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THE EFFECTIVENESS OF PUBLIC EXPENDITURE IN PORTUGAL

Chiara BRONCHI

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Keywords: Public economics, structure and scope of government, government expenditure, health, education, state and local government, Portugal.

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ABSTRACT/RÉSUMÉ

The effectiveness of public expenditure in Portugal

Over the past decade, Portugal has experienced imbalances and inefficiencies in the public sector that have impeded better economic performance. Though Portugal's total spending as a proportion of GDP is somewhat below the EU average, the rapid and uncontrolled growth of its primary current spending to a level now above the OECD and EU average, is worrying, because it puts at risks long-term fiscal sustainability. This paper points to major shortcomings in the budget management process and in the planning and control of public spending. The paper acknowledges recent action taken by public authorities to address some of the shortcomings and makes recommendations for moving further ahead. It suggests policy options that can make public expenditure more efficient and effective at overall levels. Administrative control, the cost-effectiveness of service provision, and incentives for efficient resource allocation all need to be improved. Ongoing efforts to develop accruals-based accounting in line with ESA95 norms should be accelerated and completed. Recent progress towards greater devolution in tax and spending power should go hand in hand with stronger fiscal accountability of local governments. To provide public services in a more cost-efficient way, the public sector should move further towards a budget and management approach geared towards outcomes. Finally, delivery of public services can be improved via market-oriented solutions, while an increase in user charges could be considered as a means to reduce excessive demand for some public services.

JEL classification: H4, H5, H7, H11, H72, H74, H77, I1, I2.
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L'efficacité des dépenses publiques au Portugal

Au cours de la décennie écoulée, le Portugal a souffert de déséquilibres et d'inefficiences du secteur public qui ont nui à la performance économique. Même si les dépenses totales du pays en proportion du PIB sont quelque peu inférieures à la moyenne de l'Union européenne, la croissance rapide et incontrôlée de ses dépenses courantes primaires, qui dépassent aujourd'hui la moyenne de l'OCDE comme celle de l'Union européenne, a de quoi préoccuper car elle menace la viabilité budgétaire à long terme. Cette étude relève les carences majeures du processus de gestion budgétaire ainsi que de la planification et du contrôle des dépenses publiques. Elle prend acte des mesures récentes prises par les autorités pour remédier à certaines faiblesses et présente des recommandations en vue d'aller de l'avant. Elle propose des options d'action susceptibles d'accroître plus l'efficience et l'efficacité des dépenses publiques au niveau global. Le contrôle administratif, le rapport coût-efficacité de la prestation des services et les incitations à une allocation efficiente des ressources sont autant d'aspects à améliorer. Il convient d'accélérer et de mener à bien l'action engagée pour élaborer une comptabilité d'exercice conforme aux normes SEC 95. Les progrès récents vers un plus large transfert de pouvoirs en matière d'imposition et de dépenses devraient s'accompagner d'une responsabilité budgétaire accrue des collectivités locales. Afin d'améliorer le rapport coût-efficacité de la prestation des services publics, le secteur public devrait aller plus loin vers une approche du budget et de la gestion axée sur les résultats. Enfin, la fourniture des services publics peut être améliorée par des solutions de marché, et l'on pourrait envisager une augmentation des redevances d'utilisation pour réduire la demande excessive de certains services publics.

Classification JEL : H4, H5, H11, H72, H74, H77, I1, I2
Mots-clés : Économie publique, structure et taille du secteur public, dépenses publiques, santé, éducation, État et collectivités locales, Portugal.

TABLE OF CONTENTS

Introduction and overview of issues....4
Pressures on public spending....5
Primary current spending has been rising rapidly....5
Public investment has been boosted by EU membership despite spending freezes....10
Addressing problems in the budget management process....10
Spending control has relied on stopgap measures…....10
… due to flaws in the budget management process…....11
… which have brought efforts at administrative reform....12
Improving the cost effectiveness of public spending....14
Inefficiencies in human resource management....14
The involvement of private finances is still limited....17
Local government spending incentives are inefficient....20
Assessing public expenditure outcomes in selected areas....22
Education outcomes do not match costs....22
Areas of inefficiency in health care....26
Social spending does not have a strong redistributive role....30
Assessment and agenda for reform....30
Strengthening monitoring and control of the budget process....33
Better matching of resources could enforce local governments' spending discipline…....33
… and improve income distribution....34
Setting outcome objectives and increasing incentives for managers....34
Encouraging competition and extending market signals....35

ANNEX I LOCAL GOVERNMENT FUNDING....37

ANNEX II PRIVATE INTERNAL RATES OF RETURN ON EDUCATION....39

Calculation....39
The case of Portugal....40
Data sources....42

BIBLIOGRAPHY....43

Boxes

Box 1. Pension system for civil servants (Caixa Geral de Aposentações, CGA)....8
Box 2. 2001 Framework Law for the State Budget and the 2002 Budgetary Stability Law....13
Box 3. Public-private partnerships: considerations to bear in mind....19
Box 4. Rates of return to education in Portugal, 1999....25
Box 5. Transforming public hospitals into corporate entities....29
Box 6. A synopsis of recommendations to improve public spending efficiency and effectiveness....32

THE EFFECTIVENESS OF PUBLIC EXPENDITURE IN PORTUGAL

Chiara Bronchi[1]

Introduction and overview of issues

1. Over the past decade, OECD *Economic Surveys* have made frequent reference to problems of public expenditure control in Portugal. General government spending relative to GDP is still lower than the EU average. But a persistent reliance on contingency measures to meet planned spending objectives -- often associated with emergency supplementary budgets — has been symptomatic of fundamental weaknesses in the budget process. Recent *Surveys* have identified unplanned shifts in the composition of public spending as a result of such short-term expedients, which have usually been based on intra-year spending freezes falling disproportionately on capital outlays. The overshooting of the general government deficit in 2001, and the need to create a sustainable budget balance path, has made it all the more critical to establish a viable medium-term profile for spending. This, in turn, requires substantial improvements to public expenditure management systems, so as to provide the authorities with the tools they need for effective planning and control.

2. Against this background, the chapter begins with an examination of the trends in aggregate spending and the evolution of public spending patterns. It then discusses the main budget-management factors behind the questionable record of Portuguese fiscal control and the recent measures taken to correct some of the evident defects in the budget process. This is followed by an assessment of the major efficiency aspects of public service provision: deficiencies in human resource management, lack of competition in the production of public goods in areas where it has proved effective in other countries, and difficulties between central and local governments' co-ordination. The subsequent section focuses on the outcomes achieved, for the costs involved, in major sectors: health, education and social spending. The policy challenges and recommendations arising from this review are then identified.

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1. Chiara Bronchi is an economist in the Policy Studies Branch of the Economics Department of the OECD. This paper was originally produced for the *OECD Economic Survey of Portugal* published in January 2003 under the authority of the Economic and Development Review Committee of the OECD. The author is indebted to Sonia Cabral, Andrew Dean, Jørgen Elmeskøv, Michael Feiner, Val Koromzay, Bénédicte Larre, Robert Price, Nick Vanston and other colleagues in the OECD secretariat, for valuable comments and drafting suggestions. Special thanks go to Sylvie Toly for excellent research assistance and to Anne Eggimann and Valérie Luccioni for their punctual secretarial support. The paper has also benefited from discussions with numerous Portuguese experts in the Ministry of Finance and in the Central Bank of Portugal.

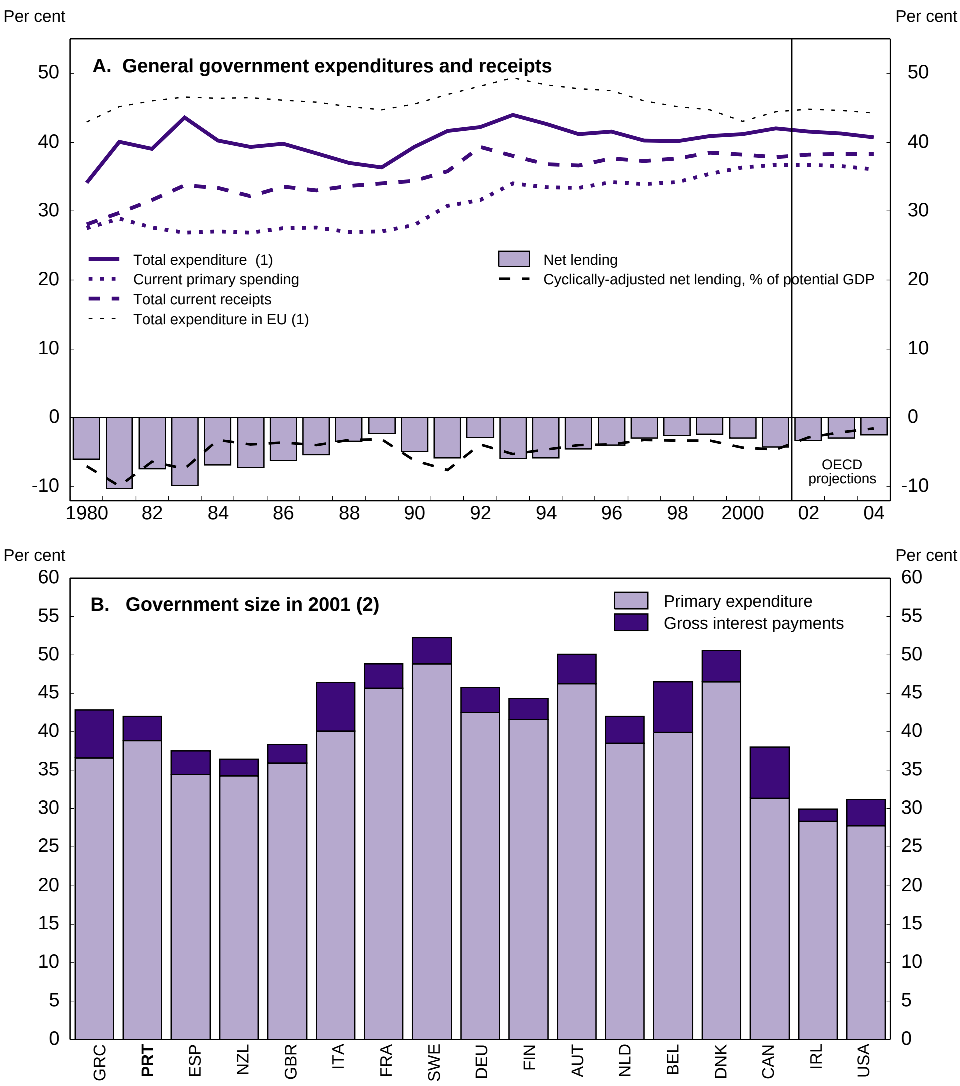
Pressures on public spending

Primary current spending has been rising rapidly

3. At 42 per cent of GDP, Portugal's government spending ratio was below the EU average in 2001 (Figure 1, panel A), though when compared with economies of similar income levels (*e.g.* Spain and New

Figure 1. **Government spending**

Per cent of GDP



1. Total spending is defined as current outlays plus net capital outlays. In 2000 one off revenues from the sale of mobile telephone licenses are recorded as negative capital outlays, amounting to 0.3 per cent of GDP.
2. Share of total government expenditure in GDP. Countries are ranked according to GDP *per capita* at constant prices and in constant PPPs, from the lowest level to the highest.

Source: *OECD Economic Outlook,* No. 72, December 2002.

Zealand) it appears to be a relatively high-spending country (panel B).[2] Primary current spending (current goods and services plus transfers) is particularly high, at over 36.8 per cent of GDP. Furthermore, Portugal is exceptional among EU members as to the extent of the rise in primary spending during the latter half of the 1990s (equivalent to 3 percentage points of GDP). The fast growth of tax receipts and the decline in interest payments allowed Portugal to reduce the deficit and meet the criteria for participating in the third phase of the European Monetary Union. Nevertheless, the pace of deficit reduction slowed considerably after 1997, despite the strong economic expansion. Over the period 1997-2000 the gains from higher revenues and lower interest payments — equivalent to accumulative 4.4 percentage points of GDP over three years — were mostly offset by higher primary current spending.

4. The rise in government primary consumption (Figure 2) has been the result of both cost and input factors. Over the past six or so years the ratio of the wage bill to GDP has increased significantly, reaching over 15 per cent, nearly half the primary current spending. The upward trend in payroll expenditures is explained by the steady increase in both public sector employment and real wages, as well as growing pressures from the civil servants' social security system (see section below):

- Public sector employment increased at an average of 3.3 per cent per year between 1995 and 2001. This was almost twice the growth rate of total economy-wide employment, so that in 2000 the share of government in total employment rose above the OECD and EU averages. Most new entrants joined the public administration and the Ministries of Health or Education, which have experienced a persistent increase in staff (see below). In recent years, the creation of several autonomous services and institutes has also contributed to the hiring expansion, and legal obstacles to redeploying public servants also help explain part of the trend.

- More importantly, the average compensation of public sector employees increased by over 20 per cent in real terms in the same period, *vis-à-vis* 14 per cent in the private sector. This was mostly the result of an upgrading of salary levels in the public administration and automatic advancements based on seniority that have increased average compensation at rates above those recorded in the private sector. These reclassification exercises increased the government wage bill by an average of 3½ per cent per year. It is not easy to demonstrate that these increases were more than necessary to bring public sector remuneration into line with that in the private sector. One pointer is that public sector employees rarely leave the public employment to take up jobs elsewhere.

