

## MANAGING PUBLIC EXPENDITURE: SOME EMERGING POLICY ISSUES AND A FRAMEWORK FOR ANALYSIS

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### 1. Introduction

Most OECD countries have experienced improvements in overall fiscal positions in recent years. In terms of the general government finance balance, the OECD area as a whole has achieved a surplus in 2000 for the first time since 1969, which is projected to be maintained in 2001-02 (see *Economic Outlook* 68, December 2000). As a result, there has been a widespread tendency to reduce taxes in many countries, including in Europe, and there are also signs that restraint in public expenditure is being relaxed. At this stage these trends can be easily accommodated without seriously weakening underlying fiscal positions in many countries, as potential economic growth is considered to have picked up and interest rates are low. However, uncertainty about the true underlying strength of fiscal positions remains, as the surprisingly strong revenue growth in recent years may incorporate a larger cyclical component (and a correspondingly smaller structural component) than assumed<sup>1</sup>. Therefore, while tax reductions are welcome in view of the scope they provide for improving incentive structures in the economy, in a longer-term perspective, with population ageing, public expenditure restraint to match these tax cuts is called for.

Obviously, in a fiscal surplus environment expenditure restraint is a delicate issue and not easily achieved. After a relatively long episode of fiscal rigour, pent-up demand for public goods and services in many countries may result into more calls for increased government spending. With fiscal positions strong, these calls may be met without a sufficiently careful trade-off between alternatives or without a sufficient evaluation of

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\* OECD. This paper is based on documentation originally prepared for the semi-annual meeting of Working Party No. 1 of the OECD's Economic Policy Committee on 16 and 17 October 2000. However, the authors are writing in a personal capacity and it does not necessarily reflect the view of the Organisation or its Member countries. They are indebted to Thomas Liebig for his contribution, to Jon Blöndal and several colleagues in the Economics Department for comments and to Anne Eggimann and Chantal Nicq for technical assistance.

<sup>1</sup> See Van den Noord (2000).

the possible consequences (economic, social, environmental or other) of spending choices. To the extent an assessment of such choices involves normative judgements, economic analysis has little to say. However, where there is scope for a given set of policy objectives to be achieved in more cost-effective ways, there is a role for economic analysis. Public expenditure is often examined in three dimensions. The first dimension refers to the macroeconomic costs of public expenditure, which include the economic distortions stemming from the tax burden and fiscal sustainability risks associated with a growing debt burden. The second dimension refers to allocative efficiency, or the outcomes achieved for a marginal unit of public expenditure, and the third one to technical efficiency, or the resource inputs for a marginal unit of output of public goods and services.

The purpose of this paper is to highlight the main policy issues related to public expenditure in OECD countries and to provide an analytical framework for its assessment. After a brief review of public expenditure developments in Section 2, Section 3 discusses the three-pronged analytical concept referred to above. Section 4 examines the various policy options that might be considered and that have been experimented with in some countries with a view to raising the performance of public expenditure. Section 5 concludes with an inventory of assessment criteria that might serve to facilitate further analysis for individual countries.

## **2. Trends in public expenditure and forces shaping them**

This section identifies recent trends in public expenditure in aggregate and by economic or functional category, and highlights their distinguishing features, as well as the factors that have shaped these trends and that are likely to operate in the future<sup>2</sup>. These factors include demographics, macroeconomic conditions and policy requirements, regulatory reform, the design of entitlement programmes, income effects and cost developments.

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<sup>2</sup> For a review covering a longer time span, see Tanzi and Schuknecht (2000).

