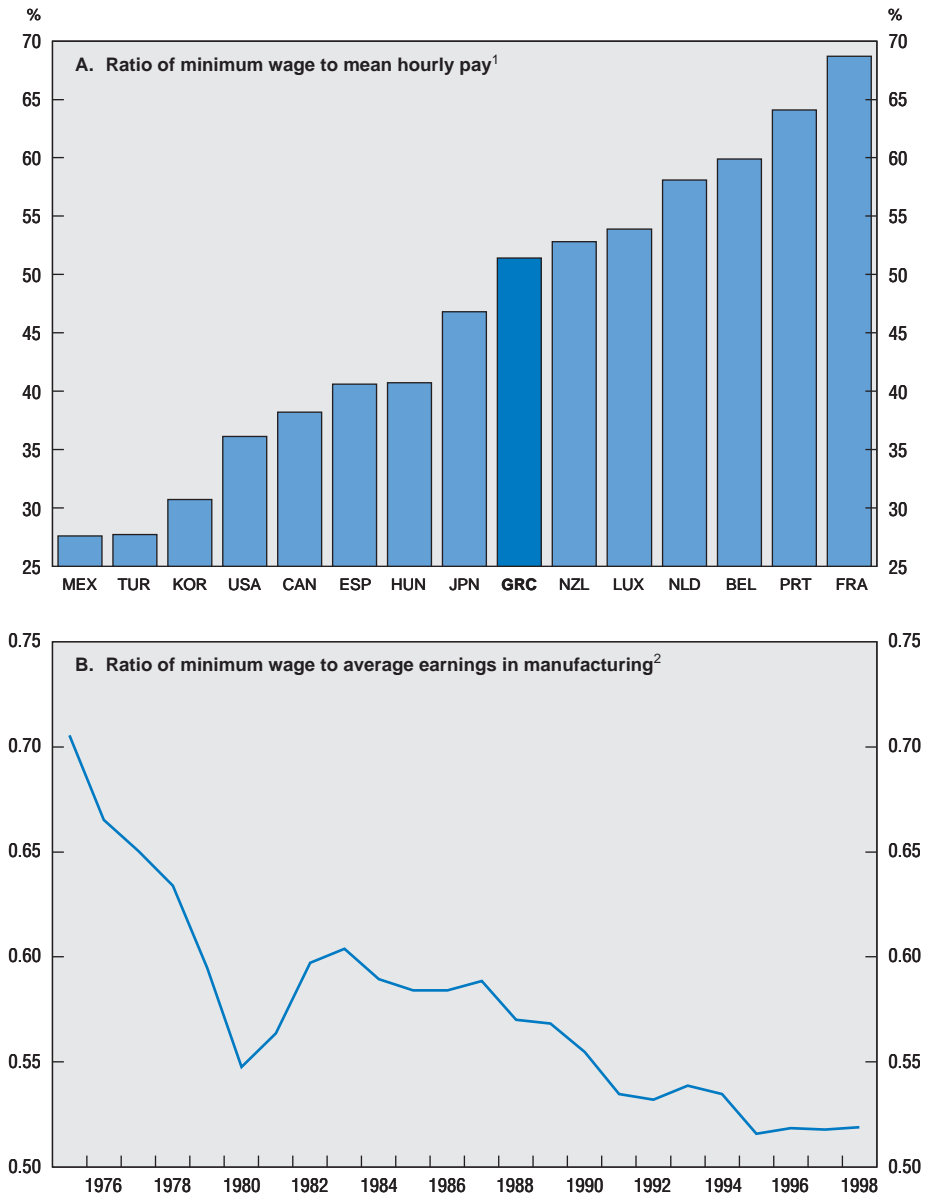
started in September 1999. In addition, with the exception of a single case, where there was an opt-out from the sectoral agreement, the existing TEPs have taken the form of employment and training schemes that promote job creation at the local level in areas such as social services, tourism, agriculture, and traditional productive activities. Overall, the TEPs cover, so far, less than 11 000 jobs.³³

The concentration of unemployment among labour market entrants (especially young women) remains high in Greece, suggesting the persistence of major rigidities. Despite a widening in the dispersion of wages over the 1990s, the relative level of the minimum wage tends to be fairly high in international comparison (Figure 9).³⁴ High minimum wages can constitute a barrier to employment for some groups of workers, especially young persons with low skills or lack of experience. The percentage of individuals, particularly women, covered by the minimum wage is likely to be high – although accurate estimates on wage distributions are lacking. The adverse effect of minimum wages on teenage employment is also highlighted by empirical estimates from cross-country panel data (OECD, 1998*a*). More ambitious steps than the introduction of the TEPs are needed. One option would be to phase out bargaining at the sectoral level, moving to wage negotiations at the enterprise level. Moreover, given the rather weak link between low pay and low household income in Greece (OECD, 1998*a*), greater flexibility in the setting of minimum wages for less experienced workers could be introduced without necessarily harming distributional objectives. Evidence from a number of OECD countries suggests that poverty is predominantly a phenomenon linked to non-employment rather than low pay. On the other hand, the adverse effect of current minimum wage levels on the employment prospects of job-seekers is partly offset by employment subsidies to firms for hiring unemployed from those groups most affected. Moreover, the recent government draft bill proposes to lower the employers' social security contributions for minimum-wage workers.

Non-wage costs

Non-wage labour cost are very high (see also the special chapter on taxation below). Some steps have been taken recently towards containing non-wage labour costs. A tax reform package was introduced in 1999, which provides incentives for firms to increase employment by reducing the company's taxable income by an amount equal to 50 per cent of the social security contributions to the basic social security funds for new hires until the end of 2001.³⁵ This measure, however, does not reduce the tax burden of small firms, as it applies only to businesses employing at least five full-time workers and its effectiveness may be limited, as it reduces non-wage labour costs only for profit-making enterprises. The draft bill submitted to Parliament in November 2000 abolishes this measure. The government envisages, instead, a reduction by 2 percentage points of the employers' social security contributions for low-paid workers whose monthly wages do not

Figure 9. Minimum wage and average earnings



1. In manufacturing, in mid-1997.

2. Blue-collar workers.

Source: Bank of Greece.

exceed GRD 200 000. This would amount to a 1.6 per cent cut in total labour costs for these workers. The proposed measure would affect around 400 000 people. Furthermore, as discussed earlier, the government will pay part (specifically, the part going to the pension account of IKA, *i.e.* 6.7 per cent of gross pay) of the employee's social security contributions for full-time workers at the minimum wage. While this measure will redistribute income, it is unlikely on its own to boost job creation, as it does not reduce the employers' social security contributions. On the other hand, it will provide an incentive to work in the formal economy.

Employment protection legislation

Employment protection legislation (EPL) is fairly strict by international comparison (Table 10).³⁶ High firing costs and the restrictive lay-off procedures could reduce incentives to hire additional workers during an upswing, encouraging them to resort to overtime work. The current regulations limit lay-offs to 5 workers per month for firms employing up to 49 workers, while it restricts lay-offs to 2 per cent of the labour force per month for firms with more than 50 workers. Severance payments for white-collar workers can reach up to 24 months' salary for 28 and more years of employment at the same employer. For blue-collar workers with employment longer than 25 years, however, severance payments are less generous, as they amount to only 125 daily wages. For both categories of workers, severance payments increase with job tenure. For blue collar workers with short tenure (two months to one year), severance payment is much lower, amounting to 5 daily wages, thus, facilitating short-term flexibility. A high level of job protection is likely

Table 10. **Strictness of EPL by international comparisons: qualitative indices¹**

	Regular contracts		Temporary contracts		Regular and temporary	
	1990	1998	1990	1998	1990	1998
United States	0.1	0.1	0.3	0.3	0.2	0.2
Japan	3.0	3.0	2.7	2.3	2.9	2.6
Germany	2.9	3.0	4.2	2.5	3.6	2.8
France	2.4	2.5	3.0	3.7	2.7	3.1
Italy	3.0	3.0	5.3	3.6	4.2	3.3
United Kingdom	0.7	0.7	0.3	0.3	0.5	0.5
Canada	0.9	0.9	0.3	0.3	0.6	0.6
Greece	2.8	2.6	4.5	4.5	3.6	3.5
Ireland	1.7	1.7	0.3	0.3	1.0	1.0
Portugal	5.0	4.3	3.5	3.2	4.2	3.7
Spain	3.8	2.8	3.5	3.7	3.7	3.2

1. The index ranges from 0 to 6, with higher values representing stricter regulations.

Source: Nicoletti, Scarpetta and Boylaud (1999), "Summary Indicators of Product Market Regulation with an Extension to Employment Legislation", Economics Department Working Paper No. 226.

to contribute to labour market segmentation between protected workers (“insiders”) and job seekers and temporary workers (“outsiders”). In this way, EPL may act as a tax on labour adjustment, thus reducing labour turnover. On the other hand, such regulations may have a positive effect on productivity, insofar as they increase training and reinforce the attachment of the worker to the firm. In Greece, however, the low level of training expenditure suggests that there can only be a weak link between EPL and on-the-job training. On the other hand, the strictness of employment rules may, in part, explain the large imbalances in the gender and age distribution of unemployment, which are among the severest in the OECD. The reduced job prospects for “outsiders” are further reflected in the high incidence of long-term unemployment (58.5 per cent of the total in 1999).³⁷ As part of its reform agenda, the government envisages to abolish the “2 per cent rule” on collective dismissals for enterprises employing between 50 and 199 workers, introducing instead the possibility for these firms to dismiss up to four people per month. Thus, for firms with less than 50 employees the envisaged limit is 4 instead of 5 workers while, for firms with between 50 and 199 employees the envisaged limit is 4 instead of between 1 and 4.³⁸

Increase working time flexibility

The labour market reforms of the 1990s increased working time flexibility by permitting firms to use a fourth shift (which allows for 24 hour operations) and by institutionalising part-time work. As a result, operating hours in industry have increased markedly over the 1990s.³⁹ Nevertheless, the share of part-time work in industry has remained low, probably reflecting, on the supply side, the unattractive earnings for part-time workers. In the retail trade sector, however, the share of part-time work is comparable to the EU average, whereas in other services (including tourism), there is evidence of a widespread use of temporary work (almost triple the EU average), reflecting the seasonal nature of the employment in the sector.⁴⁰ On the demand side, the calculation of the social security contributions for part-time workers on the basis of actual earnings does not discourage part-time work in general.⁴¹ Overall, the share of part-time work in total employment on the basis of the Labour Force Survey (LFS), edged up to 6.1 per cent in 1999, from 4.6 per cent in 1997. Part time work has made a marked contribution to total employment growth, especially in the case of women, where part-time employment growth accounted for around 60 per cent of the rise in their employment between 1997 and 1999. At the same time, estimates by the General Confederation of Labour suggest that the share of workers in “atypical” forms of employment, part-time and temporary, comprised 20 per cent of total employment in 1999.

The 1998 law on industrial relations provides for more flexibility of working time, by allowing the calculation of working time over a longer period, without additional costs. However, this measure has been very little used. In the context of

the draft bill currently under Parliamentary scrutiny the government's proposals aim at removing the disincentives for part-time work by introducing: *i*) a 7.5 per cent increase in the wage of those working less than 4 hours per day and remunerated on the basis of the minimum wage (no change is envisaged for those working more than 4 hours); *ii*) an income subsidy to special categories of long-term unemployed who take up a part-time job;⁴² and *iii*) by abolishing the possibility of overtime for part-time workers. Moreover, the Government has proposed a limitation of overtime which is at the employers' discretion 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 overtime premium.⁴³ This measure would raise labour costs. The reduction of overtime work can be accompanied by a flexible calculation of the weekly working hours, on an annual basis, although this scheme is voluntary. For those firms adopting the more flexible scheme, the annualisation of the working time will result in an effective reduction of the agreed workweek to 38 hours.⁴⁴ This proposal would not have a strong direct impact on labour costs.

In response to union demands, a move towards reducing the normal working week to 35 hours, without any reduction in pay, was tried on a pilot basis by the Hellenic Bank Association in some 50 bank branches.⁴⁵ This move, however, has been discontinued since both sides agree that the experiment has failed. Such a move, if it were to become more wide-spread and were not accompanied by wage restraint or measures that raise productivity, could push up costs considerably and have damaging effects on the economy.

Active labour market policies and improvement of skill and competencies

The previous *Survey* highlighted the scope for improving the effectiveness of ALMPs, calling for a greater emphasis on training rather than employment subsidy programmes, and the creation of a well-functioning PES. The improvement of the educational system, in general, was also considered to be a matter of great importance, in light of the considerable mismatch between private sector demands for new employees and their skills. The main progress achieved, since then, with regard to the upgrading of the Greek PES (OAED), was the establishment of 50 EPCs in the context of the implementation of the National Action Plans for Employment (NAPs) for 1998, 1999 and 2000.⁴⁶ In addition, some progress has been made in exposing the PES to market forces by authorising private employment agencies for ten different categories of workers, although the bulk of job placement and training activities is still under the competence of the public organisations.⁴⁷

Greece has made progress towards meeting the target of helping 20 per cent of the unemployed by active measures in 1999, but the activation rate is still below the target.⁴⁸ However, there was little progress in shifting resources from employment subsidy programmes to training. In 1999, 64 per cent of the total

OAED expenditure on the unemployed was allocated to subsidy schemes (including financial support to entrepreneurs and direct subsidies or work experience programmes). Moreover, there still remains scope for improving further the quality and the job-linkage of vocational training. Improvements in ALMPs should be combined with improvements in the education system⁴⁹ to ease the transition from school to work and meet evolving labour demand needs.⁵⁰

The 2000 NAP has allocated over GRD 800 billion to combat unemployment. However, spending may not be very effective unless closely monitored. Efforts should be stepped up to improve the monitoring of the ALMPs and achieve a proper assessment and evaluation. A faster than envisaged completion of the reform of the PES (including the computerisation and reform of public employment services) should facilitate the implementation of other actions included in the NAP, thereby helping Greece to achieve the 20 per cent activation target.

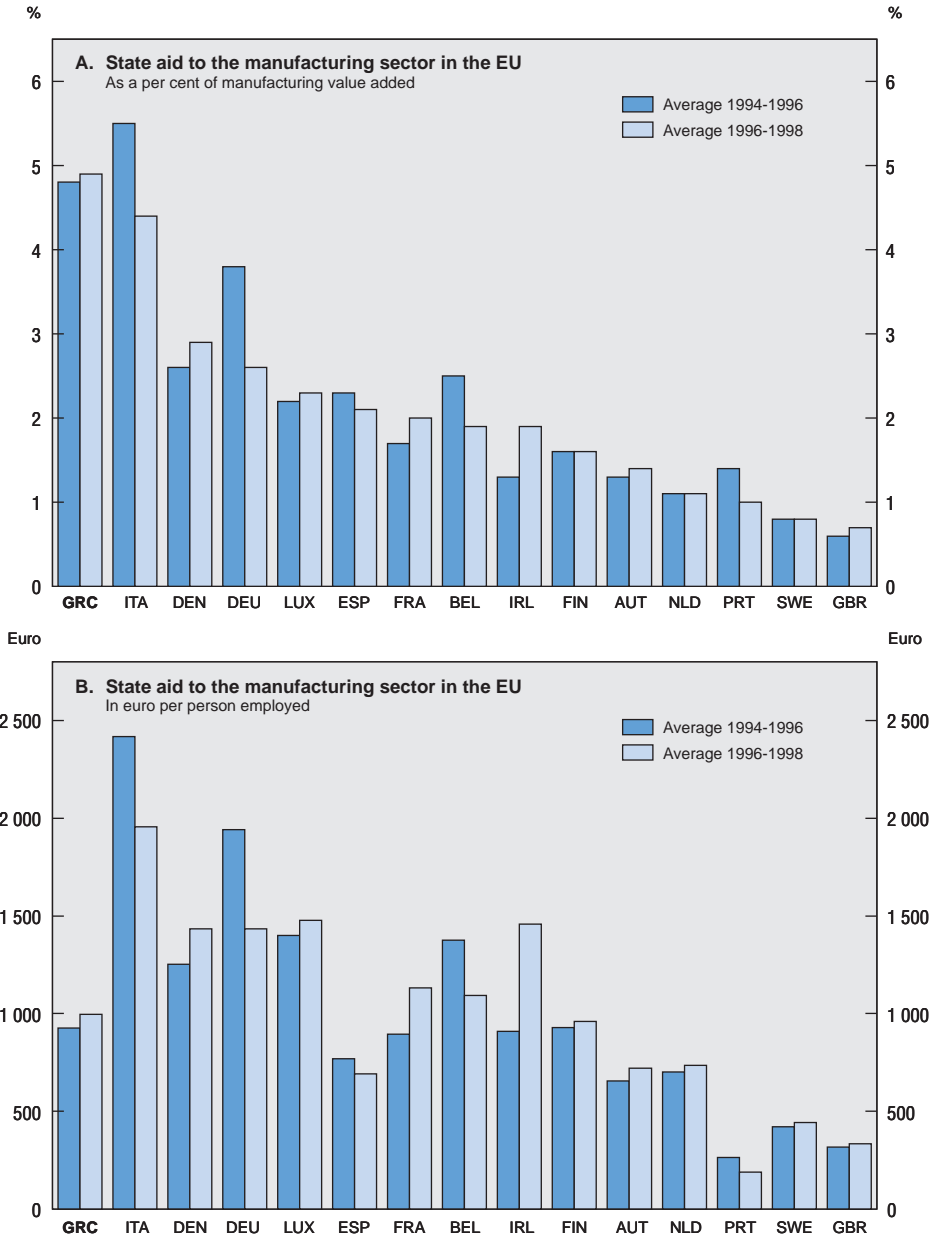
Product markets

Subsidies to industry should be reined in

Greece has traditionally provided a wide range of subsidies to industry, often in combination with EU structural funds. Expressed as a percentage of gross value added, public support to manufacturing was the second highest in the European Union, although it ranked somewhat below average in terms of aid per person employed (Figure 10).⁵¹ The main objectives of industrial policy are to boost investment, to improve competitiveness, to support exports, to provide easier financing and to promote research and development. Subsidies can also be granted for the support of declining sectors and the reduction of regional disparities. They are mainly provided in the form of direct grants, and to a much lesser extent, tax incentives and soft loans.

A wide range of incentives have been designed to support investment in industry. Approved subsidies (under the Law 1892/90) amounted to 2.5 per cent of business investment between 1990 and 1998, although only half of them were implemented over the period. A new investment law (Law 2601/98) has become effective in April 1999. It provides measures for newly established enterprises, tax incentives and accelerated depreciation for existing enterprises of growing size, and high technology investments or investments using alternative energy resources or protecting environmental resources. The new legislation reduces investment incentives, classifies investors into two categories – “new” and “old” – and differentiates the incentives granted accordingly.⁵² The “new” investors can qualify for cash grants, soft loans, leasing subsidies or tax allowances. The “old” investors can only be granted tax allowances and soft loans.⁵³ A further distinguishing feature of the new law is that the amount of cash granted is linked to the number of jobs being created. Between 1998 and mid-2000, 816 projects for all

Figure 10. Subsidies to industry



Source: European Commission (2000), Eighth Survey on State Aid in the EU.

sectors of the economy were approved under the new law, and amounted to 0.7 per cent of GDP for 1999. The subsidies approved covered 32½ per cent of investment spending, although their implementation has lagged behind.

Public support programmes to industry could distort competition and allocative efficiency, especially when granted in an *ad hoc* manner to particular firms. Apart from such considerations, subsidies have adverse budgetary consequences, even though Greece also benefits from the Community Structural Funds. A better monitoring, and especially systematic evaluation of public programmes, along with a focus on horizontal, rather than sectoral, objectives and short duration of industrial support would help to reduce public expenditure.⁵⁴ Support to R&D and innovation should become a key concern of horizontal programmes, as Greece is lagging behind the other OECD countries, with public sector financing accounting for around half of total expenditure on R&D (Table 11). The effectiveness of support programmes could also be improved by the elimination of administrative inefficiencies.⁵⁵

Table 11. R&D expenditure and sources of funding¹

	GERD ²	Funding of GERD ²		
	As a % of GDP	Industry	Government	Abroad
United States	2.84	68.5	27.6	..
Japan	3.06	72.6	19.3	0.3
Germany	2.29	61.7	35.6	2.4
France	2.18	50.3	40.2	7.9
Italy	1.05	43.9	51.1	5.0
United Kingdom	1.83	47.3	31.0	16.8
Canada	1.61	49.2	31.2	13.8
Greece	0.49	20.2	46.9	30.3
Ireland	1.41	69.4	22.2	6.7
Portugal	0.63	21.2	68.2	6.1
Spain	0.90	49.8	38.7	6.7
European Union	1.81	53.9	37.2	7.0
Total OECD	2.23	63.1	30.6	..

1. 1999 or latest available year.

2. Gross domestic expenditure on R&D.

Source: OECD, Main Science and Technology Indicators (MSTI) Database.

Restructuring of the agricultural sector should be stepped up

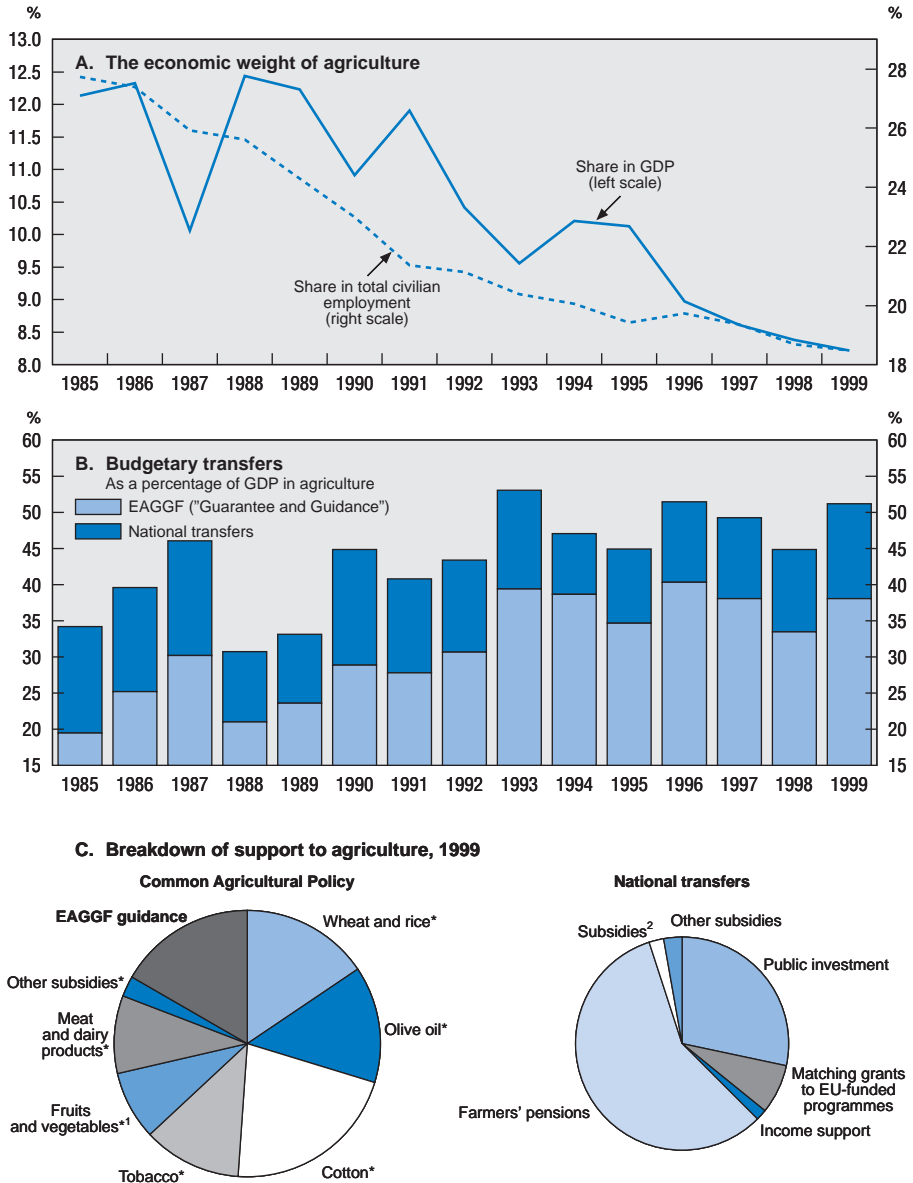
Agriculture still remains an important sector of economic activity in Greece, accounting for 7.2 per cent of GDP and 19 per cent of civilian employment in 1999. Agriculture's contribution to GDP has been declining, while agricultural

employment has shrunk by 5 percentage points as a share of total employment since the early 1990s (Figure 11). Agriculture has remained the most heavily-subsidised sector. In 1999, it received budgetary transfers estimated at 51 per cent of the sector's value added (3.7 per cent of GDP). Moreover, the amount of support has increased since the early 1990s. Nearly 75 per cent of total support (2.8 per cent of GDP) comes from the EU's Common Agricultural Policy transfer schemes. Cotton, wheat, olive oil and tobacco are the most heavily protected products, attracting nearly 80 per cent of total budgetary transfers. The rest of the CAP transfers aim at the restructuring of production under the EAGGF Guidance Fund. Most of the national budgetary transfers (around two-thirds) are earmarked for investment, including improvements of rural infrastructure and matching grants for farm modernisation programmes eligible for EU support. A significant part of national transfers also consists of support to young farmers, early retirement, and preservation of the countryside. In addition to such direct budgetary transfers, substantial indirect support comes from national sources to fund a non-contributory scheme for farmers' pensions.⁵⁶

The sector suffers from structural weaknesses that are reflected in poor international competitiveness. Structural impediments to enhance productivity are mostly due to the large number of small inefficient farms, with the average farm size being just 25 per cent of the EU average. Other factors are also at play. Owing mainly to weaknesses in promotion and distribution, the competitiveness of exports has remained poor and only 30 per cent of farm production is processed further. Agriculture has become very intensive, with a heavy use of fertilisers and pesticides, which has led to a levelling off of yields, a declining quality of farmland, and signs of environmental damage (Ministry of Agriculture, 1999). In addition, easy access to water resources (through, for instance, unlicensed artesian wells) and low prices have encouraged waste of water resources. As agriculture accounts for 85 per cent of the country's water consumption, water shortages are looming. Long-standing structural weaknesses are exacerbated by distortions arising from the EU's CAP. For example, generous support granted to cotton and wheat cultivation sustains strong demand for well-irrigated farmland, thus boosting land prices and rentals. The latter can reach up to 50 per cent of a farmer's income.

Looking forward, Greek agriculture will need to cope with a number of challenges. Under the "Agenda 2000", Greek agriculture will enjoy an unchanged level of budgetary transfers until 2006. Thereafter, if national resources were to substitute for part of the transfers funnelled through the CAP, the annual cost to the budget could be substantial. Moreover, the current WTO round on agriculture will aim to reduce international trade barriers in agriculture and the EU agreements with the southern Mediterranean countries (Euro-Med partnerships) will improve access of Mediterranean farm products to EU markets and intensify competition for many Greek products. At the same time, the EU's enlargement to

Figure 11. Support to agriculture



* Income support from EAGGF guarantee

1. Fruits, fresh vegetables and others not elsewhere classified.
2. Interest and fuel.

Source: Ministry of National Economy and Ministry of Agriculture.

Central and Eastern Europe will improve market access for Greek products, especially for fresh fruits and vegetables. To cope with the upcoming pressures and also to take advantage of new market opportunities, policies need to be geared towards improving competitiveness. The 3rd Community Support Programme, spanning the period 2000 to 2006, will provide large-scale funding to assist the transformation of Greek agriculture, and will also provide indirect support by funding investment to improve core infrastructure. The agricultural sector will further benefit from the implementation of the "Agricultural Development Plan", that is currently under discussion. Spending of approximately euro 3.7 billion over the next six years is planned. The plan, 73 per cent of which will be financed by national sources and the rest by EU funds, focuses on: *i*) the early retirement of 50 000 farmers aged between 55 and 65 years who hand over their farms to younger farmers aged under 40 (involving public spending of euro 1.2 billion);⁵⁷ *ii*) the granting of additional payments to farmers working in mountainous and less-advantaged areas to motivate them to remain there (amounting to euro 1 billion); *iii*) the implementation of agro-environmental measures, particularly for extensive animal breeding (amounting to euro 0.4 billion); and *iv*) the provision of incentives to convert unproductive plots to forest land (amounting to euro 0.2 billion). This implies that agricultural subsidies will rise in the future, rather than decline.