5. Looking ahead, some structural factors will continue to put pressure on payroll expenditures. It will be difficult to revise downward automatic advancements based on seniority and salary upgrading that apply to the wide public sector. More importantly, while reforms are being undertaken in the pension system of the private sector, there has been only limited reform attempts to relieve the pressure on the

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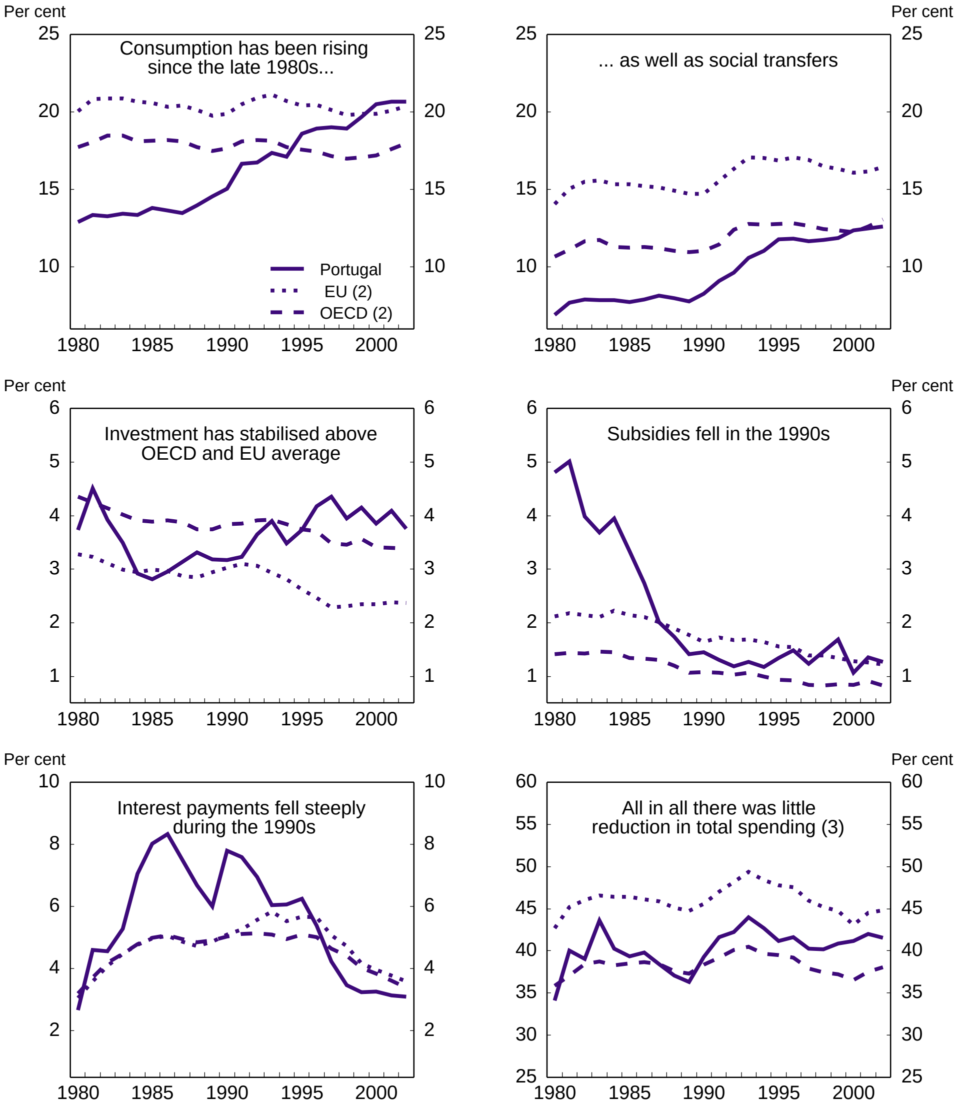
2. The ratio of public outlays to GDP is the most commonly used indicator for expressing public sector size in an international and historical context. Such comparisons should, however, be made with care. If tax expenditures for social and economic purposes and taxes on social transfers were taken into consideration for all countries, the international picture would be quite different (Adema, 2001). Unlike many OECD countries, Portugal does not tax social transfers, and provides social and economic assistance *via* tax expenditure. When taking into account tax expenditure, Portugal total public spending is even higher.

Figure 2. **General government outlays by economic category**[1]

Per cent of GDP



1. Based on ESA 95. OECD estimates for EU and OECD in 2002.
2. Weighted average of available countries.
3. Total spending is defined as current outlays plus net capital outlays.

Source: *OECD Economic Outlook*, No. 72, December 2002.

already fragile *Caixa Geral de Aposentações* (CGA), the pension system of civil servants (Box 1). Measures have been taken to address the long-term sustainability of the system, including making benefits less generous for those joining the civil service after 1993 in order to meet commitments to those retiring in years to come.[3] These are expected to bear fruit in the longer-run. In the meantime, the burden on taxpayers should be alleviated by whatever means are available, by raising contributions and reducing the growth of benefits.

Box 1. **Pension system for civil servants (Caixa Geral de Aposentações, CGA)**

The CGA system is designed as a PAYG defined-benefit scheme, receiving contributions from subscribers and employers and distributing these as pensions. The State contributes with the amount necessary to balance the CGA, which is not actuarially balanced, making it particularly vulnerable to the effects of population ageing and the ensuing jump in internal dependency ratios. Moreover, the average pension has still to reflect the recent rapid jump in public sector wages.

The system has already been facing significant strains related to ageing. Between 1990 and 2001, the number of pensioners more than doubled, whereas the number of active contributors increased by an estimated 17 per cent. By 2000, 20 per cent of state payroll expenditures was being spent on civil servants' pensions, and direct subsidies to the system had reached 2 per cent of GDP. The disbursements of the CGA are expected to rise rapidly in the coming decades. This is due both to the fact that civil servant pensions are indexed to civil service salaries and to the growing number of pensioners: 40 per cent of civil servants are due to retire in less than ten years. The size of the CGA will rise and general government transfers to CGA will increase more rapidly than civil servant contributions in order to meet commitments to those retiring in years to come.[1]

The State Budget for 2003 has modified the CGA in order to control future expenditure growth. As of 1st January 2003 the relevant wage to determine the pension are net of CGA contributions. Moreover, those civil servants who have reached full pension entitlements but are still below the statutory minimum retirement age (60), can retire earlier but with a lower pension. Up to the end of 2002, a CGA subscriber with full pension rights can retire earlier with the right to a full pension. As of the beginning of 2003, pension benefits are reduced by 4.5 per cent per year of anticipation. Though these measures are in the right direction, they will have only a small financial impact in the short-term and are insufficient to restore financial equilibrium of the CGA.[2]

1. All civil servants, excluding employees of public enterprises contribute to the civil servants' social security system.
2. It has been estimated that a large number of CGA subscribers with full pension entitlements will apply before the end of 2002.

6. Additionally, the demand for social services nearer to European standards has brought increasing expenditure in health, education and social protection (in 1999 the minimum-guaranteed income was introduced), raising the collective share of such programmes to just under 60 per cent of total spending by the end of the 1990s (Figure 3, Panel B). As the Portuguese population ages, pressures on public spending will intensify, as in other OECD countries. OECD simulations suggest that spending on health care could rise by a further 3 percentage points of GDP by 2030 as a result of population ageing alone (OECD, 2001*a*). Furthermore, the price of health services in Portugal remains below those in other EU countries. As it is likely that non-tradeable prices will rise relative to these of tradeable, *via* the Balassa-Samuelson

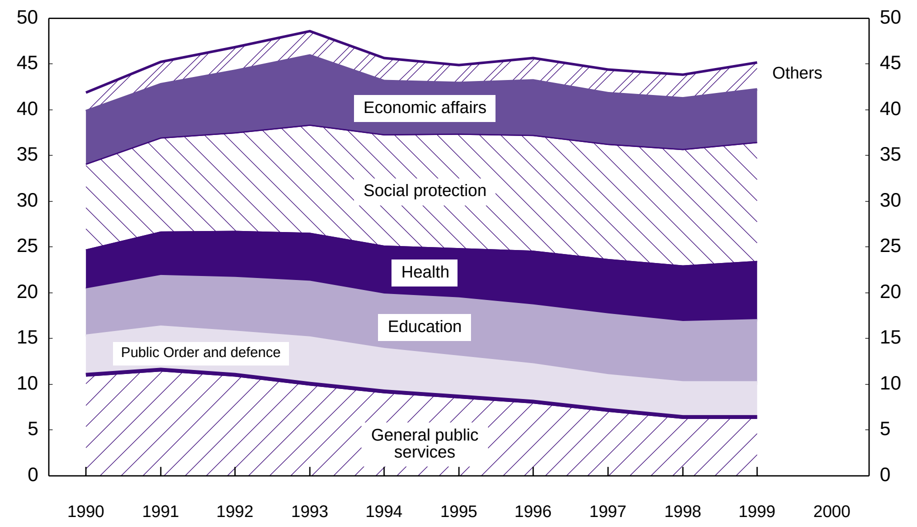
3. The pension benefits of workers joining before 1993 are based on the last salary, as well as on permanent remuneration granted in the last two years of service. Public employees hired after September 1993 are now subject to the same provisions as those applicable to the private sector (see OECD 2003). However, with around two thirds of public employees hired before 1993, pension expenditure is set to rise rapidly relative to GDP in the medium-run.

effect, health service prices are likely to rise faster than the general price level. These sectors thus pose special problems, which are discussed below.

Figure 3. **Main components of general government outlays (1)**

As a percentage of GDP

A. Portugal



B. International comparison, 1999 (2)

% of GDP

	General public services	Defence, public order and safety	Education	Health	Social protection	Economic affairs	Others	Total outlay
Austria	8.2	2.5	6.1	8.1	21.5	5.0	2.4	53.8
Belgium	10.4	2.8	6.2	6.3	17.5	4.8	2.1	50.2
Denmark	4.6	2.6	8.0	5.3	24.0	4.4	2.5	56.0
France (1993)	4.6	4.2	6.0	10.8	19.5	4.7	6.7	56.6
Germany	6.5	2.9	4.4	6.2	22.0	4.3	2.5	48.8
Finland	6.5	3.1	6.6	5.9	22.4	5.2	2.3	52.1
Greece	10.4	4.2	4.1	3.9	19.3	0.2	1.1	43.4
Ireland	5.9	2.2	4.2	5.7	7.1	7.3	2.4	34.8
Italy	9.9	3.2	5.1	5.8	18.2	4.0	2.6	48.8
Netherlands	8.9	3.1	4.8	4.0	18.0	5.1	3.3	47.1
Portugal	**6.4**	**3.7**	**6.9**	**6.4**	**13.0**	**5.8**	**2.9**	**45.1**
Spain (1995)	1.8	3.8	4.9	5.5	15.2	6.2	9.9	47.2
Sweden	10.1	3.8	6.8	6.3	25.3	4.8	3.2	60.3
United Kingdom (1995)	1.9	5.5	5.4	5.8	16.4	3.3	6.0	44.3
EU unweigted average	6.9	3.4	5.7	6.2	18.5	4.7	3.6	49.2

1. Based on ESA 95.
2. For France, Spain and the United Kingdom, due to lack of information, data are presented on the basis of SNA 1968.

Source: OECD, *National Accounts.*

Public investment has been boosted by EU membership despite spending freezes

7. In the second half of the 1990s Portuguese public investment stabilised at a level above the OECD and EU averages, mainly as a consequence of EU co-financing (Figure 2). Since joining the EU in 1986, Portugal has received, on average, 3 per cent of GDP in structural transfers per year in the context of successive Community Support Frameworks (CSF), which include both structural and cohesion funding. These transfers, equivalent to 15 per cent of public spending on goods and services, have played an important role in the modernisation and restructuring of the Portuguese economy, aiding convergence to EU average productivity levels. They have had a significant impact on infrastructure development. The density of motorways doubled between 1994 and 2000 and a significant proportion of railway lines were electrified (see OECD, 2003). They have been instrumental in pushing public investment from 2.8 per cent in 1985 to 4.1 per cent of GDP in 2001. According to recent estimates this expansion has "crowded in" private investments as well as employment in Portugal, with a positive impact on output growth.[4]

8. Despite the observed relatively high level of capital spending, however, problems of planning and execution may have impeded Portuguese convergence to productivity levels in more advanced EU countries. Results have not been very visible in the domain of innovation, research and development, while the *ad hoc* temporary spending freezes used to meet the Stability and Growth Pact (SGP) targets over the past few years have resulted in disproportionate cuts and deferrals to capital outlays not related to structural funds. Moreover, the large share of capital transfers that serves to finance the chronic deficits of certain public enterprises (around 0.2 per cent of GDP) waste resources that could go into more productive public investments.

9. The third *Community Support Framework* (CSF III) will provide the equivalent of an annual 2.7 per cent of GDP between 2000 and 2006, focusing particularly on the development of information and communication technology (ICT). Investment projects co-financed by CSF III funds are expected to represent about 20 per cent of total investment.[5] However, there is no guarantee that CSF funds will be available for Portugal at these levels after 2006, implying even greater pressure on public finances thereafter, if infrastructure spending is to continue at rates that will help faster convergence to EU norms.[6]

Addressing problems in the budget management process

Spending control has relied on stopgap measures…

10. Apart from issues related to economic development, where Portugal has been catching up with its European partners, many spending pressures are shared — to differing degrees — with other OECD economies. However, in Portugal's case budgetary pressures have also been a function of inadequate spending control, since primary spending overruns have been the norm in recent years, often by a margin

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4. According to the European Commission, EU Structural Funds contributed about ½ per cent per year to growth between 1989 and 1999. The cumulative effect added about 10 per cent to GDP in Portugal as well as Greece and Ireland. Estimating an annual series covering investment in transportation infrastructure on GDP from 1976 to 1998, Pereira and Andraz (2002) find a similar result for Portugal.

5. According to the Ministry of Planning, the CSF III, funds are expected to raise the GDP level by 2.1 per cent and to create 81 000 jobs (1.6 per cent of the labour force), over the period to 2006.

6. For example, the proportion of electrified railway lines is still well below the EU average of 48 per cent.

exceeding 3 percentage points.[7] Containing the deficit in the face of such overruns has meant a heavy reliance on budgetary safeguard clauses in order to meet fiscal targets. These allow wide discretion in implementing mid-year cuts in budget allocations. The Executive (in practice, the Ministry of Finance) uses its discretion as to whether a freeze is justified in order to meet the deficit target. It also decides which expenditures will be frozen, both within and among spending categories.[8] Typically, a freeze is seen as a pre-emptive action. It may or may not turn into a definite cut, depending on overall budgetary developments (on both the revenue and spending sides of the budget).[9] However, their continuous use may lead to inefficiencies and imbalances in the composition of public spending. Such chronic overruns are also symptomatic of grave deficiencies in the preparation of the original budgets in the first place, as well as in their implementation.

… due to flaws in the budget management process…

11. During the 1990s, several reform measures were introduced to try to improve the efficiency and accountability of public administration, to enhance internal control and to modernise accounting systems. However, such measures were limited in scope and insufficient to prevent recurrent spending control problems, culminating in a renewed effort at comprehensive reform (OECD, 1999 and 2001*a*). In 2001, under pressure to keep medium-term current spending on target, the government launched a comprehensive reform strategy for reviewing the budgetary process and spending control mechanisms. A Task Force within the Ministry of Finance, the so-called *ECORDEP* (*Estrutura de Coordenação da Reforma da Despesa Pública*) was created to identify major areas for reform. Its report, the *Relatório de Coordenação para a Reforma da Despesa Pública*, was issued in September 2001.