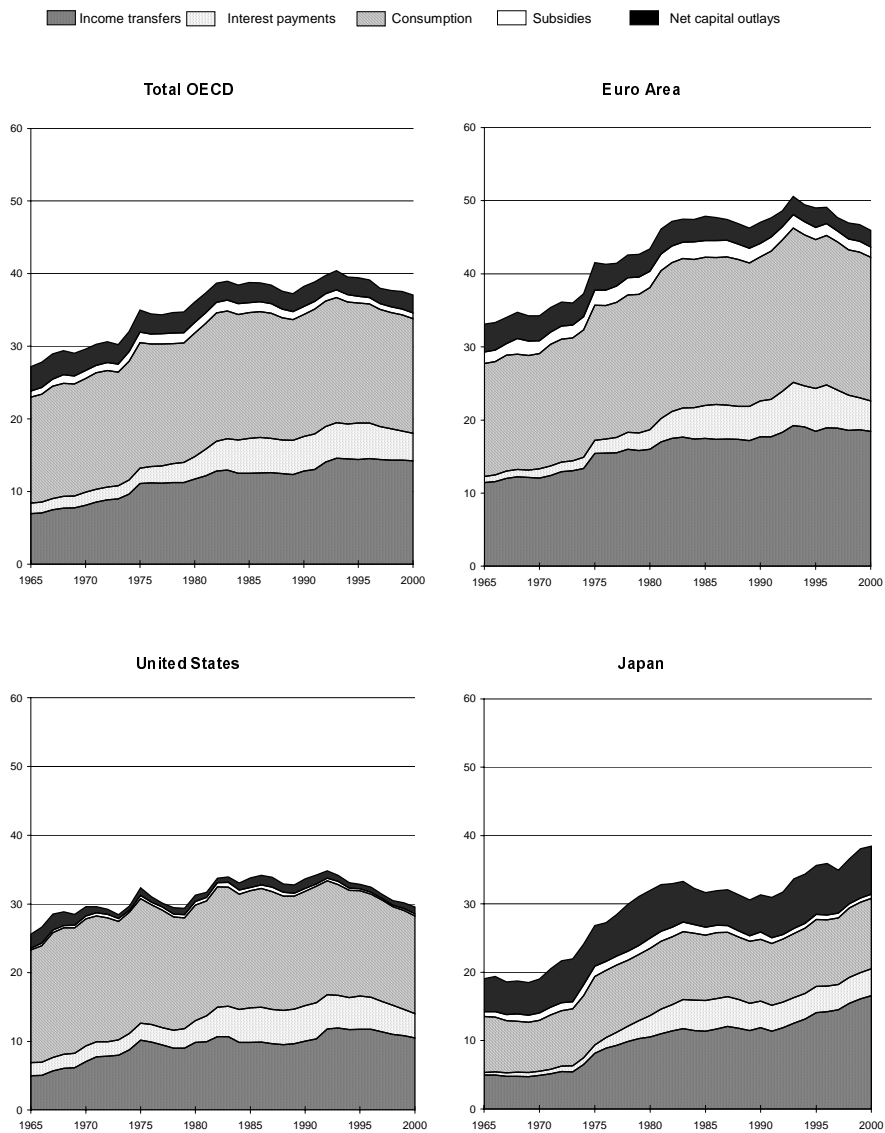
### *2.1 Trends in general government expenditure*

Although institutional arrangements and the boundaries of the public sector vary both over time and widely across countries, national accounts data for the general government provide a reasonable basis for examining the main trends in public expenditure on a cross-country basis. The totals, as well as a breakdown by economic category for most OECD countries since 1965, are reported in Figure 1, Table 1 and Table 2. A more detailed breakdown can be found in the Annex. The main features of these trends are:

- Total spending as a share of GDP rose rapidly nearly everywhere until the early 1980s. Since then most countries have given greater weight to expenditure restraint, often in the context of medium-term fiscal strategies, and growth of spending generally slowed. Since the early 1990s most countries, with Japan being the most notable exception, have achieved reductions to levels below those of the early 1980s.
- Government spending displays a clear counter-cyclical pattern in most OECD countries, rising sharply at the time of recessions around 1975, 1982 and the early 1990s. Given that each successive cyclical spending peak has exceeded previous peaks it is probably too early to be certain that the long-term upward spending trend has been broken. The test will come during a future downturn.
- There are marked differences in spending levels across major OECD regions, and these differences have changed substantially over time. In 1965, spending in the United States was around 26 per cent of GDP, just below the OECD average, some 7 percentage points higher than in Japan and some 7 percentage points lower than in the euro area. During the 35 years since then, the rise in spending in the United States, around 4 percentage points, has been far less than in the euro area (12 percentage points) and in Japan (19 percentage points). The result is that it is now Japan where spending, at 38 per cent of GDP, is close to the OECD average (37 per cent of GDP), while in the United States it is some 7 percentage points below average, and in the euro area it is nearly 9 percentage points above average.
- The major factor that has put upward pressure on spending over this period in nearly all countries has been the establishment and expansion