The privatisation process has progressed, but the pace has slowed

Public enterprise reform started in the early 1990s and has become a policy priority since 1996, stimulated by the need to comply with EU regulations and the EMU criteria. Major privatisations, beyond those concerning the previously state-owned banks (discussed below), since 1996 comprise the sale of 49 per cent of the Hellenic Telecommunications Organisation (OTE), 32.1 per cent of the Hellenic Petroleum Corporation (HP), 30 per cent of the Athens Water and Sewage Company (EYDAP), and 43 per cent of Hellenic Vehicles Industry. The pace of reform has accelerated since 1998 and total privatisation receipts amounted to close to 4 per cent of GDP in 1999. Since end 1999, progress has been slower, though, due to the pending elections. Also the search for strategic alliances has caused delays. In the meantime, the government has announced a new privatisation plan which includes the sale of minority (and in some cases, majority) shares, and tenders for managing the operations of another 10 enterprises (excluding banks) in the period 2000-01 (Table 12).⁵⁸

While the privatisation of public enterprises has progressed, the state has yet to sell more than 49 per cent of any public utility, as private majority stakes were, so far, forbidden by law. The government, however, has recently decided to lift the upper limit on private ownership of OTE and Olympic Airways (OA). In addition, legislative amendments to the 1991 privatisation law aim at facilitating

Table 12. **Privatisation programme for public enterprises**
1998-2001

Company	Date	% share	Method of privatisation
Privatisations that have taken place			
Macedonia Thrace Bank	April 1998	33	Block trade through the stock exchange
General Bank	April 1998	33	Private placement and listing
Bank of Crete	June 1998	97	International competitive tender
Public Petroleum Corporation I	June 1998	23	Primary and secondary offering in the stock exchange
Bank of Central Greece	July 1998	51	Block trade through the stock exchange
OTE III	Nov. 1998	10	Additional secondary offering
Ionian Bank	March 1999	51	Sale by Commercial Bank
OTE IV	July 1999	14	Additional secondary offering
Public Gas Corporation	Dec. 1999	22	Exercise of Hellenic Petroleum option
Athens Water and Sewage	Dec. 1999	30	Break up into two entities: land, plants and operations management/ concession agreement/privatisation through the stock exchange of the services entity
Olympic Catering I	April 1999	25	Primary and secondary offering in the stock exchange
Duty Free Shops	August 1999	67	Sale to the Agricultural Bank
Olympic Catering II	Dec. 1999	7	Offering on the stock exchange
Hellenic Bank for Industrial Development	Jan. 2000	25	Public offering
Hellenic Petroleum II	Feb. 2000	9	Public offering
Hellenic Vehicles Industry	August 2000	43 per cent and management	Strategic investor
Athens Stock Exchange III	August 2000	10	Listing in the stock exchange/primary and secondary offering
COSMOTE	Sept. 2000	15	Initial public offering
Commercial Bank	Oct. 2000	7	Strategic investor and alliance

Table 12. **Privatisation programme for public enterprises** (*cont.*)

1998-2001

Company	Date	% share	Method of privatisation
Privatisations currently under way			
Corinth Canal		Concession contract	Concession contract
Salonica Water and Sewage		20-25	Break up into two entities: land, plants and operations management/ concession agreement/privatisation through stock exchange of the services entity
Pireas Port Authority		20-25	Creation of port management subsidiary/privatisation of the management company through public offering
Salonica Port Authority		20-25	Creation of port management subsidiary/privatisation of the management company through public offering
OTE		15-20	Strategic ally
Public Power Corporation		To be determined	Initial public offering
Olympic Airways		65	Strategic investor
Postal Services		15-25	Strategic partner in the field of courier services
Football Prognostics Organisation		10-20	Initial public offering
HELLEXPO		30 per cent and management	Strategic partner
Agricultural Bank		20-25	Initial public offering
Hellenic Bank for Industrial Development		> 26	Strategic partner
Hellenic Petroleum		Subject to negotiations	Strategic ally

Source: Ministry of National Economy.

and speeding up the privatisation programme. These include: *i*) the re-definition of the public sector;⁵⁹ *ii*) the obligatory appointment of financial advisors in all privatisation transactions in order to raise transparency and effectiveness; *iii*) the introduction of the possibility to exchange the shares of a state-owned company with those of a company from the private sector as a new privatisation method; and *iv*) the broadening of the evaluation criteria for the awarding of a tender to a tentative bidder. The proposed changes to the 1991 law should strengthen private investor interest and management incentives, while at the same time increasing privatisation receipts.

The Industrial Reconstruction Organisation (IRO), is under liquidation.⁶⁰ This should be completed in May 2002. The mis-management of the companies by IRO has cost the Government an estimated GRD 1 trillion since the beginning of its operation in 1983. The government will assume outstanding IRO debts of GRD 665 billion when the holding company will be closed (Economic Intelligence Unit, 1999).

The effectiveness of competition policy needs to be strengthened

So far, competition policy has only played a minor role in raising competitive pressures. Recognising the need to strengthen the role of the Competition Committee, a recent law aims to correct several of the shortcomings in the operation of the Competition Committee. Nearly all of the Competition Committee's time and resources had been devoted, so far, to reviewing merger applications, even though anti-competitive mergers are not likely to be a major issue in Greece. Most businesses in Greece are fairly small, and there is substantial scope for consolidation. The Committee was barely able to handle the merger workload, which it is obliged to do under the 1995 amendments to the Competition Act. Meanwhile, no resources are available to deal with horizontal issues. They could be of significance because of the tightly-knit business community and because planning and price controls were still in place in the not too distant past (OECD, 2001).

The Competition Committee had never been consulted about reforms of network industries, and it has been unable to study and offer policy advice on regulations and government decisions that impair competition. The Committee does not have the power to deal with potential distortions due to subsidies, while the ministry that used to set its budget has supported "gentlemen's agreements" among firms to constrain price increases in order to meet the Maastricht inflation criterion. The Competition Committee does not have the capacity either to deal with competition problems arising from efforts to protect inefficient state-owned enterprises, and it has been unable to undertake systematic investigations of sectors that apparently show significant competition problems.

The recent law upgrades the Competition Committee by granting it economic, in addition to administrative independence.⁶¹ The law also changes the merger control provisions by: i) abolishing the post-transactions notification provisions of concentrations; and ii) increasing the minimum market share threshold from 25 to 35 per cent⁶² beyond which firms are obliged to seek approval by the Competition Committee for mergers. Furthermore, the new law assigns a more pro-active role to the Competition Committee by allowing the latter to deliver opinions on its own initiative and not just on demand. Increasing the threshold of market share concentration will encourage an increase in the size of Greek companies in the context of the single European market and lower the workload of the Competition Committee. At the same time, the new law should enhance competition, as it envisages a co-ordination between the Competition Committee and the new sectoral regulators in telecommunication and energy.

As indicated below, there are a number of important reforms underway in the Greek energy, telecommunications, transport and financial sectors. It would be useful to expand the capacity of the Competition Committee to review those reforms in order to ensure that, where feasible, economic efficiencies are reaped through the introduction of greater competition. This should include giving the Competition Committee a full opportunity to make its views known on privatisation proposals relating to companies presently enjoying considerable market power. Full private ownership of such companies will result in pressures to set prices above (and outputs below) what would prevail were the sectors subject to greater competition. Post-privatisation regulation is an imperfect way to deal with this problem. It might be better, assuming economies of scope are sufficiently low, to restructure vertically integrated companies prior to privatisation. The Competition Committee is uniquely well placed to make recommendations concerning the trade-off between economies of scope and the efficiencies that could be reaped if companies were subject to greater competitive pressures, and regulation were confined to true natural monopolies.

The Competition Committee also merits a role in the privatisation process because it is more likely to take a long run, consumer-oriented point of view than ministries conducting the privatisations. Selling market power along with bricks and mortar is a good recipe for securing a fast sale at a politically attractive high price. The short-term gains from such a policy could, however, be more than offset by subsequent harm to consumers and lost tax revenues due to inefficient companies charging high prices for output below the optimal level.

Sectoral reforms⁶³

Energy: Electricity, gas and oil

The electricity market is dominated by the stated-owned Public Power Corporation (DEH). DEH is vertically integrated in all aspects of the electricity

sector – generation, transmission, distribution and supply – as well as lignite mining. Greece is committed to liberalise the electricity market in February 2001, in accordance with the relevant EU Directive.⁶⁴ In preparation, the regulatory framework for the electricity market and for the future structure of DEH has been set up (Annex I).

Though the provisions of the 1999 law are a step towards opening the electricity sector, effective competition is likely to remain limited. The measures leave DEH with significant monopoly power, as the corporation remains the exclusive supplier of the more profitable, captive small consumer market. At the same time, the sector's structure, in combination with the existing regulatory framework and the relative isolation of the Greek network, both geographically and technically, impede market entry. Competition from imports, for instance, is virtually precluded, due to demanding conditions on supply authorisations,⁶⁵ while competition through domestic entry is likely to develop only very slowly. The key constraints for electricity companies include access to transmission and distribution, and price discrimination in favour of large industrial customers. To foster the creation of competing generating companies a more radical reform of the sector will be required, involving the splitting of DEH into several independent and competing generation companies. Under current plans, partial privatisation is expected to improve DEH's efficiency. Privatisation, however, should follow the establishment of competition, as external shareholders may lobby against the subsequent creation of effective competition in the sector, since their interests are not identical to those of consumers (OECD, 2001). In any event, the partial privatisation of DEH – planned to take place soon – will require the restructuring of the corporation and the reduction of its significant financial liabilities, which arise from high operating costs and a heavy debt burden.⁶⁶ The separation of the social security fund from the corporation was a step towards restoring DEH's financial viability.

In addition to taking steps to encourage competition among electricity generators, there are two other restructurings that should be considered prior to proceeding with full or partial privatisation of DEH. To begin with, ownership of oil and gas distribution should be studied as a means to promote competition between those two energy sources. Gains might also be realised by separating the ownership of municipal electricity distribution grids. Such horizontal splits would facilitate regulators being able to compare the performance of similarly placed municipal distribution grids, and consequently set rates encouraging greater efficiency by the companies concerned. The same applies to municipal gas distribution grids.

The gas sector is dominated by the Greek Public Gas Corporation (DEPA), which is a vertically integrated monopoly. DEPA is state-owned, except for a blocking 35 per cent, owned by HP. The private sector will 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 in DEPA's distribution subsidiaries and the management of these companies.⁶⁷ Finalising the legal and administrative framework for gas distribution is key to speeding up the introduction of natural gas. At present, demand from small users is virtually non-existent as the development of the low-pressure network lags considerably behind schedule. Given that natural gas was introduced in Greece only in 1997, the country was granted a derogation for liberalising the natural gas market until the end of 2006. As a result, the sector is unlikely to operate in a competitive environment in the medium term and DEPA is expected to manage the supply of natural gas, unless the company is privatised before the end of the derogation period.⁶⁸ Without competition, the existing dual pricing system for natural gas could hinder competition in the electricity sector.⁶⁹

Regarding the oil sector, competition has increased in the retail market, but the upstream refining sector has largely remained a duopoly of HP, the biggest player in the market, and the privately-owned Motor Oil. At present, 67.9 per cent of the shares of HP are still public. The government plans to proceed with a strategic alliance for HP. The expansion and modernisation of installations, planned by the privately-owned Petrola, would provide more competition at the refining stage by increasing the number of players. The Ministry of Development is currently considering to allow retailers to buy fuel directly from a refinery (bypassing the marketing companies). The implementation of this measure will enhance competition. Competition would be further intensified, by the elimination of HP's exclusive right to supply large public consumers. Severing the link between DEPA and HP would also be a positive step. An additional source of competition could come from imports, which are currently curtailed by the linkage of purchase agreements to storage contracts. A more lenient licensing procedure for the construction of storage facilities, currently constrained by environmental considerations, would provide more room for competition from imported refined products.

Telecommunications

The Greek telecommunication market is fully open to competition since 1 January 2001. OTE is still the monopoly provider of fixed voice telephony, the last one in the European Union. Starting in 1997, OTE has been partially privatised and the Government listed 15 per cent of the cellular telephone subsidiary of OTE, CosmOTE, in September 2000.⁷⁰ The government plans to search for a strategic partner to purchase a portion of OTE's shares. The strategic investor will also participate in OTE's management – although to what extent is still to be decided. The sale of a further tranche of OTE's shares would reduce the state's ownership to less than 51 per cent, resulting in OTE becoming the first public enterprise in Greece to have a majority private ownership. The market for fixed voice telephony was liberalised in January 2001, when the three-year derogation from the relevant

EU directive expired. In preparation, a law has been recently ratified by Parliament, specifying the general framework for telecommunications. The law increases the responsibilities and independence of the National Telecommunications and Post Commission (EETT) granting it the right to award licences and impose fines. To date, the EETT has taken action to increase competition and ensure that the appropriate regulatory safeguards are in place in that part of the market, which is open to competition. Its role will become increasingly important, with the arrival of several new operators in fixed and mobile telephony. In view of the liberalisation of the telecommunications sector, the completion of the rebalancing of OTE's tariffs, which has been underway for several years now, is an issue of crucial importance, as it would reduce OTE's vulnerability to competition from new entrants. Overall, though, prices, while declining, have remained high in Greece (Table 13). Off-peak internet access prices have, however, converged to the OECD average, although the level of internet penetration has remained very low.

Table 13. **Telephone charges and Internet penetration**

	OECD basket of telephone charges		Number of secure servers and Internet hosts		Internet access basket ¹
	Expressed in PPPs		Per million inhabitants	Per thousand inhabitants	Expenses in PPP
	Total charges, households (August 1998)	International charges, households ² (August 1998)	Secure servers (March 2000)	Internet hosts (Sept. 1999)	(2000)
United States	340.5	106.4	170	160	35.4
Japan	347.9	91.2	15	19	49.2
Germany	419.1	71.5	34	20	56.2
France	420.0	47.0	18	13	59.8
Italy	435.8	111.4	11	9	30.9
United Kingdom	367.3	66.0	55	35	25.3
Canada	326.9	84.9	87	76	35.8
Greece	530.2	78.7	6	7	51.6
Ireland	432.8	60.4	48	14	38.6
Portugal	660.2	111.2	9	7	76.5
Spain	668.1	98.1	16	10	37.1
OECD average	427.2	100.0	60	54	51.6

1. Refers to OECD Internet basket for 40 hours at off-peak times including VAT.

2. Zone Distribution Method in US dollar. OECD countries are divided into three regions (Europe, North America, Pacific) and international call destinations are assumed to be distributed equally to each area. The charges are expressed in the form of an index so that the OECD average becomes 100.

Source: OECD (1999), *Communications Outlook*, OECD (2000), *Economic Outlook 67* and OECD (2000), *Local Access Pricing and E-Commerce*.

There are three cellular mobile operators in Greece and a fourth licence will be given soon. Even though Greece was the last country in the European Union to grant licences to mobile phone operators, mobile phones have already achieved a penetration rate of more than 50 per cent towards the end of 2000 and this rate is on a rising trend. Competition between the mobile telephone operators has given an impetus to the provision of new services, as well as a decline in charges.

Transport

In June 1999, the Government awarded a 30-month contract to Speedwing – a subsidiary of British Airways – to manage the ailing state carrier Olympic Airways (OA), in a bid to make the airline profitable. British Airways was also granted an option to bid for 20 per cent of OA's share capital and the intention was that Speedwing would take the troubled airline into an international alliance.⁷¹ Nevertheless, after only a year under Speedwing management, the results were disappointing and led the company into another vicious circle of rising deficits.⁷² The continuing critical condition of OA led to the termination of the contract in June 2000. At the same time, British Airways did not take up the 20 per cent stake in the carrier. In light of the urgent need to improve the airline's financial position the Government now plans to sell OA. The method of privatisation still has to be decided, however. OA still suffers from high labour costs and inflexible working conditions and is among the few airlines without a strategic alliance. The potential for OA as a regional carrier could be enhanced by the relocation of its activities to the new airport in March 2001. Moreover, the Government has tabled a law that would release OA from applying the strict employment regulations for civil servants. This would make it easier to restructure the carrier. The law would also spare the new management from being accountable to parliament for the company's business operations. The failure, so far, to improve the efficiency of OA has not prevented an increasing degree of competition in the sector since the liberalisation of domestic flights in 1992. The national carrier has also lost its monopoly in the islands in July 1998, while the provisions governing ground-handling services have been liberalised. Moreover, the state has privatised other airport services, including duty free shops and catering.

Financial markets

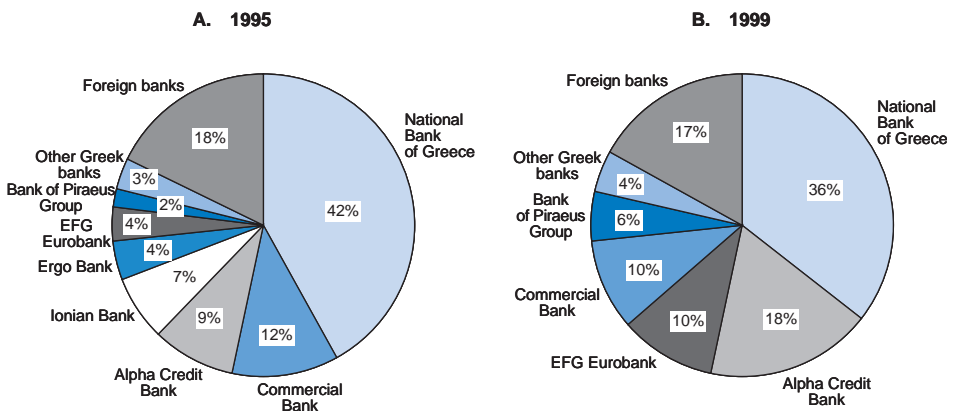
A rapidly changing landscape of the banking system

Following liberalisation, the Greek banking system has undergone deep changes.⁷³ The progressive withdrawal of the state from commercial banking (Table 12) has provided an impetus to the development of the private banking sector and competitive pressures have risen. Greek private banks have been

engaged in a fierce battle for market share, through mergers and take-overs that will continue to reshape the landscape of the banking system along with further downsizing of public ownership of commercial banks. As a result of privatisations and greater competition, the market share of state-controlled banks in total assets of commercial banks fell from 60 per cent in 1995 to 46 per cent in 1999. Restructuring of the banking system has gained momentum after the sale, in March 1999, of Ionian Bank – following two unsuccessful tenders in 1998 and fierce resistance by unions – the disposal of which enhanced the credibility of the government's bank privatisation programme.⁷⁴ The process of bank consolidation has further increased concentration in the Greek banking system. In 1999, the five biggest banks (of which two are still under state control) accounted for nearly 78 per cent of commercial banks' total assets, up from 73.4 per cent in 1995 (Figure 12).

Progress in restructuring state-controlled commercial banks has been rapid, with cleaning up of their balance sheets from non-performing loans and equity holdings in loss-making firms being almost completed.⁷⁵ Also the restructuring of one of the two biggest specialised credit institutions in public hands, the Hellenic Bank for Industrial Development (ETVA) and the ATE, has advanced;⁷⁶ ATE's capital adequacy ratio exceeds, as of June 2000, the minimum 8 per cent as a result of the various measures taken by the government in 1999 and 2000 and ATE has now a sound balance sheet. The government intends to tender 20 to 25 per cent of ATE's equity capital and a controlling stake in ETVA.

Figure 12. Market shares of Greek commercial banks¹



1. In total commercial bank assets.
Source: Federation of Greek Banks.

Bank efficiency should be enhanced while prudential supervision should remain vigilant

Owing to financial market liberalisation and enhanced competition, the efficiency of the Greek commercial banks has improved during the 1990s, even though it remains significantly lower than in the best-performing OECD countries (Table 14). The operating cost-to-gross income ratio, for instance, has declined. However, operating costs are still high, reflecting overstaffing of Greek banks. In 1997, banks counted still on average 22 employees per branch, which – though 25 per cent down since 1994 – was almost twice as high as the EU average. Until mid-2000, Greek banks have also faced rather strict regulatory constraints, including an exceptionally high 12 per cent required reserve ratio (now reduced to 2 per cent), which is reflected in the interest rate spread, and measures for restraining banks' credit expansion over the period April 1999 to end-March 2000 (see above). Provisioning of Greek commercial banks for the large amount of doubtful loans also partly accounts for the high interest rate spreads.⁷⁷

Looking forward, macroeconomic stability, improved banking regulation, and stronger supervision of bank lending should help the banking system to deal with doubtful loans better than in the past. Nevertheless, enhancing market discipline in loan repayment is also needed. For instance, generous measures taken by the Government in January 2000 to write off interest arrears on doubtful loans in banks' portfolios up to certain limits may be counterproductive.⁷⁸ Aside from their potentially large cost – which will burden either the banks or the budget – interest arrears' amnesties may result in severe moral hazard problems as they discriminate against borrowers who have managed to cope with the high interest rates that have prevailed in the past. They can therefore undermine market discipline and distort borrowers' incentives. The ATE is a good case in point, as it has been heavily burdened with non-performing loans, partly reflecting poor incentives for loan repayment that have resulted from rescheduling and the arrears amnesties often granted to farmers in the past.

Since the mid-1990s profitability has declined somewhat, reflecting stronger competition, especially in the retail loan market, though more recently it recovered, also thanks to securities transactions in the booming stock market. Reducing operating costs further hinges, however, on staff restructuring, which is particularly cumbersome because of the restrictive EPL – especially the fact that bank employees are hired on permanent contracts. Fierce competition and declining bank profitability may induce banks to take more risks in lending and asset management. This should be of concern in the current context of declining interest rates and strong growth in domestic demand, which may lead to an unsustainable credit expansion. Though starting from a low level compared with other OECD countries, mortgage and consumer credit have been surging at a rate of around 20 per cent since 1996. Enhanced supervision will thus become more

Table 14. International comparison of bank profitability
As a per cent of average balance sheet total

	Greece ¹			Austria	Finland	France	Germany	Italy	Netherlands	Portugal ¹	Spain
	1997	1998	1999								
	1999 ²										
Net interest income	2.3	2.4	2.7	1.4	1.9	0.8	1.5	2.2	1.7	2.1	2.2
Non-interest income (net)	2.2	1.9	3.7	1.2	1.9	1.0	0.6	1.3	1.3	0.9	1.0
Gross income	4.5	4.3	6.4	2.6	3.8	1.8	2.1	3.6	3.0	3.0	3.3
Operating expenses	2.8	2.6	2.7	1.8	3.3	1.2	1.4	2.2	2.0	1.7	2.1
<i>of which: staff costs</i>	1.9	1.7	1.6	0.9	0.8	0.7	0.8	1.3	1.1	0.9	1.3
Net income	1.6	1.8	3.8	0.8	0.5	0.6	0.7	1.4	1.0	1.2	1.2
Provisions (net)	0.7	0.6	0.7	0.4	0.0	0.1	0.3	0.4	0.2	0.4	0.2
Profit before tax	1.0	1.2	3.0	0.5	0.5	0.5	0.4	1.0	0.8	0.8	1.0
Inhabitants per bank branch	4 040 ³	3 736 ³	3 652 ³	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	15	19	15	18	13	19 ⁴	12	6

1. Commercial banks.

2. The data for Austria and Finland are for 1998.

3. Data refer to the entire banking system.

4. 1998.

Source: Bank of Greece and OECD Bank profitability.

pressing as the Greek financial system is undergoing rapid changes. In fact, until 1992, the need for prudential supervision was less urgent owing to the strict regulation of the banking system, the prevalence of state-owned banks, and the underdevelopment of collective investment institutions and capital markets. Compliance with EU banking directives and Basle committee capital adequacy standards has led to better supervision. Further steps in this direction since 1998 involve:

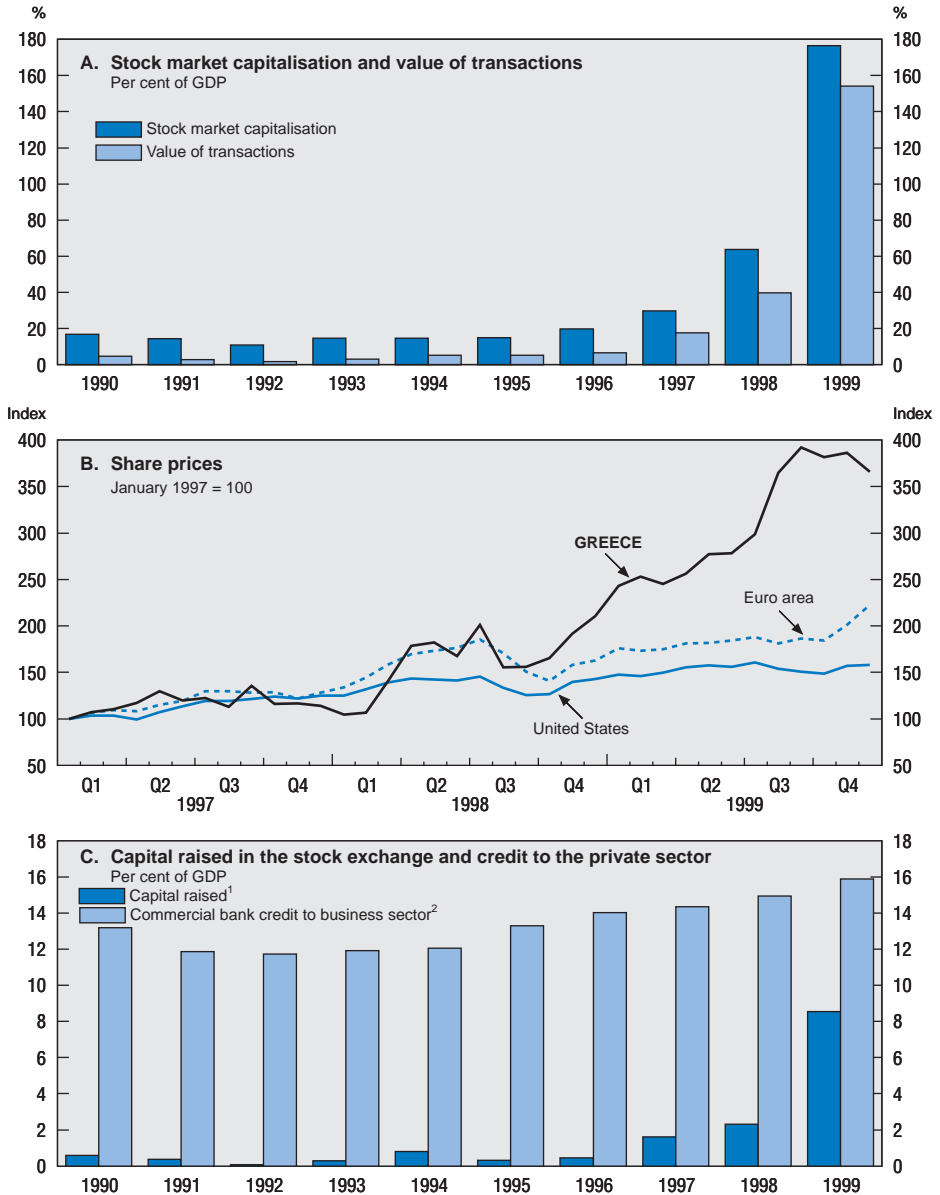
- The introduction of a framework for enhanced monitoring of credit institutions' internal risk management systems;⁷⁹
- The implementation of a more rigorous system of provisioning with the aim of improving the quality of bank loan portfolios and accelerating the cleaning up of doubtful loans (with a 1 per cent general provision rate for all loans and ranging from 10 to 50 per cent for non-performing loans, depending on servicing delays).

Nevertheless, there is still scope for improving the frequency of bank reporting (from a biannual to a quarterly basis) and the quality of disclosed information, so as to enhance monitoring by the supervisory authorities. This will be all the more needed as Greek banks have begun to play a larger role in transition economies in the Balkans, where risks are much higher, especially for activities not related to the financing of Greek companies' ventures.⁸⁰ Reflecting concerns about strong credit growth, the Bank of Greece has recently stepped up the supervision of the fastest growing credit institutions.

The stock market has gained a prominent role but remains highly volatile

Until recently capital markets had played only a minor part in corporate financing. Moreover, the regulatory framework, especially the preferential tax treatment of government bonds, discouraged the development of private fixed-income securities markets or of a market for commercial paper. Market capitalisation of the Athens Stock Exchange (ASE) was until the mid-1990s less than 20 per cent of GDP (Figure 13), one of the lowest in the OECD area, and was mostly accounted for by a small number of banks and insurance companies. This has changed radically since 1997, with the stock market soaring until 1999, out-performing core stock exchange markets. The stock market surge was triggered by the successful entry of the drachma to the EMS in early 1998, which improved euro area membership prospects. A further impetus came from the expected reduction in interest rates, which improved expected earnings valuations and made investors shift massively from deposits and interest-bearing debt to equities. However, market expectations were apparently exuberant, and subsequently the market suffered a large correction, with the index falling back from its peak of 6 355 in September 1999 to 3 430 in August 2000. It has recovered somewhat since then. Following the sharp rise in the stock market, doubts about the sustainability of the

Figure 13. Share prices and stock market capitalisation



1. Excluding share flotations of public enterprises.

2. Credit to industry, mining and trade.

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

stock market boom emerged during 1999. For example, market capitalisation climbed to 175 per cent of GDP in 1999, up from 63 per cent in 1998. Even taking into account a substantial amount of unrecorded GDP, such levels of market capitalisation are far above the levels seen in other OECD countries with comparable or even significantly higher levels of economic development. In particular, owing to the strong rise in price/earnings ratios, equity prices looked increasingly inflated. Moreover, the FTSE/ASE blue-chip index, which is composed of 20 high-capitalisation stocks, has increased significantly less than the general index, pointing to underlying speculative demand focusing on smaller capitalisation stocks. Concerns about market overvaluation led to a sharp correction in mid-September 1999, followed by a period of increased volatility – reflecting mainly movements of foreign investment funds and market nervousness prior to the elections. Capital raised in 1999 by private-sector companies amounted to 8.5 per cent of GDP, nearly four times the amount raised in 1998, which was already the largest on record. The stock market's strength supported a large number of IPOs and mergers among industrial companies, thus facilitating the ongoing restructuring.