12. In this report, which was intended to guide the reform of public spending, the Task Force identifies several shortcomings in the budgetary process and control mechanisms:

- *There are no explicit budgetary rules for spending control*. The Stability and Growth Pact targets a downward trend for the Portuguese deficit in order to reach budget balance over a time horizon of several years, but does not set rules for budgetary discipline.

- *Macroeconomic assumptions are not thoroughly examined and debated either by independent experts or Parliament.* The macro-economic assumptions included in the annual draft budget

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7. Budget estimates of payroll costs are generally prepared a few months before wage negotiations with public sector unions are concluded, explaining the existence of discrepancies between budget and actual figures. Also, a special (contingent) budgetary endowment is available to the government in order to meet "unforeseen" spending needs. This endowment has in the recent past been largely used to finance the increase in the payroll.

8. The clauses can be invoked when unexpected circumstances threaten the achievement of the budget deficit target. The contingent measures are specified *ex ante* in the budget and are the maximum amount that can be frozen by the Executive without parliamentary approval. There are no specific trigger mechanisms governing the imposition of a budget freeze.

9. Prior to 2000, budget freezes were used as a response to the overshooting of spending by some Ministries (especially health). They often affected less than the maximum authorised amount and were then partly (or mostly) reversed closer to the year-end, as revenue windfalls often offset overspending. In this way a tendency developed for the budget deficit to turn out better than targeted during most of the 1990s, in spite of spending overruns. The freezing foreseen in the 2003 budget is meant to provide a true "margin of safety", in as much as the evolution of revenues is uncertain. It is the Government's intention to unfreeze some of the amount if the macroeconomic environment turns out to be better than expected.

documents are often based on an overly optimistic macroeconomic scenario that does not take the business cycle into consideration, and which is not thoroughly debated by Parliament or independent experts.

– The accounting system is mainly on a cash basis.[10]

– *Control and evaluation are inadequate*. The Ministry of Finance initiates the budgetary process and negotiates with line ministries and independent agencies for their respective programmes, before presenting the draft budget to Parliament for approval. The law defines spending procedures and spending limits at each level of the hierarchy. Unspent resources cannot be carried forward, encouraging line managers to spend all of their annual resources while surpluses in one department or ministry cannot be carried forward and/or cannot be re-allocated to activities elsewhere. There is an absence of agency or department-specific performance evaluation, with no internal financial control in some areas, and an overlapping of competencies, in others.

– *Co-ordination between central and local government is inadequate.* Local governments depend on unconditional central government transfers (see below) but they do have some autonomy in spending. The central government budget law ensures that current spending cannot exceed current revenues, and sets a ceiling on annual debt servicing, but the Local Finances Law does not impose a limit on the annual net borrowing for investment spending. It is possible for local governments to run large deficits, especially when they are faced with political pressure and the ceiling on debt-servicing is weakened by low interest rates (for example in 2001, ahead of the December municipal elections). In any case there are no sanctions for overshooting the ceiling on debt servicing while the monitoring of local government finances is hampered by the lack of timely budget statistics.

… which have brought efforts at administrative reform

13. In view of these problems, in August 2001, the Parliament passed a new framework law for the State Budget, together with a set of measures aimed at the better administration of spending (Box 2). The new legislation sets out general principles for a rationalisation of budgetary and financial decisions of the different branches of the administration, as well as the basis for financial co-ordination among different layers of government that should help to improve budget co-ordination and to monitor sub-central government indebtedness. As endorsed by the new administration, the centrepiece of the new law is the introduction of a two-step budget procedure. At the first stage, in the spring, the government establishes a multi-annual spending program that includes an expenditure ceiling for the first year; in the second stage, taking place in the summer, the government prepares the annual budget bill, which has to be presented to Parliament on the first of October. This will make the Government’s budget process more transparent.

14. However, the budget and the Parliamentary appropriation are not subject to pre-approved spending ceilings over the whole period covered by the expenditure program. Expenditure ceilings for the remaining three years are only indicative and can be modified depending on the evolution of macroeconomic and fiscal variables. The ceiling on the annual level of indebtedness of local authorities is

10. Although, the migration to the ESA 95 system is in progress, the annual budget and general accounts of the State, autonomous funds and services, as well as the social security fund, are still recorded entirely on a cash basis, implying delays in recognising on-going financial commitments.

Box 2. **2001 Framework Law for the State Budget and the 2002 Budgetary Stability Law**

The 2001 Framework Law for the State Budget marks the first step of the reform of budgetary procedures. The Budgetary Stability Law, approved in July 2002 and integrated in the Framework Law for the State Budget, adds new provisions that are instrumental to reach budgetary stability.

The 2001 Framework Law for the State Budget includes the following provisions:

Multi-annual financial programming

– Multi-annual financial planning is to be implemented, starting with the budgetary procedures for the 2003 budget law.

– Such planning should cover four years, in line with the EU Stability and Growth Pact and include an explicit and credible target for current primary expenditure.

– The State Budget Law must include multi-annual estimates of assets and liabilities of the central administration, regional and local administrations. The social security fund, and autonomous funds and services should also present multi-annual estimates in their budgets.

Two-step budget procedure

– In May the Government must present the pre-budget to the Parliament for discussion. The pre-budget must indicate the orientation of public expenditure within a medium-term macroeconomic scenario and must set expenditure ceilings for the first year and some expenditure ceiling indication for the following years. The Government also must submit an indicative spending ceiling for local governments. The first stage of the process concludes with the adoption by Parliament of the spending ceiling.

– Stage two entails the preparation of the annual budget bill by the Government and the voting of appropriation by Parliament.

Activity-based budgeting (ABB)

– The state budget must be structured by programme. Structuring by activities should help to determine more precisely, *via* management indicators, the links between outcomes and human and financial resources. The inclusion of sunset clauses and "learning by doing" procedures is one of the main motivations for implementing the ABB.

Strengthening audits and controls mechanisms

– In order to strengthen audit and control mechanisms, each ministry will have an internal financial controller, responsible for controlling the budget execution and producing consolidated accounts. The budgetary execution will also be subject to external audits at regular intervals of six to eight years.

Better financial co-ordination within the public sector

The 2002 Budgetary Stability Law includes the following provisions:

– The budget of the Autonomous Funds and Services must be in balance or in surplus. All Autonomous Funds and Services, with the exception of those that are required by the Constitution, or are integrated in the National Health Service or are supervision bodies, lose financial autonomy if their own resources do not cover at least two thirds of their expenditure (with receipts other than transfers from the central government).

- The Ministry of Finance can require other sub-sectors of general government to provide financial data on budget outturns during the year, on a regular and timely basis

– If sub-central governments or autonomous funds exceed the limits on annual debt increase set in the State Budget or if the financial information is not provided in time, State transfers can be reduced or suspended.

accompanied by a sanction that reduces state transfers if the ceiling is not met, but there is no rule preventing the central government from bailing-out sub-central governments. Nor are the local authorities obliged to provide the necessary information on time to allow monitoring and auditing of local finances. Some EU countries have gone as far as approving a Law on the internal stability of the budget to ensure that all levels of government are committed to comply with the Stability and Growth Pact.[11] Though a major step in the right direction, the new framework law is thus unlikely to curtail all spending overruns in future, and it is also important to ensure that the new rules are fully implemented in practice.

15. In July 2002, the Parliament approved the Stability Law that complements the 2001 Framework Law. This law strengthens the financial co-ordination between all levels of the general government, setting up three principles: the first principle, budgetary stability, requires that the general government fiscal position be in balance or in surplus on the basis of National Accounts (ESA 95) the second principle, the solidarity principle, imposes that all sectors of the general government contribute to budget stability; the third principle relates to transparency and implies that all levels of government must provide financial information about their budget implementation. Moreover, the Budgetary Stability Law allows the government to define, in the State budget, measures to achieve budget stability (Box 2).

Improving the cost effectiveness of public spending

16. The spending pressures which make the adoption of new management and control measures so essential are not unique to Portugal. But they do emanate in part from the institutional characteristics of the Portuguese system which have determined the cost and efficiency with which public services are provided. Three such features stand out: the effectiveness of human resource management; the respective roles of the government and private sectors in public service provision; and the incentive structures implied by fiscal-federal relations.

Inefficiencies in human resource management

17. Although the size of the public sector labour force is now close to the OECD average, as noted above, Portugal is characterised by both a comparatively high expenditure on wages and salaries and by a large wage premium in favour of the public sector (Figure 4), the wage gap between the public and private sectors being the highest in the EU.[12] Considering identical workers' characteristics, a Portuguese woman working in the general government receives an hourly wage premium 64.6 per cent higher than that earned by a woman working in the private sector, while the wage premium for men corresponds to 37.6 per cent (Table 1).[13] Furthermore, government compensation conditions become even more favourable when wages are corrected for non-wage benefits (*e.g.* generous pension schemes, flexible working hours, less stressful conditions and predominant life-long tenures) making public jobs more attractive. General government

11. In the context of the Stability and Growth Pact, national governments make budgetary commitments to the EU on behalf of the general government, so that compliance concerns all levels of public administration. Some Euroarea Member States have put in place a Domestic Stability Pact" in order to promote fiscal discipline at subnational levels (*inter alia* Germany, Italy and Spain). In 1999 the Italian financial law, for example, ushered in the so-called *Internal Stability Pact*, setting some rules on the deficit and the debt of sub-central governments (see OECD 2002*b*).

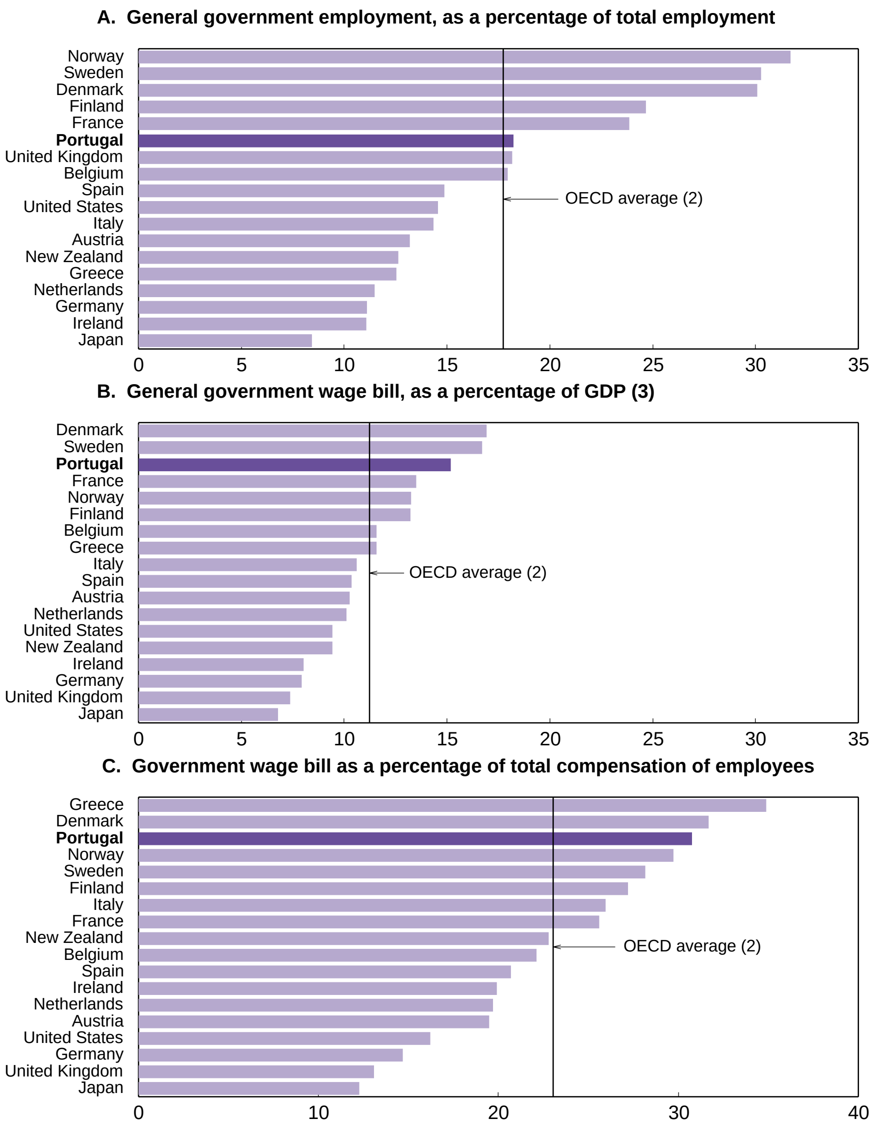
12. Portugal and Centeno (2001) using the European Union Household Panel data.

13. Although the gap is substantially reduced when differences in education levels between the public and private sectors are taken into account, it remains much larger in Portugal than in most other EU countries

workers hardly ever leave the public sector on a voluntary basis and the number of job applications is high whenever new vacancies are advertised in the general government.

Figure 4. **General government employment and wage bill in OECD countries**[1]

Per cent



1. 2001. Data are OECD estimates. Excluding public enterprises, except for Japan.
2. Unweighted average.
3. Wages and social security contributions.

Source: OECD, *Economic Outlook* No. 72, December 2002.

18. New working arrangements were introduced as of 1998, in order to modernise the workforce in the public sector and improve skills and performance.[14] Permanent staff are allowed to opt for a four-day week, subject to certain conditions. Public servants near retirement age are allowed to complete their careers on a part-time basis. The authorities expected that this would permit a partial renewal of the government's workforce without increasing the wage bill. However, in 1999 when the last public administration survey took place, only 2.7 per cent of total public employees had a part-time job, despite 26 per cent of civil servants being over 50 years old. Some efforts have also been made to introduce internal mobility among staff. Employees can compete for vacancies available at both local and central government levels, and can apply for transfers or secondment from one administration to another in the same way as they can move from one department to another.

Table 1. **Wage differences between the public and private sector**[1]

Percentage

	Men	Women
Austria	-2.3	11.9
Belgium	3.6	2.9
Denmark	-9.0	7.1
France	7.7	14.7
Germany	0.8	13.7
Greece	10.3	22.0
Netherlands	2.8	5.7
Ireland	32.8	41.0
Italy	10.3	25.8
Luxembourg	31.0	36.5
Portugal	**37.6**	**64.6**
Spain	19.7	34.8
United Kingdom	2.8	10.5
Average of the above countries	11.2	21

1. Estimates are based on panel data for households in the European Union area, harmonised by Eurostat.

Source : Portugal and Centeno (2001).