Figure 1

**Trends in general government total outlays  
by economic category  
(percent of GDP)**



**Table 1**

**General government outlays, by country**  
(percent of GDP)

|                             | 1965 | 1970 | 1975 | 1980 | 1985 | 1990 | 1995 | 2000 <sup>1</sup> |
|-----------------------------|------|------|------|------|------|------|------|-------------------|
| Australia                   | 24.6 | 25.2 | 31.3 | 32.3 | 37.8 | 33.0 | 35.4 | 31.4              |
| Austria                     | 36.6 | 38.0 | 44.4 | 47.2 | 50.1 | 48.5 | 52.4 | 48.8              |
| Belgium                     | 35.0 | 39.7 | 47.6 | 53.4 | 57.3 | 50.8 | 50.3 | 46.7              |
| Canada                      | 27.8 | 33.8 | 38.9 | 39.1 | 45.4 | 46.0 | 45.3 | 37.8              |
| Denmark <sup>2</sup>        | 31.8 | 40.1 | 47.1 | 55.0 | 58.0 | 53.6 | 56.6 | 51.3              |
| Finland                     | 30.3 | 29.7 | 37.0 | 37.1 | 42.3 | 44.4 | 54.3 | 44.8              |
| France                      | 37.6 | 37.6 | 42.3 | 45.4 | 51.9 | 49.6 | 53.6 | 51.2              |
| Germany                     | 35.3 | 37.2 | 47.1 | 46.5 | 45.6 | 43.8 | 46.3 | 43.0              |
| Greece                      | 22.0 | 23.3 | 27.1 | 29.6 | 42.3 | 47.8 | 46.6 | 43.7              |
| Ireland                     | 36.0 | 37.7 | 40.7 | 47.6 | 50.5 | 39.5 | 37.6 | 27.7              |
| Italy                       | 32.8 | 32.7 | 41.0 | 41.8 | 50.6 | 53.1 | 52.3 | 46.7              |
| Japan                       | 19.0 | 19.0 | 26.8 | 32.0 | 31.6 | 31.3 | 35.6 | 38.2              |
| Korea                       | 14.5 | 14.8 | 16.9 | 19.2 | 17.6 | 18.3 | 19.3 | 23.4              |
| Mexico                      | ..   | ..   | ..   | ..   | ..   | ..   | 21.4 | ..                |
| Netherlands                 | 34.7 | 37.0 | 45.7 | 50.9 | 51.9 | 49.4 | 47.7 | 41.5              |
| Norway                      | 29.1 | 34.9 | 39.8 | 43.9 | 41.5 | 49.7 | 47.6 | 40.6              |
| Portugal <sup>2</sup>       | 18.1 | 18.0 | 25.2 | 28.1 | 42.9 | 44.2 | 41.2 | 42.1              |
| Spain                       | 19.5 | 21.7 | 24.1 | 31.3 | 39.4 | 41.4 | 44.0 | 38.5              |
| Sweden                      | 33.5 | 41.7 | 47.3 | 56.9 | 59.9 | 55.8 | 62.1 | 53.9              |
| United Kingdom <sup>2</sup> | 33.5 | 36.7 | 44.4 | 43.0 | 44.0 | 41.9 | 44.4 | 38.4              |
| United States               | 25.6 | 29.6 | 32.3 | 31.3 | 33.8 | 33.6 | 32.9 | 29.3              |
| Euro area                   | 33.1 | 33.9 | 40.9 | 43.0 | 47.2 | 46.3 | 49.1 | 45.1              |
| OECD                        | 26.9 | 29.2 | 34.4 | 35.5 | 38.1 | 38.0 | 39.4 | 36.5              |

1. Estimates.

2. Prior to 1988 in the case of Denmark, 1995 for Portugal and 1987 for the United Kingdom data are backward extrapolations based on earlier National Accounts series.

Source: OECD Economic Outlook 68, December 2000, OECD National Accounts and OECD calculations.

**Table 2. Estimated general government outlays by economic category for the year 2000**  
(percent of GDP)

|                | Income transfers | Subsidies | Interest payments | Consumption | Net capital outlays <sup>1</sup> | Total outlays |
|----------------|------------------|-----------|-------------------|-------------|----------------------------------|---------------|
| Australia      | 8.3              | 1.2       | 2.0               | 18.5        | 1.4                              | 31.4          |
| Austria        | 18.3             | 2.5       | 3.5               | 19.4        | 5.1                              | 48.8          |
| Belgium        | 14.4             | 1.5       | 6.7               | 21.0        | 3.1                              | 46.7          |
| Canada         | 10.9             | 1.1       | 7.4               | 18.4        | 0.0                              | 37.8          |
| Denmark        | 17.2             | 2.3       | 4.5               | 25.3        | 2.0                              | 51.3          |
| Finland        | 12.6             | 1.5       | 3.1               | 20.8        | 6.7                              | 44.8          |
| France         | 18.1             | 1.3       | 3.3               | 23.4        | 5.1                              | 51.2          |
| Germany        | 18.6             | 1.7       | 3.4               | 18.8        | 0.4                              | 43.0          |
| Greece         | 16.1             | 0.2       | 7.2               | 15.0        | 5.2                              | 43.7          |
| Ireland        | 9.7              | 0.7       | 2.2               | 11.8        | 3.2                              | 27.7          |
| Italy          | 17.3             | 1.2       | 6.5               | 17.9        | 3.7                              | 46.7          |
| Japan          | 15.7             | 0.6       | 4.0               | 10.1        | 7.8                              | 38.2          |
| Korea          | 3.3              | 0.3       | 1.6               | 9.7         | 8.6                              | 23.4          |
| Netherlands    | 11.8             | 1.6       | 3.9               | 22.6        | 1.5                              | 41.5          |
| Norway         | 13.7             | 2.5       | 1.6               | 18.8        | 4.1                              | 40.6          |
| Portugal       | 12.5             | 1.2       | 3.2               | 21.0        | 4.2                              | 42.1          |
| Spain          | 12.4             | 1.0       | 3.6               | 16.9        | 4.6                              | 38.5          |
| Sweden         | 18.3             | 1.8       | 4.1               | 26.5        | 3.2                              | 53.9          |
| United Kingdom | 13.1             | 0.5       | 2.7               | 18.3        | 3.8                              | 38.4          |
| United States  | 10.5             | 0.2       | 3.6               | 14.1        | 0.9                              | 29.3          |
| Euro area      | 16.7             | 1.4       | 4.2               | 19.7        | 3.0                              | 45.1          |
| OECD           | 12.8             | 0.8       | 3.8               | 15.7        | 3.4                              | 36.5          |