Stock market volatility raises concerns, as it may impair the efficiency of the capital-raising mechanism, damage the effectiveness of the market in monitoring corporate performance, and undermine its effectiveness in improving portfolio diversification and risk management. Policy should address a range of factors which, by distorting market functioning and investor behaviour, may explain part of the high stock market volatility:

- Existing trading rules and, especially, price limits applying to individual shares may exacerbate volatility as, by suspending trading when the price limit is hit, they provide room for taking relatively low-risk speculative positions.⁸¹ Implementing limits on fluctuations of the general index, coupled with temporarily suspending trading, rather than price limits on individual shares, might improve risk assessment on the part of investors and foster market stability.
- The tax treatment of capital gains on listed companies, which are exempt from the PIT boosts the after-tax return on equity investments, and may be a factor driving increases in equity demand and prices. Partly to address such concerns, but mainly to raise tax revenues, the government has introduced a stamp tax on stock market transactions, which was raised from 0.3 to 0.6 per cent in September 1999.

Important steps have been taken since 1997 to modernise the regulatory framework, and enhance the supervisory process. In particular, the dematerialization of traded securities significantly enhanced investor safety, transactions' efficiency, and monitoring by the supervisory authorities. To address market volatility, the Capital Market Commission (CMC) introduced a series of measures in September 1999, with the aim of improving disclosure of information and

discouraging speculative behaviour. This involved establishing and regularly updating a list of companies falling short of market transparency standards. These stocks are excluded from the market's general index. Other measures have aimed at tightening reporting standards of listed companies' financial results, and improving information on changes in ownership structure, as well as on the use of funds raised in the stock exchange.⁸² To further enhance investor safety, the minimum level of share capital required to set up a portfolio investment company was significantly raised (from GRD 500 million to GRD 2 billion). Moreover, a White Paper has been issued by the CMC, setting forth best-practice rules aimed at promoting better corporate governance (Committee on Corporate Governance in Greece, 1999). A "New Market" was established in February 2000 and will allow trading of fast-growing small or medium-sized enterprises' (SMEs) stocks under easier listing requirements. Minimum equity capital requirements for companies listed on the "New Market" will be limited to GRD 200 million. In addition, the Athens Derivatives Exchange (ADEX), which started operating in August 1999, provides investors with greater risk management opportunities. The establishment in 1997 of the "Investor Compensation Guarantee Fund" has been a major improvement in the investor protection framework. The fund currently commands liquid assets worth GRD 100 billion (300 million euros), as compared to GRD 6 billion it commanded in 1996, and offers a compensation of up to 30 000 euros per investor in case a brokerage firm defaults. Moreover, a campaign was undertaken by CMC to provide information and advice to unsophisticated investors regarding the operation of and the risks involved in the capital market. Finally, the promotion of professionally certified market participants has been a persistent and ongoing effort by the Commission.

In July 2000, steps were taken to fill gaps in the powers of supervision of listed companies, which were previously supervised by the stock exchange (and indirectly by the CMC). These measures are included in the Code of Conduct for listed companies which is now in effect following the recent regulation by the CMC (CMC Decision 5/204/2000). The code introduces high-level disclosure standards regarding ownership change, dividend policy, corporate announcements, distribution of insider information, publicity, accounting policies and also establishes internal control and investor information mechanisms. A recent law (Law 2843/2000) puts in place the framework for the listing of securities firms and funds investing in shipping companies. Finally, a framework has been established for the use of margin accounts so that securities firms can extend margin financing to their clients.

Other measures to support the development of financial markets have also been introduced. Incentives directed at venture capital have been enhanced, taking the form of tax relief on distributed profits, financial assistance to venture capital companies and the creation of a "Fund for the New Economy".⁸³ In November 1999, a regulatory framework for real estate mutual funds and real

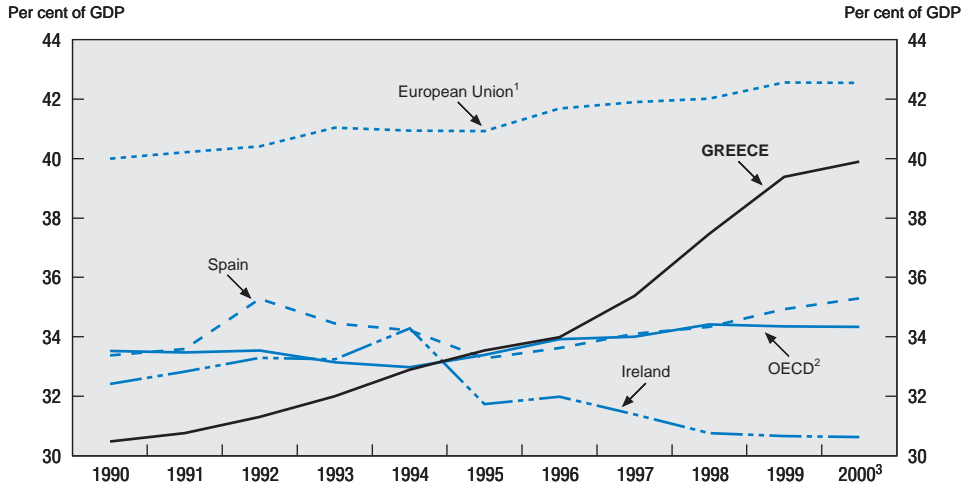
estate investment companies was created.⁸⁴ It is expected to boost the development of the real estate market and provide a better link to the capital markets. The creation, as from February 2000, of the legal framework for securitisation of assets and other future claims will enhance opportunities for portfolio diversification. Capital market liquidity will be further boosted by the liberalisation of regulations governing investment of pension funds' reserves – which are estimated at over GRD 3 trillion (8 per cent of GDP) and may currently be invested in securities markets only up to 20 per cent. However, as pension fund management often lacks professional expertise in this area, enhanced supervision will be needed to ensure that changes in the regulatory framework go in step with the investment practices and risk assessment capabilities of pension funds.

IV. Reforming the Greek tax system

Until the mid-1980s, government spending was fairly low by international comparison, keeping tax pressure considerably below the OECD average. Subsequently, government expenditure accelerated sharply. The surge largely reflects the rapid expansion of the welfare state, the implementation of a sizeable public infrastructure programme, problems with streamlining the bloated central government administration, the rapid increase of interest payments on the public debt, substantial support to loss-making enterprises and transfers to cover operating deficits of public utilities. The rise in taxation did not keep pace with spending, resulting in a huge government deficit that peaked at 16 per cent of GDP in 1990. In the run-up to EMU membership, budget consolidation became a priority. This consolidation has been largely achieved by fast rising taxation while EU transfers have become an important source of revenue. The tax burden also rose in other EU countries, but the rise in Greece (10 per cent of GDP between 1990 and 2000) was the sharpest (Figure 14). Currently, total tax revenues amount to 40 per cent of GDP, which places Greece between the EU and the OECD averages. As elsewhere, social security contributions, personal income and consumption taxes account for the major part of revenues. By international comparison, though, the share of consumption taxes and social security contributions is high (together they account for more than 73 per cent of total tax revenues), while the share of direct taxes is well below average (Table 15).

Contrary to many other OECD countries, there has not been a systematic effort to redesign the whole tax system. To this end, the government is planning a comprehensive tax reform that could be enacted in 2002. There were numerous changes to taxation in a piecemeal fashion. Many of them have led to a complex and non-transparent system, generous individual allowances and a web of preferential incentives for the business sector. There has also been a general lack of strong and uniform tax enforcement. These features hamper both efficiency and equity and, overall, the tax system has performed poorly in various respects. In recent years there has been considerable progress, however in three areas. First, tax compliance has improved with a sizeable positive impact on revenues, reflecting the better enforcement of tax legislation. Second, there has been a broadening of the tax base by abolishing a number of tax expenditures and by taxing

Figure 14. Total tax revenue in selected countries



1. GDP weighted average, excluding Portugal.
2. GDP weighted average for 20 countries.
3. Estimates.

Source: OECD Analytical Database.

Table 15. The structure of taxation by type of tax

1998

	Corporate income taxes	Individual income tax	Unallocable taxes on income, profits and capital gains	Social security and payroll taxes	Consumption taxes ¹	Other taxes, including property taxes
Per cent of total tax revenue						
United States	9.0	40.5	0.0	23.7	16.2	10.6
Japan	13.3	18.8	0.0	38.4	18.8	10.8
Germany	4.4	25.0	0.0	40.4	27.4	2.8
France	5.9	17.4	0.0	38.5	26.6	11.6
Italy	7.0	25.0	0.6	29.5	27.4	10.4
United Kingdom	11.0	27.5	0.0	17.6	32.6	11.3
Canada	10.0	37.8	0.8	15.8	24.7	11.0
Greece²	6.4	13.2	3.4	32.2	41.0	3.8
Ireland	10.7	30.9	0.0	13.8	38.7	6.0
Portugal	11.6	17.1	0.2	25.5	41.3	4.3
Spain	7.3	20.8	0.1	35.2	29.4	7.2
OECD countries, unweighted average	8.8	27.1	0.5	25.9	30.7	7.0
OECD countries, weighted average	8.8	29.1	1.0	27.8	24.0	9.2
EU countries, unweighted average	8.5	25.5	0.5	28.9	30.4	6.1
EU countries, weighted average	7.1	23.9	0.2	32.5	28.8	7.5

1. Consumption taxes equal total taxes on goods and services less "profits of fiscal monopolies" and "other taxes".

2. 1997 data.

Source: OECD Revenue Statistics.

previously untaxed incomes such as income from interest, large immovable properties and stock exchange transactions. Third, a major effort is underway to modernise the administration of taxes. The first section of the chapter discusses the key forces shaping tax policy in Greece, followed by a section on the main features of the tax system and its major weaknesses. The third section outlines the main options for reform.

Forces shaping the system: past, present and future

Poor tax compliance

It is widely recognised that a high degree of social and political acceptance of the tax system reduces the disincentive to comply. The Greek tax system has not met with such acceptance, however, and this partly explains its long-standing poor performance (Mavraganis, 1994 and Agapitos *et al.*, 1995). Moreover, the self-employed and those working in the underground economy could avoid taxes more easily than employees and pensioners who have paid a disproportionately large share of taxes. The principles of horizontal and vertical equity⁸⁵ have been continually undermined, through an ever-increasing number of exemptions to certain social groups irrespective of their ability to pay.⁸⁶ Moreover, frequent tax amnesties have aggravated tax inequality and undermined the credibility of the tax system (as well as compliance incentives). All of this has encouraged tax evasion – estimated at around 7 per cent of GDP in 1995 – and tax avoidance (Agapitos *et al.*, 1995).

There are many factors that have hampered tax collection: an informal economy estimated to generate output equivalent to anything from 24 to 30 per cent of GDP (Schneider *et al.*, 2000) to more than 40 per cent (Agapitos *et al.*, 1995); a workforce with a large share of self-employed; an inefficient tax administration; bank secrecy; the lack of a land register and, until recently, the lack of an appropriate infrastructure for cross-checking information between the different tax authorities. Moreover, taxpayers' compliance has also been discouraged because of the violation of the principle of legal certainty due to the continuous revisions and amendments of the Tax Acts,⁸⁷ the complexity of tax laws, the loopholes due to the numerous tax allowances and exemptions, and, finally, the extra burden of so-called "third-party" taxes that are extensively used to fund various institutions (*e.g.* the pension fund of the lawyers, engineers, and media workers).

Nevertheless, revenue developments in recent years have been encouraging, signalling that the recent changes to the tax system and the administration are proving effective. A series of tax simplification and tax control measures taken in recent years have led to an improvement in tax compliance, as indicated by the higher-than-expected income elasticity of many important taxes, such as the value added tax (VAT), the corporate income tax (CIT) and the personal income tax (PIT).

This accounts for the large tax revenue realisations as compared to the budgeted amounts in recent years. In particular the improvement in revenue collection reflects better compliance by companies with reporting standards (as many of them have been queuing to be listed on the ASE), as well as efforts to enforce the tax law with the creation of a special bureau of tax investigation (SDOE); improvements in tax administration have also played an important role.

Sharp tax hike in the last decade

In order to meet the rapid growth of public expenditure, tax revenues as a share of GDP have increased steeply over the last ten years and are now above the OECD average (Figure 14), even though recently there have also been selective cuts in excise taxes to help hit the inflation target associated with EMU membership. All taxes contributed in similar amounts to the overall increase. The rise in PIT receipts reflects inflation-driven increases (*i.e.* fiscal drag), increased tax compliance and enforcement, while consumption tax receipts were boosted by the introduction of the VAT system in 1987 and a subsequent broadening of its base, and better enforcement. Revenues from social security contributions and property taxes have also risen due to rate increases and the trend decline in the number of farmers⁸⁸ (Table 16). Overall, the sharp rise in tax revenues (Figure 15) has been the main factor in nearly closing the gap between revenues and expenditures – the latter, at 43 per cent of GDP, is currently below the EU, but above the OECD average – and ultimately fulfil the Maastricht fiscal criteria (Table 17).

Spending pressures will remain strong

In the medium and long term, the tax system will face increasing pressure from growing expenditure. As indicated in Chapter II, a rapidly ageing population (the number of pensioners is expected to rise steeply after 2005), a pension

Table 16. **Level and changes of general government tax revenues¹**

Per cent of GDP

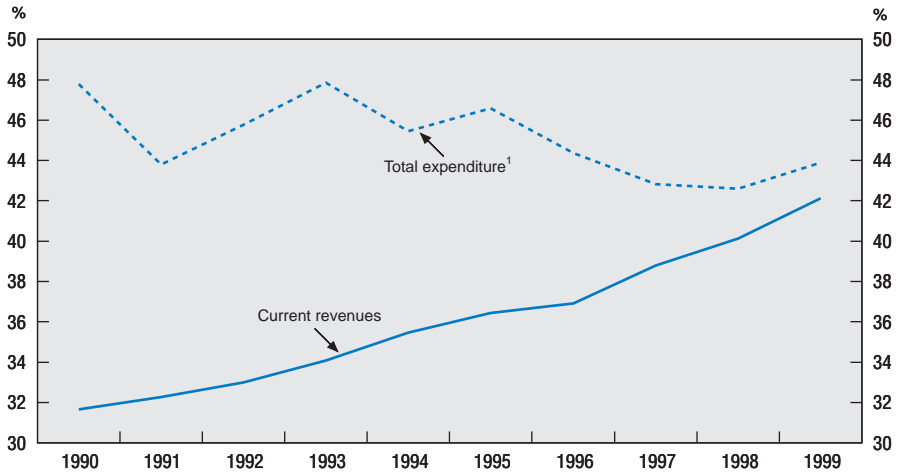
	Level	Change between				Level
	1980	1980-85	1985-90	1990-95	1995-99	2000 ²
Tax revenues	25.2	4.6	0.0	3.8	5.5	40.0
Personal income tax	3.6	0.6	-0.2	0.7	1.9	6.5
Social security	9.5	2.4	-0.3	1.2	1.1	13.8
Corporate income taxes	1.5	0.2	0.1	1.2	1.3	4.3
Consumption taxes	10.7	1.4	0.4	0.8	1.3	15.4

1. Changes are calculated from three-year moving averages centered at the end points of each sub-period.

2. Estimates.

Source: Ministry of National Economy and OECD.

Figure 15. Trends in general government expenditure and revenues
As a percentage of GDP



1. Includes net capital transfers.

Source: Ministry of National Economy.

Table 17. General government expenditure in selected OECD countries
As a percentage of nominal GDP

	1990	1995	2000 ¹
United States	33.6	32.9	29.3
Japan	31.3	35.6	38.2
Germany	43.8	46.3	43.0
France	49.6	53.6	51.2
Italy	53.1	52.3	46.7
United Kingdom	41.9	44.4	38.4
Canada	46.0	50.3	37.8
Greece	47.8	46.6	43.7
Ireland	39.5	37.6	27.7
Portugal	..	41.2	42.1
Spain	41.4	44.0	38.5
OECD countries, unweighted average	43.8	45.0	41.2
OECD countries, weighted average	38.2	39.5	36.6
EU countries, weighted average	47.0	48.8	44.3

1. Estimates.

Source: OECD Economic Outlook 68, December 2000.

scheme that is generous with respect to pension rights and largely unfunded, a large debt accumulated by loss-making public enterprises, and a likely decline of the sizeable transfers from the European Union after 2006 will impose pressures to raise taxes in the future. These pressures come against the background of a public debt that is still among the highest in the OECD as a per cent of GDP. While stronger trend growth and future privatisations should counterbalance these pressures to some extent, hard decisions concerning future spending will be required. Moreover, the speed of convergence in per-capita income with the EU average could be affected by government spending and taxation decisions. While the international evidence is not conclusive and the issues involved extend well beyond tax distortions, high levels of government spending and taxation have often been found to be associated with slower economic growth (Box 4). With standards of living in Greece some 30 per cent lower than the EU average, the need to keep economic distortions and other impediments to growth to a minimum is of primary importance to achieve a rapid catch-up in living standards.

Box 4. Taxation and economic growth

The direction of tax effects on the level and growth of income is not always clear. Taxation may, in fact, be beneficial for the economy if it provides the financial basis for the provision of public goods that improve average living standards and social welfare. More and better public goods and services can serve to increase the productivity of private fixed and human capital and hence increase economic growth, while government transfers reduce poverty and improve social cohesion. On the other hand, higher taxes increase distortions and may reduce saving, investment and work incentives and adverse effects on economic efficiency may grow disproportionately with the increase in the tax burden.

As the net effect of taxation on economic performance depends on the level and structure of taxation, and whether tax revenue is spent in a productive or unproductive way, the benefits and costs of taxation are difficult to disentangle empirically. Nevertheless, a number of studies have sought to do so. Leibfritz *et al.* (1997) examined the relationship between taxation and growth for a sample of OECD countries (not including Greece) and found that a 10 percentage point increase in the tax/GDP-ratio is accompanied by a 0.5 percentage point reduction in growth. This result is consistent with the earlier findings of King and Rebelo (1990), Barro (1991) and Plosser (1992). But several other studies, including Levine and Renelt (1992), Slemrod (1995) and Kneller (1999) have found a non-significant or even positive correlation, leaving some researchers to suggest that there may be non-linearities implying a positive growth effect if taxes are increased from a low level and a negative growth effect if they are increased from a high level.

The decentralisation process has so far only touched spending

Since the early 1990s Greece has started a slow process of decentralising government competencies. So far this has largely related to spending powers with a view to improving public administration and the efficiency of public goods delivery, and at a better relationship between citizens and the State (OECD, 2001), while decentralisation of taxing powers is virtually non-existent. This raises questions about the potential imbalances between spending and revenue-raising responsibilities at the sub-national government levels and whether bolder moves towards tax decentralisation would be desirable. At present, there are three levels of government (including the central government) with spending responsibilities that overlap. The risk is that weak co-ordination and overlapping competencies create excessive spending that is unchecked by the restraining influence that should arise when local authorities are obliged to raise taxes to finance these expenditures.

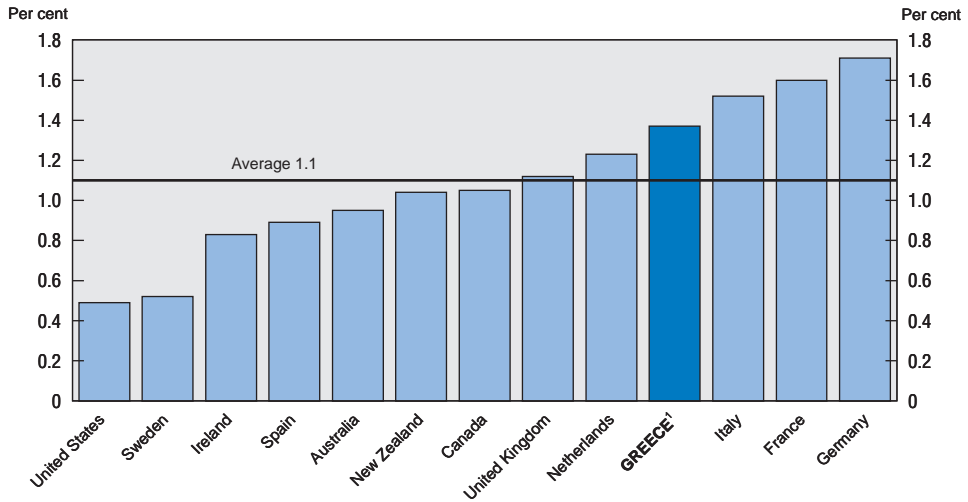
Main features of the tax system

Tax administration and compliance: work in progress

Since the mid-1990s, the improvement of the structure and quality of tax administration has been high on the government's agenda. Policy has focused on reducing tax evasion by improving the tax administration's efficiency, transparency and exchange of information. For many years the tax administration has been fairly inefficient in determining the actual income of taxpayers and expensive to run.⁸⁹ At 1.4 per cent of net revenues collected,⁹⁰ the cost of collecting taxes is above the OECD average and rather high (Figure 16). In 1996, the Centre for Planning and Economic Research (Balfoussias, 2000a) carried out a study that estimated administrative costs in Greece (Table 18). PITs were particularly expensive to collect. This was due to the large number of self-employed, who provide their own assessment and are particularly difficult to monitor, but also more generally to the difficulties of complying with a personal tax system that is complex and non-transparent. The cumbersome "objective criteria" to assess the taxable income of the self-employed (Table A3), based mainly on extensive cross-checking of living expenditures, are also responsible for the high administrative cost of the PIT.⁹¹ The system has also worsened taxpayers' (traditionally deep) mistrust of the tax administration, which is likely to have weakened tax compliance. Tax arrears also represent a serious problem. In 1996 revenues collected from past unpaid liabilities amounted to about 3 per cent of total tax revenues.

Moreover, the management of taxes collected on behalf of third parties (third-party taxes) represent a considerable cost in terms of revenue raised. These levies constitute a grid of taxes, duties, charges, contributions and fees that have been enacted by the central government in favour of different authorities or

Figure 16. Tax administration costs in OECD countries
1997, administrative costs/net tax revenues



Note: Net tax revenues include taxes and social contributions; for France, Germany, Italy, Spain and United Kingdom: taxes only.

1. 1996.

Source: Lepine Report (1999), KEPE (1996).

Table 18. Tax administration costs by type of tax

1996

Type of tax	Labour resources used by tax administration	Cost for each GRD 1 000 collected	Index based on relative cost
	Per cent of total		Per cent of total
Direct taxes	37.8	15.8	115.7
Personal income	27.5	21.9	160.2
Corporate income	7.1	11.0	80.5
Other	3.2	42.4	310.2
Social security contributions	3.3	18.5	135.2
Wealth	10.6	109.1	798.0
Indirect taxes	37.7	9.3	68.1
VAT	28.5	10.7	78.3
Excise	9.2	4.7	34.4
Other	10.4	18.6	135.8
Tax arrears	8.3	37.5	274.3
Direct	6.4	34.2	250.2
Indirect	1.9	55.2	403.8
Third-party taxes	2.3	102.6	750.0
Direct	1.0	394.6	2 886.0
Indirect	1.3	64.6	472.5
Total	100.0	13.7	100.0

Source: Centre for Planning and Economic Research (KEPE) and OECD.

private entities.⁹² They are mostly collected directly by various agencies (*e.g.* banks, public utility companies, lawyers etc.), distributed to the final recipient and often escape registration in the state budget. An attempt towards their estimation was made in the 1996 budget, when the Ministry of Finance published a report listing more than 1 000 third-party taxes. However, their revenues were reported for only a third of the total. The Ministry of Finance reckons that third-party taxes are inefficient and expensive to collect (it has estimated that in 1999 some 2 per cent of total tax revenues were not recorded in the state budget) and is committed to examine the issue and to find a quick solution.

Since the mid-1990s, efforts to enforce compliance have intensified and modern tools have progressively been introduced by the tax authorities (Box 5). Perhaps the most important initiatives, included in the 1994 and 1995 budgets, were the foundation of the School of Training (SEYYO) and of the SDOE. By 1999, SEYYO had trained about 13 500 employees, issued two manuals on control and collection procedures for SDOE and the local tax collection authorities (DOY), and started training on the new information system for the legal information data bank. The audits conducted by the SDOE are having a positive effect on voluntary tax compliance and state revenue, at relatively low collection costs. Since its inception in April 1997, SDOE has discovered serious cases of tax evasion and smuggling representing tens of billions of drachmas. For the year 1999 alone, revenue from fines is estimated at GRD 49 billion, while during the same period taxpayers paid GRD 11 billion extra directly to the DOY to avoid further penalties.⁹³

The 1997 budget paved the way for the development of a large and ambitious integrated tax information system: TAXIS (Annex II). Several benefits are expected from the computerisation of the tax administration: directly accessible fiscal and financial information, uniform application of fiscal legislation, reduction in administration costs, accurate auditing, reliable and integral capture of primary data and improved revenue projections.⁹⁴ Moreover, once TAXIS is fully operational, it will be possible to cross-check related data with different tax agencies, and failure to file tax returns and cases of “unexplained revenues” will be detected more rapidly. TAXIS will also allow for pinpointing duplicate tax registration numbers and updating the Ministry of Finance’s records of home addresses.⁹⁵

Following the computerisation of the tax administration, the 1999 budget provided two important innovations. A standard multipurpose tax compliance certificate was introduced that will progressively replace the current multitude of individual certificates required, for example, every time an individual needs to obtain insurance or a bank credit. Meanwhile, taxpayers registered at tax offices that are connected to TAXIS were exempted from providing tax compliance certificates all together. Moreover, since the end of 2000, taxpayers are able to obtain tax information and tax return forms via the internet, periodical submission of VAT returns is possible electronically, and tax payments with a credit card are being

Box 5. **Main initiatives to improve tax administration and compliance in the 1990s**

The 1994 tax reform

- Revision of the “objective criteria”. According to the revised system, the income of the self-employed (including farmers) is evaluated on the basis of certain criteria associated with the size and nature of the taxpayer's business. Taxation is based on the imputed income, if the latter is higher than the declared income.
- Lifting of bank secrecy upon the request of the tax authorities, in cases where the taxpayer paid the tax due by a personal check over GRD 1 000 000.
- Establishment of special bodies in the Ministry of Finance directed at combating tax evasion.
 - the Council of Fiscal Studies, with the task to submit proposals on issues of fiscal policy;
 - the Tax Data Bank, with the function to aid tax auditing;
 - the Special Legal Office of Taxation, with the aim to provide legal support to the tax authorities in tax litigation cases;
 - the Price Inspection Office with the task of gathering data on the prices of goods and services to control transfer-pricing practices.

The 1995 budget

- For the first time, a School of Personnel Training (SEYYO) for the employees of the Ministry of Finance was established. The School started operating in 1996. Its main objective is to identify and analyse educational needs and provide professional training to the employees of the Ministry of Finance, of the supervised Legal Entities, as well as to employees of the finance departments of other Ministries.
- The Special Bureau of Tax Investigation (SDOE) was established. Its main task is to carry out preventive audits and to signal infringements to the relevant tax inspectorates. It started operating in April 1997.

The 1997 and 1998 budgets

- The “TAXIS” integrated tax information system was approved. It aims to cover all the tax operations of DOYs and the central services.
- The CUSTOM computer system identifies potential VAT shortfalls. It was introduced in 1997, and expanded in 1999.
- New national and regional audit centres (ETHEK and PEKs) commenced operations in 1998.
- Introduction of tax identity numbers and a pension registry.
- A real estate tax was introduced together with a land registry to support collection of this tax.

Box 5. Main initiatives to improve tax administration and compliance in the 1990s (cont.)

- The frequency of the collection of taxes withheld at source (mainly of wage earners and pensioners) was accelerated from every quarter to every two months. This allows the central government to better monitor tax revenues.
- Provisions were made to facilitate the payment of overdue taxes to the government. In particular tax liabilities overdue by 17 September 1998 could be paid in up to 18 two-monthly instalments. A 35 per cent discount on the surcharge imposed on failed past payments was granted if the full amount was paid by 31 December 1998.

The 1999 budget

- Uniform certificates were introduced.
- Taxpayers registered with tax agencies that have permission to connect with TAXIS, are exempted from filing proof of tax payment (see main text). This piece of information can be requested via the TAXIS communication network.

tried out (the confederation of Greek banks, the Hellenic Bank Union, has agreed to accept the use of credit cards for tax payments as a pilot case). This will reduce the workload of local tax offices and save time for taxpayers. These initiatives go in the right direction as they reduce administration costs and improve tax compliance, though a satisfactory outcome will depend also on the integrity of tax inspectors and more importantly on the perception of taxpayers that the tax system is becoming more predictable, transparent and equitable.