19. While public employees are free to move within the public administration, they cannot be required to do so. The legal barriers impeding managers from transferring public servants between different services, levels of government and functions have not been removed. This has brought duplication of tasks in some services, and understaffing in others, and has resulted in a very inefficient deployment of human resources in the public sector. For example, the Ministry of Education has little flexibility in reallocating teachers, who have life-long tenures in a particular school, to the schools most in need and away from schools whose pupil base has shrunk. Similar problems have been faced by other Ministries. The low mobility in public employment has made public spending behaviour asymmetric. Public employment has tended to adjust upwards when a new demand emerged in a specific sector, but failed to adjust downwards when demand waned, thus contributing to the steady rise in the number of public employees since 1990 (Table 2). However, in mid-2002, the government proposed new rules to increase staff mobility. Legislation to create an employment "pool" of civil servants was then approved.

14. Local government staff is insufficiently qualified with respect to increasing technical needs including experience with contracting out of tasks to the private sector. The training quality of Staff working in local government is also poor.

And the employment "pool" should be in place in early 2003.[15] The government seems also committed to use "hard budget" constraints for many departments (with the exclusion of the Health Sector).

Table 2. **Trends in general government employment**

As a percentage of total employment

	1990	1995	2000	2002[1]
Portugal	**14.8**	**17.2**	**18.1**	**18.2**
Belgium	18.9	18.2	18.4	18.6
Ireland	13.7	13.1	11.0	11.6
Greece	12.3	12.2	12.5	12.6
Spain	13.5	15.0	14.4	14.6
EU	18.3	18.8	17.9	18.0
Euro area	15.9	16.5	15.8	15.8
OECD	16.2	17.6	16.9	16.9

1. OECD estimates.

Source : OECD.

20. Finally, there is a broad consensus that the lack of incentive schemes in the Portuguese civil service pay system weakens the performance of managers and employees. As in many OECD countries, wages are based on rigid pay scales linked to professional category and seniority. In addition, promotion tends to be based more on seniority than on merit. As a general rule the Portuguese public-sector pay scheme has no provision for individual productivity or performance-related pay systems:[16] civil servants competencies are not clearly defined, a proper performance assessment system is not in place, and hence poor performance is not sanctioned, nor is exceptional performance easily rewarded. Nevertheless, since 1998, performance-related compensation has been introduced, at an experimental level, to improve the quality of the National Health Service (NHS), tax administration and justice.[17] Those in the health service are described below. In tax administration all employees share a team-based productivity premium based on the ability of the department to recover tax arrears and fight tax evasion. Similarly, a group premium for professionals operating in the judiciary system is now granted when procedural delays and the length of court trials are reduced.

The involvement of private finances is still limited

21. Contracting out for the provision of publicly funded services and support functions (*e.g.* cleaning and building maintenance) is not systematically used in Portugal. Only 8 per cent of value of public services provided by the public administration and defence comes from inputs purchased from other

15. Public sector employees made redundant as a consequence of the on-going restructuring of the public administration will be placed in an employment "pool" or "bourse", in view of their reassignment. The employment "pool", which is under the responsibility of the Ministry of Finance, will centralise information on civil servants available and on job opportunities. Employees in the pool will see their salary reduced by one sixth after three months. This reduction is expected to give them an incentive to search for a new job.

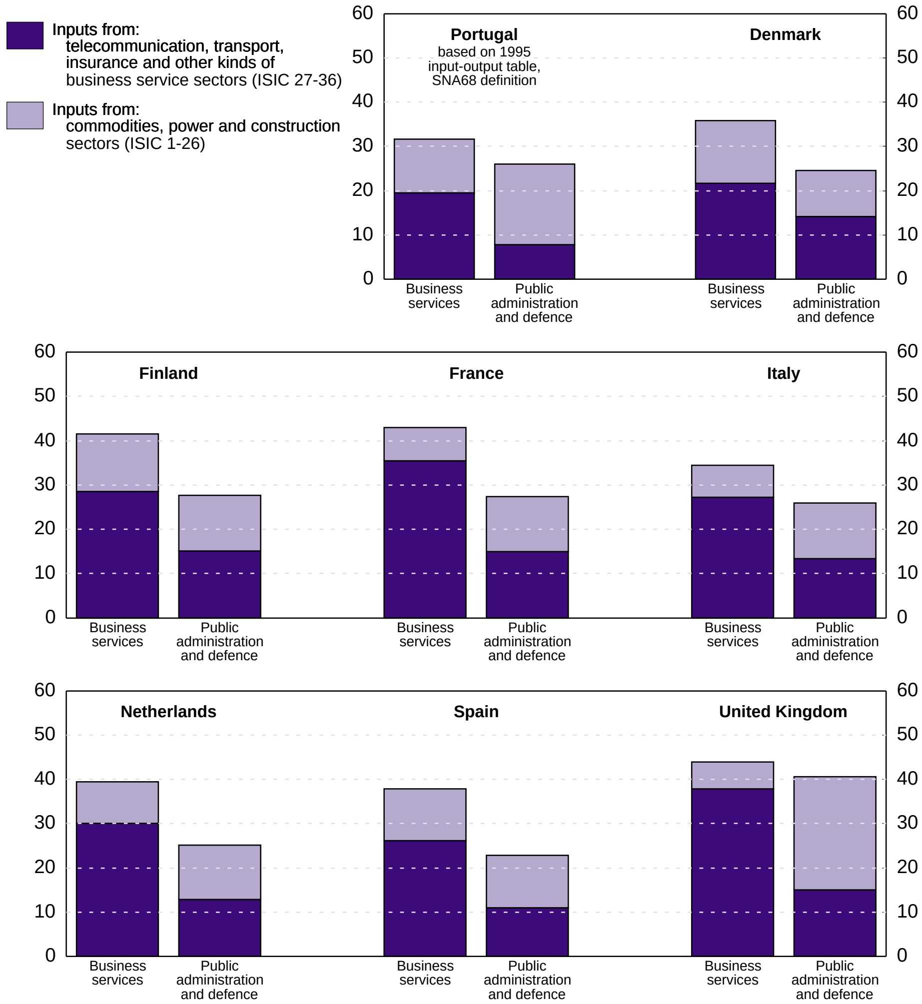
16. The system does however allow for incentives to individual or team productivity of a non-pecuniary nature (*e.g.* sabbatical periods, scholarships, promotions *in situ*).

17. See the reform proposal number 16 of the aforementioned report of the ECORDEP for further details.

service sectors (telecommunications, transport, catering, insurance, IT, real estate, and other business service sectors), whereas the corresponding figure for other OECD countries varies between 10 and 20 per cent (Figure 5).[18]

Figure 5. **Sub-contracting**

Inputs purchased from outside the sector as a share of total sector production value, 1995-1998



Note: The business services shown for comparison in the first column include accounting, consultancy, architecture, engineering and legal services (ISIC 36). Public administration includes also agencies for compulsory social security schemes. Purchases from, as well as payments to and among public administration, education, health, care and social and community services have been eliminated, as statistical methods differ across countries.

Source: OECD, STI/EAS based on Input-output tables from national accounts.

18. The Portuguese private sector also uses fewer external support services (20 per cent of value added) than is the case in other OECD countries (first column in Figure 5).

22. On the other hand, for large infrastructure investment, Portugal has made significant use of public-private partnerships. Beginning with motorways, the provision of public services *via* the application of public-private partnerships has expanded rapidly with 14 deals being concluded in 2000 across the areas of transport, water and energy. Notable examples have been the construction of the Vasco da Gama Bridge in 1998, which was undertaken through a concession contract to build, own, operate and transfer (BOOT) over a period of 33 years, and the motorways construction concession. In the latter case, running costs are paid by the State on a shadow toll basis with no charges for users.

23. Public-private partnerships can be an effective tool for promoting efficiency and improving the delivery of certain public goods,[19] but there is a lack of systematic evaluation of the performance of public-private partnerships projects in Portugal. From a budgetary point of view, however, some of the privately funded infrastructure projects have entailed large explicit and contingent liabilities for future years, which have not been reflected in the budget (OECD 2001*a*).[20] Only if efficiency in delivery is enhanced or if payment is shifted to users through charges as part of the private finance arrangement will there be a net benefit. In any case, public-private partnerships initiatives need to be carefully designed to ensure an adequate risk sharing with the private sector and that the costs of setting up and monitoring public-private partnerships are not excessive (Box 3).

Box 3. **Public-private partnerships: considerations to bear in mind**

The performance of public-private partnerships is affected by the following considerations:

- Often the Government is a co-owner of the public-private partnerships in order to ensure that any financial gains arising from the partnership are shared with the taxpayer. This set-up may confuse the roles of the Government as a shareholder and regulator, and could establish a *de facto* monopoly position of the incumbent private partner. It also entails a greater exposure of the budget if a private partner fails.
- The empirical evidence suggests that most efficiency gains stem not from the tender as such but rather from the permanent exposure of potential contractors to competition: competition in the market is more important than competition for the market. It is therefore essential that the process of tendering and contracting be organised in such a way that they reduce the government's dependence on the incumbent franchise or concession holder.
- Keeping transactions simple could reduce the relatively high costs of writing contracts and bidding for tenders.

24. An important aspect of ensuring competition for public contracts is to announce calls for tender internationally. Portugal has been active in advertising public procurement internationally. In the second half of the 1990s, around 15 per cent of total public procurement value were advertised internationally each year between 1995 and 2000, which was above the average for EU countries. More recently, though, other EU countries such as Greece, Ireland and Spain, with which Portugal might typically be compared, have

19. The often-cited and controversial study by Arthur Andersen (2000) concludes that in the United Kingdom, for example, public-private partnerships projects can reduce costs by 17 per cent.

20. Using public-private partnerships projects as an opportunity for shifting public investment and borrowing off-balance sheet ignores the fact that possible macroeconomic crowding-out of market activities in principle is the same for public investment and private investment *via* public-private partnerships (Van den Noord, 2002), the more so since in both cases taxes need to be levied in order to meet future capital and operating costs.

progressively increased the share of public procurement being advertised internationally to almost a quarter of the total (Table 3). There is thus scope in Portugal as well to inject more competition by this means.

Table 3. **Share of public procurement being openly advertised internationally in European Union countries**[1]

Value of public procurement which is openly advertised in per cent of total value of public procurement

	1995	1996	1997	1998	1999	2000
Austria	5	8	7	8	7	13
Belgium	7	8	11	14	16	16
Germany	5	6	6	7	5	6
Denmark	16	13	13	13	14	21
Finland	8	9	8	9	10	13
France	5	7	8	11	12	15
Greece	34	37	43	45	38	n.a.
Ireland	11	16	19	16	17	21
Italy	10	10	11	11	13	18
Luxembourg	5	7	9	14	13	12
Netherlands	5	5	6	5	6	11
Portugal	**15**	**18**	**15**	**16**	**15**	**15**
Spain	9	11	11	12	17	25
Sweden	12	12	13	13	14	20
United Kingdom	15	15	17	16	15	22
Total EU	8	9	11	11	11	15

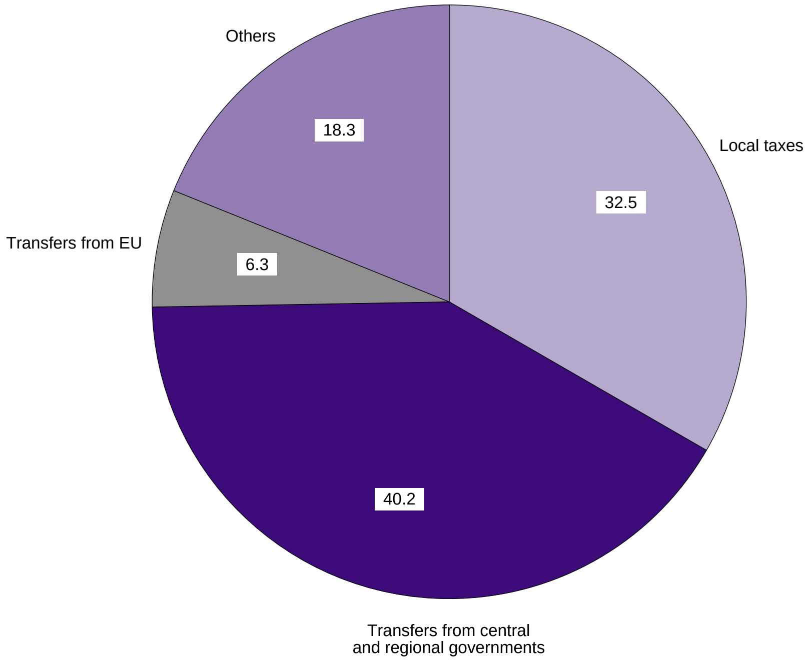
1. Value of public procurement published in the EU official journal as percentage of estimated total value of public procurement.

Source : European Commission, Internal Market Directorate General.

Local government spending incentives are inefficient

25. The current legislation that defines how local governments can raise funds does not seem to establish an adequate relationship between the decisions to increase expenditure and the responsibility for raising additional revenue (in particular through tax increases). The financial resources of municipalities come largely from the central budget in the form of unconditional grants, while local governments own resources account for a little more than one-third of the local budget (Figure 6 and Annex I). The Local Finance Law, last revised in 1998, strictly governs local funding, leaving very limited margin of manoeuvre to local authorities to affect the amount of their revenues, including local taxes. As a result, local governments do not take the marginal social cost of raising these revenues into account when deciding how to allocate resources and tend to use additional transfers for further spending even when its social utility is low (Correia da Cunha *et al.*, 2002). This need not matter insofar as the local provision of key areas such as health care, higher education and social services is still tightly regulated by the central government, which explains the low local government share in total spending. However, local governments have spending autonomy in strategic areas such as the staff of public offices and institutes, including pre-primary schools and nurseries, as well as investments in local infrastructure (*e.g.* schools, playgrounds, etc.). In 2000, for example, investment expenditure accounted for 41 per cent of total local spending and for a larger share (45.5 per cent) of total investment of the general government. Local governments have therefore an important influence on the cost and output of a number of spending programmes.

Figure 6. **Local government receipts by source of finance**



Source: OECD, In Jorge Correia da Cunha and Patrícia Silva, Bank of Portugal , Boletim economíco (March 2002).

26. Moreover, the Local Finance Law in Portugal does not provide local governments with adequate incentives to contain spending. Given the limited scope for adjusting other sources of financing, municipalities tend to finance gaps between receipts and expenditure by additional borrowing that is not subject to legal limits. As explained above, the Local Finance Law sets an annual ceiling only on debt servicing of local governments and on short-term loans. These ceilings depend positively on the total amount of funds transferred by the central government to the local authorities and past investment spending.[21] In the period 1999–2001, the decline in interest rates as well as additional transfers induced by the 1998 revision of the law for local finances eased, to a large extent, the limits to borrowing based on the debt service. Table 4 compares over the period 1999 to 2002 transfers from the central government to local authorities based on the 1998 Law for local finances with the transfers that would have taken place under the previous law. Central transfers to local authorities rose by an annual average of 13.5 per cent, compared with the 8.7 per cent annual average assumed under the 1987 law on local finances. At the same time, the bank liabilities of local authorities rose by an annual average of 1 percentage point of GDP, indicating that the additional transfers induced by the 1998 Law was used for further spending rather than containing local net additional borrowing. The Central Bank of Portugal estimated that this has resulted, *ceteris paribus*, in 0.2-0.3 per cent of GDP increase in the total general government deficit.

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21. However these limits do not apply to medium and long-term loans contracted for carrying out projects co-financed by European structural funds, within the scope of the Community Support Framework, loans used for the repayment of other loans, loans to meet extraordinary expenditure resulting from public calamity situations, and loans for the acquisition, construction or repair of real estate for social housing purposes.

Table 4. **Central Government transfers and bank liabilities of local authorities**

Million euros

		1998	1999	2000	2001	2002
Central government transfers according to:						
1998 law for local finances	(A)		1620.3	1775.4	2012.2	2243.0
percentage change			19.7[2]	9.6	13.3	11.5
1987 law for local finances[1]	(B)	1354.1	1438.8	1594.3	1757.8	1888.8
percentage change			6.3	10.8	10.3	7.4
Difference	(C)=(A)-(B)		181.5	181.2	254.4	354.3
in percent of GDP			0.2	0.2	0.2	0.3
Bank liabilities						
Net bank liabilities[3]		570.2	739.5	1081.3	1649.8	
in percent of GDP		0.6	0.7	0.9	1.3	
Changes in net bank liabilities		53.8	169.3	341.9	568.4	
in percent of GDP		0.1	0.2	0.	0.5	

1. Values are based on the 1998 Central government transfers and on VAT estimates enclosed in the State Budgets of the following years.
2. Growth rate based on Central government transfers made in 1998.
3. Values at 31 December.

Source: General Government Budget 1998-2002 and estimates by the Central Bank of Portugal.

27. So far, local authorities have not worried too much about debt accumulation because, as mentioned above, there have been no sanctions for overshooting debt servicing ceilings. Control over local spending should improve with the new limits on additional borrowing by local governments introduced by the State Budget for 2003.

Assessing public expenditure outcomes in selected areas

28. Assessing efficiency in public spending on merit goods is a difficult exercise. In spending areas such as education, health and social spending, matching costs to outcomes is most difficult. The three spending areas together accounted for more than 60 per cent of general government outlays in Portugal in 2001. They have risen more rapidly than other spending components over the 1990s and, by international standards, are high. The number of personnel working in education and health, including administrative personnel, increased steadily and by 2000, reached around 20 and 35 per cent (respectively) of total public employment. Despite this heavy weight on public spending, little has been done to assess the costs and benefits of public education and social policy spending, and piecemeal reforms in the health care system have not made much progress in enhancing efficiency in this sector.

Education outcomes do not match costs

Primary and secondary education is costly…

29. At around 5.7 per cent of GDP, public spending on education is close to the OECD average (Table 5). However, expenditure per student is about 14 per cent higher than the OECD average in secondary education and has been increasing since the 1990s. Unlike in some other OECD countries, private-sector co-payments in tertiary education are negligible. Despite high costs, educational attainment

Table 5. **Spending and unit costs at various levels of education**

1999

	Public spending on education				Total spending on educational institutions	Spending per student (2000)[3]	Unit costs		
	Primary and secondary[1]	Tertiary	*of which:* Student grants[2]	All levels of education	All levels of education		Primary	Secondary	Tertiary
	Per cent of GDP						Expenditure per full-time student relative to GDP per capita[4]		
Australia	3.8	1.2	0.4	5.0	5.8	1.7	19	27	46
Austria	4.1	1.7	0.2	6.3	6.3	2.6	26	33	47
Belgium	3.5	1.5	0.2	5.5	5.5	1.8	16	26	39
Denmark	4.8	2.4	0.8	8.1	6.7	2.3	24	28	39
Finland	3.8	2.1	0.3	6.2	5.8	1.8	18	25	35
France	4.2	1.1	0.1	6.0	6.2	2.1	18	31	34
Germany	3.0	1.1	0.1	4.7	5.6	1.6	16	27	42
Greece	2.4	1.1	0.0	3.6	3.9	1.7	14	18	27
Ireland	3.1	1.2	0.2	4.3	4.6	1.0	12	17	37
Italy	3.2	0.8	0.1	4.5	4.8	2.4	22	27	32
Japan	2.7	0.5	0.0	3.5	4.7	2.0	21	24	41
Netherlands	3.1	1.3	0.3	4.8	4.7	n.a	16	21	46
New Zealand	4.8	1.2	0.3	6.3	n.a.	n.a	n.a	n.a	n.a.
Norway	4.6	2.0	0.6	7.4	6.6	1.7	20	26	43
Portugal	**4.2**	**1.0**	**0.1**	**5.7**	**5.7**	**2.0**	**20**	**30**	28
Spain	3.3	0.9	0.1	4.5	5.3	1.8	19	26	30
Sweden	5.1	2.1	0.6	7.7	6.7	2.1	24	25	61
Switzerland	4.0	1.2	0.0	5.5	5.9	2.2	23	34	63
United Kingdom	3.3	1.1	0.4	4.7	5.2	1.8	16	24	41
United States	3.5	1.4	0.3	5.2	6.5	1.9	20	24	57
Country mean	**3.7**	**1.3**	**0.3**	**5.5**	**5.6**	**1.9**	**19**	**26**	**41**

1. Includes post-secondary non-tertiary education.
2. Scholarships/other grants to households and student loans.
3. Cumulative expenditure on educational institutions up to age 15 in USD, converting using purchasing power parities.
4. Multiplied by 100. Includes both public and private institutions except for Austria, Norway (1998), Italy (1998), Portugal and Switzerland (1998) where data refer to public institutions only and Greece (1998) and the United Kingdom for which they concern public and government-dependent institutions.

Source: OECD, *Education at a glance,* 2002; OECD, *Knowledge and Skills for life - First results from PISA 2000*, Table 3.6.

in Portugal remains significantly below international standards[22] (see OECD 2003), encouraging increasing numbers of middle-class families to send their children to private schools. In addition, there are costs because of pupils abandoning school and students who take one or more years longer to complete upper secondary education.[23]

30. High outlays per student seem to result from high educational staff salaries: in compulsory education, the staff wage bill represents 90 per cent of total spending on education. Cross-country comparison shows that teachers' relative compensation tends to fall as per capita income levels rise (OECD 2002*c*). However, this has not been the case for Portugal. Measured in purchasing-power parity terms, teachers' starting salaries are below the OECD average but they increase rapidly above the average with experience (OECD 2002*c*). Overall, as a multiple of per capita income, salaries are at least 9 per cent above the average for other OECD countries.

31. Geographical restrictions and the limited responsibility of local authority spending have an impact on school size and performance at the compulsory school level. Pupils who are residents in one municipality are not entitled to go to school in another. This largely stems from the funding system of municipalities, whereby transfers from central government are based on the number of inhabitants, whether or not they use the services provided by their municipality of residence. Moreover, local authorities are responsible only for the maintenance of school buildings and local school transport, and do not bear the high wage costs. Therefore, local communities have no incentive to give up their schools. In 2001-2002 nearly two thirds of schools had fewer than 30 students, and 1 700 schools had fewer than 10 students.[24] Maintaining such small schools may also entail excessive variation in learning outcomes with students in some schools not receiving adequate teaching.[25] However, local communities have few incentives to co-ordinate and merge local schools into larger and less costly units because neither local governments nor their residents directly bear the high costs per student.

… while private returns to tertiary education are high

32. The public education system heavily subsidises tertiary education in Portugal. Public university fees are very low and deductible from the personal income tax. At the same time wage premia for people

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22. Based on the recent OECD Programme for International Student Assessment (PISA) the average reading, science and mathematics performance of Portuguese 15-year olds, who are approaching the end of compulsory schooling, is significantly inferior to their counterparts abroad.

23. According to recent estimates by the Ministry of Education, over the period 1990-2000, each year 13 per cent of pupils leave before completion of primary schoolings, and more than 40 per cent of those who graduate from upper secondary education have taken at least one to two additional years before successfully graduating.

24. In 2000 the Ministry of Education planned to slightly reduce the number of public schools for primary and secondary education from 14 137 in 2000-01 to 13 671 in 2002-03. It also planned to merge a number of schools under one administration. This is expected to improve school management, while not necessarily to reduce the number of schools. In academic year 1999-2000, 30 per cent of individual schools were assembled into 400 groups including on average 10 schools each. As restructuring continuos, the number of groups is expected to rise to 1 382 in 2005-06. http://www.dapp.min-edu.pt/est_plan/pdf/mudar.pdf

25. According to the OECD (2001*b*) PISA report, in Portugal the variation of in student performance on the PISA reading literacy scale between schools is high and above the OECD average.

Box 4. **Rates of return to education in Portugal, 1999**

To obtain information on returns to education in Portugal, the direct derivations of internal rates of return made in Blöndal *et al*. (2002) for 10 OECD countries were reproduced for Portugal using data for 1999.[1] The results confirm the existence of very high returns to education in Portugal, especially from upper secondary to tertiary education. Overall, the estimates indicate that there are strong incentives for the average student to continue studying beyond the compulsory schooling age.

The overall incentives to invest in human capital that are embedded in the labour market benefits, financing and tax arrangements can be summarised in estimates of private internal rates of return. The internal rate is equal to the discount rate that equalises the real costs of education during the period of study to the real gains from education thereafter. In Portugal, these net gains due to human capital investment in tertiary education are estimated to be above 20 per cent (see Table), which is much higher than for the other 10 countries included in the OECD study. The high private internal rates of return that are available to those who successfully complete upper-secondary and, especially, tertiary education programmes suggest that there are strong incentives for the average Portuguese student to engage in post-compulsory education.

Private rates of return[1] to education for men in selected OECD countries

Per cent

	Upper secondary	Tertiary
Portugal (1999)	**11.3**	**23.9**
United Kingdom (2000)	15.1	17.6
United States (1999)	16.4	17.5
France (2000)	13.5	14.1
Netherlands (1997)	7.9	9.7
Canada (2000)	13.6	9.2
Sweden (1999)	6.4	9.1
Japan (1999)	6.8	8.6
Italy (1998)	11.2	8.3
Denmark (1999)	11.3	6.8
Germany (1998)	10.8	6.7
Unweighted average	11.3	12.0

1. Rates of return based on after-tax earnings and the length of studies taking into account the unemployment risk.

1. See Annex II for a discussion of methodological issues.

who have a university degree are high and seem to have increased during the 1990s (see Box 4).[26] This combination implies very high private returns to education.[27] Such heavy subsidisation seems debatable on

26. Using the micro-data of the Portuguese Labour Force Survey of 126 233 individuals between the first quarter of 1998 and the fourth quarter of 2000, Portugal and Centeno (2001) find that a college graduate woman (man) earns 92 per cent (88 per cent) more of what a woman (man) with full secondary education

equity grounds, and because tertiary education tends to be less prone to positive externalities than lower education levels.[28] Moreover, students from a favoured background still account for an important proportion of participants in public tertiary education, despite the increase in the participation of students from disadvantaged backgrounds and with modest income backgrounds that took place in the wake of the expansion of enrolment rates in secondary education.

Areas of inefficiency in health care

The public health-care system does not impose the right incentives…

33. Public health care spending in Portugal accounts for some 6 per cent of GDP, up from 4 per cent a decade ago. This increase in spending, accompanied by a steady growth in private outlays has brought overall health spending above the OECD average in the second half of the 1990s (Figure 7).[29] Although this has been associated with an improvement in health outcomes, several studies indicate that Portugal's health performance is still lagging behind the EU average and that the sector displays important inefficiencies.[30] In 1998, the *OECD Economic Survey of Portugal* highlighted the main problems of the public health system and sources of spending pressure. These derive from a multitude of factors, including an inefficient system of doctors' remuneration, lack of management flexibility and accountability, inadequate co-ordination between public health institutions, and insufficient competition in health provision and sale of pharmaceuticals.

… with respect to doctors' remuneration…

34. The remuneration system for physicians employed by the National Health System (NHS) does not set the right incentives and it is a cause for spending pressures. Doctors' remuneration there is linked to professional category and length of service, irrespective of productivity.[31] About half of NHS doctors work

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earns. In most European countries the wage premium associated with college education varies from a maximum of 60 per cent for women in the United Kingdom to a minimum of 40 per cent for women in Italy (Blöndal *et al.*, 2002).

27. Pereira and Martins (1999) estimate the economic returns to education in Portugal in the 1982-95 period. They find that the return was increasingly above 9 per cent for both men and women over the entire period.

28. Blöndal *et al.* (2002).

29. Health is the only sector where hiring is still permitted after the 2002 budget freeze, in services that are understaffed. However, the new hiring will be based on regular civil servant contracts because the hiring freeze on fixed term and individual contracts applies also to the health sector.