Narrowly based personal income taxes

Taxation of labour income

Both employees and the self-employed pay the PIT that applies a progressive schedule to all earned income, net of social security contributions and of deductible expenses. The schedule comprises six income brackets with rates ranging from 0 to 45 per cent. Tax brackets have recently been adjusted to partly correct for the significant fiscal drag in recent years, while the first bracket has been further broadened (Table 19). When measured as the difference between the marginal “all-in”⁹⁶ tax rate faced by a top wage earner and the marginal “all-in” tax rate for an average production worker (APW), the statutory progressivity of the

Table 19. **Principal tax rates and bases for labour income**

Tax rates	Taxable income for each tax rate in 1998 (GRD)	Accumulated income as a share of APW ¹ annual income	Taxable income for each tax rate in 2000 ² (GRD)	Accumulated income as a per cent of APW annual income
Business and professional income net of deductible expenses				
0	1 055 000	0.3	2 000 000	0.6
5	1 582 500	0.8	710 000	0.8
15	1 582 500	1.3	1 625 000	1.3
30	3 165 000	2.3	3 245 000	2.2
40	8 440 000	4.9	8 655 000	4.7
	<u>15 825 000</u>		<u>16 235 000</u>	
45	In excess of 15 825 000		In excess of 16 235 000	
Wage income and occupational pensions				
0	1 355 000	0.4	2 300 000	0.7
5	1 282 500	0.8	410 000	0.8
15	1 582 500	1.3	1 625 000	1.3
30	3 165 000	2.3	3 245 000	2.2
40	8 440 000	4.9	8 655 000	4.7
	<u>15 825 000</u>		<u>16 235 000</u>	
45	In excess of 15 825 000		In excess of 16 235 000	

1. Average production worker (APW) in manufacturing, single, no children.

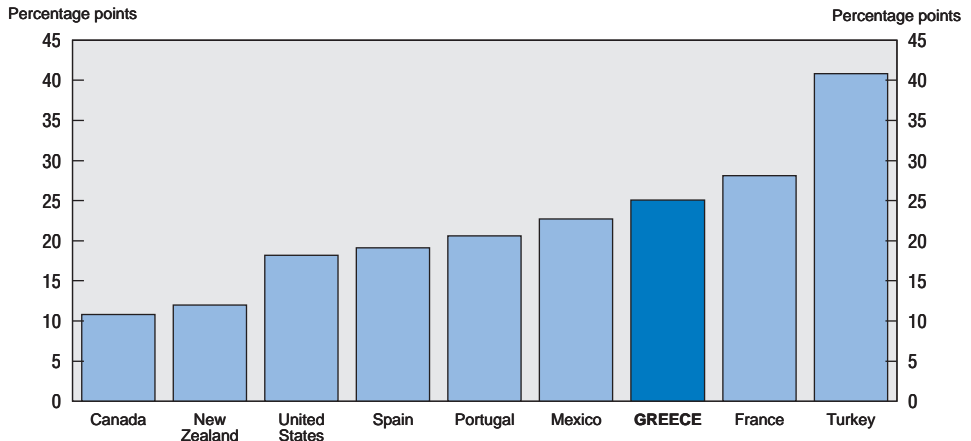
2. In 2001, the top rate has fallen to 42.5 per cent. All tax brackets were adjusted by 5 per cent. The zero rate bracket increased by GRD 100 000.

Source: Ministry of Finance and OECD.

Greek PIT is on the upper side if compared with other OECD countries (Figure 17). However, this crude measure of progressivity does not take into consideration the wide range of tax deductions to which taxpayers are entitled.⁹⁷ In principle, these should help to promote horizontal equity, but in practice they also reduce the progressivity of the PIT because larger allowances are available to the rich (Balfoussias 2000b). This is combined with taxation of income from capital that is low by international comparison and considerably below the top rate levied on income from labour, as interest payments are subject to a lower rate, while equity income is tax exempt (Figure 18). Moreover, in some cases, the tax on interest can be avoided by round-tripping between banks.⁹⁸ All of this implies that there is little redistribution of income from the wealthiest to the poorest and is one factor that explains the very uneven distribution of after-tax income (Figure 19).⁹⁹

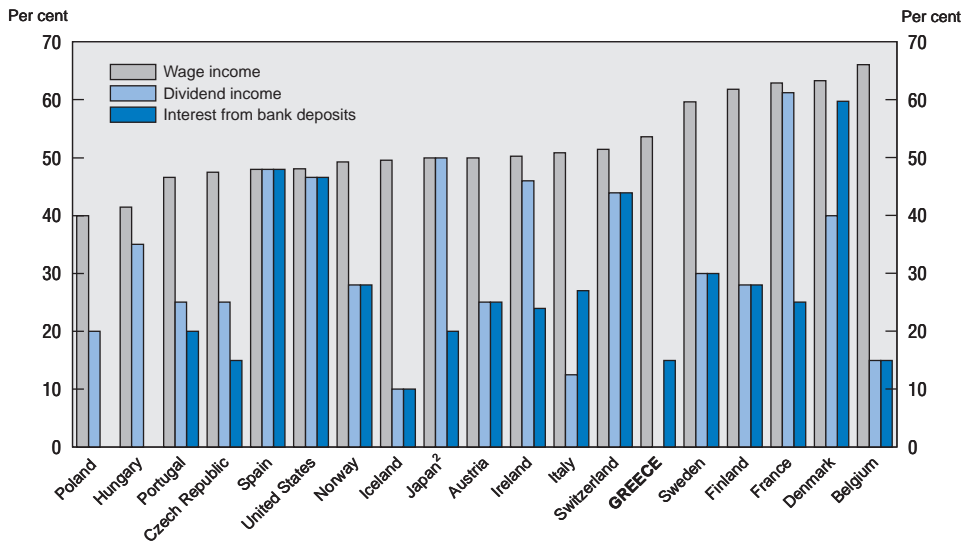
In addition to the PIT, labour income is subject to social security contributions (Table 20). The aggregate contribution rates for wage earners, both statutory and including income tax deductibility, are among the highest in the OECD (Table 21).¹⁰⁰ While employees and employers together contribute above 44 per cent of gross wages to the social security system, small entrepreneurs and traders

Figure 17. Progressivity of individual income tax systems
In selected OECD countries,¹ 1999



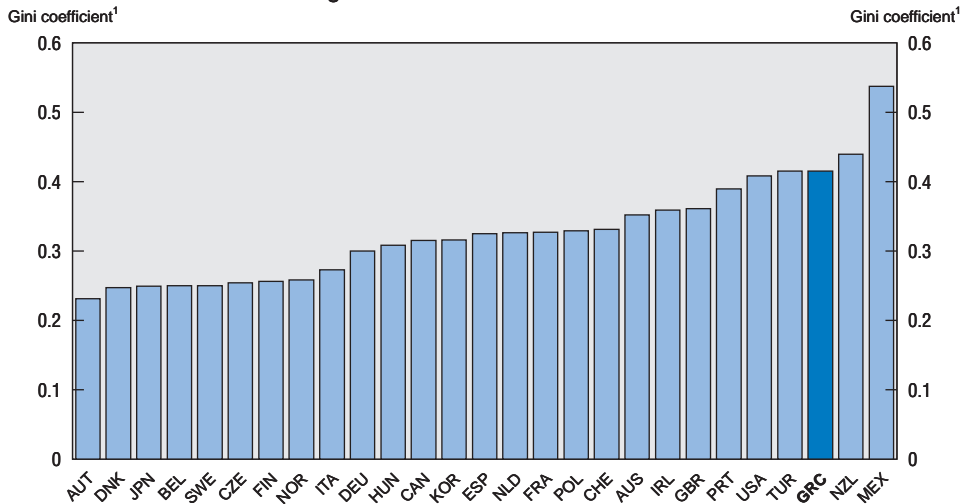
1. Progressivity is measured as the difference between the marginal “all-in” tax rate faced by a top wage earner and the marginal “all-in” tax rate for an average production worker. “All-in” rates include employee’s social security contributions, surcharges and local taxes when applicable.
Source: OECD, *Taxing wages* and OECD calculations.

Figure 18. Highest “all-in” tax rates for top income earners¹
1999



1. “All-in” rates include central and sub-central government taxes as well as social security contributions when these are not capped. Countries are ranked by ascending wage income tax rate.
2. Tax on dividends depends on the size of payment. Tax credit is not included.
Source: OECD.

Figure 19. Income distribution



1. The Gini coefficient is a measure of income inequality: the higher the coefficient, the wider the income distribution. Gini coefficients are for 1997 or nearest year available.

Source: KEPE (1999); REIS (2000); World Bank, *World Development Indicators* (2000).

Table 20. Social and health insurance contributions
2000

Wage earners	Employee	Employer	Total
IKA contribution rates¹			
Social insurance			
Benefits in kind and in cash	2.55	5.10	7.65
Pension	6.67	13.33	20
Heavy and health hazardous work	2.2	1.4	3.60
Occupational risk	0	1	1
Sub-total	11.42	20.83	32.25
Supplementary insurance	3	3	6
Sub-total	14.42	23.83	38.25
Supplementary insurance for heavy and health hazardous work	1.25	0.75	2.00
Sub-total	15.67	24.58	40.25
Contribution rates concerning other organisations (OAED-Unemployment, Family benefits, etc. Worker's Housing Organisation, Worker's Foundation)			
	3.68	6.53	10.21
Total	19.35	31.11	50.46

Self-employed

Most self-employed people must make a monthly lump sum contribution to TEVE (Social Insurance Institution for Professionals and Craftsmen). This monthly payment ranges from GRD 42 000 (GDR 27 400 for pension contributions and 14 600 for sickness contributions) to GRD 105 400 (87 000 for pension contributions and 18 400 for sickness contributions). The payments are deductible from the personal income tax base.

1. IKA: pension fund of private sector wage earners. The contribution base is gross wages. A monthly ceiling of GRD 588 000 applies to wage earners who joined IKA prior to 1 January 1993.

Source: Ministry of Labour and Social Security.

Table 21. **Social security contributions of top income wage earners**
1998

	Employee's contributions		Employer's contributions	
	Statutory rate ¹	Net rate	Statutory rate	Net rate
United States	1.5	1.5	1.45	0.88
Japan	12.8	cap	27.75	13.88
Germany ²	20.5	cap	20.5	cap
France ²	0.85	0.3	20.2	12.55
Italy ²	10.2	5.4	39.95	25.17
United Kingdom	10.0	cap	12.2	8.54
Canada	6.5	cap	7.7	cap
Greece²	15.9	8.7	27.96	16.78
Ireland	2.0	2.0	12	cap
Portugal ²	11.0	6.6	23.75	15.39
Spain ²	6.4	cap	31.79	cap

Note: Date as of 1 January 1998.

1. The net rate differs from the statutory rate when employee's contributions are deductible from the personal income tax or when employer's contributions are deductible from the corporate income tax. Where a ceiling applies to all contributions, the legal rate indicates the contribution rate just before the cap applies.

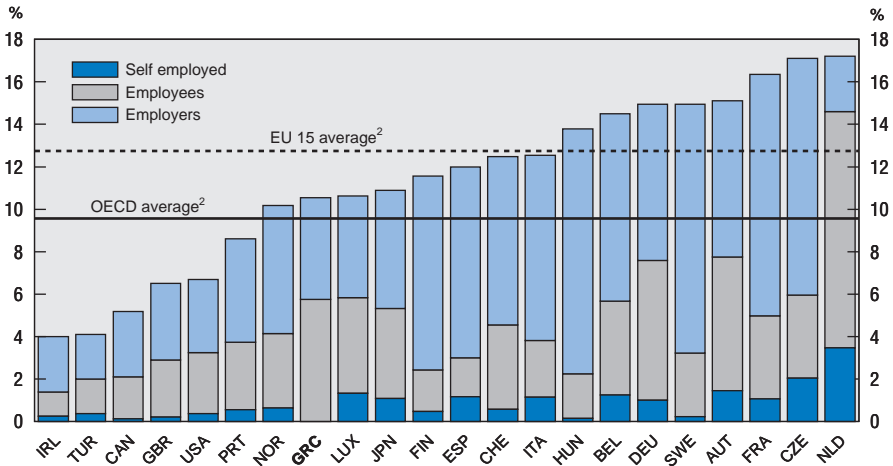
2. Rates may vary according to certain circumstances (*e.g.* seniority, type of job and social security fund).

Source: OECD and *European Tax Handbook*, 1999.

make a monthly lump-sum payment that ranges between 15 and 37 per cent of the gross earnings of an APW, farmers make no contribution, and finally other professionals have their contributions supplemented (if not replaced) by “third-party” taxes – essentially earmarked levies that are transferred to the relevant institution.¹⁰¹ Thus, the self-employed contribute very little to the social security system (Figure 20). They tend to place themselves in low income classes to pay less, while being entitled to the same health service provision and broadly the same pensions as are employees in the same sector. This provides an incentive to be self-employed and helps explain why at present about 45 per cent of the employed are self-employed (Box 6).

The combination of PITs and social security contributions introduce a tax wedge between the cost of labour to the employer and the take-home pay of the employee. In 1999, the overall tax wedge for a single APW was just above 35 per cent.¹⁰² Employers' and employees' contributions accounted together for almost the entire wedge (Figure 22), with the major part (51 per cent of the wedge) corresponding to the employer's contributions. The tax wedge is close to the OECD, and thus below the EU average.¹⁰³ During the 1990s the tax wedge increased by more than 3 percentage points. Concerning marginal tax wedges, which can help identify work disincentives, Greece is significantly below the EU average, with a marginal tax wedge for a single APW of 44 per cent in 1999. However, the total marginal tax wedge rises to above 54 per cent for a single person with 1.7 times APW earnings (Figure 23).

Figure 20. **Social security contributions by payer**
As a percentage of GDP, 1998¹



1. 1997 for Greece and the Netherlands.

2. GDP weighted average.

Source: OECD, *Revenue Statistics*.

Owing to the combination of untaxed unemployment benefits and high social security contributions that also apply at low income levels, households with primary part-time earnings and no secondary earnings, or with the principal earner unemployed for less than 12 months and the secondary earner in part-time employment face a higher marginal tax rate than in most other OECD countries (Table 22). This indicates a strong disincentive for secondary earners to enter the labour market on a part-time basis. The incidence of legal part-time work is actually very low in Greece. Moreover, in connection with the relatively short periods required to qualify for a pension, a high tax wedge provides an incentive to work in the untaxed underground economy until a few years before retirement. This is of particular concern in Greece, because the size of the informal sector appears to be substantial. In the case of single-earner households, where part-time work is taken up after a long unemployment spell (Table 22, second column), the marginal effective tax rate (METR) is not very high, which makes labour market entry attractive and reduces the probability that these households are caught in an unemployment trap.¹⁰⁴

Taxation of savings

The taxation of income from savings is uneven, with different forms of capital income taxed at substantially different rates. With the exception of rents from

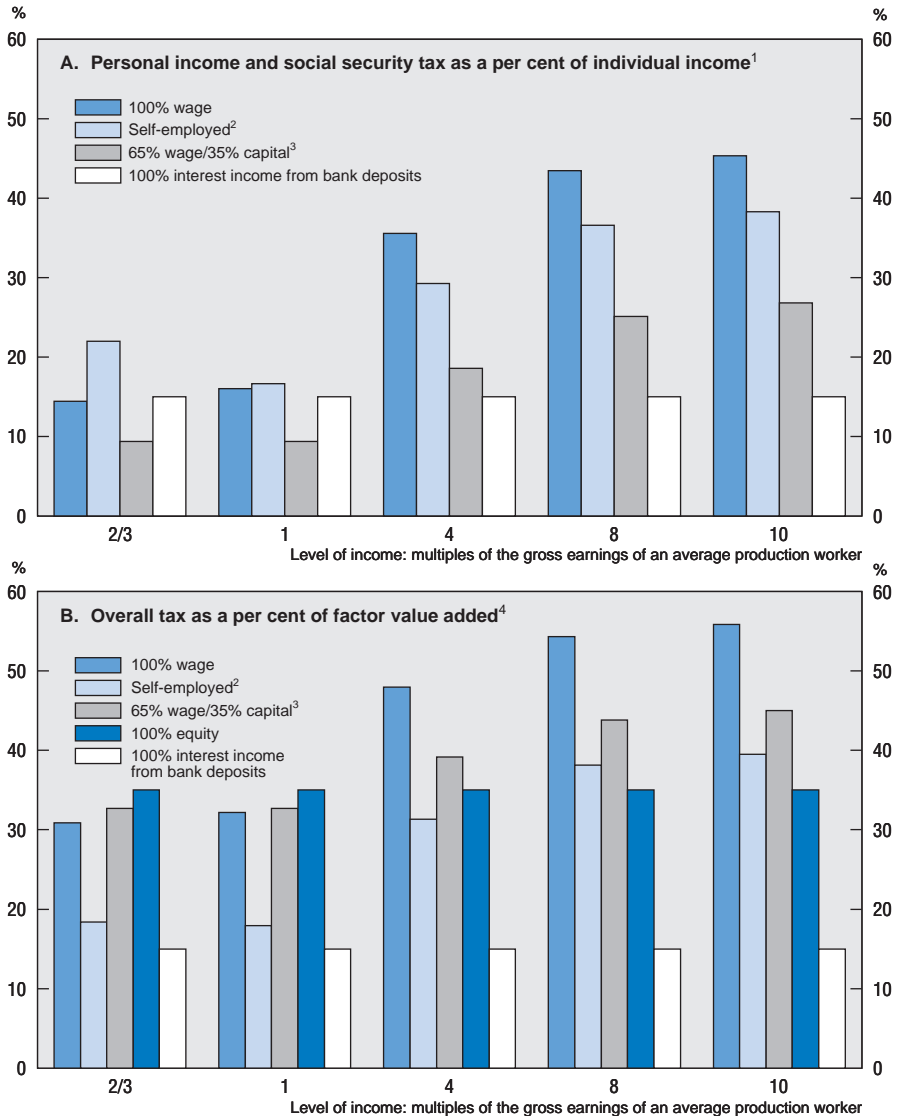
Box 6. The bias in favour of capital and self-employed income

Panel A of Figure 21 reports the total taxes that would be paid by an individual (including the social security contributions of employees and the self-employed – but not those of the employer) depending upon the source and level of income. Thus, the first group of four bars indicates the differences in the average tax rate paid by an individual whose total income (from all sources) is equal to two-thirds of the annual wage of an average production worker depending upon whether revenues come from: wages alone; self-employment only; 65 per cent wages and 35 per cent equity income; and finally 100 per cent in the form of interest from bank deposits. The subsequent groups of histograms shows the same calculation at different levels of income. In each case, there is a significant difference in tax paid depending upon the source of income, with wage earners and the self-employed systematically paying most and individuals receiving their income from bank interest paying the least. Not shown, because no PIT is paid, is the case of someone receiving only equity income in the form of dividends and capital gains.

While Panel A of Figure 21 suggests that, at all income levels, those whose income is drawn from capital sources would pay the least and that a self-employed person pays more tax than an employee at least for income levels at or below APW, in fact the chart tells only part of the story. Because employers pay high social security taxes and firms pay CIT, the overall tax paid on labour and capital is higher. In Panel B of Figure 21 all of these factors are taken into consideration, illustrating that the total tax paid on the earnings of the self-employed is substantially lower than that of the employee at all levels of income. The difference stems principally from the lump-sum contribution that the self-employed make to the social security system. As their income rises, the salary portion that should generate social security contributions falls. The third column in each group of histograms in Panel B illustrates the impact on the overall average tax rate of imposing the same social security charges on the labour component of the total earnings of the self-employed as on the dependent workers, under the assumption that the labour component of the self-employed reflects that of national value added (*i.e.* 65 per cent). Clearly such a change would equalise the overall tax burden faced by employees and the self-employed, at least for low income levels. Finally, capital income is taxed below both employee and self-employed earnings over high income ranges. The gap between the overall tax on equity holdings and interest payments is surprisingly wide, though. Capital gains and dividends are indeed tax exempt in the hands of the individual shareholder, but they are taxed at the company level, while interest payments by banks are only subject to a 15 per cent final withholding tax.

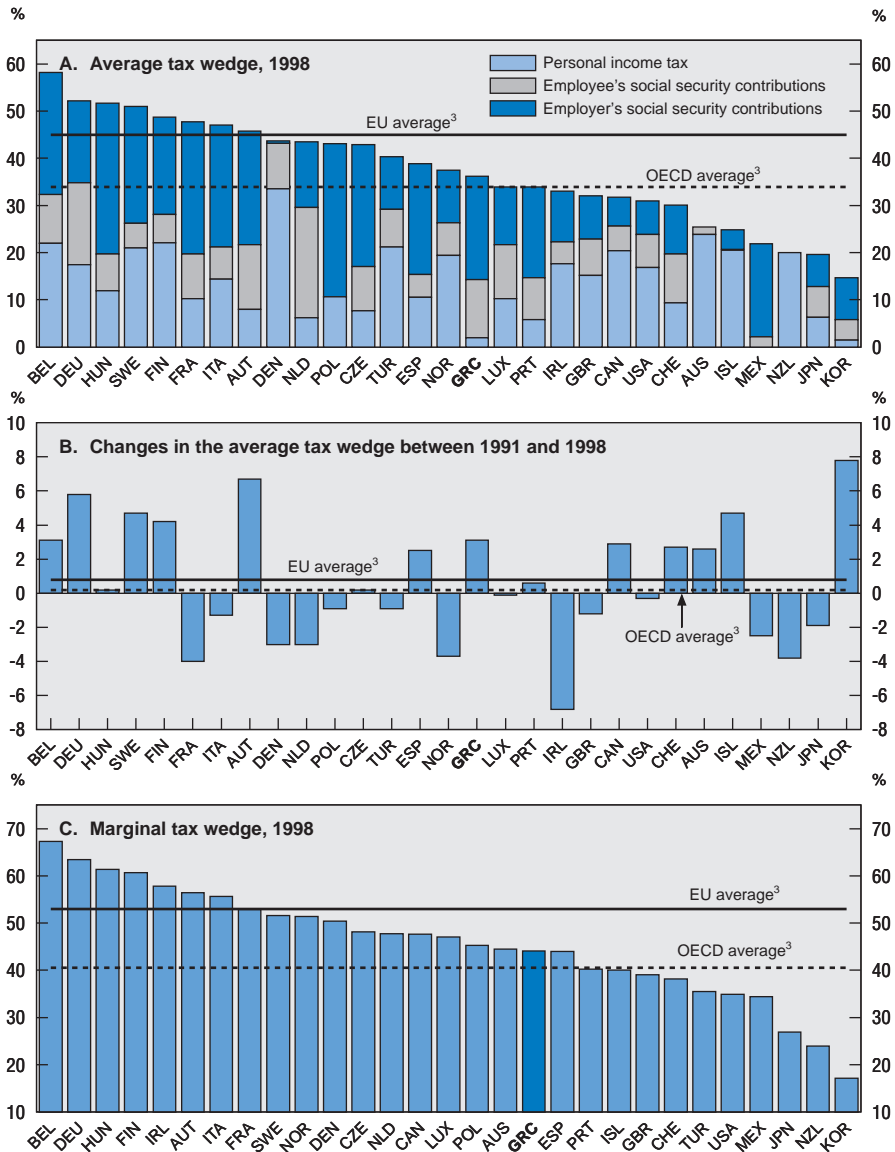
land and buildings and of income from private pension funds, which are subject to the PIT,¹⁰⁵ income from savings is taxed under a separate flat-rate regime at rates ranging between 0 and 15 per cent depending on the manner in which the income is invested and distributed (Table 23). Such gaps tend to affect the allocation of

Figure 21. Average statutory tax rates by source of income
2000



1. Personal income tax, final withholding taxes on capital income and social security contributions paid by employees and the self-employed.
 2. It is assumed that the self-employed pay the minimum social security lump-sum.
 3. Income from capital is composed of dividends and capital gains.
 4. As in 1 plus employers' social security contributions and corporate income tax at 35 per cent rate.
- Source: OECD.

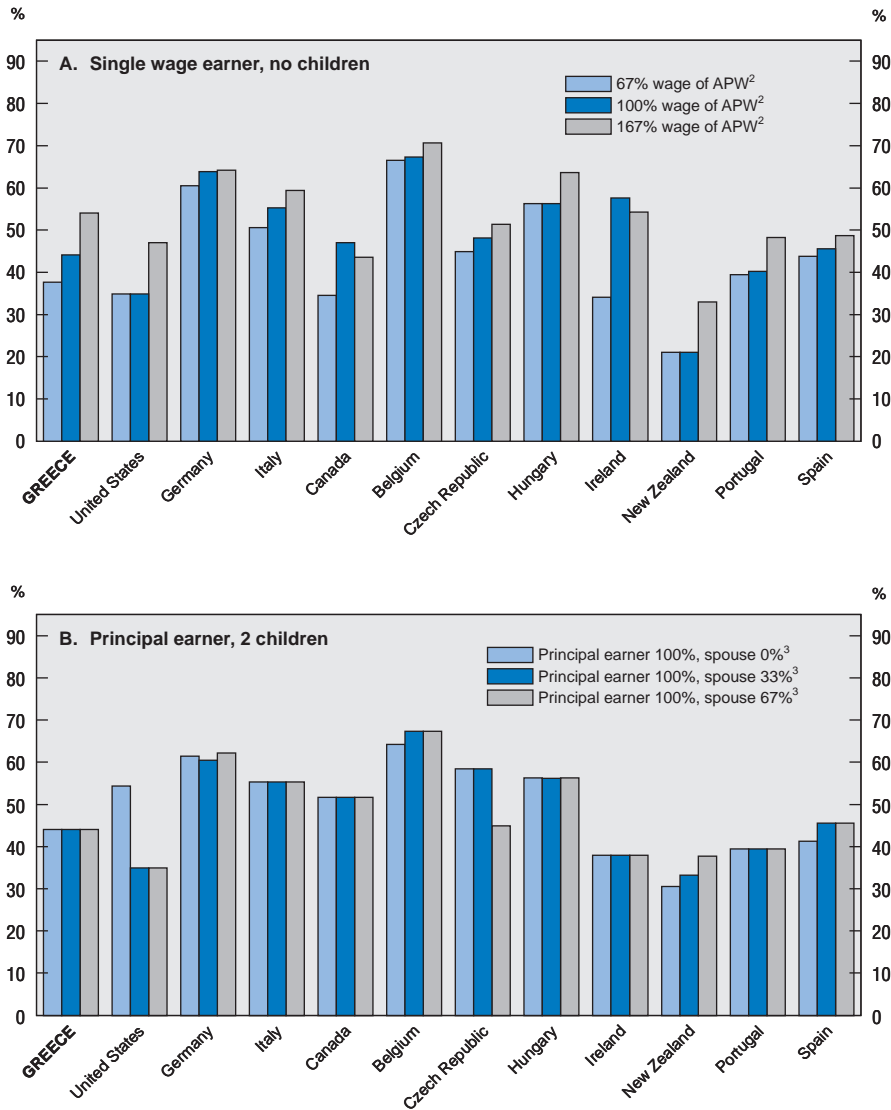
Figure 22. Tax wedge on labour¹
As a percentage of labour costs²



1. For a single individual at the income level of the average production worker.
 2. Gross wage plus employers' contributions.
 3. GDP weighted.

Source: OECD, *Taxing wages*.

Figure 23. Marginal tax wedges by family type and wage level¹
1999



1. Marginal tax rates covering employee's and employer's social security contributions and personal income tax with respect to a change in gross labour compensation.

2. APW: Average production worker in manufacturing.

3. Refers to the proportion of an APW's wage.

Source: OECD, *Taxing wages*.

Table 22. **Marginal effective tax rates on additional income¹**

1997

Principal earner	Part-time employed ²	Part-time employed after 5 years of unemployment	Unemployed	Unemployed
Secondary earner	Non-employed	Non-employed	Employed ³ full-time	Employed part-time without benefit entitlements
United States	102	102	20	0
Japan	133	133	10	7
Germany	115	115	31	19
France	69	133	29	30
Italy	84	84	37	19
United Kingdom	93	93	60	55
Canada	105	131	34	29
Greece	104	58	66	118
Ireland	83	60	20	38
Portugal	174	174	14	11
Spain	77	159	23	19

1. Marginal effective tax rate (METR) = $1 - (\text{net income in work} - \text{net income out of work}) / \text{change in gross family income}$. In columns 1 and 2 the METR is calculated for the principal earner when moving from unemployment to part-time employment, while in columns 3 and 4 the METR is calculated for the second earner.

2. Part-time employment corresponds to 16 hours or two days each week, and total earnings are 40 per cent of the APW level of earnings.

3. Earnings from full-time employment correspond to APW earnings.

Source: OECD (1999) *Benefit Systems and Work Incentives* and OECD.

Table 23. **Principal tax rates and bases for personal investment income**

2000

	Tax base	Tax rates
Income from capital	Interest income from Greek government bonds, treasury bills and corporate bonds	10
	Interest income from deposit and postal saving accounts	15
	Dividends from resident companies	Exempt
	Capital gains ¹	Exempt
	Dividends and interest paid by a pension fund:	
	– if the payment does not exceed GRD 600 000 per annum	5
	– if the payment exceeds GRD 600 000 per annum	10
– if the payment exceeds GRD 1 400 000 per annum	15	
Income from immovable property	Gains from the sale of immovable property	Exempt
	Imputed rent for owner-occupied dwellings up to 150 sqm and up to 2 children (for every extra child the exempt amount increases by 20 sqm)	Exempt
	The market value of the imputed rent in excess of 150 sqm	3.5

1. Listed shares are subject to a 0.6 per cent transfer tax, while capital gains arising from unlisted shares are subject to a 5 per cent tax on the actual sales price.

Source: Ministry of Finance.

savings and firms' financing decisions.¹⁰⁶ Indeed, the gap between the overall tax burden on distributed earnings from equity holdings and interest payments is a case in point. This arises from two principal sources: 1) the PIT rate levied on different incomes from capital, and 2) the extent to which these earnings are subject to CIT (directly or indirectly through deductions allowed for some kinds of distribution). As a result, depending on the manner in which a given GRD 100 earnings is distributed, it will be taxed anywhere between 10 and 64.25 per cent (Table 24). Capital that is paid in the form of interest is taxed at the lowest rate as it is fully deductible from the CIT base and only subject to a 15 or 10 per cent final withholding tax. Capital gains and dividends, which are not taxed at the level of the individual, are the next most favoured form of distribution.