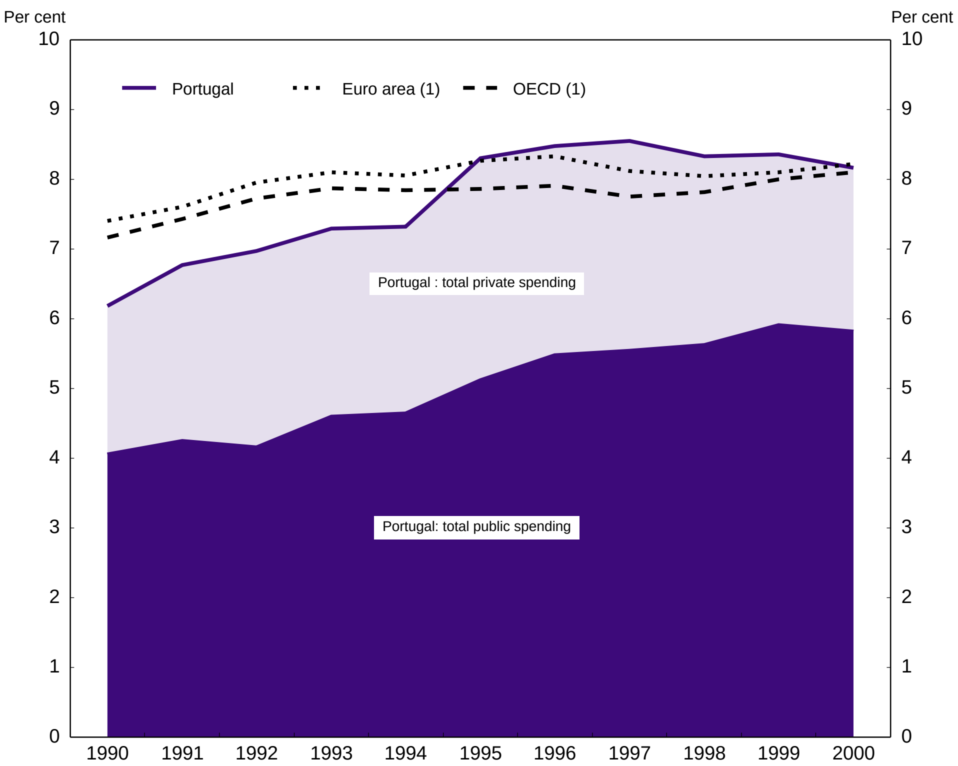
30. See St. Aubyn (2002) for a survey.

31. A voluntary experimental remuneration model for general practitioners (GPs) involving 500 doctors at the national level has been recently implemented. This project requires participating doctors to organise themselves in groups, so as to enhance peer pressure within the new remuneration model. As far as hospitals are concerned, the cardiology division of the hospital of Coimbra has recently become a pilot case, where a share of doctors' pay, as well as managers' pay, has been related to workload and performance, while a new-performance related pay system for hospital doctors and other health care professionals is under study.

in the private sector to compensate for the lower remuneration in the public sector.[32] The dual employment status of hospital doctors leads to low work intensity and thus to long waiting lists for some non-urgent surgical procedures. It also exacerbates problems of accessibility and encourages people to seek private-sector health care, the cost of which is partly deductible from personal income tax. Since patients face only a low marginal cost of obtaining a "second opinion", the result can be duplication of diagnostic tests and prescriptions. Hospitals are short of nurses, while doctors dedicate increasing hours to private practice, leading to large purchases by hospitals of laboratory services in the private sector and long waiting lists made worse by the lack of public infrastructure for the care of the elderly that tend to crowd hospitals seeking assistance. Some progress has been made in making budget allocations more therapy-based, including the introduction in 1997 of a case-mix system whereby diagnostic related groups (DRG) are used to define in-patient and ambulatory surgery cases. This system, however, affects only 20 per cent of hospitals' initial budget allocation.

Figure 7. **Total expenditure on health care**

Per cent of GDP



1. Mean of available data.

Source: OECD *Health Data 2002*.

32. Private fees are in principle regulated by the government, but in practice the range of minimum and maximum reference prices is set by the Medical Association (*Ordem dos Médicos)* at very high levels by international comparison.

…while the budget constraints on hospitals are too soft…

35. Public Budget allocation in public hospitals is based on historical figures and in practice, public hospitals operate with an open-ended budget, as the NHS directly and passively covers unexpected outlays by supplementary allocations that have become the norm.[33] Administrative penalties for excess spending have been increasingly applied, but remain rare. Managers and administrators have no personal incentives to improve hospital performance. Salaries typically account for 80 per cent of hospitals' current outlays, but health institutions have limited management autonomy, notably in the area of staff policy. The lack of effective budget constraints, combined with administrative hurdles, has contributed to inflate current costs, crowding out investment in capital equipment and new recruits in understaffed areas.

36. Non-critical health-care facilities are allocated suboptimally. With the public sector having to compete with high private-sector fees, and hospitals' wage bills and medical fees claiming the bulk of resources, health centres have suffered from under-equipment of capital, and under-endowment of quality labour, especially in poor regions. Such centres are generally responsible for public ambulatory or primary health care. The absence of financial and managerial autonomy, combined with the bureaucratic rules governing health centres, has led to inefficient modes of service. Rural and low-income areas are characterised by a general shortage of health professionals. Health centres unable to meet the demand for ambulatory services have diverted demand to hospitals, thus contributing to the overcrowding of hospital emergency rooms.

37. Apart from some pilot programmes, there has until now been only modest action to improve the managerial structure of hospitals. In 2002 a new Framework Law on Health was approved, whereby 35 out of 114 public hospitals will be converted into public enterprises (Box 5). The remaining 79 traditional hospitals will not be modified for the time being. Ideally, the transformation into corporate entities should enhance accountability and efficiency. The details of the reform, however, are not known yet. A few pilot programmes, where either public hospitals have incorporated private practices in cost management, or hospitals are privately run, show that costs can be reduced. The government has also planned to build ten new hospitals, which will all be public-private partnerships.

…and pharmaceutical consumption is excessive

38. Expenditure on pharmaceuticals is a major source of total health care spending (around 26 per cent) and its share out of total health expenditure is the highest in the OECD after Hungary (OECD 2002*d*) and pharmaceutical sales per inhabitant are among the highest in the OECD. The drug market is characterised by freedom of prescription for doctors (outside the hospital inpatient setting), largely unregulated drug prices, disincentives for the production of generic medicines,[34] and monopolistic power for the pharmacists who sell drugs.

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33. Central government transfers (*i.e.* the tax system) finance 90 per cent of the National Health System (NHS) budget. The remaining 10 per cent is financed by the NHS own receipts, mostly generated by hospitals charging fees for services. The annual general budget establishes a cash limit for total National Health System (NHS) spending. However, this initial allocation is perceived to a large extent as indicative, and the need for supplementary budgets has been the norm in recent years.

34. Generics are not widely used, accounting for 1 and 2 per cent of the market. They are subject to a government-established price ceiling. This is equivalent to 80 per cent of the lowest-priced similar product. Only products with market share equal or above 10 per cent are considered for comparison purposes.

Box 5. **Transforming public hospitals into corporate entities**

A new framework Law on Health Services was approved in July 2002. One of the most salient changes proposed is the transformation of the financial relationship between the State and hospitals and the consequent modernisation of hospital management. The government has allocated € 900 million in the 2002 Supplementary Budget (about 0.7 per cent of GDP) and an additional 400 million in the 2003 Budget Law for the transformation of around one third of public hospitals into public enterprises, with an executive board composed of managers. The State will be the sole shareholder, *i.e*. the hospitals will remain in public ownership, but incentives towards efficiency and demand-orientation of service provision should be heightened. The objective is to simulate a market for hospitals where the National Health System will be free to purchase from either the public or private sector. The details of the reform are likely to be based on experience drawn from the pilot programmes put into place during the past six years or so.

The five year old pilot programme in the public hospital of *Nossa Senhora do Rosário* (NSR) in the outskirts of Lisbon shows that it is possible to make efficiency gains by making each director fully responsible for the management of his service (*i.e.* hiring, purchasing of goods and service, time management, etc.). This should help break down the resistance of doctors and nurses in traditional public hospitals to changes to their familiar environment, even if the changes are intended to increase efficiency. At the same time, activity-based costing (ABC) has been introduced. The objective, (which has met with growing support from professional staff in the NSR hospital), is to set up a system in which each patient-based activity (appointments, operations, reception, discharge, medication etc.) has been costed in each service, so that comparisons can be made, benchmarks established and inefficiencies spotted. While the ABC is a long-term programme, some efficiency gains can already be observed. At present, savings from spotting some of the inefficiencies are paying for the running costs of the programme. But higher gains are expected in the future.

Another pilot programme in the public hospital of *São Sebastião* (HSS), might serve as an example of how private employment contracts can co-exist with those of the civil service. In 1998, when the programme started, hospital employees where given the choice of to leaving their civil servant status and entering into individual private contracts where salary was also based on individual performance as assessed by managers. In 2000, approximately 80 per cent of personnel had entered into individual contracts, allowing more flexibility in the organisation of services. According to the 2002 review carried out by the *National Instituto of Administration* (INA), personnel productivity enabled the HSS to reduce the percentage of losses from one year to another, and to keep personnel spending below the average of the other public hospital of same size, in the same region.

The government is also planning the creation of ten new hospitals in the next four years or so. These will have the legal form of public-private partnerships. Ownership will remain in public hands, while the management will be completely private. The government expects to shift part of the risks of the investment to the private sector, while retaining the benefits of a privately-run service. The experience in Portugal not yet conclusive because of the few cases of these types of partnerships in the public sector. According to the INA report, the hospital *Fernando da Fonseca* (HFF), one of the few existing examples of public-private partnerships in Portugal, is indeed profitable with a more efficient personal management (that is they employ less people for the same services), but the prices of services that it provides are not competitive.

39. On the demand side, low private co-participation, deductibility provisions of health costs from the personal income tax and NHS reimbursement for drugs prescribed under private treatment limit consumers' perception of real costs.

Social spending does not have a strong redistributive role

40. There is very little state provision of community care services in Portugal, including long term care, day centres and social services for the elderly, the chronically ill and other groups with special needs such as the mentally and physically disabled. The family is the first line of social care in Portugal. However, two out of three families receive social benefits other than pensions, and their share in total spending is around the OECD average (Table 6, panel A). Non-pension income transfers do not play much of a redistributive role in Portugal, largely because such a broad section of the population receives them. The share of such benefits in total income per "adult equivalent"[35] is negligible: they are equivalent to one quarter of pension benefits and make up 5 per cent of total income per "adult equivalent", one of the lowest shares in the EU (Table 6, panel B). In the majority of EU member countries, half of non-pension benefits are distributed to the lowest quintile of the income distribution, whereas Portugal pays out less than 40 per cent to this income group, even though Portugal has one of the widest income distributions. After benefits, income disparity remains important with the Gini coefficient being 6 points above the EU average (Table 6, panel C). If the wide range of tax credits and deduction of personal income tax is taken into consideration, the fiscal system probably exacerbates the inequality of income distribution.[36]

Assessment and agenda for reform

41. The foregoing analysis points to major defects in the Portuguese system of public spending planning and control. This is potentially important for economic performance, which depends, *inter alia*, on an economically efficient composition of public expenditure at overall levels that minimise the distorting effects of the taxes needed to finance it. Though Portugal's total spending is somewhat below the EU average, the rapid and unstructured growth of its primary current spending now above the OECD and EU average, is disturbing.

42. To an extent, some of the above problems were addressed in the 2001 Framework Law of the previous government. As well, the 2002 supplementary budget also included a number of measures with a longer-term impact on the control of spending. In particular, the merging and suppression of public organisms with similar functions providing a duplication of services in the public administration should help to reduce spending and free-up resources. The ban on the growth of the annual local administration debt, unrelated to structural fund spending, should also help to limit future spending *via* a better control of local spending. However, efficient public spending requires a strategic overhaul of the incentive systems built into the budget systems, institutional arrangements and the process of public service provision. An array of recommendations are highlighted in this section and summarised in Box 6, and discussed in greater detail below.

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35. The concept "per adult equivalent" is based on household income, not on the income of each member of the household taken separately. For the methodology see Marlier and Cohen-Solal (2000). Marlier and Cohen-Solal (2000) analyse social benefits in the European Union. Their analysis is based on the 1996 European Community Household Panel (ECHP).

36. Tax expenditures, which are not counted in income transfer expenditures, are estimated to represent a high cost in terms of revenue foregone. In 1998, the last year for which data are available, it was estimated that only 60 per cent of the gross income declared by households was taxable and a large share of tax expenditure went to the highest income categories (see Bronchi and Gomes Santos, 2001).

Table 6. **Social benefits and their redistributive effects**

A. Share of population receiving transfers

	Pensions	Other social benefits	All social benefits together
Austria	34	69	86
Belgium	28	69	89
Denmark	19	75	85
France	25	62	79
Germany	29	57	78
Greece	39	19	50
Ireland	23	82	90
Italy	40	18	51
Luxembourg	29	66	86
Netherlands	19	66	81
Portugal[1]	**36**	**68**	**89**
Spain	34	33	58
United Kingdom	28	71	85
European Union	30	52	73

B. Percentage of income from social benefits in total income per "adult equivalent" in the EU[2]

	All Households				
	IBB	P	SBOTP	TI	SBOTP/TI
Austria	10 144	2 600	1 589	14 334	0.11
Belgium	9 250	2 609	1 961	13 820	0.14
Denmark	10 034	1 635	2 338	14 007	0.17
France	9 855	2 337	1 285	13 475	0.10
Germany	10 180	2 818	1 018	14 015	0.07
Greece	6 577	1 626	169	8 372	0.02
Ireland	8 416	1 112	1 406	10 935	0.13
Italy	7 389	2 383	313	10 085	0.03
Luxembourg	15 988	3 965	2 003	21 956	0.09
Netherlands	9 686	2 045	1 651	13 382	0.12
Portugal	**6 058**	**1 234**	**418**	**7 710**	**0.05**
Spain	6 784	1 647	662	9 093	0.07
United Kingdom	10 506	1 677	1 524	13 707	0.11
European Union	9 078	2 203	1 040	12 320	0.08

C. Measures of inequality in income distributions in the EU[2]

	Gini coefficient %		Quintile ratio S80/S20	
	OI	TI	OI	TI
Austria	31	26	5.4	3.9
Belgium	32	28	10.3	4.4
Denmark	30	23	8.0	3.3
France	34	29	7.4	4.4
Germany	30	28	6.8	4.5
Greece	35	34	6.7	6.3
Ireland	39	33	26.8	5.4
Italy	34	33	6.9	5.8
Luxembourg	32	28	6.2	4.1
Netherlands	33	29	11.5	4.5
Portugal	**39**	**37**	**9.1**	**7.1**
Spain	36	33	9.2	5.7
United Kingdom	39	33	16.9	5.5
European Union	35	31	8.4	4.9

Key: IBB = income before benefits; P = pensions; SBOTP = Social benefits other than pensions; TI = total income; OI = official income

1. The first line of the table reveals that 36 per cent of Portuguese live in households where at least one member draws a pension. For other social benefits, the figure is 68 per cent. For all social benefits together, the figure is smaller than 104 per cent (*i.e.* 36 per cent plus 68 per cent) since some households receive more than one type of social benefit.
2. All amounts quoted in the table are for adult equivalent. This concept is based on household income not on the income of each member of the household taken separately.

Source: Eurostat.