A surprising feature of the system is that, when dividends are paid through a private pension fund the distribution is subject to a second round of taxation that can be as high as 64.25 per cent. This difference in rates creates an incentive to invest in equities directly rather than via a private pension fund and does not encourage long-term savings. Moreover, a 0.6 per cent tax is levied on stock market transactions,¹⁰⁷ whereas the proceeds from the sale of unlisted shares are subject to a 5 per cent special income tax.¹⁰⁸ This difference in rates distorts the allocation of capital across listed and unlisted companies.

Table 24. **Taxation of capital income by type of distribution**
2000¹

	Dividends				Capital gains	Interest payments	
	Direct	Indirect ²	Mutual fund	Pension fund		Bank deposits	Government and corporate bonds
Corporate income tax ³	35	35	35	35	35	0	0
Initial distribution withholding tax	0	0	0	0	0	15	10
Subsequent distribution withholding tax	n.a.	0	0	15	n.a.	n.a.	n.a.
Personal income tax	n.a.	n.a.	n.a.	45 ⁴	n.a.	n.a.	n.a.
"All in tax" rates ⁵	35	35	35	64.3	35	15	10

n.a. Not applicable.

1. Rates are for 1 January 2000.

2. Dividends flow through different companies before reaching the final shareholder.

3. As a per cent of pre-tax profit (excluding interest payments of a listed company).

4. Top rate of the personal income tax.

5. As a per cent of pre-tax profit under the assumption that all profit is distributed.

Source: OECD.

Investment in residential housing also receives a preferential tax treatment: the imputed rent of an owner-occupied dwelling with a floor area up to 150 square metres is untaxed; mortgage interest is fully deductible for the taxpayer's principal home; for dwellings up to 120 square metres net gains from the sale of property are exempt; and finally the first GRD 69 million of the value of the dwelling is exempt from the central government real estate tax (FMAP) (Annex II). These tax incentives are partly reflected in a very high share of owner-occupied housing in the residential housing stock.¹⁰⁹ Given the low responsiveness of housing supply to demand – partly reflecting the scarcity of residential land near urban areas – tax incentives may have been capitalised to some extent into higher land prices and could divert capital from more productive investments. Moreover, tax advantages for owner-occupied housing are likely to lower the mobility of workers.

A principal role for consumption taxes

As noted above, consumption taxes are the major source of tax revenue (41 per cent of the total). VAT was introduced in 1987 with an initial standard rate of 16 per cent, and raised to 18 per cent in 1998, which is close to the EU average (Table 25). To contribute to the achievement of redistributive goals a reduced rate of 8 per cent applies to goods deemed to be necessities and a second lower rate of 4 per cent applies to goods of cultural nature (*i.e.* newspapers and books).¹¹⁰ Thanks to the efforts of the tax administration to curb tax evasion, VAT collection has improved in the past few years and the elasticity of VAT revenues with respect to consumption has stood at close to 1.4. The effective VAT rate (the ratio of VAT revenue to consumption) and its productivity (measured as the ratio of the effective to the statutory rate) have also closed the gap with the EU average¹¹¹ (Table 25).

Apart from VAT, excise taxes are levied on petroleum products, alcoholic beverages, tobacco products as well as on cars, trucks and motorcycles. The minimum rates for these excise taxes have been harmonised at the EU level, and Greece has brought its rates into line with EU legislation¹¹² with the exception of road taxes on large vehicles brought into line with EU rules from January 2001.¹¹³ Consumption taxes have recently played a role as a short-term instrument for controlling inflation in view of Greece's efforts to join EMU (Chapter I). In order to secure entry between autumn of 1998 and the end of 1999, the government introduced a series of indirect tax cuts to lower the CPI: excise taxes on petroleum products were cut twice (Table 26) as well as the special tax on the purchase of imported new and old cars. Indirect taxes by their nature have essentially transitory effects on inflation. While restraining inflation for a short period, they do not ensure the sustainability of low inflation – as demonstrated by the need for a new set of tax cuts in 1999 to compensate for the vanishing of the effects of the 1998 package. Moreover, such tax cuts adversely affect the fiscal accounts¹¹⁴ and, in

Table 25. Value added taxes

Panel A. VAT in international comparison, 1998				
	Value added tax revenue, per cent of GDP	Standard rate, ¹	Effective VAT rate, ²	Effective rate, in per cent of standard rate
		per cent	per cent	
		A	B	B/A
Japan	2.6	5.0	3.7	73.7
Germany	6.6	16.0	9.4	59.0
France	7.7	20.6	10.9	53.0
Italy	6.1	20.0	8.5	42.7
United Kingdom	6.7	17.5	8.8	50.1
Canada	2.6	7.0	3.4	49.2
Greece³	8.2	18.0	9.5	53.0
Ireland	7.2	21.0	12.2	58.2
Portugal	8.2	17.0	10.5	61.5
Spain	5.7	16.0	8.0	49.7
OECD average ⁴	6.7	17.7	9.7	56.3
G6 average	5.4	14.4	7.5	54.6
EU average ⁴	7.2	19.4	10.5	54.2
Panel B. Effective VAT rate in per cent of standard rate				
	1990	1995	1998	
Japan	68.2	73.0	73.7	
Germany	63.8	63.4	59.0	
France	61.1	50.4	53.0	
Italy	41.7	42.2	42.7	
United Kingdom	53.1	50.6	50.1	
Canada	46.2	44.4	49.2	
Greece³	50.6	48.7	53.0	
Ireland	43.6	51.9	58.2	
Portugal	46.0	59.0	61.5	
Spain	60.1	44.8	49.7	
OECD average ⁴	53.5	52.8	55.0	
G6 average	55.7	54.0	54.6	

1. Position as of 1 January 1998.

2. Effective VAT rate is VAT revenue divided by base (*i.e.* consumption exclusive of VAT).

3. For 1998, VAT revenues are from national accounts.

4. Simple average over available countries.

Source: OECD Revenue Statistics, OECD Consumption Tax Trends and OECD.

some cases, fuel consumption (for example car sales boomed following the rebate on the special consumer tax on the purchase of imported cars). Finally, cuts in energy taxes may be at variance with environmental concerns and objectives.

Table 26. **Taxation of petroleum products**
In euro per kilolitre

Date	Leaded petrol	Unleaded petrol	Diesel for engines	Diesel for heating ¹
Minimum community rate	€ 337	€ 287	€ 245	€ 18
24 September 1998 to 4 August 1999	354.64	306.96		
31 December 1998			247.35	
15 October 1998 to 30 April 1999 ²				59.6
5 August 1999 to 30 June 2000	339.74	292.06		
15 October 1999 to 28 April 2000				18.18

1. Winter period.

2. An excise rate of 83 000 GRD/kilolitre applied from 1 May 1999 to 14 September 1999.

Source: Ministry of Finance.

Scope for greater use of environmental taxes

Over the past decade or so, environmental elements incorporated in the tax system have had some effect in controlling environmental pressures from economic activity and in particular from the fast-growing transport, energy and tourism sectors. To promote the use of cleaner fuels, excise rates on transport fuel are differentiated between leaded and unleaded gasoline, taxing the former 6 percentage points higher than the latter. Similarly, all types of vehicles are taxed on the basis of the environmental technology fitted to them, dual fuel vehicles are tax exempt as is natural gas when used as vehicle engine fuel. Although Greece is moving towards taking externalities better into account, a study carried out by the OECD's Environmental Policy Committee shows a lot more could be done to curb the emission-intensity of strong growth in general and to improve air quality in urban areas in particular (OECD, 2000a). In 1997 SO_x emissions from large power plants, for example, exceeded by 12 per cent the 320 kiloton emission ceiling established by the EU directive. The taxation of lignite/coal, which is used to generate 66 per cent of the nation's electricity and is a large emission source for CO₂ and SO_x, does not reflect its carbon content and SO_x emissions. Moreover, fuels are not taxed according to CO₂ emissions.

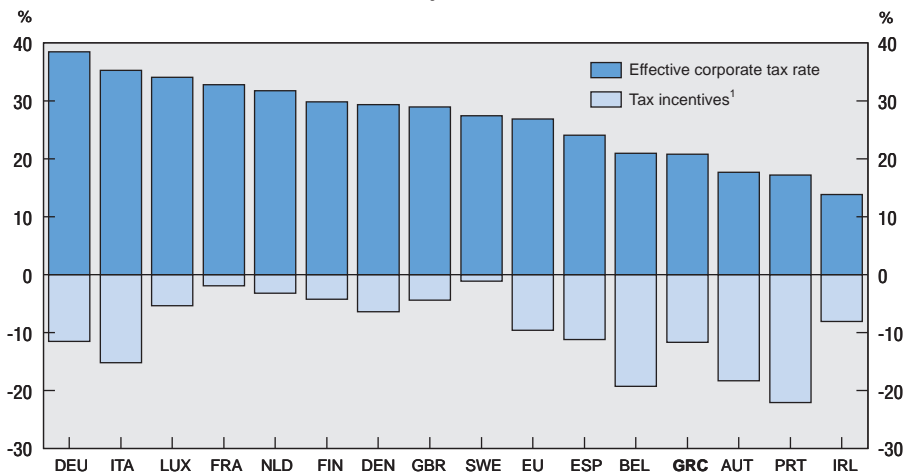
As with energy, water pricing is not very well geared towards internalising environmental externalities and reflecting its scarcity. Pressures on available water mainly result from increasing use for irrigation and, to a lesser extent, by households. While water and sewage charges have been sharply increased for household consumption in the early 1990s, most farmers are not charged either for the abstraction of irrigation water or for the significant pollution of ground and surface water resources caused by a generally intensive use of pesticides and fertilisers.¹¹⁵ Waste water charges apply only to industries in areas equipped with waste water

treatment plants, and a flat rate charge is calculated on the volume of effluent rather than on pollution or toxic load that provides no incentive for industry to adopt production processes that minimise effluents.

The corporate income tax: some move toward a more level playing field

The CIT is levied on the world-wide income (profit) from all activities of legal entities, including limited partnerships, and the domestic income earned by non-permanent establishments of foreign companies. Deductible business expenses include depreciation of physical capital, interest on liabilities, provisions for bad debts, wages and social security contributions. The standard CIT rate of 40 per cent for non-listed companies is above the international average. However, the CIT rate has been reduced to 37.5 per cent from 2001 and will be cut again to 35 per cent from 2002, so that there will be no more tax discrimination between listed and unlisted companies. Also the discrimination between resident and non-resident companies is abolished from 2001. As elsewhere in Europe, though, Greece displays a fairly low effective rate of corporate taxation as a result of a wide range of tax incentives. Estimates suggest that over 1990-96, the effective CIT rate has been 12 percentage points below the statutory tax rate (Figure 24), which is just above the average tax subsidy provided in the European Union (Buijink *et al.*, 1999). There are a number of difficulties associated with such international comparisons, so that they need to be interpreted with care.

Figure 24. Effective corporate taxation in the European Union
Average 1990-96



1. Difference between the effective corporate tax rate and the statutory corporate tax rate.

Source: Maastricht Accounting and Auditing Research and Education Center, April 1999.

Compared with other OECD countries, the tax system shows a less distortive treatment across physical assets, but a strong bias in favour of debt as a source of finance (Table 27). The tax system is neutral towards investment decisions and corporate financing if a given pre-tax flow of corporate profits produces the same after-tax income for final investors, whether the return takes the form of interest payments, dividends, or capital gains. This requires that the combination of corporate and personal taxes is equal across financing instruments and capital assets. The overall marginal effective tax wedge across corporate financing is relatively low in Greece, as is its standard deviation, which is a rough measure of non-neutrality.¹¹⁶ This result is mainly driven by the low – by international comparison – overall rate on capital income and because dividends and capital gains are taxed equally. However, more than any other OECD country, Greece favours debt finance since corporate interest payments – as opposed to distributed profits – are deductible from the corporate tax base and taxed at a very low rate in the hands of the recipient.¹¹⁷ With respect to investment, buildings are taxed at relatively low marginal rates, which is mainly due to a very short depreciation period.¹¹⁸ Inventories are more heavily taxed (as indeed they are in most countries) because they do not benefit from any depreciation allowance.

Wide range of tax incentives

Tax incentives can be used to correct perceived market failures faced by specific sectors or disadvantaged regions. In principle, they should be narrowly targeted. In Greece the major corporate tax incentives are provided on a regional and sectoral basis. They take the form of lower statutory rates and of partial or total exemption of the tax base. Lower corporate tax rates apply to companies listed on the ASE, to SMEs and collective investment institutions, while off-shore and shipping companies are tax exempt (Table 28). Moreover, eligible companies are entitled – depending on the state of development of geographic areas¹¹⁹ – to set aside 40 to 100 per cent tax-exempt reserves for productive investment.¹²⁰ Targeted sectors and activities include agriculture and marine culture, construction, commercial and manufacturing enterprises, energy conservation, R&D, investment in information technology, international trade, and foreign and shipping companies. That is, practically the whole spectrum of economic activities (see Annex II for detail).¹²¹

Offshore companies should be of particular concern to the Greek tax authorities.¹²² Substantial tax and other incentives are offered to offices set up by foreign companies using Greece as an administrative centre to co-ordinate their business operations. No income or other taxes are imposed on the profits on operations conducted by so-called “Law 89 Offices”.¹²³ A recent report, following a systematic probe carried out by SDOE in a number of such companies, points out that their number is growing rapidly, particularly in the domains of real estate,

Table 27. **Marginal effective tax wedges in manufacturing**¹
1999, percentages

	Sources of financing ²				Type of assets ³				Overall	
	Retained earnings	New equity	Debt	Standard deviation	Machinery	Building	Inventories	Standard deviation	Average ⁴	Standard deviation
United States	1.66	4.79	1.42	1.54	1.48	2.50	2.04	0.42	1.89	1.17
Japan	3.30	5.50	-0.09	2.30	1.41	3.74	2.64	0.95	2.33	1.77
Germany	0.89	2.53	1.28	0.70	1.05	1.50	1.11	0.20	1.19	0.54
France	3.58	7.72	0.67	2.89	2.25	3.45	4.02	0.74	2.98	2.14
Italy	1.27	1.27	0.39	0.41	0.72	1.18	1.23	0.23	0.96	0.34
United Kingdom	2.88	2.40	1.55	0.55	1.99	2.31	3.30	0.56	2.37	0.57
Canada	4.48	5.63	1.98	1.52	2.74	4.21	5.33	1.06	3.72	1.31
Greece	0.92	0.92	-0.58	0.71	0.15	0.34	1.03	0.38	0.40	0.57
Ireland	1.52	4.12	0.69	1.46	1.15	1.45	2.32	0.49	1.49	1.12
Portugal	1.13	2.50	-0.25	1.12	0.48	0.94	1.26	0.32	0.78	0.83
Spain	3.20	2.23	1.65	0.64	2.36	2.72	2.81	0.20	2.56	0.49
OECD unweighted average	1.81	2.81	1.01	0.74	1.25	1.78	2.33	0.44	1.63	0.61

1. These indicators show the degree to which the personal and corporate tax systems scale up (or down) the real pre-tax rate of return that must be earned on an investment, given that the household can earn a 4 per cent real rate of return on a demand deposit. Wealth taxes are excluded. See OECD (1991) for a discussion of this methodology. Calculations are based on an inflation rate of 2 per cent.
2. The weighted average uses the following weights: machinery 50 per cent, buildings 28 per cent, inventories 22 per cent.
3. The weighted average uses the following weights: retained earnings 55 per cent, new equity 10 per cent, debt 35 per cent.
4. The weighted average uses weights indicated in footnotes 2 and 3.

Source: OECD calculations.

Table 28. Main legal entities and their corporate income tax rate

Legal form	2000	2001	2002
Resident corporations (AEs) whose shares are not quoted on the Athens Stock Exchange (ASE)	40	37,5	35
Banks	40	37,5	35
Non-resident companies ¹	40	35	35
AEs listed on the ASE (excluding banks)	35	35	35
Limited liability companies	35	35	35
Co-operatives and joint ventures	35	35	35
General and limited partnerships and civil law associations ²	25	25	25
Mutual funds and portfolio investment companies ³	15	15	15
Offshore companies under Law 89 offices	Exempt	Exempt	Exempt
Greek shipping companies	Exempt	Exempt	Exempt

Note: Date as of 1 January 2000.

1. As of 1 January 2001, non-resident companies will be subject to the same regime as resident companies.

2. The tax rate for general and limited partnerships and civil law associations was reduced from 35 to 30 per cent for the 1999 tax year, and from 30 to 25 per cent for the year 2000.

3. Except for income related to Greek Government bonds that are taxed at 10 per cent. In addition, these entities are liable to tax on their average value of their investments and their disposable funds at a rate of 0.3 per cent.

Source: Ministry of Finance and 1999 *European Tax Handbook*.

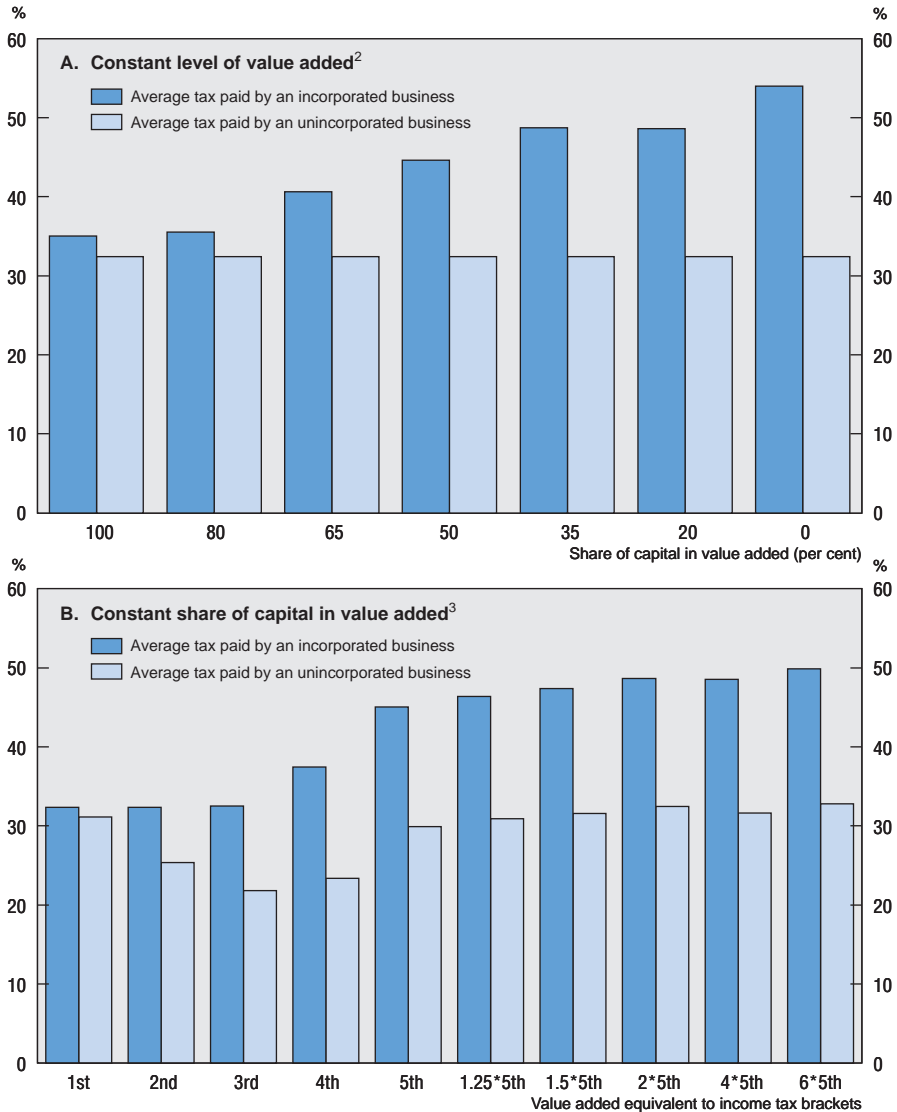
import and intra-EU trade brokerage. It warns of a steep rise in revenue losses in the immediate future, if additional legislative provisions are not urgently introduced. In the real estate sector, for instance, 2 100 foreign offshore companies were detected that own just one large real estate property and engage in no other activity. The investigation focused on the 25 companies with the highest value of real estate property. It turned out that they were all owned by Greeks who bought land in various upmarket locations in southern Athens suburbs and Aegean islands.¹²⁴ Since this scheme, together with the special tax regime for shipping, may exacerbate tendencies of international tax base erosion, the OECD Committee on Fiscal Affairs, is currently examining them under the recently adopted Guidelines for Dealing with Harmful Preferential Tax Regimes in the OECD Member Countries.¹²⁵

A bias in favour of unincorporated businesses

The tax system favours more generally the operation of unincorporated as opposed to incorporated firms. Panel A of Figure 25 shows the total effective tax rate paid by an owner-operated firm with value added equal to twice the lower boundary of the top PIT rate. As the share of the wage bill in pre-tax value-added rises from 0 to 100 per cent, the overall tax burden (including the taxation of labour) on the value-added of an incorporated business increases, whereas it remains constant for a non-incorporated firm that is treated for tax purposes in the

Figure 25. **Average statutory tax rates on incorporated and unincorporated businesses¹**

2000



1. Average statutory tax rates include: corporate and personal income taxes, and employer's and employee's social security contributions.

2. Value added equal twice the lower boundary of the top personal income tax rate.

3. Share of capital and labour are 35 per cent and 65 per cent, respectively.

Source: OECD.

same way as a general (or limited) partnership.¹²⁶ Panel B holds the share of wages constant at 65 per cent (the average share for the business sector as a whole) and shows the variation as income rises from the upper boundary of the lowest PIT bracket to eight times the lower boundary of the highest bracket. Panel A underlines that, except in the case where almost all of a firm's value-added derives from the employment of capital, the tax system offers a clear incentive not to incorporate, while in Panel B this incentive is shown to persist even at very high incomes. The difference in corporate tax rates for incorporated and partnerships together with the lower social security burden faced by the self-employed are the main reasons for the bias in favour of unincorporated businesses. The implications of such a system can be more far-reaching than just discriminating in favour of small-scale businesses. It is also an important factor hampering the profitability of corporations in labour-intensive industries, thus undermining their competitiveness and employment creation.¹²⁷

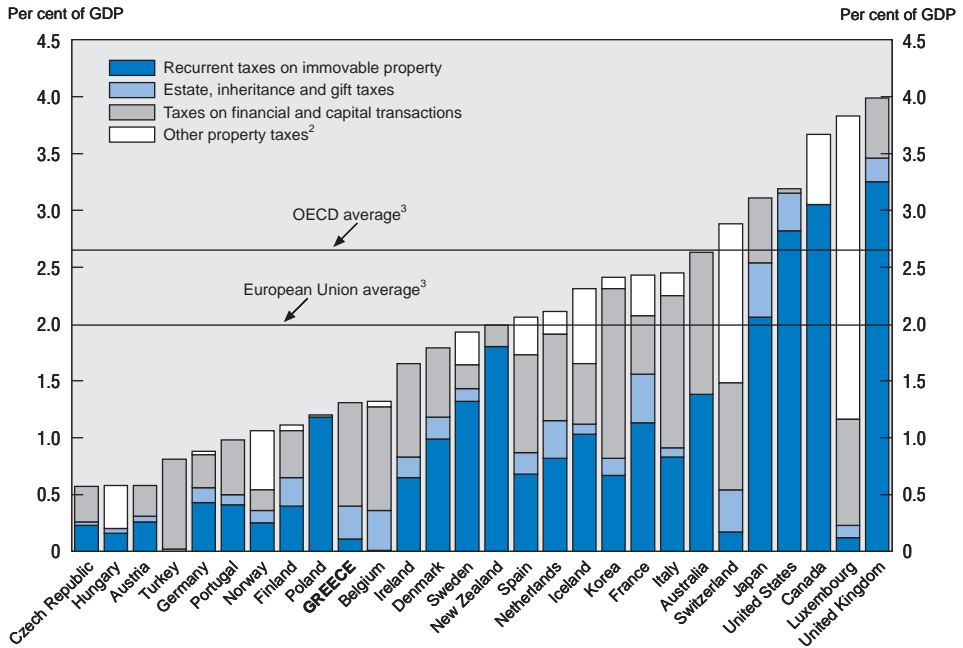
Property taxation is low

Property taxation accounts for only 1.3 per cent of GDP in Greece. Stamp taxes on market transaction of movable property are the main source and, at 70 per cent of total property taxes, represent a relatively high share of GDP compared with other OECD countries (Figure 26). Other components include the central government inheritance and gift tax, and the central and local taxes on real estate values. Since their introduction in 1974, real estate taxes have been controversial and have developed into a complex and inefficient web of tax rates and generous allowances (Box 7). Moreover, the absence of a land registry makes taxation difficult.¹²⁸ Revenues from these taxes are only 0.14 per cent of total revenues with high collection costs, estimated at about 1.1 per cent of total tax administration costs in 1996 (Balfoussias, 2000a).

The tax system is very centralised

Local governments have very limited tax-raising power. In 1996, own taxes of sub-central governments accounted for only 0.4 per cent of total tax revenue with the majority of their revenue depending on the central government. Taxes collected locally are limited to the TAP real-estate tax on land and buildings and various locally-levied fees, such as those covering waste removal and the use of public land. Local authority finances largely depend on grants, which do not provide adequate incentives to contain spending. Although this has not been a problem so far – thanks to close monitoring by the central government (there is tight regulation on the local provision of health care, education and social services) – the current set-up may need to be reviewed, as the government is moving towards greater administrative and spending decentralisation.

Figure 26. Property taxation in OECD countries
1998¹



1. 1997 data for Greece.

2. Includes recurrent taxes on net wealth and some non-recurrent taxes on property (for instance land development permission charges).

3. GDP weighted.

Source: OECD Revenue Statistics.

Main options for reform

Although the details have not been disclosed, the government is planning a broad reform for 2002. Redesigning the tax system in a comprehensive and coherent way so as to support rapid and sustainable growth should indeed be a policy priority. Since the mid-1970's numerous changes to taxation have taken place in a piecemeal fashion. Many of them have led to a complex and non-transparent tax system, including generous individual allowances, and a web of preferential incentives for the business sector. These features hamper both efficiency and equity and, overall, the tax system has performed poorly. There has also been a general lack of strong and uniform tax enforcement, even though the

Box 7. The taxation of real estate

Real estate taxation was introduced in 1974 and then again abolished in 1980, reflecting the vocal protests of real estate owners and construction contractors, who considered it as a barrier to the development of the construction sector, which in previous decades had been the “powerhouse” for the country’s development (Drakopoulos, 1999). The tax was reintroduced in 1982, but it was not enforced. In 1988, the tax was converted into a local tax levied by municipalities and communities, though, control of its collection remained in the hands of the state. In 1993 this tax was renamed “Fixed Property Rate” (TAP) and responsibility for collecting it came under the control of local authorities (TAP ranges between 0.25 and 0.35 per thousand of the value of a property). In 1997, the central government introduced an additional annual tax dubbed “Large Real Property Tax” (FMAP). It had been preceded, for the first time in Greece, by a full inventory of all real estate holdings, filed at tax offices by all citizens along with their income tax returns. Today, FMAP is only levied on the “privileged”. All natural or legal entities that own real estate property in the country are liable to pay, provided they own property worth in excess of GRD 69 million (or GRD 138 million for couples, raised by an additional GRD 17.3 million for every child). Including these two annual property taxes, real estate owners in Greece are liable to pay up to 14 different taxes and levies (including government taxes on income) in relation to their property.

government has already made commendable progress in recent years. Tax reform should cover a broad range of measures that aim to broaden the base and lower the rates. This would not only lower growth-restraining distortions but also reduce inequities and tax evasion incentives. In this context, the tax system cannot be looked at in isolation. Future expenditure pressures and the high debt to GDP ratio are also of concern. At present, because of the high debt level, Greece cannot afford to lower the overall tax burden if primary expenditure is not pruned at the same time. It is thus important that public expenditure reform be seriously considered along with tax reform.

Future pressures to raise more revenues to meet higher expenditure – especially in view of the likely decline of EU transfers and rising ageing-related spending – could be challenging because of the erosion of highly-mobile tax bases. Capital taxes are already proving to be difficult to rely upon due to the high mobility of their base and the current lack of a consistent exchange of information across countries. The rapid growth of e-commerce may also contribute to weaken the tax base as it relies heavily on consumption taxes. Although concerns over these issues are shared by the majority of OECD member countries and by a

wider international community that is co-operating to find common solutions for the future, some of the pressure will need to be met by taxing less mobile bases more heavily. Main tax reform options involve: *i*) The further improvement of transparency and reliability of the tax system, with priority given to a lower frequency of tax changes, the abolition of the practice of tax amnesties and bank secrecy; *ii*) Making the taxation of labour more equitable and less onerous. This can be done by shifting the tax burden to other types of income such as immovable property,¹²⁹ which is taxed very little, and indirect taxes levied by local government (*e.g.* user charges and fees), which are usually residence based and difficult to evade. Higher social security contributions of the self-employed, higher environmental taxes, reduction of corporate tax incentives and improved tax compliance can also help to finance a reduction of labour income taxes; *iii*) Broadening the base and lowering the rate of the CIT further. This can be achieved by taxing savings instruments and corporations in a more neutral way and streamlining investment tax incentives. This section sets out the main options for reforming the tax system. They are summarised in Box 8.