Box 6. **A synopsis of recommendations to improve public spending efficiency and effectiveness**

Strengthening monitoring and control of the budget process

- The 2001 Framework Law and the 2002 Budgetary Stability Law need to become operational and effective as soon as possible.
- Set aggregate spending ceilings, based on prudent macroeconomic assumptions, over the four year period covered by the expenditure program. This should prevent overspending and undesirable mid-year cuts in budget allocations.
- Consider introducing a quantification of short and long term effects before the budget is approved. This should be done sufficiently in advance to allow the supervision of independent experts.
- Allow managers to transfer efficiency savings between programmes and fiscal years.
- Strengthen internal and external auditing.
- Move to accrual accounting of public expenditure.

Improve matching of resources

- Allow greater fund raising autonomy to enforce local government's spending discipline and increase local accountability.
- The internal budget stability rules endorsed by 2003 State Budget Law should be accompanied by compulsory deadlines for the presentation of local budget outturns and by credible sanctions when spending ceilings are not met. The strict enforcement of a no bailout rule would be instrumental in this regard.
- Consider reassessing the non-pension transfer system and the tax credits for health and education to make the spending system more redistributive.

Increase flexible incentives and strengthen control mechanisms in public administration

- Define public sector objectives in a more outcome-oriented fashion, and devise instruments to evaluate managers' performance. The establishment of an independent body for this purpose and of activity-based funding systems for public entities might be instrumental.
- Rely more extensively on performance-oriented career management schemes for public employees and reconsider the extent of their non-pecuniary benefits (e.g. long-life tenure and pension arrangements in particular). Encourage internal mobility of civil servants.
- Rely more on fixed-term contracts, or recourse to outside consultants, to handle issues that could prove temporary. This could allow mangers further flexibility to allocate resources according to needs.

Encourage competition and extend market signals

- Strengthen the user choice, both across public providers and between them and private providers. This would require the development of cost-accounting, in particular for local governments.
- Consider funding compulsory education on the basis of the number of student served and less dependent on the institutional structure.
- Reduce public funding for tertiary education by raising private fees for tuition. At the same time introduce mean-tested mechanisms and loan arrangements to ease access to young people from disadvantaged backgrounds.
- Pursue pilot schemes to introduce efficiency incentives in the provision of public health care. Introduce them more widely if they prove successful.
- Increase co-payments to limit excessive pharmaceutical consumption, paying due regard to equity objectives.
- Pursue efforts to encourage outsourcing and competitive tendering, subject to a careful assessment of benefits and transaction costs.

Strengthening monitoring and control of the budget process

43. The 2001 Framework Law indicates the direction for reforming budget management and control. This needs to be quickly endorsed.

- With pre-budget discussions taking place in May, and a medium-term budget framework, covering four years the budgetary process will be more transparent. However, to enhance fiscal sustainability the budget and the Parliamentary appropriation should be subject to pre-approved spending ceilings over the whole period covered by the expenditure program.

- In order to make budget targets more credible, the assumptions behind the macroeconomic scenario underlying the draft budget should be made public and subjected to scruting by independent forecasters. The budget law should be approved only if a quantification of the budget's short- and long-term effects is carried out beforehand. Furthermore, it is important that budget proposals include a "margin of safety" to allow for unexpected imbalances.

- The ongoing transition towards accrual accounting of public expenditure needs to be stepped up in order to improve transparency and set budget priorities at all levels of government.

- Similar to other OECD countries, the carry-over of a certain percentage of the unspent appropriation to the next fiscal year should be envisaged.[37] This would help to avoid "spending sprees" at the end of each fiscal year that normally lead to unplanned and inefficient spending.

- As concerns audit activities, the internal audit system should be reinforced and some form of external auditing should be established.

Better matching of resources could enforce local governments' spending discipline…

44. Many of the incentive problems derive from the nexus of central-local government relations. Some progress has been made towards greater devolution of power; but local authorities should be given more spending and taxing powers to make fiscal responsibility operational within harder budget constraints. Local government finances currently depend on grants that do not provide adequate incentives to allocate spending efficiently, notably in staffing, health and education. Local governments should be given more freedom to organise local expenditure programmes, avoiding overlapping responsibilities with the central government, and to design the appropriate fees and charging structures. This would make local policy more transparent and accountable before the local electorate. Local public administration and public good delivery should also improve. Meanwhile, the restrictions on additional borrowing by local governments proposed by the 2001 Framework Law and endorsed in the State Budget for 2003 should be imposed each year and incorporated in the Local Finance Law. Compulsory deadlines for the compilation of local governments budget statistics should also be introduced. Sanctions have been introduced, when spending ceilings or deadlines are not met; they should be made effective.[38] Strict enforcement of a no bailout rule would be instrumental for effective compliance.

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37. The Netherlands, for example, allow to carry 1 per cent of a year's budget over the following financial year (Blöndal and Kronmann Kristensen, 2002).

38. In Spain, for example, local authorities may lose a share of the EU structural funds if they do not meet the spending ceilings set by law.

… and improve income distribution

45. Insofar as progressive tax and non-pension transfers have an income-distributive objective (though at some cost in terms of labour and other incentives) the marginal excess burden of the system could be reduced by simplification and streamlining without significant social cost. A step in this direction came with the ending of subsidies to home loans in October 2002; the elimination of the tax credits for private health and education expenses could also be considered since they tend to be regressive.[39]

Setting outcome objectives and increasing incentives for managers

46. Empowering and motivating managers to improve performance offers scope for efficiency gains from lower staffing levels and reduced operating expenditures, as well as improved public services. But achieving these gains requires more flexibility in public management, to enable performance assessment that ensures that accountability goes hand-and-hand with greater autonomy. Health services could be made more cost-effective, for example, if hospital managers were given greater discretion and autonomy, including in those public hospitals which are not slated to be run as private enterprises.

47. Managers' activities should be governed by properly-defined objectives and consistent evaluation. This should be supported by measures that create the appropriate incentives for public employees. In those areas where outcomes — individual or team based — are measurable, public bodies should be able to use their efficiency gains to reward employees associated with those gains. In addition, there should be a general shift towards a gradually weakening of seniority-based wage and promotion elements. Pilot schemes in health, justice and tax administration should be reviewed and extended. More generally, public employees' compensation should more closely reflect economy-wide labour market conditions. This implies a re-assessment of the generosity of civil servants' wage and non-wage compensation to reduce the gap with the private sector and enhance mobility between the public and private sectors.

48. In less than ten years, 40 per cent of civil servants are expected to retire, which could represent an opportunity to replace older, low-skilled workers with smaller numbers of better-trained recruits. The more general use of fixed-term employment contracts could allow managers more flexibility in attracting the best suited employees and to allocate resources according to needs. This could help avoid blind hiring freezes in future. In the meantime, labour mobility within public administration should be strongly encouraged. Recent reform measures will help increasing mobility within the administration. These measures, including the creation of the public employment "pool", are key to re-allocate staff for the restructuring of central government, while maintaining some control over the wage bill. Enhanced mobility would help to maintain public service quality across the country. The average quality of education, for example, could be improved across regions if the Ministry of Education had greater possibilities to re-allocate teachers according to educational needs or from schools with a decreasing number of students to schools that are relatively understaffed, while taking account the family circumstances of the teachers involved. In addition, if salary levels were allowed to take local conditions more into account, health provision as well as teaching resources could be improved in needy municipalities.

49. The structure of public hospitals could be improved and made more cost-effective if managers were given greater authority over procurement and staff policy (and had the training to enable them to do so efficiently). The availability of improved facilities to measure efficiency gains could also be used to

39. Crude estimates by the Ministry of Finance based on 1999 data, show that income distribution could be slightly improved by removing tax credits for health and education spending (Reis, 2003).

reward productivity gains. The activity-based costing analysis, currently applied as a pilot programme in the hospital of *Nossa Senhora do Rosário*, could be instrumental to allow managers to detect areas where resources could be used more effectively and keep cost control. Transforming hospitals into public enterprises, subject to private-sector law and hard-budgeting constraints as planned, could also help to improve performance while containing costs.

Encouraging competition and extending market signals

50. A number of ways of improving the efficiency and the effectiveness of public outlays have been tried in OECD countries. Possible techniques include user charges, enhanced consumer choice (vouchers), creating internal competition and contracting-out. Some of these market mechanisms have been used in Portugal, but their extension could improve allocative efficiency.

User choice could be strengthened across jurisdictions…

51. Enhanced competition between alternative providers of public services would help to raise public spending efficiency and responsiveness to users' needs. Stimulating demand-side pressure to improve public sector performance would require removing the existing geographic restrictions on user choice, particularly for hospitals and compulsory education, as residents from one municipality are not entitled to use the services offered by another. The "money follows the user" principle could be applied more consistently through co-operation agreements between municipalities. This, though, would require accurate and transparent information on the cost structure of public service providers. To facilitate the development of cost-accounting, guidelines could be provided by the central government.

… and between public and private sectors

52. Empirical studies indicate that competition between public and private schools can improve learning outcomes in both. A central element in compulsory education spending could be to move towards funding based more on the number of students served and less on whether the institutions concerned are public or private. Some OECD countries have allowed parental choice of school, while letting the public funding follow the students as a type of voucher, thereby allowing public and private schools to compete. At present, existing differences in parental fees encourage social segregation, with public facilities taking a greater share of the children from low-income families and with special needs. To ensure a level playing field for this competition, and to avoid social segregation, Sweden and the Netherlands, for example, provide private schools with the same level of public funding, as public schools. Sweden also prevents private schools from charging tuition fees, while in the Netherlands market competition is sufficient to prevent private schools from charging fees.

An extended use of price signals could reduce excessive demand for costly public provision

53. There is scope to raise the price individual users pay for publicly-funded services, without raising serious distributional concerns, at least in tertiary education and in some areas of health spending. The high subsidy element involved in public education, together with high rates of return to tertiary education, call for an assessment of the level of cost recovery in public universities. University tuition fees could be raised and student loans could be made available at the same time. Education tax credits should be reconsidered to focus more on lowest income groups. Evidence from some OECD countries (*e.g.* United Kingdom, Australia and New Zealand) shows that participation in tertiary education does not fall with higher tuition fees when accompanied by means-testing mechanisms and loan arrangements that take graduates income

into consideration (Blöndal *et al.*, 2002). Moreover, besides reducing public costs in post-compulsory education, such a system can reduce inequality without compromising efficiency goals. An increase in tuition fees would reduce the regressive nature of public funding of post-compulsory education, while the greater availability of student loans would act to offset the impact of increased private costs of enrolment. Easier access to student loans may be important to young people from disadvantaged backgrounds, improving opportunities for all individuals to develop their potential.

54. In the health care area, higher co-payments could make households more cost aware and help them to limit excessive pharmaceutical consumption. It is important, however, that any increase in co-payments should not conflict with equity objectives. This can be achieved through increased differentiation of co-payments according to indicators of income levels or general health status. Alternatively, tax credits for drugs could be subject to a ceiling equivalent to the price of generics. Entry restrictions in the pharmacy sector should be eased; the market share of generic treatments should be raised and fixed margins on the sale of pharmaceuticals should be abolished.

Improving and expanding competitive tendering and public-private partnerships

55. The appropriate use of competitive tendering and contracting can raise efficiency and thereby allow a constant quality of service to be provided at lower costs — especially for technical services like cleaning, where savings typically range from 10 to 30 per cent. The sources of these savings include efficiency gains from economies of scale and specialisation, as well as improved work practices. However, contracting is not free from pitfalls and a careful assessment should be made in each case to weigh the benefits from efficiency gains against transaction costs and to ensure that contracting is made in a way that does not lock the public purchaser in with a single private monopoly supplier. Moreover, public managers need to acquire the capabilities associated with managing competitive tenders and contractual relations.

56. The recourse to private sources of financing through public-private partnerships will continue with the creation of ten new hospitals. Public-private partnerships are often used as a means both of raising more funds for investment and benefiting from private sector expertise. Moreover, involving private firms as suppliers may make competition more dynamic, as they are more likely than public agencies and private non-profit institutions to expand their activities. However, experience in other countries shows that contracts need to be well designed[40] to insulate the budget from the risk of project failure.

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40. For guidelines on contracting out and public-private partnerships, see *OECD Economic Survey of Mexico* (2000*a*) and *OECD Economic Survey of the United Kingdom* (2001*c*).

ANNEX I

LOCAL GOVERNMENT FUNDING[41]

1. A slow process of devolving spending competencies to local governments has recently started and municipalities are now deciding several policies and organisation matters (OECD 2001*a*). A new Law replaced the 1987 Law on Local Finances in 1998. This defines in detail all the revenues to which *autarquias* (municipalities) are entitled and sets an annual ceiling on their debt servicing.

2. *Central and regional government transfers:* Local authority finances largely depend on an annual transfer from the central and regional governments. In 2000, these accounted for about 40 per cent of local government total revenues. The annual transfer is distributed to *autarquias via* three different funds defined by law: the *Fundo de Base Municipal* (FBM), the *Fundo Geral Municipal* (FGM) and the *Fundo de Coesao Municipal* (FCM) that correspond to 13.6, 62 and 16.7 per cent of the transfers respectively. The remaining 7.7 per cent is distributed directly to the *Freguesias* (parishes). The FBM grants a minimum transfer to each local authority that is apportioned in equal amounts. The calculation of FGM shares is made in two steps. The first divides the total amount into three parts: the mainland and the two autonomous regions according to number of residents and hotel bed capacity, number of municipalities and geographical area. The second divides the amount amongst the component municipalities according to number of residents and hotel bed capacity. The FCM has been created to guarantee the equitable distribution of public resources and balancing social and economic differences. Finally, 40 per cent of the total transfer received by each local authority must be reserved as funds available for investment projects and recorded as capital receipts.

3. The 1998 Law has clarified the rules governing transfers from the central government to local authorities and made an important change to the transfer formula. Since 1999, the transfer system has been based on a backward-looking approach. The general grant to transfer each year is linked to 33 per cent of the simple average of revenues from three central government taxes: the personal income tax (IRS), the corporate income tax (IRC) and the value added tax (VAT) accrued the year before the budget law is designed. It follows that the central government transfer in year *n* is equivalent to: $Transfer_n = 0.33x\frac{IRS_{n-2} + IRC_{n-2} + IVA_{n-2}}{3}$. According to the 1987 Law on Local finances, the total amount of the annual central government grant was transferred according to the anticipated trend in VAT according to the following formula: $Transfer_n = Transfer_{n-1}x\frac{IVA_n}{IVA_{n-1}}$. Under the new Law, central government transfers are higher than under the old system when the economy slows down, because they are based on past values of tax receipts. On the other hand, they are lower when the economy picks up again.

41 . This annex is based on the description of local government funding in Correia da Cunha and Silva (2002).

4. *Local taxes:* In 2000, own-taxes of the sub-central level of governments were the second most important source of local finance and accounted for about 35 per cent of the total. Local taxes include, *inter alia*: the *Derrama* a surcharge on the Corporate Income Tax; the *Sisa*, a tax on property transactions and the *Contribuçao Autarquica*, a tax on the value of real estates. Local authority autonomy over these revenues is confined to setting the tax rates within strict limits fixed by the Law for local finance.[422]

5. *EU funds:* Municipalities also receive grants from the EU through the Structural Funds and from the European Regional Development Fund (FEDER) to co-finance investment projects. Grants from the EU in 2000 amounted to about 6 per cent of total municipal revenues. Local authorities have more power to influence the amount of EU transfers than with the previous sources of revenues because the amount of transfers depends on the quality and eligibility of the individual investment projects submitted for co-financing purposes.

6. *Borrowing:* Finally, local authorities have access to capital markets and may borrow or issue bearer bonds to finance gaps between expenditures and revenues. Short-term loans may be used to meet cash constraints, whereas medium and long-term loans, including bonds, can only be used to finance investment spending or to face situations of structural financial imbalance or financial collapse. The Law for Local Finances also establishes limits on the amounts of short-term loans and on annual debt servicing, depending on the total amount of funds transferred by the State to the local authority and past investment spending. These limits do not include, however, medium and long-term loans contracted for carrying out projects co-financed by European Structural Funds, loans used for the repayment of other loans, loans to meet extraordinary expenses due to natural calamities, and loans for the acquisition, construction or repair of council housing. Moreover, the limit on annual debt servicing has become less stringent over the years as interest rates fall. As a result, a number of municipalities are currently experiencing large deficits.

7. The 2002 Budgetary Stability Law allows the central government to impose indebtedness ceilings in order to control local authority spending and deficit problems that may ensue. Central government transfers can be reduced if the indebtedness limits are not respected and or/if financial information is not provided in time.

42. For an assessment of local taxes in Portugal see Bronchi and Gomes Santos (2001).

ANNEX II

PRIVATE INTERNAL RATES OF RETURN ON EDUCATION[43]

1. The private internal rate of return on education is an indicator that measures the effects higher educational attainment has on the earnings of workers relative to the cost of the initial investment on education. It can be interpreted as the average increase in earnings related to the attainment of extra years of schooling beyond compulsory education.

Calculation

2. The private internal rate of return on education (ROR) is defined as the discount rate "δ" that equalises the real costs of education at a given level during the period of study to the real gains from education thereafter. It is calculated from the following general formula:

$$\sum_{t=a}^{a+l}(1+\delta)^{-(t-a)} \text{ x } C^{e} \text{ (t)} = \sum_{t=a+l+1}^{64}(1+\delta)^{-(t-a)} \text{ x } B^{e}(t)$$

where: t is the age, *a* the typical age at the start of the period of education in question, *l* the theoretical length of the education period, C^e the costs of the education and B^e the real benefits linked to an investment in the education. The benefits are assumed to last until the age of 64. The parameters *a* and *l* depend on the particular type of education beyond the compulsory level.

3. According to the factors that affect the costs and the benefits, different indicators can be derived. Thus considering only the gross differential earnings and the length of education one can define a narrow rate. Taking into account factors like the tax system, the unemployment risk and private spending on education a more comprehensive rate can be evaluated.

4. The costs incurred by individuals are their foregone earnings net of tax while studying adjusted for the probability of being in employment, plus any education fees minus the resources made available in the form of grants and loans. In the particular case of tertiary (university) education the formula is:

$$C^{u}(t) = \left[1-\tau\left(E^{s}(t)\right)\right] \times \left[1-ur^{s}(t)\right] \times E^{s}(t) \times (1+g)^{(t-a)} + F^{u} \times (1+g)^{(t-a)} - S(t)$$

where τ is the average tax rate for base-year earnings $E^{s}(t)$ of a single person with upper-secondary education at age *t*, ur^s is the unemployment rate of people with upper-secondary education at age *t*, *g* is the

43. For a detailed analysis of the theory and of the methodology see Blondal *et al*. (2002), "Investment in human capital through post-compulsory education and training : selected efficiency and equity aspects", OECD *Economics Department Working Paper* No. 333 available through OECD's Internet Web site http://www.oecd.org/eco http://appli1.oecd.org/olis/2002doc.nsf/linkto/eco-wkp(2002)19/$FILE/JT00129531.PDF).

growth rate of labour productivity in the economy as a whole, F^u is the annual private cost of tertiary education in the base-year, and $S(t)$ is student grants and loans at age *t*. The scaling factor $(1+g)^{(t-a)}$ allows to obtain future earnings by the scaling up of base-year earnings with the productivity growth rate for the economy as a whole. For the sake of simplicity, it is assumed that average tax rates remain at the level *t* throughout. The costs of upper-secondary education are similarly defined.

5. The benefits are the gains in post-tax earnings adjusted for higher employment probability minus the repayment, if any, of public support during the period of study and are expressed in the case of tertiary education as:

$$B^u(t) = [1-\tau(E^u(t))] \times [1-ur^u(t)] \times E^u(t) \times (1+g)^{(t-a)} - \\ [1-\tau(E^s(t))] \times [1-ur^s(t)] \times E^s(t) \times (1+g)^{(t-a)} - R(t)$$

where $E^u(t)$ is the base-year earnings of a single person with tertiary education and $R(t)$ the repayment of loans. The benefits of upper-secondary education are similarly defined.

6. The calculations assume that the student is in full-time education and has no work activity, and hence no earnings while studying. Moreover, as the probability of course dropout has not been taken into account, the internal rates are conditional on successful completion of the relevant education programmes.

The case of Portugal

7. In the case of Portugal, two estimations of the ROR have been calculated: the ROR based on pre-tax earnings and the length of studies (the narrow rate) and a "comprehensive rate" estimated from a simplified form of the equation, taking into account only the effects of the tax system and the unemployment risk.[44] It has been assumed that the standard length of upper-secondary is three years and that of tertiary education four years, the typical ages at the start of upper-secondary education and tertiary education have been set respectively at 15 and 18. Both rates suggest a large return, at upper-secondary as well as at tertiary levels (Table A1). These results are in line with those found in other studies.[45]

Table A1. **Private rates of return, 1999**

Per cent

Education attainment	Narrow rate	Comprehensive rate
Upper-secondary	11.9	11.3
Tertiary	21.8	23.9

Source : Secretariat's calculations.

44. Data on education fees, loans and grants were not strictly comparable with those of countries shown in Box 9 table.

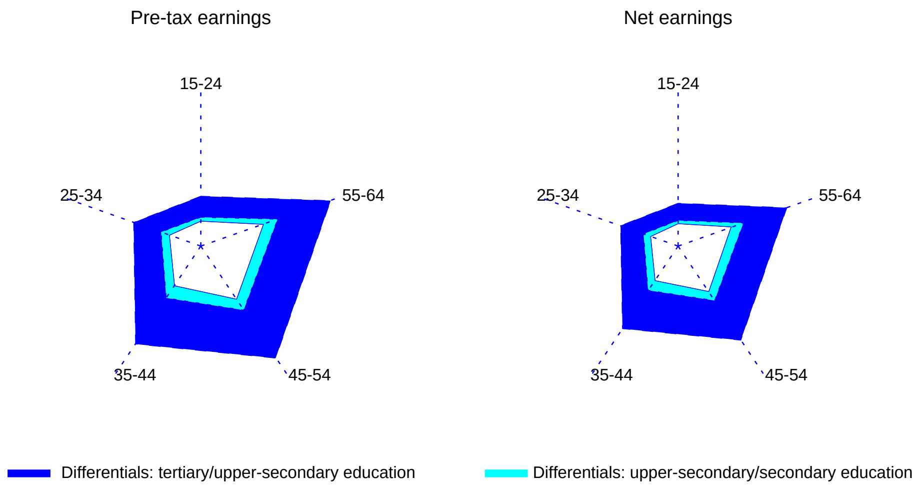
45. Pereira and Martins (2002), "Education and Earnings in Portugal", Conference of the Bank of Portugal, 24-25 May 2002. Barceinas-Paredes *et al*. (2001), "Unemployment and returns to Education in Europe", PURE project, Final Report.

8. According to the narrow indicator, ROR for the tertiary education is much larger than the one for upper-secondary education. Different reasons may have influenced these results. *First*, the gross wage differentials are narrower between people with secondary education and people with upper-secondary education than between people with upper-education and people with tertiary education (Figure A1). *Second*, the relatively short education programmes have also to be considered as prime determinants.

9. The results are not much altered for the ROR based on net earnings; this can be explained by the relatively low progressivity of the tax system.[46] Hence in the case of upper-secondary ROR the taxes reduce the internal rate by one-third of percentage point, and for the ROR in tertiary education by 0.5 percentage point.

Figure A1. **Wages differential by level of education and by age**

Men, 1999



Source: 1999, Quadros de Pessoal.

10. Unemployment risk differentials are expected to increase the internal rates of return compared with the narrow rates, reflecting a lower risk for more educated people. In the Portuguese case, however, the results for the upper-secondary education have been affected negatively by an adverse labour market in 1999, the year over which the RORs have been calculated, since in 1999 the global unemployment rate was 4.1 for people with upper-secondary education whereas it was 3.9 per cent for people with lower education. Conversely, for tertiary education where the unemployment rate is low at 3.1 per cent, the unemployment differential adds 2.1 percentage points to the narrow rate.

11. These estimations have several important limitations. They assume stability in the wage premia through the life cycle and are based on average earnings and costs. They are strongly influenced by the length of studies and in practice, there can be considerable variation in rates of return for different fields of study or particular social groups. Moreover they are likely to be biased upwards as unemployment, retirement and early retirement benefits are not taken into account. Finally the non-monetary benefits of investment in education (for instance better health) are not taken into consideration.

46. See *OECD Economic Survey of Portugal*, 2001.

Data sources

12. The calculations have focused on ROR for men. Gross medium earnings data have been obtained from the 1999 “Quadros de Pessoal”, a large data set that includes information about employees and their firms. They refer to full-time workers aged 15 to 64 and are available for ten-year age intervals and by type of education attainment. The categories of phases of education follow the ISCED convention.[47] Upper-secondary programmes are the final stage of secondary education. Entry to tertiary education requires completion of upper-secondary education.

13. The income tax rates and the social contributions paid by the employers come from *Taxing Wages* 2000-2001 and refer to 1999.

14. The unemployment rates by education and age come from *Education at a Glance* and refer to 1999.

15. The labour productivity growth rate used in the calculation is set equal to the average rate in the medium-term reference scenario for 2003-07 of the OECD Economics Department.

47. For a full description see OECD, *Education at a Glance* (2002).

BIBLIOGRAPHY

ADEMA, W. (2001),
"Net social expenditure, second edition", *Labour Market and Social Policy -- Occasional Papers*, No. 52, OECD, August, Paris. http://olishdweb.oecd.org/2001/08/29/JT00111869doc/index.asp

ANDERSEN, A. (2000),
"Value for money drivers in the private finance initiative", Treasury Task Force, United Kingdom.

BLÖNDAL, J.R. and J. K. KRISTENSEN (2002),
"Budgeting in the Netherlands", *OECD Journal on Budgeting*, Vol. 1, No. 3, Paris.

BLÖNDAL, S., S. FIELD and N. GIROUARD (2002),
"Investment in human capital through post-compulsory education and training: selected efficiency and equity aspects", *OECD Economics Department Working Papers*, No. 333.

BRONCHI, C. and J.C. GOMES SANTOS (2001),
"Reforming the tax system in Portugal", *OECD Economics Department Working Papers*, No. 302, Paris.

CORREIA DA CUNHA, J. and P. SILVA (2002),
"Finanças locais e consolidação orçamental em Portugal", Banco de Portugal, *Economic Bulletin*, March.

LUNFDSGAARD, J. (2002),
"Competition and efficiency in publicly funded services", *OECD Economics Department Working Papers*, No. 331, Paris.

MARLIER, E. and M. COHEN-SOLAL (2000),
"Social benefits and their redistributive effect in the EU" *EUROSTAT Statistics in Focus*, Theme 3-9.

OECD (1999),
Strategic Review and Reform -- Portugal, September, Paris.

OECD (2000),
Economic Survey of Mexico, Paris.

OECD (2001*a*),
Economic Survey of Portugal, April, Paris.

OECD (2001*b*),
"Knowledge and skills for life", *PISA Report*, Paris.

OECD (2001*c*),
Economic Survey of United Kingdom, Paris.

OECD (2002*a*),
OECD Economic Outlook No. 72, December, Paris.

OECD (2002*b*),
Economic Survey of Italy, February, Paris.

OECD (2002*c*),
Education at a Glance, Paris.

OECD (2002*d*),
Health data, August, Paris.

OECD (2003),
Economic Survey of Portugal, Paris.

PEREIRA, P. and F. LIMA (1999),
"Wages and human capital: evidence from the Portuguese data", in "Returns to human capital in Europe: a literature review", edited by R. Asplund and P. Pereira, ETLA –The Research Institute of the Finish Economy, Taloustieto Oy.

PEREIRA, P. and P. MARTINS (1999),
"Returns to education in Portugal: 1982-1995: High and Rising", mimeo prepared under the scope of the 15-country "PuRE - Public Funding and Private Returns to Education" European Commission TSER project.

PEREIRA, A.M. and J.M. ANDRAZ (2002),
"Public investment in transportation infrastructures and economic performance in Portugal", *Review of Development Economics*, forthcoming.

PORTUGAL, P. and M. CENTENO (2001),
"Os Salários da Funçao Pública", Banco de Portugal, *Economic Bulletin*, September.

REIS, H. (2003),
Despesa Fiscal com Saúde e Educacão em IRS: efeitos sobre a progressividaded de IRS, ¨Portuguese Ministry of Finance, *mimeo.*

St. AUBYN, M. (2002),
"Evaluating efficiency in the Portuguese health and education sectors", *mimeo* presented at the conference on *Desenvolvimento Económico Português no Espaço Europeu: Determinantes e Políticas* organised by Bank of Portugal, 24-25 May 2002.

VAN DEN NOORD, P. (2002),
"Managing public expenditure: the UK approach", *OECD Economics Department Working Papers*, No. 431, Paris.

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