Make the tax system transparent and reliable

Greece faces important challenges in terms of applying tax laws even-handedly while raising compliance. One way to foster greater acceptance is to make the tax system more solid and transparent. Every year taxpayers and tax administrators struggle to comply with numerous revisions and amendments to the tax legislation. It can thus be difficult for businesses and citizens to identify the full requirements of the law. In order to reduce the extent of uncertainty and raise the predictability of the tax system's administration, clearer rules should be introduced guiding the tax administration. Moreover, the large number of inefficient and expensive third-party taxes should be registered, re-assessed and progressively phased out. Finally, the practice of offering periodical tax amnesties should be abandoned to remove the perception of taxpayers, and in particular of the large group of the self-employed, that the probability of being investigated for infringements of the tax law is low.

Successful steps to raise tax compliance have been taken in recent years and have been reflected in higher revenues. However, tax evasion is still deemed to be very high and the government needs to pursue its current efforts vigorously to prove its determination in enhancing tax enforcement. Further steps that might be taken to improve tax enforcement and also redress the fairness of the tax system would also include: *i*) phasing out bank secrecy for tax purposes; *ii*) speeding up the creation of a fully-fledged land and property register to improve cross-checking; *iii*) putting in place cross-checking of PIT returns filed by taxpayers and tax withheld on interest income (this is technically feasible thanks to TAXIS but not implemented as yet).

Box 8. Synopsis of options for reforming the tax system

Enhance tax administration and tax compliance

- *Refrain from making numerous revisions to the tax legislation.* This would make the tax system simpler to deal with and more certain.
- *Tax changes should be communicated in a clear and transparent way.* This would help businesses and individuals to identify the full requirements of the law.
- *Third-party taxes should be registered, re-assessed and phased out,* to improve transparency and equity.
- *The practice of tax amnesties should be abandoned.* This should limit the incentive to infringe the tax law.
- *Introduce a tax-expenditure budget.* This should help to evaluate the effectiveness of the numerous tax breaks in place.
- *Phase out bank secrecy for tax purposes.* This would allow to cross-check personal taxable income with withheld tax on interest income and other sources of information on taxpayers assets – including the land and real estate register.
- *Replace the “objective criteria” system for assessing taxable personal income with straight-forward accounting rules* by taking appropriate steps to broaden the PIT base and improve tax compliance incentives, while taking advantage of enhanced possibilities for cross-checking provided by TAXIS.

Make the personal income tax fairer

- *Evaluate tax-expenditure and streamline tax allowances to broaden the tax base and reduce distortions.* Tax base broadening would permit lower tax rates and a less progressive PIT rate structure. This in turn could result in a more equitable system and would help to improve compliance.
- *Harmonise the overall tax rates on capital income and bring interest income taxation in line with other capital income taxes.* This would enhance tax neutrality towards corporate financing. It would yield extra revenue that might help to reduce the corporate tax rate and also to tax labour income more lightly.
- *Phase out tax incentives to housing.* This would improve the allocation of savings and reduce the pressure on house prices.

Make the CIT more neutral

- *Phase out the lower rate for small-scale businesses.* It would remove the bias in favour of unincorporated businesses and improve the competitiveness and employment creation of corporations in labour-intensive industries.
- *Limit the wide range of tax incentives to a strict minimum.* They should be replaced by a more transparent tax scheme that targets only the areas where market failure is evident.
- *Review the regimes for shipping companies and offshore companies.* Reforms of these regimes should be designed to reduce the opportunities for tax-planning at the national and international levels.

Box 8. **Synopsis of options for reforming the tax system** (*cont.*)

Rebalance the tax-mix

- *Reduce the tax burden on labour.* To finance revenue shortfalls, the priority should be given to expenditure cuts. As a second best, a switch to higher social security contributions of the self-employed, environmentally related taxes and immovable property taxes could be envisaged.
- *Eliminate the bias in favour of the self-employed.* The lump-sum contribution of the self-employed earners to the social security system introduces a serious bias in favour of this work form. Social security charges should be levied as a proportional share of the net earnings of the self-employed.
- *Tax emissions according to their environmental costs.* For instance, energy taxation geared to reflect carbon content and greenhouse emissions would provide the right market signals to consumers and producers for abatement.

Strengthen local government finances

- Increase sub-national governments' revenue-raising power by allowing them more flexibility in setting property taxes and by relying more on environmentally related charges and user fees, rather than on transfers from central government. Greater tax decentralisation would give a better incentive to local authorities to grow their tax base and to be more responsive to the concerns of local voters.
- Streamline property taxes. The implementation of the National Land Registry should be accelerated. This should provide an accurate record of all the real estates in the country and market valuation of land and buildings. The taxation of property could then be based on the real value of the assets.

Redistribute the tax burden

Overall, the Greek tax burden is not very high by international comparison, but its distribution appears to be more uneven than in the majority of OECD countries. There are various options for widening a number of tax bases and reducing some of the higher and more distortive tax rates, thus re-balancing the overall tax mix and eliminating anomalies. Specifically, there is an opportunity to broaden the base of the PIT (Greece derives the smallest share of total revenue from this source) and of the CIT, and to increase revenues collected from real-estate property, while at the same time lowering social security contributions. A re-balancing of revenue sources could be engineered so as to improve the fairness of the tax system.

The government should also introduce a tax expenditure budget and undertake an in depth examination of tax expenditures focusing on their effectiveness in achieving the desired outcomes. While such a comprehensive examination has not been carried out here, principally because of the lack of recent data, it appears that the wide variety of tax breaks (*e.g.* unfocused individual tax allowances and credits and business tax incentives) only partly succeed in achieving their objectives, while requiring substantial public resources.¹³⁰

Broaden the income tax base

Reducing the number of tax deductions would broaden the PIT base and improve fairness and efficiency. Since the value of any given deduction rises with the marginal tax rate, all tax allowances provided under the PIT system should be re-assessed and possibly eliminated. The wide zero-rated band of the PIT, together with the recently announced reduction in social security contributions (see below), should be sufficient to keep a high share of low income earners out of the income tax net, as at present, but in a more simple and efficient manner. Moreover, tax base broadening would allow lower PIT rates, which could in turn help to reduce incentives for tax evasion. The rather strong progressivity of the tax schedule for higher income groups is also a factor likely to weaken tax compliance – especially for the self-employed who are not subject to withholding taxes.

Given the large number of self-employed workers (45 per cent of total employment), it would be advisable to accelerate the phasing out of the imputation system for the self-employed and replace it with a straightforward accounting assessment of taxable income. The objective criteria system for the self-employed has been in place since the 1970s. In late 1999, the government announced its intention of gradually phasing it out, but the budget for 2000 proposed only minor changes. Promoting self-employment assessment and reliable book-keeping through tax credits could be an option. The “blue-return” system in Japan¹³¹ has had some success in encouraging the self-employed to keep regular books. This would prevent the tax liability of the small self-employed from being systematically biased downwards and it would facilitate tax auditing. Nonetheless, this should go alongside other initiatives to broaden the tax base and improve cross-checking.

The benefits of broadening the PIT base could be enhanced by the broadening of the capital income tax base, thus creating room to tax labour income more lightly. Such a move should be accompanied by measures to remove the non-neutral way of taxing capital income. At the moment, returns to capital distributed in the form of interest payments are taxed at much lower rates than other sources of capital income resulting in a bias in favour of this form of savings. A solution that would preserve the advantages of the current system’s reliance on easy-to-administer withholding taxes might be envisaged. One option, which has been applied in

some OECD countries (for instance, in Norway and Finland), would equalise the overall tax rate on capital income. This can be achieved by setting the withholding tax on interest income equal to the CIT rate, which could then be reduced substantially (possibly close to about 25-30 per cent) to prevent capital flight.¹³² In this way, all three forms of income from capital (*i.e.* dividends, interest and capital gains) would be taxed at the same rate.¹³³ Dividends and interest distributed from pension funds and collective investment institutions should also be subject to the same overall tax rate. Although other options exist, they would tend to be more difficult to administer.¹³⁴

Finally, the generosity of the tax-breaks for owner-occupied dwellings should be reconsidered. A phasing out of tax incentives to owner-occupied housing would help remove underlying distortions in the allocation of savings. Priority should be given to the progressive elimination of mortgage interest and rental deductions. Together with raising revenues, this could provide an impetus to the development of the rental housing market and take away some of the pressure on house prices especially in urban areas.¹³⁵

Lower social security contributions and change the system for the self-employed

With the intent to raise income of the lowest paid workers, the government has recently announced that employees receiving minimum wages will be exempt from social security charges. However, the whole Greek payroll system should be revisited in tandem with a pension reform. At present, the employer and employee combined social contribution rate for a skilled worker is around 50 per cent and the labour cost of an APW is 1.3 times his gross salary. To reduce the adverse labour-demand effects that high payroll taxes are likely to generate, these should be lowered. At the same time, social security charges on self-employed taxpayers should be levied as a proportional share of the net earnings (or at least its labour component). In addition to improving the functioning of the labour market, such a reform would go a long way towards reducing the present bias in favour of self-employment as well as the incentive to work in the underground economy. At the same time, horizontal equity would be improved.

Consider taxing pollutants according to their environmental costs

Taxing pollutants should provide the right market signals to consumers and producers for abatement. In this respect, the taxation of lignite/coal, heavily employed in energy production, could be geared to reflect carbon content and greenhouse gas emissions. Moreover, clean air policy should be more comprehensive. Actions should include taxing all fuels according to CO₂ emissions. Also water charges should be based on pollutant load and toxicity to provide incentives for industry and agriculture to adopt production processes that minimise effluents.

Focus business tax incentives and reform special regimes

The wide range of tax incentives given to the business sector should be reduced and streamlined. Tax incentives distort market signals, which leads to sub-optimal outcomes for the economy as a whole. Moreover, incentives complicate tax administration and tax laws, increase compliance costs and pave the way for unintended loopholes, abuse and evasion. Above all, tax incentives are difficult to target. A poorly targeted tax instrument gives rise to a waste of resources, while an inadequate dosage may be ineffective. Tax incentives should be limited to a strict minimum and only be provided in areas where there is evidence that market failures may lead to under-investment. Such areas may include R&D, environmental protection and training.¹³⁶ Also the generosity of the regional tax incentives should be reconsidered. Fiscal depreciation of capital assets, in particular buildings, should also be re-assessed to reflect the true economic depreciation of physical assets. The additional revenues that would arise from such a reform could be used to harmonise CIT rates at a lower rate. This would reduce the bias in favour of unincorporated businesses, and level the playing field for large businesses.

The presence of a separate regime for shipping companies and offshore companies is a feature of the Greek corporate tax system. Differences in tax treatment may produce incentives for tax-planning by companies or investors that are in a position to choose between these regimes. This results in an inefficient allocation of capital, while also heightening the risk of revenue losses. The existence of these regimes could also have an effect outside Greece by diverting capital from more productive investments elsewhere in the world and by eroding the tax base of other countries. Possible reform of these regimes should take account of both domestic and international concerns.

Improve local government finances

In addition to raising revenue, the taxation of property may serve several purposes such as redistributing income and wealth or capturing part of the wind-fall gains from excess demand for land. To create a solid tax base, the rapid implementation of a National Land Registry with an accurate record of all real estate in the country and market valuation of land and buildings would be desirable. The taxation of property could then be based on the real value of the assets. The rise in revenues that would follow could in part be off-set by a cut in transaction taxes (for instance, the elimination of third party taxes such as fees to the Lawyers' Fund for drafting contracts). Moreover, since local governments rely on property taxes as the main independent source of revenues, their revenue-raising power would rise and narrow the gap with their spending powers. This would also make sub-national governments more responsive to voters. Taxing powers of local governments could also be improved by relying more on the "polluter pays" principle (*e.g.* for example for wastewater). Better pricing should go hand in hand with the simplification of administrative procedures (*e.g.* to grant wastewater discharge permits) and better enforcement at the local level.

Notes

1. The Statistical Office produces an account for the private sector, including public enterprises. In this account, the saving ratio fell from 11 per cent in 1998 to 10 per cent in 1999.
2. Since 1999, the balance of payments accounting changed from a currency to a residency basis, which should make it more accurate. Data for 1997 and 1998 could only be partially back-dated, because of lack of primary information, while data before 1996 remain on a currency basis. Due to this change the difference between settlement and customs data has shrunk from 50 per cent in 1996 to 18 per cent in 1999.
3. Both the labour force and employment rose strongly in 1998. On the basis of LFS data, more than a third of the labour force increase of 184000 (4.3 per cent) was due to non-EU immigrants (71 000). The LFS methodology was changed in 1998, to comply with Eurostat's methodology, which is likely to explain a large part of the rest of the sharp increase.
4. The OECD estimate is based on a Kalman filter approach, which takes into account inflation expectations and temporary supply shocks represented by changes in non-oil import prices and real oil prices. In the case of Greece, inflation expectations are likely to have been lowered by the prospect of entering EMU. To capture this effect, inflation expectations from 1991 onwards are specified as a weighted average of past Greek inflation and average euro area inflation, with the weight on euro area inflation increasing linearly over time.
5. Including also public sector pension payments, total compensation of employees in the public sector is budgeted to rise by 8.8 per cent.
6. For the period January-August 2000, minimum wage earners will get a tax rebate in mid-2001. This means, that the effect of this measure in 2000 is 2.7 per cent on the annual take-home pay of minimum wage earners and only 0.2 per cent on aggregate take-home pay of all wage earners.
7. With the price level effect waning, average annual inflation will be raised, *ceteris paribus*, by 0.3 percentage point in 2000 and 0.6 percentage point in 2001.
8. The difference between CPI and HICP inflation has narrowed since the HICP coverage was raised in January 2000.
9. Liquidity absorbing operations were large until November 1999, much smaller until May 2000 and the Bank of Greece has provided small amounts of liquidity since then.
10. Excluding valuation effects due to the yen and dollar appreciation, private credit expanded by 17.6 per cent in July 2000.

11. The latest (and last) convergence programme (the updated convergence programme of December 1999) is out of date. The first stability programme has been presented in December 2000.
12. The surplus does not include revenues from the auctioning for third-generation mobile phone licences. The government is currently seeking advice on how to best set up an auction for such licences. An auction could be held in early 2001. No estimates of the potential revenues from the auction are currently available.
13. For 2002, both the official and OECD projections show a further improvement in the fiscal balance of around 1 per cent of GDP to 1½ per cent of GDP and ¼ per cent of GDP surpluses, respectively. In both cases the fiscal stance is neutral.
14. The assumptions of the two exercises differ somewhat, but the differences largely offset each other.
15. 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.
16. Under the 1998 pension reform, a new fund – covering 850 000 insured and 220 000 pensioners – replaced the three large primary funds for the non-agricultural self-employed, while there was a unification of the 12 supplementary funds for civil servants and 48 funds for rural lawyers. In addition, the 7 supplementary funds confronting financial difficulties were merged with the large supplementary fund for private sector employees (IKA-TEAM).
17. Starting in 2001, pensioners younger than 55 years who work will not receive their pension, while those above that age limit will receive only 30 per cent for the amount of pension exceeding GRD 200 000 per month.
18. The estimates for private outlays included in the total expenditure should be viewed with caution as they also attempt to capture unofficial payments. Another source of uncertainty regarding the amount of health expenditure arises from poor accounts of hospitals and social security funds, as well as the existence of long arrears to suppliers. They are cleared with a long delay by the government. The outstanding stock of arrears to suppliers of the public hospitals stands at around GRD 160 billion.
19. As noted in the 1998 Survey of Greece, the existing polyclinics of social security funds (mainly IKA) in the urban centres are dysfunctional and provide a limited range of services, often resorting to private providers (including visits to private diagnostic centres or consultation with doctors working in the polyclinics or in the hospitals).
20. This programme is mainly financed by the European Social Fund and is intended to continue over the next four years. Some staff members have already been sent abroad for post-graduate studies while a significantly larger number has attended seminars organised by the Ministry of Health. Some 420 training programmes are currently implemented.
21. Its use by all hospitals is envisaged from 2001 onwards.
22. The diagnostic related groups payments in public hospitals (a measure not envisaged in the 1997 reforms) would allow for a differentiation between surgical and pathological services (including separate rates for specific high cost services).
23. The measures – enacted in late 1997 – contained the prices of expensive, mainly imported, drugs. On the other hand, the prices of inexpensive, domestically produced drugs were increased in order to enhance the attractiveness of local production. Demand for pharmaceuticals was restrained through the introduction of a positive list of medicines in April 1998 which limited public drug reimbursements to some 3 000 drugs.

24. Employment in the broadly-defined public sector, including employment in state-owned enterprises, accounted for about 17 per cent of total employment (and about 31 per cent of employees) in late 1999.
25. The 1994 law introduced hiring on the basis of exam scores, with some additional points in favour of the socially disadvantaged. The main elements of the new policy were: a rigorous control for new positions; the establishment of an independent agency responsible for recruitment; and the development of transparent promotion procedures (Kotis and Kotis, (1996); OECD (2001)).
26. Health, education and national security sectors are exempted from this policy.
27. This five-year programme is known as Ioannis Kapodistrias. The programme has resulted in the restructuring of 5 775 local jurisdictions, which existed prior to 1997 into 1 033 municipalities.
28. Initiatives include the creation of a Citizens' Bureau in every prefecture and municipality to deliver services, information and administrative forms; a help-line call centre for citizens to apply for certificates to be sent home, to apply for passports or to obtain more information; the publication of information on the services provided by the Ministry of Interior, Public Administration and Decentralisation and others.
29. For a discussion of the labour market measures taken during the 1990s see OECD (1996) and OECD (1998).
30. A study by Lianos *et al.* (1996), based on the sample of four provinces in Northern Greece, estimated that the productivity adjusted wages of illegal immigrants were 40 to 60 per cent below those received by comparable Greek workers.
31. Using a general equilibrium model, Sarris *et al.* (1999) found that the overall real wage rate declined due to illegal immigrants, but with marked differences among labour categories. The real wage for unskilled Greek workers in the rural and urban sectors decreased significantly as a result of illegal immigrants. On the contrary, the real wages of the urban semi- and highly-skilled workers experienced a rise. About one-third of illegal immigrants were found to displace locals, while the remaining is a net addition to the Greek labour market.
32. This threshold is about 25 per cent higher than the level of the minimum wage.
33. Territorial Pacts have been developed on a pilot basis in seven regions characterised by serious employment problems. Grants for the acquisition of vocational experience and the employment of unemployed aged between 30 and 64 years have been extended to all businesses and self-employed whose enterprise is based in a region covered by TEPs (Ministry of Labour and Social Affairs, 2000).
34. The differential between average earnings in manufacturing (for blue collar worker) and the national minimum wage is lower on average, since the latter increases with the marital status and experience.
35. This measure applies to firms with annual gross revenue over GRD 100 million, operating for at least two years and which have not recently dismissed workers (Ministry of Labour and Social Affairs, 1999).
36. The policy stance became slightly less strict in the 1990s, mainly reflecting a small decrease in the mandated dismissal notice period in the case of regular contracts.
37. The figures refer to the results of the LFS for the second quarter of 1999. Since 1998, the LFS is conducted every quarter, rather than once per year (second quarter), as it was previously the case.

38. For companies with more than 200 employees, the current 2 per cent upper limit on dismissals per month will continue to apply.
39. Average operating hours in total industry increased from 64 hours per week in 1989 to 94 hours per week in 1999.
40. A study by IOBE (Politis, 2000) concludes that the decoupling between operating hours and weekly working hours (of full-time employees) comes mainly from the use of shift work (three shifts per day, on average) in the industrial sector. Part-time work in industry accounts for 1 per cent of the employees in the sector, comprising exclusively women. Part-time work accounts for 33 per cent of all employees (compared to an EU average of 37 per cent) in the retail trade sector (concentrated mainly on firms with over 50 employees) and 9 per cent (compared to an EU average of 17 per cent) in the services sector.
41. Social security contributions for part-time workers are calculated on the basis of actual earnings. The number of days, however, that part-time workers work (independently of the number of hours per day) is taken into consideration as an eligibility criterion for pensions but not for determining pension levels.
42. In particular, the long-term unemployed who take up a part-time job for the first time will be entitled to receive a monthly allowance of GRD 30 000 for up to one year, on the condition that they work over 4 hours per day.
43. The second measure aims to compensate workers for the reduction in their overtime work. It is officially estimated that the reduction of overtime work will lead to about 50 000 new jobs.
44. In the case of the more flexible arrangement, the workers would agree to work 138 hours of overtime per year during the peaks of economic activity (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 work 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.
45. A study by the Greek Federation of Bank Employees' Unions calculated that the introduction of a 35-hour week would bring about a reduction in banks' return on equity by 0.4 to 2.3 percentage points, with an average loss of 1 percentage point. At the same time, a study by the General Confederation of Labour suggests that the implementation of the 35-hour working week would lead to 160 000 additional jobs. Employers' groups have opposed such a reduction on the grounds that it would add significantly to their costs, particularly at a time when they are being pressed to restrict prices (Economic Intelligence Unit, 1999).
46. The unemployed are assisted by the EPC's specialised employment advisors, who are gradually providing individualised advisory services.
47. The modernisation of the EPCs is closely associated with the use of the Employment Card system – currently used on a pilot basis in 10 EPCs. When fully operational, the EPCs, along with the computerised system and the implementation of the individualised approach, will make the monitoring of the flows in and out of unemployment possible. The use of the Internet to disseminate information about OAED's programmes, and since 2000, for job seeking represents a further step towards modernising the PES. In 2000, steps have been taken towards monitoring ALMPs, through data processing and continuous monitoring of registered unemployment flows. This work is coordinated by the National Observatory for Employment. To this end, reliable indicators on the implementation of the 2000 NAP will be available in Spring 2001.

48. In 1999, 154 000 persons benefited from the implementation of OAED programmes, 105 000 of which were unemployed. Moreover, 33 000 employees received training through LAEK (Employment and Vocational Training Fund).
49. The 1998 educational reforms have set up a new framework for conducting technical and vocational education, while at the same time upgrading the role of this sector and establishing closer links between the educational system and the labour market. The new institutional arrangements are expected to facilitate the implementation of certain measures relating mainly to life-long training, dropouts and apprenticeship.
50. Policies under the other three pillars of the NAP include special measures for SMEs in order to support and promote entrepreneurship; the revision of the statutory framework of work organisation through the implementation of the 1998 law on industrial relations (discussed above); and measures aiming to improve equal access of men and women to the labour market, including the establishment of Centres for Play for Children and Day-Care Centres, and implementation of the "Creation of Social Welfare Centres for the Care of the Elderly" programme (Ministry of Labour and Social Affairs, 2000).
51. The figures are based on the EU's Eighth Survey on State Aid (EC, 2000) and cover all forms of state aid including direct transfers to firms, equity participation, soft loans, tax deferrals and government guarantees.
52. The 1998 law regulates investment in all sectors, and not only manufacturing. It defines as "new" investors the corporations, which have not yet been constituted, or have been constituted within a period of less than five years from the submission date. Corporations, which have been established at least five years before the submission date, on the other hand, are defined as "old" investors.
53. For the application of incentives Greece is divided into four zones (A-D). Zone D includes the northern region of Greece and the northern islands; zone C includes areas with acute problems of unemployment and/or a declining population (these areas will be defined by the Ministry of National Economy by a decree); zone B includes some areas of Attica and Thessaloniki, and all other areas that are not included in the other zones; and zone A includes the prefectures of Attica and Thessaloniki (apart from the parts that may be included in zone B or C).
54. An evaluation of the Business Programme for Manufacturing (BPM) over the period 1994-99, was conducted by BCS Consultants for Development and Environment (2000), in order to provide background information for the new Plan of Business Program 2000-06 for Manufacturing and Services, and as a guide for future discussions. However, due to the low absorption rate, the report, rather than being an *ex post* evaluation of the programme, provided largely an "on-going" evaluation, and in the case of some measures with a significant delay in their implementation, an *ex-ante* evaluation.
55. The bulk of CFSII (about 70 per cent) regards infrastructure investments. Nevertheless, production and employment in manufacturing remained subdued, apart from the last three years, because the majority of the projects were completed late and with substantial quality problems, due to administrative inefficiencies (OECD, 2001).
56. Budgetary resources assigned to farmers' pensions amounted to 1.3 per cent of GDP in 1999. Adding payments for farmers' pensions to direct budgetary transfers brings overall support to agriculture to nearly 70 per cent of the sector's GDP. Spending on farmers' pensions is set to increase further by 0.3 per cent of GDP in 2000, due to a GRD 10 000 (30 per cent) increase in the minimum pension for farmers. A further GRD 10 000 increase will take place in January 2001.

57. The government estimates that the measure will succeed in raising the average size of farms from 2.5 hectares to 8.5 hectares. The retirees must hand over the entirety of their farms, being allowed to keep only up to 10 per cent or half a hectare, and even that is not to be used for farming purposes.
58. The state controls almost 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). Until recently, the state also had under its control the Hellenic Vehicles Industry (ELVO).
59. The public sector was redefined and now also includes the companies falling under the scope of Law 244/1996 and state-controlled (with the state owning 51 per cent of shares) financial institutions (*i.e.* ATE and Hellenic Development Bank), and specifically excluding from the scope of Law 2000/91 any subsidiaries and stakes in other firms of such companies or financial institutions.
60. The IRO and its affiliated companies have been placed under liquidation by Law 274/1999. The organisation was created in 1983 to restructure 79 heavily-indebted enterprises with total liabilities amounting to GRD 240 billion. The aim was to save some 33 000 jobs. Since the beginning of its operation, IRO has managed to restructure and sell 16 of the 79 companies, while most of the rest were liquidated and 24 000 jobs lost (Economic Intelligence Unit, 1999).
61. In particular, the Societe Anonyme which are established or increase their capital are obliged to pay a duty amounting to 0.1 per cent of the original capital or the increase in capital. The revenues from the duty are earmarked for the Competition Committee.
62. Or, in the case that the combined aggregate turnover within the national market of all undertakings concerned is at least equal to euro 150 million, and the aggregate national turnover of each of at least two of the undertakings concerned is more than euro 15 million. Prior notification of concentrations is obligatory where the above limits are exceeded.
63. Reforms of the postal service and water and sewage companies are discussed in Annex I.
64. Greece was granted a two-year derogation for implementing the EU Directive on the liberalisation of the electricity sector. Under the directive, Greece must liberalise 30 per cent of its market by 19 February 2001 and 33 per cent by 2003.
65. An applicant must own adequate generating capacity installed in an EU country and provide "satisfactory long-term confirmation" that it has access to sufficient transmission and interconnection capacity to transmit the electricity it will supply. These conditions exclude supply from Greece's immediate neighbours. A small interconnection with Italy is expected to be ready after 2001, thereby providing limited competition (OECD, 2001).
66. The company's debt amounts to GRD 1.7 trillion but profits are only expected to be close to GRD 10 billion (Kathimerini, 30 September 2000).
67. Several foreign and domestic firms have tendered to participate in the low-pressure natural gas distribution companies. These companies, known as EPAs, are subsidiaries of regional gas distribution companies (EDAs), which in turn are 51 per cent-owned subsidiaries of DEPA. The competing firms have tendered to supply the Attica, Thessaloniki and Thessaly regions. Italgas has been finally chosen for the natural distribution network in the regions of Thessaloniki and Thessaly until the year 2007. The competition for the supply of Attica region is still ongoing.

68. DEPA is in the process of selecting a financial advisor to examine the possibility of listing at the ASE.
69. As discussed in the 1998 OECD Economic Survey (OECD, 1998*b*), 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 DEH, 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 DEH appears to be high compared with prices in the European Union. Nonetheless, DEH has been granted compensation in the form of a profit-sharing agreement with DEPA. This system could hinder competition in the electricity sector if DEH and potential entrants using gas-fired generation are not treated equally.
70. OTE controls 70 per cent of CosmOTE, the third biggest mobile operator in Greece. The Norwegian Telenor holds 22 per cent and the remaining 8 per cent is held by an offshore company in Cyprus. CosmOTE is the fastest growing Greek cellular telephone operator. The number of its subscribers reached 1.5 million in June 2000, 31 per cent of the market.
71. For the 30-months duration of the contract, Speedwing was offered a total of USD 10 million with an additional USD 4 million tied to productivity-related bonuses.
72. The 1999 deficit of OA has exceeded GRD 30 billion. A deficit of around GRD 8 to 10 billion is expected for 2000, even after taking into account the revenues from the sale of 17 aircraft and the sale of a building in New York (Tanea, 24 April 2000).
73. Financial market liberalisation started in 1987 and was largely completed by 1993. The main steps were reviewed in the 1995 OECD Survey of Greece (OECD, 1995).
74. A battle to become the third biggest player in the Greek banking system swiftly followed the sale of Ionian Bank. The target was Ergobank, the sixth largest bank by assets and the third by lending, which was taken over by EFG Eurobank, winning over a bid by Bank of Piraeus. The latter – the fifth largest commercial bank – completed in 1999 its merger with Bank of Macedonia-Thrace and Xiosbank.
75. The National Bank of Greece (NBG), by far the largest player in commercial banking, has completed its 1998 merger with the National Mortgage Bank of Greece. This should help reduce operating costs. NBG has completed the writing off of doubtful debts in late 1998.
76. ETVA completed cleaning its balance sheet from doubtful debts ahead of the 5-year business plan introduced in 1995, with a total recapitalisation cost to the budget of GRD 427 billion (1.1 per cent of GDP), and is profitable since 1998. Nevertheless, it encounters difficulties in selling off its equity holdings in loss-making industrial enterprises. ETVA's privatisation will be preceded by the sale of ETVA's 51 per cent holding of Scramaga shipyards. The creation of a new firm is also envisaged, the "Hellenic Industrial Real Estate SA", to manage 24 Industrial Development Parks owned by ETVA. The Hellenic Industrial Real Estate SA will be listed on the ASE. Regarding ATE, a new five-year restructuring plan was introduced in early 1998, with the aim of stepping up the disposal of several of ATE's financial and industrial subsidiaries in order to strengthen its capital base and better focus on core activities.
77. Non-performing loans accounted for 14.7 per cent of the total in 1999, against 13.6 per cent in 1998 and 16.5 per cent in 1997. The rise in 1999 partly reflects the tightening of classification criteria, with loans classified as doubtful if not serviced for more than three months.

78. The bill approved by the parliament curtails repayment of compounded interest (according to ceilings that depend on the date of loan contract) for some 400 000 debtors with still unsettled debts. Of them, 150 000 relate to commercial banks, 200 000 to the ATE, and the rest to the state-controlled Organisation for Workers' Housing (OEK). Estimates concerning the ATE suggest, that the total cost to the budget could reach as much as GRD 100 billion. In a surprising move that went beyond the proposed settlements, the NBG announced that it intends to write off unpaid debts from credit cards, personal and consumer loans, and small-sized loans to SMEs that ceased to be serviced after 1992 – covering around 13 500 additional debtors.
79. Since 1999, Greek banks are required to meet the standards for an effective internal control system (ICS): *i*) setting up a Risk Management Unit for all banks with assets exceeding GRD 300 billion; *ii*) establishing an operationally independent audit committee, reporting to the bank's management and to the Bank of Greece, on the effectiveness of the bank's ICS; *iii*) reviewing regularly contingency plans to comply with standards set by the Bank of Greece.
80. Examples of take-overs in the Balkans by Greek commercial banks are: Post Bank in Bulgaria by EFG Eurobank (1998); Kreditna Banka and Stopanska Banka in FYR of Macedonia by Alpha Credit Bank and NBG respectively (1999); Pater Bank in Romania by Piraeus Bank (1999); Interlease in Bulgaria by NBG (1999).
81. Trading on the ASE was limited until 1:30 p.m., which is significantly shorter than in other stock exchanges and daily price fluctuations of individual shares were limited to 8 per cent. Starting from February 2000, trading hours have been progressively extended until 3:30 p.m. and price limits have been widened to 12 per cent. To forestall price manipulation, a new procedure was introduced in September 1999, requiring the closing price to be computed as the average of the stock's transaction prices during the last 30 minutes of the trading day.
82. As from January 2000, capital requirements have been raised from GRD 2 billion to GRD 4 billion for companies listed on the main market of the ASE, to improve capital adequacy standards and match the significant amounts of capital these companies raised through the stock market in 1998-99. Required equity capital for companies listed on the parallel market was raised from GRD 500 million to GRD 1 billion. In addition, the flotation rate of the company's outstanding share capital was raised from 15 to 25 per cent – thus bringing it to parity with the required ratio on the main market. Additional rules and regulations include: the increase in the amount of compensation provided by the Compensation Guarantee Fund for ASE members; the regulation of market details necessary to set in operation the New Market (referring to small and medium size firms); readjustment of upper and lower limits of daily price fluctuations from 8 to 12 per cent; provisions for the auction for non-materialised shares; increase of the minimum amount of share capital required to obtain a license to run a mutual fund management firm from GRD 200 million to 400 million; rules for repurchase agreements and short shares. The most important regulation introduced by CMC concerns the terms and conditions for engaging in a tender offer in the capital market, which replaces the previously applied inadequate rule. Public security tender offers are in place since July 2000.
83. Over the next four years, the government plans to spend GRD 150 billion of privatisation revenues on a scheme to co-finance, with private sector venture capital, the start-up of firms which specialise in new technologies (such as IT, Internet applications, mobile telecommunications, development of new patents and others) (EIU, 2000).

84. Real estate mutual funds must invest up to 70 per cent of their assets in commercial or housing real estate. The rest of their assets may be invested in securities with at least 10 per cent held in the form of bank deposits. Real estate mutual funds will be exempt from the real estate tax and from capital gains taxes.
85. The principle of horizontal equity implies that taxpayers with the same income and similar family situation should pay the same tax, while vertical equity implies that taxation should vary with different levels of income reflecting ability to pay.
86. According to estimates included in the 1995 Budget, tax exemptions amounted to nearly 11.6 per cent of total tax receipts in the same year.
87. The principle of legal certainty dictates that the tax system should not raise doubts among taxpayers with regard to the applicability of its provisions and that the scope and the content of tax laws should be unequivocal and simple.
88. Traditionally, farmers do not pay social security contributions and property taxes. Their share in total employment has fallen from 35 per cent in the mid-1970s to 20 per cent in 1998.
89. Prior to 1994, tax collection heavily relied on the notion of "assumed income", otherwise known as "objective criteria", based only on factors connected with expenses. For example, if a taxpayer owned a new car of 2000cc, an income of GRD 4 300 000 was assumed. Tax authorities had difficulties in assessing taxes and cross-checking tax data, penalties for tax evasion were trivial and no real estate register was in place.
90. Net revenues collected are gross tax revenues less tax refunds plus social tax subsidies. In the case of Canada and the United States, a share of gross tax revenue finances some social programmes and this is netted out of tax revenues. To allow international comparisons, this share has been added back to net tax revenues. In the other countries, these social programmes are directly financed out of the central budget or social funds (Lepine Report, 1999).
91. In 1994, the "objective criteria" system, in place since the 1970s, was somewhat streamlined to evaluate imputed income on the basis of certain criteria associated with the size and nature of the taxpayer's business. However, income is still mainly imputed on the basis of living expenses or acquisition of certain assets.
92. In October 1997, the European Commission decided to refer Greece to the Court of Justice because third-party taxes in the form of contributions to the lawyers' social fund were levied on lawyers' clients for a range of services, including the setting up of a company or increasing its capital. For an increase in a company's capital, the levy amounted to 0.5 per cent of the company's capital and this was in violation of the capital duty Directive (69/335/EEC). The Directive requires Member States to ensure that duty levied on capital raised for the formation of a company, or to increase a company's capital, may be no higher than 1 per cent and also stipulates that besides capital duty, Member States may not impose any other taxes or levies on raising company capital that have an equivalent effect, whatever their denomination may be. The Commission did not accept the argument of the Greek Government that the provisions in question were necessary to guarantee social protection for lawyers.
93. The SDOE has an average annual budget of GRD 22 billion to cover: *a*) the cost of ordinary and extraordinary salaries for 1 300 employees (GRD 9 billion) and *b*) operating costs, such as rent, petrol, equipment for investigations etc. (GRD 13 billion). As a preventive audit department, the SDOE drafts an annual programme of audits for each regional directorate and category of audit. A total of 135 992 audits in all categories were scheduled for 1999. In November 1999, the Unit had already surpassed the target and carried out 146 336 audits (*i.e.* 112 audits per annum per employee).

94. Between mid-1998 (when TAXIS had become operational in the largest tax inspectorates) and the end of 1999, 2 883 100 tax returns for different types of tax, other than personal and CIT, were filed and cleared by the computer tax information system.
95. Some taxpayers register with different local authorities in order to take advantage of tax refunds and benefits more than once.
96. "All-in" rates include employee's social security contributions, surcharges and local taxes.
97. For example, taxpayers are entitled to deduct a small part of their expenses on goods and services, the rent for the main residence up to GRD 250 000, medical expenses up to GRD 12 500 000, etc. Further, a tax credit is granted for each dependent child. Annex II provides more details on the conditions associated with these and other personal tax breaks.
98. The tax on interest can be avoided by round tripping with banks in countries where non-residents are also tax exempt. For example, interest earned by a Greek investor may be remitted to an account in a UK bank and subsequently re-directed to an account in a Greek bank. In both countries the payment is deemed to be made to a non-resident investor and therefore it goes untaxed. Because of bank secrecy it is not possible to cross-check.
99. Pre-tax personal income is also unevenly distributed. According to Anastassakou *et al.* (1999) in 1994 the lowest two deciles earned 0.1 per cent of total pre-tax income and the top two deciles 54 per cent.
100. The social security system was described in detail in the 1997 *Economic Survey of Greece* (OECD, 1997) and reform efforts since then were discussed in the 1998 *Economic Survey of Greece* (OECD, 1998*b*) and are also outlined in Chapter II of the present *Survey*.
101. For example, the lawyer's fund receives a percentage from all contracts, the doctors' fund 6.5 per cent of the wholesale price of pharmaceuticals (hence taxing other social security funds), engineers a percentage of public works, and journalists a percentage of television and radio advertising receipts.
102. This number does not include the additional social security contributions for hazardous work.
103. Tax wedges do not include indirect taxes and are therefore biased to different degrees across countries.
104. The maximum duration of full unemployment benefits is 12 months after which the unemployed receive only unemployment assistance. While the net replacement rate of unemployment benefits is around 50 per cent, the net replacement rate of unemployment assistance is only around 10 per cent.
105. Income distributed by public pension funds is also subject to the personal income tax.
106. Graham and Lemmon (1998) document that firms facing high corporate tax rates tend to have high levels of debt. This result confirms work by Schulman *et al.* (1996) for Canada and New Zealand as well as that of Desai (1997), who reports a positive cross-sectional correlation between debt and taxes across a sample of 51 countries. More recently, Graham (1999) found that an increase in corporate taxes has a positive effect on debt finance, while an increase of personal taxes on interest relative to equity income has a negative effect.
107. Mainly to enhance tax revenue collections, in 1998 the government introduced a stamp duty on stock market transactions, which was raised from 0.3 to 0.6 per cent in September 1999. Thanks to the stock market boom, in 1999 tax revenues collected from this tax amounted to GRD 230.1 billion (around 0.6 per cent of GDP).

108. The Law 2753/1999 labelled the 5 per cent tax as an income tax by inserting it in the Income Tax Code under special income from business. However, it is *de facto* a transfer tax since it is levied on the value of a transaction, regardless of whether income arises from the transaction. Mavraganis (2000) provides a thorough description of the new tax regime for the sale of shares in Greece. Prior to 1999, a final withholding tax of 20 per cent was levied on any gain arising from the transfer of unlisted shares.
109. According to the 1999 Household Expenditure Survey the rate of owner-occupied housing was 80 per cent in 1999.
110. For the period 2000-02, the reduced rate of 8 per cent is also applied to some services that are considered labour-intensive: small services for repairing clothing and household linen, and domestic care services.
111. Estimates for 1999 show that the effective VAT rate was 10.9 per cent and its productivity 60.5 per cent.
112. In Greece, excise rates on petroleum products and tobacco products are at the lower end of the scale allowed under Community legislation, while the average excise rate on alcoholic beverages is close to that in the other EU Mediterranean countries.
113. The tax system for vehicles and motorcycles applied an extremely high rate of tax, especially on passenger vehicles. Although still not in line with the EU rules, this tax system was completely revised in November 1998. Specifically: the fiscal differentiation between new and second-hand vehicles was abolished; the tax now depends on the manufacturing year and the anti-pollution technology, as stipulated in Community directives; excise and the additional special registration fee were abolished and a new "registration fee" was introduced. The rate for this fee depends on the cubic capacity of the engine and the clean-technology of the vehicle, the tax base depends on the factory price and freightage, and insurance premiums actually paid. A new scale of write-off values for second-hand cars based on their age was also introduced. After the 1998 revisions and the tax cuts during the last quarters of 1999 and 2000, the combined vehicle and motorcycle tax have been in line with the EU rules.
114. The budgetary cost of cutting excise taxes on petroleum product and on cars amounted to 0.24 per cent of GDP in 1998 and to 0.6 per cent of GDP in 1999.
115. Irrigation water supplied by individual projects, which represent about 60 per cent of the irrigated area, is not subject to charges. The remaining 40 per cent is supplied by community irrigation projects and water fees are paid to the Local Land Reclamation Board (TOEV), which charge GRD 30 000-70 000 a year per hectare served. The revenues from these charges cover only 60 per cent of total expenses.
116. The marginal effective tax wedge reflects the difference between the required pre-tax rate of return an investment has to earn in order to provide a personal investor with the same after tax return as a bank deposit earning a pre-tax 4 per cent real rate of interest. The estimates shown in Table 27 are based on the King-Fullerton methodology (Gordon and Tchilinguirian, 1998, and OECD, 1991). The results should be interpreted with caution since for some investment and financing decisions the results may not adequately reflect the effects of taxation on these incentives. For instance, special depreciation measures are not reflected in the calculations. Other simplifying assumptions are also applied, including: perfect competition, a rudimentary treatment of financial structures and the intermediation process, absence of uncertainty, perfect loss offsetting and capital irreversibility.

117. As explained above, Greece does not tax dividends and capital gains in the hands of the shareholder. Therefore, the overall rate on new equity and retained earnings is identical and equal to the CIT rate, whereas interest payments are deductible from the CIT base and only subject to the final withholding tax of 10 per cent. This implies that a new investment completely financed with debt requires a lower cost of capital than financed via new shares or retained earnings. The system would be completely neutral if the tax on interest payments were levied at the CIT rate. Alternatively, the system would be neutral if distributed income were deductible from the tax base of the CIT and taxed at the same rate as interest at the shareholder level.
118. According to a 1999 report by Baker and McKenzie, average true economic depreciation for buildings and machinery should be 53 and 11 years, respectively, while the average EU lifetime used for tax purposes is 25 years for buildings and seven years for machinery on a straight-line basis. In Greece, the depreciation period for machinery is close to the EU average (6.5 years) whereas for buildings it is between 8 and 20 years.
119. Generous corporate tax incentives, if not carefully monitored may generate large shifts of tax revenue across regions through plant and employment shifts, may distort competition and resource allocation, and contribute to lower levels of revenues as they open up multiple possibilities for non-compliance through tax avoidance and tax evasion.
120. Reserves may be formed from the annual profits declared for tax purposes. For commercial companies whose object of activity is the purchase and sale of tangible goods the above tax-exempt rate is 50 per cent for all geographic areas.
121. Although the Greek government does not produce a tax expenditure budget, and therefore no estimate of the CIT revenue forgone is available, tax authorities claim it is a high proportion of total CIT liabilities. Under request of the Ministry of Finance, in 1996 the IOBE published a list of tax breaks available to companies and individuals in 1995. The list was very long indicating a clear need to estimate the revenue loss involved.
122. Kathimerini, "Offshore is too far from the tax man", Athens, 4 April 2000.
123. Moreover, offshore engineering and civil construction companies benefit from a complete tax exemption, provided *i*) their personnel is composed of at least four fifths Greek nationals in total and at least three fifths in each personnel category, *ii*) they have deposited a special guarantee with a recognised bank in Greece, and *iii*) they transfer a minimum amount of USD 50 000 annually to cover expenses.
124. Under Greek tax legislation, the owners of these companies would have had to pay an annual 7 per cent on the value of their properties, but tax under offshore statutes is negligible. Moreover, Greek property transfer tax is between 9 and 13 per cent and inheritance tax varies between 0 and 60 per cent.
125. In May 1998 the OECD Committee on Fiscal Affairs published the Report on Harmful Tax Competition (OECD, 1998c). Following this, a Forum on Harmful Tax Practices was created. This set forth the Guidelines for Dealing with Harmful Preferential Regimes in Member Countries, and adopted a series of Recommendations for combating harmful tax practices. At present the Forum is undertaking an evaluation of preferential tax regimes, analysing the effectiveness of counteracting measures, and examining whether particular jurisdictions constitute tax havens. In June 2000 the Forum issued a list of 47 preferential tax regimes in the OECD area that are potentially harmful (OECD, 2000b).

126. Unincorporated firms, including unlimited partnerships and up to 50 per cent of the share of total profit accruing to general partners in partnerships or limited liability companies are treated for tax purposes in the same way as the profits of the self-employed. In all of these cases, the salaries of the employees of the firm (other than that of the self-employed individual or the partners) is deducted from sales in determining the tax base.
127. This may also be one of the reasons why in Greece 96 per cent of SMEs employ less than 9 employees (EOMMEX, 2000).
128. Work on compiling a unified Land Register for Greece is in progress.
129. At the same time the way of taxing immovable property should be rationalised.
130. For example, Balfoussias (2000*b*) has estimated that in 1995 the tax expenditure linked to the PIT was 1.14 times the actual revenues collected from this tax.
131. The main objective of the blue return is to encourage small and medium-sized businesses to keep a minimum set of accounting records. To promote the system, significant tax advantages are offered to corporations and individuals opting for the blue return. See OECD (1999) for more details.
132. The extent to which a lower rate would be feasible will depend on the relative importance of the offsetting revenue impacts of a higher tax rate on interest income and the lower CIT rate.
133. The first two are taxed at the corporate level, while interest payments (which are deductible from the firm's tax base) are taxed in the hands of recipients with a flat tax rate identical to the CIT rate.
134. An alternative solution would subject all income (both capital and labour earnings) to the same progressive income tax schedule and offering tax credits to individuals for the amount of taxes withheld at the firm level. While perhaps technically superior, this would be much more difficult to administer. In contrast to the current scheme where firms do not need to report the total amount of income distributed, under this revised scheme both they and the government would have to record such information for each individual recipient.
135. On average, real estate prices have doubled over the past decade and in certain areas of Athens they have risen more.
136. For instance, the incentives to SMEs in Greece do not seem to be particularly well targeted since SMEs have always represented a high percentage of firms. This is an indication that not all of them operate in sectors that are subject to market failures.

Glossary of acronyms and terms

ADEX	Athens Derivatives Exchange
AE	Corporation
ALMPs	Active Labour Market Policies
APW	Average Production Worker
ASE	Athens Stock Exchange
ATE	Agricultural Bank of Greece
BPM	Business Programme for Manufacturing
CIT	Corporate Income Tax
CPI	Consumer Price Index
CSF II	Second Community Support Framework
DEH	Public Power Corporation
DEPA	Public Gas Corporation
DOY	Local tax collection authorities
ECB	European Central Bank
EYDAP	Athens Water and Sewage Company
EETT	National Telecommunications and Post Commission
ELTA	Hellenic Postal Office
EMU	Economic and Monetary Union
EPCs	Employment Promotion Centres
EPL	Employment Protection Legislation
ERM	Exchange Rate Mechanism
ETVA	Hellenic Bank for Industrial Development
EAGGF	European Agricultural Guidance and Guarantee Fund
FMAP	Central government real estate tax
GDP	Gross Domestic Product
GRD	Greek drachma
HICP	Harmonised Index of Consumer Prices
HP	Hellenic Petroleum Corporation
ICS	Internal Control System
IOBE	Foundation for Economic and Industrial Research
IKA	Social Insurance Institute
IRO	Industrial Reconstruction Organisation
KEPE	Centre for Planning and Economic Research
LFS	Labour Force Survey
METR	Marginal Effective Tax Rate
NAPs	National Action Plans for Employment
NBG	National Bank of Greece
OA	Olympic Airways
OAED	Organisation for Manpower Development

OTE	Hellenic Telecommunications Organisation
PES	Public Employment Service
PIT	Personal Income Tax
PPP	Purchasing Power Parities
SDOE	Special bureau of tax investigation
SEYYO	School of training for tax administrators
SME	Small and medium-sized enterprise
TAP	Local real estate tax
TAXIS	Integrated tax information system
TEPs	Territorial Employment Pacts
TEVE	Social Insurance Institution for Professionals and Craftsmen
VAT	Value-added tax

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Annex I
Supporting material for Chapter III

I. 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 DEH cannot cross-subsidise between liberalised and captive customers.
- Requires DEH to keep separate accounts for its generation, transmission, and distribution-supply activities.
- Removes DEH'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 DEH's legal monopoly on supply by introducing an authorisation regime, but retains DEH as the unique supplier to captive consumers.
- Retains DEH 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, S.A. 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 DEH.
- Provides for access to the transmission and distribution grids at tariffs set by the System Operator and DEH, 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 DEH in its tariffs. To do so, the Government applies a transitional ("stranded cost") regime.

2. Reform of the postal and water and sewage services

Postal services

A business plan for the restructuring of the state-owned Hellenic Postal Office (ELTA) was approved, and the associated management contract was signed in July 1998.¹ ELTA was forced by EC Directives, and competition from overnight mail and other new services to restructure, so as to prevent a further deterioration of its already poor financial position. The implementation of the restructuring plan led to marked reductions in the corporation's losses in 1999, and ELTA could become profitable in 2000.² Further liberalisation of the sector has been delayed until 2003, when the currently protected market for items weighing less than 350 grams will also be liberalised. In order to meet the deregulation challenges, the corporation is in search of a strategic ally – most likely an established European operator – who will acquire a stake in ELTA and establish a 50-50 per cent subsidiary in express delivery services. The partner will undertake the management responsibility of the subsidiary.³ In any event, if ELTA fails to hold its own in a more competitive environment, it will need to consider concentrating on basic services and leave the remainder of the market to private sector operators.

Water and sewage

The service arm of the Athens Water and Sewage Company (EYDAP) was listed on the stock exchange in December 1999. Prior to the partial privatisation (a public offering of 30 per cent) management has been restructured, a new pricing policy has been introduced and an effort was made to improve the poor financial performance of the company. The initial restructuring of EYDAP was completed in November 1999. The company has been divided into two entities: an asset holding company, and a distribution and sales company. The reform package also includes price increases over a five-year period. Water tariffs are indexed to inflation, while sewage tariffs will be adjusted in line with the cost of the provision of services.⁴ To generate sufficient profitability to attract private investors, the Government has agreed to partially finance a major medium-term investment programme. Moreover, local authority debts have been settled and a mechanism for avoiding the accumulation of new debts has been introduced. As a result of the restructuring, EYDAP's operating surplus increased by 13.8 per cent in 1999. In addition to the partial privatisation of the service division of EYDAP, the Government plans to float 20 to 25 per cent of the services division of the Thessaloniki Water and Sewage Company, after breaking the company into two entities, as in the case of EYDAP.

Notes

1. For a discussion see OECD (1998*b*).
2. The operating deficit (on an accrual basis) declined from GRD 16.9 billion in 1998 to GRD 5.1 billion in 1999. The operating surplus is projected to stand at GRD 1.5 billion in 2000.
3. An international financial advisor has been appointed in order to approach the interested parties and help ELTA in the negotiations.
4. It is envisaged that the sewage bill will gradually increase from 40 per cent of the water bill to 60 per cent by 2005.

Annex II

Supporting material for Chapter IV

I. Detail on the Greek tax system

Table A1. Taxes levied on corporate income: standard regime

Nature of the tax																	
<ul style="list-style-type: none"> – Resident companies are liable to national corporate income tax (<i>Foros eisodimatos nomikon prosopon</i>). – In practice, a company is resident if it is incorporated under Greek law. The location of the place of effective management in Greece also constitutes residence. 	<ul style="list-style-type: none"> – A company is taxable on world-wide profits. – Income and capital gains are generally taxed as ordinary income. Capital gains derived from the sale of business assets are normally included in taxable income. 																
Exemptions, credits and allowances																	
<ul style="list-style-type: none"> – The following entities are totally exempt from income tax: <ul style="list-style-type: none"> • the state, including certain special funds; • all local authorities; • offshore companies under <i>Law 89 offices</i> (see below); • Greek shipping companies with Greek flag. – Greece has an exemption system. Dividends distributed from after-tax profits of resident companies to resident individual and corporate shareholders are not subject to further taxation in the hands of the recipient. – A 20 per cent withholding tax is levied on foreign source dividends if the payment is effected in Greece. This tax is credited against the final income tax liability of the recipient. – Gains from the sale of shares listed on the Athens Stock Exchange are exempt if distributed or capitalised, or if they are entered into a special reserve to offset future losses from the sale of shares, both listed or unlisted and from the valuation of shares and bonds. 	<ul style="list-style-type: none"> – A provision for bad and doubtful debts may be deducted up to 0.5 per cent of turnover from the supply of goods or services or 1 per cent of sales on credit of certain commonly consumed goods. The bad debt deduction cannot exceed 35 per cent of trade receivable. Special bad debt provision rules apply to banks. – Depreciation of business assets is taken on a straight-line basis on acquisition cost of the asset. The rates of annual depreciation are: 																
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Description</th> <th style="text-align: left;">Rate (%)</th> </tr> </thead> <tbody> <tr> <td>Office equipment</td> <td>20</td> </tr> <tr> <td>Automobiles</td> <td>15</td> </tr> <tr> <td>Trucks</td> <td>20</td> </tr> <tr> <td>Machinery</td> <td>15</td> </tr> <tr> <td>Buildings</td> <td>8 or 20 years</td> </tr> <tr> <td>Goodwill</td> <td>up to 5</td> </tr> <tr> <td>Patents/Know how</td> <td>over useful life</td> </tr> </tbody> </table>	Description	Rate (%)	Office equipment	20	Automobiles	15	Trucks	20	Machinery	15	Buildings	8 or 20 years	Goodwill	up to 5	Patents/Know how	over useful life
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Patents/Know how	over useful life																

Table A1. **Taxes levied on corporate income: standard regime** (*cont.*)**Exemptions, credits and allowances**

- Unilaterally, Greece grants residents an ordinary foreign tax credit for income tax paid abroad. The credit is limited to the amount of Greek tax attributable to such income.
- Where a tax treaty applies, the taxpayer may, in general, choose the most advantageous between the unilateral and the treaty relief.
- Losses may be carried forward and set off against profits for the next five years. Loss carry-backs are not permitted. In the case of a merger, losses of absorbed companies are not transferred for tax purposes to the company that continues the business and are not carried forward.
- After 1 January 1998 machinery and technical production equipment acquired by industrial, handicraft and mining and quarrying companies, may be depreciated either with the straight-line or the declining-balance method.
- Additional depreciation was abolished by Law 2601/1998 for investments made after 14 April 1998.
- Capital gains realised on the sale of fixed depreciable assets such as plants and machinery are exempt from tax if placed in a special reserve to be used for the acquisition of replacement assets within two years of the sale. The replacement assets are not depreciable to the extent they are financed using the reserve.
- Inter-company dividends are exempt from the corporate income tax at the share holder level and from any withholding tax.

Rates

- For income year 2000, the rate of corporate income tax is 40 per cent for resident corporations (AEs) whose shares are not quoted on the Athens Stock Exchange (ASE). The same rate applies to banks and non-resident companies. The rate is 35 per cent for AEs listed in the ASE (excluding banks), limited liability companies, co-operatives, civil law associations and joint ventures, and 25 per cent for general and limited partnerships. Up to 50 per cent of the share of profits held by individual partners in a partnerships or limited liability company are subject to personal income taxation. This amount is deducted from the entity's profits.
- The income of the mutual funds and portfolio investment companies is subject to a rate of 5 per cent. In addition, these entities are liable to a tax on the average value of their investments and their disposable funds at a rate of 0.3 per cent.
- The proceeds (actual sales price) from the sale of a business, branch, share in a partnership, a limited liability company, a joint-venture, joint ownership and from the sale of unlisted companies are subject to a 5 per cent "special tax on business income".
- Interest from government bonds, treasury bills and corporate bonds are subject to a final tax of 10 per cent, while interest from bank deposits and bonds issued by banks and insurance companies are subject to a final tax of 15 per cent.
- A surtax of 3 per cent is imposed on income earned by companies from immovable property.

Table A2. **Taxes levied on corporate income: special tax incentives**

Greece grants a wide range of incentives. The incentives are available both to Greek investors and to foreign investors participating in Greek enterprises. Only tax incentives are presented below.

1. Tax allowances under the previous incentive Law 1892/1990

Manufacturing and handicraft companies located in Area A (according to Law 1892/1990) that make investments by 31 December 2004 for the modernisation of their production equipment are entitled to exclude from taxation and enter into a tax-free reserve an amount equal to 60 per cent of the cost of the investment. The annual allocations are limited to 60 per cent of profits.

2. Tax-free interest on loans in foreign currency

The measure applies to interest on long-term loans or credits provided by Greek or foreign banks or the branches of foreign banks in Greece or investment banks to industrial and mining companies for productive investment, provided the capital lent is brought in from abroad solely for that purpose.

3. Tax exemptions under Law 2601/1998

Qualifying enterprises making qualifying investments may claim a reduction in their taxable profits. For purposes of incentive measures, Greece is divided into four territorial areas (A-D).

Area A:

The prefectures of Attica and Thessaloniki, except the parts included in the other areas.

Area B:

The industrial zone of ETBA, the province of Langadas and the part west of the Axios river which belongs to the prefecture of Thessaloniki, the province of Troizinia belonging to the prefecture of Attica, as well as the prefectures and areas not belonging to areas A, C and D.

Area C:

The prefectures and areas where the working population is declining or unemployment increases, including the Lavreotiki zone but excluding the prefectures of Attica and Thessaloniki and the prefectures or part of prefectures belonging to area D.

These areas are specified by a ministerial

decision which is issued every two years and cannot be amended prior to the expiry of the two-year period.

Area D:

The prefectures of Xanthi, Rodopi and Evros, the industrial zones of ETBA in the geographical and administrative area of Epirus, the islands with a population less than 3 100 inhabitants according to the 1991 registration, islands belonging to the geographical and administrative area of the Northern Aegean Sea (prefectures of Lesvos, Chios, Samos), the island of Thassos, the prefectures of Dedocanese (except the area of the town of Rhodes) and the border areas of the various prefectures of the mainland up to a distance of 20 kilometres from the state border and the municipalities or communities whose local boundaries are intersected by the zone of 20 kilometres.

Areas not expressly mentioned in the above regions A, B and D will enjoy the incentives applicable to region C until 31 December 2000.

The law provides for tax exemptions that vary from 40 per cent to 100 per cent of the acquisition cost of the relevant asset depending on the nature of the investment and the region in which it takes place.

The following table indicates the ordinary rates with exceptions provided for specific cases:

Region	Tax exemption of the value of the investment (per cent)
A	–
B	40
C	70
D	100

The tax-free profit which is recorded in a reserve account is taken from the profits of the financial year in which the investment took place unless these profits are not sufficient. In such case, the amounts are taken from the future ten financial years.

Table A2. **Taxes levied on corporate income: special tax incentives** (cont.)

<p>With regard to investments and/or leasing projects which are spread over more than one financial year, the reserve may be created from the profits of each financial year based on the investment expenses incurred in that year or the rent paid upon the condition that the investment of the leasing project will be completed within five years.</p> <p>After the completion of an investment which has enjoyed a tax exemption, an application must be filed with the appropriate tax authorities so that a tax audit of the investment can take place.</p> <p>The tax exemptions are provisional and the exempt profits will be taxed if certain events specifically provided by Law 2601/1998 occur.</p>	<p>is composed of at least four fifths Greek nationals in total and at least three fifths in each personnel category, <i>ii</i>) they have deposited a special guarantee with a recognised bank in Greece and <i>iii</i>) they transfer a minimum amount of US\$50 000 annually to cover expenses, especially for Greek companies.</p>
<p>4. Tonnage tax</p> <p>Profits derived by Greek companies from the operation of ships registered under the Greek flag are subject to a special tonnage tax which satisfies the income tax obligation of the shipowner and shareholder with respect to such income. The exemption applies to income from operating a ship, profit on the sale thereof, and receipt of insurance claims. The tax is assessed on the basis of the capacity and the age of the vessel. Exemptions from or a reduction in tax are granted in certain circumstances, such as where the ship was built or repaired in Greece. Furthermore, the shipping industry enjoys more favourable terms in financing and certain incentives are granted for the modernisation and development of shipyards.</p>	<p>7. Rate freeze for foreign investment</p> <p>Under Law 2687/1953, foreign investors are secured against any increase in the rates of income tax on undistributed profits during the first ten years from the establishment of the company. In addition, there is a reduction of, or a total exemption from, customs duties and other levies on the import of machinery, spare parts, etc., as well as from municipal taxes and levies imposed by harbour authorities. The incentive also applies for the first ten years.</p>
<p>5. Offshore offices</p> <p>Substantial tax and other incentives are offered to offices set up by foreign companies using Greece as an administrative centre to co-ordinate their business operations. These are called Law 89 Offices. The main relief granted is that no income or other taxes are imposed on the profits of offshore operations.</p> <p>6. Offshore engineering and civil construction companies</p> <p>Offshore engineering and civil construction companies benefit from a complete tax exemption, provided <i>i</i>) their personnel</p>	<p>8. Incentives for mergers</p> <p>Law 1297/1972 applies to mergers and transformations effected until 31 December 2000. The incentives provided by this law take the form of exemptions from various taxes and duties, <i>e.g.</i> exemption from stamp duty, exemptions from real estate transfer tax and the deferral of income tax on gains arising from the revaluation of assets at the time of the merger until the dissolution of the company or the distribution of gains.</p> <p>These benefits apply provided the company resulting from the merger will have a paid-up capital of at least GRD 100 million in the case of an AE, or at least GRD 50 million in the case of an EPE, and in most cases, that 75 per cent of the AE's shares or the EPE's parts will not be transferable for the first five years following the merger. The restrictions on transferability does not apply to mergers of AEs.</p> <p>Law 2166/1993 provides for a simpler procedure for the transformation of business (transformations, absorptions, mergers, splitting, contributions). The main tax benefits of this law are as follows:</p> <ul style="list-style-type: none"> – No revaluation gains are recognised, since assets and liabilities are transferred to the new company at the book values confirmed either by a certified auditor or by the tax authorities; and

Table A2. **Taxes levied on corporate income: special tax incentives** (*cont.*)

- Exemptions from real estate transfer tax, stamp duty and other taxes imposed on contracts and, in most cases, capital concentration tax (capital duty).

The application of Law 2166/1993 is subject to the following two conditions:

- The businesses being transformed must maintain double-entry accounting books and have published financial statements for a period of at least 12 months; and
- The company resulting from the merger must have a paid-up capital of at least GRD 100 million in the case of an AE

or at least GRD 50 million in the case of an EPE.

9. Relief in the Aegean islands

Companies resident in any Aegean island with a population of less than 3 100 are granted the following relief until 31 December 2005:

- The corporate income tax is decreased by 40 per cent (the 40 per cent rate is reduced to 24 per cent and the 35 per cent tax to 21 per cent); and
- Real estate transfer tax is decreased by 40 per cent.

Table A3. Taxes levied on household and other business income

Nature of the tax	
<p>Personal income tax</p> <ul style="list-style-type: none"> – The income tax (foros eisodimatos physikon prosopon) is levied on world-wide income of resident individuals. Taxable income is classified into six categories: rental, investment, employment, agricultural, business and professional. – Income from each source is separately computed and individuals are subject to tax on the aggregate income from all categories. Losses from one category are offset against income from other categories. Losses arising from sources of income outside Greece can only be offset against income arising outside Greece. Losses from industrial or agricultural activities which are not absorbed by other income in any particular year may be carried forward to be offset against the income of the five years immediately following. – Married couples are subject to tax separately on their own income but are required to file a joint tax return. <p>Stamp duty tax on salaried income All wages are subject to stamp duty of 1.2% which is borne equally by the employee and employer (<i>i.e.</i> 0.6% each).</p>	<p>Imputed versus actual income</p> <p>The legal provisions designed to prevent tax evasion specify that individuals are taxed on the higher of either their declared income or certain minimum income imputed from their business and professional sources. Income is also imputed on the basis of living expenditure or acquisition of certain assets. The main factors considered in imputing income from living expenses or acquisitions are: engine size of owned motor vehicles, cost of maintaining household staff, amount of any loans granted by the individual to companies in which there is a participation, purchase of a business or acquisition of partnership parts or shares in an AE company, purchase or construction of real estate, cost of operating pleasure boats, rental paid for a summer home exceeding 120 square meters in size, etc. Income thus imputed will constitute an individual's taxable income if it is more than 20% higher than declared income. That is unless there is evidence that the difference between the imputed income and the declared income is covered by borrowings or from savings that have been taxed or exempted from tax in the past or from gifts which have been subject to or exempted from donations tax, from income taxed abroad and imported to Greece, etc.</p>

Rates and tax brackets

Tax brackets for business and professional income net of deductible expenses		Tax rates	Tax brackets for wage income and occupational pensions	
First	2 000 000	0	First	2 300 000
Second	710 000	5	Second	410 000
Third	1 625 000	15	Third	1 625 500
Forth	3 245 000	30	Forth	3 245 000
Fifth	8 655 000	40	Fifth	8 655 000
Above GRD	16 235 000	45	Above GRD	16 235 000

Rents from land and buildings are also subject to a surtax of 1.5 per cent, increased to 3 per cent for residential buildings with a floor area greater than 300 sqm. However this tax cannot exceed the tax imposed on the taxpayer's total taxable income.

Allowances, credits and exemptions

- The obligatory employee portion of social security contributions and the stamp duty on employment income are deductible from the tax base.
- Expenses acquired for business income purposes are generally deductible from the tax base.

Table A3. **Taxes levied on household and other business income** (cont.)**Allowances, credits and exemptions**

- A rent deduction equal to 40 per cent of the annual rent paid for the taxpayer's principal residence up to GRD 250 000 per year.
- Life insurance premiums are deductible at a rate of 40 per cent and up to GRD 250 000 per year.
- Medical expenses of the taxpayer and his dependants are fully deductible up to a declared income of GRD 10 million. For income between GRD 10 and 15 million, expenses can be deducted up to GRD 10 million plus 50 per cent of expenses between GRD 10 and 15 million. Medical expenses in excess of GRD 15 million cannot be deducted.
- Donations to the state, municipalities and certain other local institutions (religious, philanthropic, educational, etc.) are tax deductible. All other donations are deductible up to a maximum of GRD 1 000 000. Above this limit the donor must pay a flat tax rate of 10 per cent.
- Additional deductions are available where the taxpayer and/or his dependants are disabled. The amount of alimony and child support paid under a court order or under terms of a formal agreement is not deductible from income. Alimony received by the spouse forms part of the taxable income of the recipient.
- A rent deduction of 40 per cent up to the amount of GRD 250 000 for the accommodation of children attending courses in approved schools (universities, etc.) in Greece.
- A deduction of 40 per cent up to the amount of GRD 250 000 paid for each child for home tuition.
- Interest paid on mortgages provided by banks or other credit institutions for the acquisition of the taxpayer's primary residence is fully tax deductible. This deduction is also available where insurance companies provide the mortgage to their employees.
- A tax credit for each dependent child can be credited against PIT liability. The credit increases with the number of children.

Number of Children	Tax credit per child (GRD)
1	30 000
2	35 000
3	50 000
4	60 000
5	70 000
6	80 000

- In addition to the expenses listed above, there is a further 30 per cent deduction of all other family purchases of goods and services, except for those relating to food, beverages, fuel, water charges, sewage service, power, insurance, circulation tax and expenses which are used to assess deemed income (i.e. car purchases etc.). This deduction cannot exceed GRD 300 000 for both spouses and is apportioned between the two spouses in accordance with their level of income. The tax saving itself cannot exceed 15 per cent of the total value of the deduction as assigned to each spouse.

Investment income**Income from immovable property**

- For owner-occupied dwellings, an amount equal to the imputed income arising from the ownership of up to 150 square meters of residence may be deducted from the imputed rental income arising from owner occupied use.
- Net gains from the sale of immovable property are exempt.
- Rental income is subject to the personal income.

Income from movable property

- Interest income from Greek government bonds, treasury bills and corporate bonds are taxed at a final withholding tax of 10 per cent.
- Interest payments on deposits and postal saving accounts are subject to a final withholding tax of 15 per cent.
- Dividends distributed from resident companies are exempt.
- Net capital gains from domestic and foreign shares are exempt.

Table A3. **Taxes levied on household and other business income** (cont.)

– Dividends and interest paid by a pension fund: if the payment does not exceed GRD 600 000 per annum, the rate is 5 per cent; if the payment exceeds	GRD 600 000 per annum, the rate is 10 per cent; if the payment exceeds GRD 1 400 000 per annum, the rate becomes 15 per cent.
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Other taxes related to movable income

A 0.6 per cent transfer tax is imposed on the sales price of shares listed in the Athens Stock Exchange or on a foreign stock exchange market.

A special tax of 5 per cent is levied on the actual sales price of unlisted shares.

Table A4. **Social security contributions**

National insurance premiums	Employers' social security contributions
Nature of the tax	
– The taxable base is gross income. Social security payments are deductible from the personal income tax base.	– Contributions are levied on gross wages and are deductible from the corporate income tax base.

Exemptions, credits and allowances

A monthly ceiling of GRD 588 000 applies to wage earners who joined IKA prior to 1st January 1993.

Rates**Employees**

Employees' social security contributions are payable at a rate of 14.42 per cent. A supplementary insurance at a rate of 1.25 per cent applies for heavy and health hazardous work (TEAM). Contribution rates concerning other organisations (OAED-Unemployment, Family benefits, etc. Worker's Housing Organisation, Worker's Foundation) may reach up to 3.68 per cent.

Employers' social security contributions are payable at a rate of 23.83 per cent. A supplementary insurance at a rate of 0.75 per cent applies for heavy and health hazardous work (TEAM). Contribution rates concerning other organisations (OAED-Unemployment, Family benefits, etc. Worker's Housing Organisation, Worker's Foundation) may reach up to 6.53 per cent.

Self-employed

They must make a monthly lump-sum contribution to TEVE (Social Insurance Institution for Professionals and Craftsmen). This monthly payment ranges from GRD 42 000 (GRD 27 400 for pension contributions and GRD 14 600 for sickness contributions) to GRD 105 400 (GRD 87 000 for pension contributions and GRD 18 400 for sickness contributions). TEVE contributions are according to income classes that are set by the taxpayers themselves.

Table A5. Taxes levied on consumption

Value-added tax	Excise duties																								
Nature of the tax																									
<ul style="list-style-type: none"> – Registered businesses, selling taxable goods and services in Greece, the state and municipalities with respect to transactions which can also be performed in the private sector, and importers as well as intra-community acquisitions are liable to value added tax (<i>Foros prostithemenis axis</i>). – The taxable base is the consideration received for sales of taxable goods and services, excluding the VAT itself, and value at importation including import duties. – Trade firms with an annual turnover in excess of GRD 1.8 million and service suppliers with an annual turnover in excess of GRD 600 000 must register in the VAT system; smaller businesses pay VAT only on their inputs. As compared with other OECD countries, this threshold is about average. 	<ul style="list-style-type: none"> – The tax is levied under a value-added system up to the wholesale level. On imports, the tax administrator (customs authority) in accordance with the Customs Act assesses the tax. The customs authority also calculates the customs duties. 																								
Exemptions, credits and allowances																									
<ul style="list-style-type: none"> – Exemptions provided by the EC VAT law can be qualified into two categories: exemptions without credit for input tax and exemptions with credit for input tax (zero-rated). – They exist (without credit for input tax) for charity, cultural services, education, financial services, insurance, lottery and gambling, medical and dental care, public postal services, property letting, supply of land and buildings, broadcasting, legal services, public cemetery, burial and funeral services and sporting events. 	<ul style="list-style-type: none"> – Zero-rated: wine and other fermented beverages. 																								
Rates																									
<ul style="list-style-type: none"> – The VAT rate is 18 per cent. – A reduced rate of 8 per cent applies to goods deemed to be necessities, such as fresh food products, pharmaceuticals, transportation, electricity, natural gas, inputs of agriculture and some services (<i>e.g.</i> hotels, restaurants, coffee shops, writers, composers, artists and services of doctors and dentists). – A reduced rate of 4 per cent applies to newspapers, periodicals, books and theatre tickets. – For the Dodecanese and Eastern Aegean islands, the above rates are reduced to 13, 6 and 3 per cent respectively. 	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Category¹</th> <th style="text-align: left;">per</th> <th style="text-align: right;">GRD</th> </tr> </thead> <tbody> <tr> <td>Beer</td> <td>hectolitre per degree Plato</td> <td style="text-align: right;">384</td> </tr> <tr> <td>Alcoholic beverages</td> <td>hectolitre of absolute alcohol</td> <td style="text-align: right;">298 414</td> </tr> <tr> <td>Mineral oils</td> <td>per 1 000 litres of product at 15 C</td> <td style="text-align: right;">8 300-114 000</td> </tr> <tr> <td>Unleaded petrol</td> <td>per 1 000 litres</td> <td style="text-align: right;">98 000</td> </tr> <tr> <td>Oil for heating purposes</td> <td>tonne</td> <td style="text-align: right;">4 500</td> </tr> <tr> <td><i>Ad valorem</i> excise</td> <td>rate</td> <td></td> </tr> <tr> <td>Tobacco</td> <td>26-59</td> <td></td> </tr> </tbody> </table> <p>I. Selected products; list is not exhaustive.</p>	Category ¹	per	GRD	Beer	hectolitre per degree Plato	384	Alcoholic beverages	hectolitre of absolute alcohol	298 414	Mineral oils	per 1 000 litres of product at 15 C	8 300-114 000	Unleaded petrol	per 1 000 litres	98 000	Oil for heating purposes	tonne	4 500	<i>Ad valorem</i> excise	rate		Tobacco	26-59	
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Tobacco	26-59																								

Table A6. **Central and local taxes on property**

Nature of the tax																							
<p>Stamp duty</p> <ul style="list-style-type: none"> – A stamp tax is levied on stock market transactions the rate of which was raised from 0.3 to 0.6 per cent in September 1999. – A stamp tax is levied on the transfer of immovable property at rates between 9 and 13 per cent. – Real estate tax. – The central government real estate tax (FMAP) and the local real estate tax (TAP) are imposed annually on the value of land and buildings. – Both businesses and individuals are liable to property taxes. – The FMAP is not deductible for corporate income tax purposes, whereas the TAP is. 	<p>Net wealth tax</p> <ul style="list-style-type: none"> – No net wealth tax is imposed in Greece. – Inheritance and gifts. – The person receiving the inheritance or gift is liable for the tax thereon. – The inheritance tax is due with respect to all movable and immovable property located in Greece regardless of the nationality or residence of the deceased/donor. Movable property outside Greece is also subject to the tax if the deceased/donor was a national or resident of Greece at the time of death. – In case of estates the inheritance and gift tax are computed on the fair market value of the share received by each beneficiary/donor. 																						
Exemptions, credits and allowances																							
<ul style="list-style-type: none"> – Immovable property situated abroad is exempt from property taxation. – Farmland, forests and buildings owned and used by companies in their business are exempt from FMAP. A further exemption from FMAP is granted to hotel owners, equal to 50 per cent of the value of the land on which the hotel buildings have been constructed. The first GRD 69 million of the value of land and buildings of an enterprise is exempt from FMAP. So is the first GRD 69 million of the value of land and buildings for each spouse. An additional exemption of GRD 17 250 000 is granted for each young child. – No exemption is granted for the TAP. 	<ul style="list-style-type: none"> – An exemption applies with respect to inheritances received by Greek charitable organisations or on movable property abroad that belonged to a Greek national who had been resident in a foreign country for at least ten years. – Any foreign inheritance tax paid on movable property abroad may be deducted from the inheritance tax due in Greece on the same property. No such relief is available with respect to the gift tax. 																						
Rates																							
<ul style="list-style-type: none"> – The FMAP rate on property of enterprises is 0.7 per cent. – The FMAP rate on property of individuals is as follows: 	<ul style="list-style-type: none"> – The inheritance and gift tax rates are determined on the basis of the proximity of relationships between the deceased/donor and the beneficiary/donor. The following tax rates apply to property received as inheritance or gift by Category I (spouse, children or parents): 																						
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Value (GRD million)</th> <th style="text-align: center;">Per cent</th> </tr> </thead> <tbody> <tr> <td>First 50</td> <td style="text-align: center;">0.3</td> </tr> <tr> <td>Next 50</td> <td style="text-align: center;">0.4</td> </tr> <tr> <td>Next 50</td> <td style="text-align: center;">0.5</td> </tr> <tr> <td>Next 100</td> <td style="text-align: center;">0.6</td> </tr> <tr> <td>Next 100</td> <td style="text-align: center;">0.7</td> </tr> </tbody> </table>	Value (GRD million)	Per cent	First 50	0.3	Next 50	0.4	Next 50	0.5	Next 100	0.6	Next 100	0.7	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Taxable share (GRD '000)</th> <th style="text-align: center;">Per cent</th> </tr> </thead> <tbody> <tr> <td>First 5 175</td> <td style="text-align: center;">0</td> </tr> <tr> <td>Next 10 500</td> <td style="text-align: center;">5</td> </tr> <tr> <td>Next 45 000</td> <td style="text-align: center;">15</td> </tr> <tr> <td>Over 60 495</td> <td style="text-align: center;">25</td> </tr> </tbody> </table>	Taxable share (GRD '000)	Per cent	First 5 175	0	Next 10 500	5	Next 45 000	15	Over 60 495	25
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Over 60 495	25																						
<ul style="list-style-type: none"> – The TAP rate is set by local councils and varies between 0.025 per cent and 0.035 per cent of the assessed value of the property. This rate applies to both businesses and individuals. 																							

2. The integrated TAX information system

The integrated tax information system, known as TAXIS was designed to cater for the following needs:

- The need for a data base at both the local level (tax inspectorates) and central level (Treasury information processing centre). This allows the tax inspectorates to retain operational independence as most work can be carried out locally. However, data also need to be available at the central level in order to carry out certain horizontal processing routines (cross-checking, etc.) and for reasons of system security;
- the need for the tax inspectorates to be able to continue to operate in the event that extraneous factors cause the central system to break down;
- the need for a uniform, user-friendly environment;
- the need to manage large quantities of data.

TAXIS includes 18 sub-routines (see below) that are gradually being installed in tax inspectorates throughout the country. During the present transitional stage:

- the full system has been installed in 175 tax inspectorates;
 - the REGISTER sub-routine alone has been installed in 56 tax inspectorates.
- It now covers:
- 98 per cent of taxpayers; and
 - 92 per cent of revenue/expenditure transactions.

Since the end of 2000, the installation of TAXIS is completed in 231 tax inspectorates, while it is in progress in the remaining 70 tax inspectorates.

Sub-routines and main operations

1. Administration of register of taxpayers

The system is based on this register. It ensures that each taxpayer has a single tax registration number. It is used to manage taxpayers' personal details and their relationships with other taxpayers. It also stores details on legal persons, background information, information on representatives, branches, holdings, main and secondary activities etc.

2. Value Added Tax (VAT)

VAT collection is supported by automated procedures for receiving, entering and verifying interim and final returns. It monitors intra-Community transactions (deliveries, purchases) for the purpose of the VIES system and immediately identifies taxpayers who have not filed a return. It also manages imposition of the relevant fines and monitors the post-audit results of this form of taxation.

3. Code of Books and Records

This records data on inspections of compulsory and optional books and records for every undertaking, automatically checks tax and insurance liabilities prior to inspection, maintains data on assets confiscated and administers the assessment of fines levied either by the tax inspectorate or by external audit agencies (SDOE).

4. Revenue – revenue accounts

Financial information on individuals in correspondence with tax inspectorates is automatically monitored both analytically and cumulatively. Provided that they have been entered, all taxpayers' liabilities *vis-à-vis* individual tax inspectorates can be located centrally. Daily, monthly and annual accounts are generated automatically. Once the system is fully

operational, any tax inspectorate will be able to generate a tax liability statement, not just the local tax inspectorate.

5. Expenditure – expenditure accounts

This manages government payments to private individuals. Payrolls and pay slips are monitored and a file of payment documentation and a register of salaried employees are kept in each tax inspectorate.

6. Litigation

This monitors legal action by tax inspectorates and identifies the government's main debtors. It manages all compulsory and precautionary administrative enforcement measures, together with outstanding debt arrangements.

7. Records – electronic files

These record incoming and outgoing correspondence with tax inspectorates. The cost is entered and the value of registered letters calculated. Applications from private individuals are monitored in order to ensure that they are answered promptly.

8. Income tax (natural and legal persons)

This provides local and central support for receiving, entering, clearing and assessing the results of income tax returns filed by natural and legal persons and for managing other withholding taxes declared.

9. Wealth tax

All returns for the purpose of inheritance tax, child benefit tax, gift tax and conveyance tax are administered. The clearance and assessment of the results of these returns are monitored, as are the post-audit results.

10. Vehicle tax

A register of vehicles and works machinery is kept and ownership is monitored. It also supports the administration of the vehicle tax and the assessment, collection and deletion of related fines.

11. Other taxes

This supports procedures for receiving, clearing and assessing other indirect and special taxes, with the exception of VAT. Other taxes include stamp duty, Greek Agricultural Insurance Agency tax, excise, special duty on tobacco products, duty on alcohol, banking tax, insurance tax, etc.

12. Cross-checking data on taxpayers

This includes the central procedure for classifying and correlating data on taxpayers obtained either from outside sources or from information supplied to various tax inspectorates and various sub-routines. The results of this procedure are sent to the relevant tax inspectorates via this sub-routine for further tax evasion controls.

13. Taxpayer's profile

This presents an overall profile of the taxpayer's activities to all the tax inspectorates and all the sub-routines which keep information on the taxpayer. This offers a flexible system for calling up available information on individual taxpayers without the need to consult all the sub-routines in order to find the same pooled information.

14. Taxpayer audits

This administers all the information available so that audits can be completed quickly and efficiently on the basis of annual auditing criteria or special criteria for each tax inspectorate. Trends in audit results and the return on the cases audited are also monitored.

15. Property valuation

A survey data base is managed centrally and can be accessed by every tax inspectorate. This allows all the information on objective property prices throughout the country to be set, changed, added or recovered and provides a service to the public by generating the rental value of property automatically and determining the minimum taxable income. It is also used as the basis for determining tax in the wealth tax sub-routine.

16. Inspections and audits by tax inspectorates

This manages information from all sub-routines on ordinary and extraordinary annual audits by tax inspectorates. Annual and periodic productivity statistics are provided, together with comparative per cent changes in efficiency based on annual parameters.

17. Work sequences

This sub-routine defines user roles and correlates them with user sub-routine access rights. It also monitors how the system applications work together and communicate.

18. Large property tax

This supports the receipt, registration and clearance of the relevant returns and the procedure for assessing and collecting the tax owed.

*Annex III***Calendar of main economic events****1999****January**

The intervention rate of the Bank of Greece for the acceptance of 14-day deposits is lowered to 12 per cent from 12.25 per cent.

Deutsche Bank is authorised to acquire 10 per cent of the share capital of Eurobank. The Bank of Pireaus is authorised to acquire 43.8 per cent of the share capital of Xiosbank.

Establishment by the Bank of Greece of a general framework of minimum quantitative criteria for assessing the adequacy of provisions made by credit institutions for claims arising from lending.

April

The Bank of Greece establishes, on a monthly basis, competitive interest rate tenders for the acceptance of three-month deposits.

Alpha Credit Bank is authorised to acquire 51 per cent of the share capital of Ionian Bank.

Sale of Olympic catering (first stake, 25 per cent), through the Athens Stock Exchange.

Introduction by the Bank of Greece of credit restrictions in the form of non-remunerated deposits, if credit grows above specific limits.

May

Increase in the maximum borrowing of credit institutions from the Bank of Greece, through the Lombard facility.

The Bank of Greece allows new credit institutions to calculate the ceiling on the change in their outstanding balance of loans as a percentage of the paid up share or co-operative or endowment capital of these institutions.

July

Sale of a fourth tranche, 14 per cent, of the Hellenic Telecommunications Organisation (OTE).

Tightening of credit restrictions for consumer credit.

August

Simplification of the provisions on the supply of foreign exchange for current transactions between residents and non-residents, as well as for capital movements.

Sale of a 67 per cent stake of the duty free shops to the Agricultural Bank of Greece.

September

Increase in the maximum borrowing of credit institutions from the Bank of Greece, through the Lombard facility, from GRD 200 to 480 billion.

Increase in the maximum amount of credit supplied by credit institutions to natural persons on collateral of securities listed at the Athens Stock Exchange from GRD 5 to 15 million.

Announcement of a tax/benefit package, the cost of which is expected to be compensated to a large extent by the doubling of the tax rate on stock-exchange transactions from 0.3 per cent to 0.6 per cent.

October

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

November

The Government submits the 2000 Budget to Parliament, targeting a central government borrowing requirement of 4.9 per cent of GDP and a deficit of 3.1 per cent of GDP.

December

The minimum daily balance of credit institutions' reserve requirement with the Bank of Greece is lowered to 85 per cent from 90 per cent.

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

The Athens Derivatives Exchange starts up with 20 participants.

A 30 per cent share of Hellenic Bank for Industrial Development (ETVA) is floated on the Athens Stock Exchange.

Hellenic Petroleum exercises its option and acquires a further 22 per cent of the Public Gas Corporation (DEPA), increasing its stake to 35 per cent.

Partial privatisation of the services division of the Athens Water and Sewage Company, through a public offering of 30 per cent of the share capital.

Sale of Olympic catering (second stake, 7 per cent), through the Athens Stock Exchange

2000**January**

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

Revaluation of the central rate of the drachma by 3 per cent.

February

Full liberalisation of purchases and sales of gold not used for commercial or industrial purposes.

The distinction between the interest bearing and non-interest bearing part of credit institutions' reserve requirements with the Bank of Greece is abolished.

Greece meets the last criterion for EMU membership, that on inflation.

Sale of a second tranche, 26 per cent, in Hellenic Petroleum, through public offering.

March

The intervention rate of the Bank of Greece for the acceptance of 14-day deposits is lowered to 9.25 per cent from 9.75 per cent.

April

The intervention rate of the Bank of Greece for the acceptance of 14-day deposits is lowered to 8.75 per cent from 9.25 per cent.

Expiration of the credit restraining measures.

General elections, with the Panhellenic Socialist Movement (PASOK) being re-elected.

May

Conclusion of a National Collective Agreement for the period 2000-01.

The National Action Plan for Employment is presented to the European Commission.

June

The European Council accepts Greece as a member in the EMU from January 2001.

The intervention rate of the Bank of Greece for the acceptance of 14-day deposits is lowered to 8.25 per cent from 8.75 per cent.

July

The Bank of Greece reduces the minimum reserve requirement for commercial banks from 12 per cent to 2 per cent (the level mandated by the ECB).

August

Sale of 43 per cent of the shares and transfer of management of the Hellenic Vehicles Industry to a strategic investor.

Sale of a 10 per cent stake in the Athens Stock Exchange.

September

The intervention rate of the Bank of Greece for the acceptance of 14-day deposits is lowered to 7.5 per cent from 8.25 per cent.

Floating of 15 per cent of Cosmote on the Athens Stock Exchange.

November

The intervention rate of the Bank of Greece for the acceptance of 14-day deposits is lowered to 7 per cent from 7.5 per cent.

The intervention rate of the Bank of Greece for the acceptance of 14-day deposits is reduced to 6.5 per cent from 7 per cent.

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