1. Net fixed investment plus net capital transfers.

Source: OECD Analytical Database figures underlying OECD Economic Outlook 68, December 2000.

of programmes and provision of services in the social policy domain (public pensions, income support, health care, education and other public services)<sup>3</sup>. The income support element of these entitlements is reflected in a persistent rise in income transfer payments until the mid-1990s. While these payments are no longer rising at the area-wide level, they have not fallen much and have made little contribution to the overall spending decline since the early 1990s.

- A second factor that contributed importantly to upward pressure on spending until the mid-1990s was debt interest. This reflected a combination of rising public indebtedness, as large and sustained budget deficits became common after the first oil price shock in 1974, and rising interest rates. As interest rates have declined and budget positions have improved during the 1990s, these forces have reversed and debt interest payments have declined, accounting for half of the overall decline in spending at the area-wide level since 1995<sup>4</sup>.
- Other major categories of spending, i.e. subsidies, government consumption and net government capital outlays, have displayed few general patterns and little overall trend. Net capital outlays and subsidies have made modest contributions to the recent declines in total spending in many countries (capital spending in Japan is the major exception, although even there net capital outlays are now only at their 1980 level as a share of GDP). While only a few countries have significantly reduced government consumption (the United States, Italy and, especially, Canada stand out during the past decade), such spending has not been a source of significant pressure in most countries since the trend toward spending restraint began in the early 1980s.

Upward pressure on spending is likely to re-emerge in the decades ahead. The major force behind this pressure would be the ageing of populations and consequent demands this implies on social spending, notably on pensions, health care and associated personal services. Other forces may include the need to restore spending in areas where restraint

<sup>3</sup> See for example Oxley and Martin (1991), MacFarlan and Oxley (1996) and OECD (1998a).

<sup>4</sup> It should be noted that recorded data overstate the importance of debt interest payments because the part that reflects the inflation compensation component in nominal interest rates has a counterpart in the erosion of the real value of outstanding debt, *i.e.* an inflation tax, which is never recorded in the budgetary accounts. This was significant when inflation was high, but at this stage, with inflation low in most countries, the bulk of interest payments imply a real burden on taxpayers.

has been applied and could prove to have gone too far, and the likelihood of rising interest rates in countries where these have fallen to low levels but public indebtedness remains high.

## 2.2 *Breaking down public expenditure by function*

For policy purposes it is important to focus on expenditures in terms of their functions, each of which may involve a mix of economic categories, since measures to affect spending must be justified in terms of their concrete purpose. The breakdown in Table 3 attempts to group government spending in line with basic concepts of public economics. Four major types of government functions which call for expenditure (over and above debt servicing, which is obligatory) are distinguished, each referring to different cases where markets and prices will fail to result in efficient outcomes, and therefore call for government intervention<sup>5</sup>:

- *Public goods and services.* This category comprises the provision of essential “pure” public goods and services that cannot be rationed by the price mechanism and therefore would not be supplied in efficient amounts if markets were used to make them available. Examples are national defence and general public services such as administration, legislation and regulation.
- *Merit goods and services.* These are public goods that in principle could be (and in most countries to some extent are) made available through markets. In many cases, government provision of such goods and services is justified because of a conviction that they would otherwise be provided in less than the efficient amount, because a significant number of consumers lack the required purchasing power, while externalities give these goods and services a public goods element. For example, government provision of education is common because citizens may ignore the social return of human capital investment, or are unable to fund it. Usually informational asymmetry is mentioned as an important additional economic motive for the government to be engaged in the delivery or provision of merit goods and services. These asymmetries limit the ability of the consumer to identify the quality of the goods and services fully and therefore distort

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<sup>5</sup> This breakdown has been introduced by Oxley and Martin (1991).



prices and the quantities delivered. Health care is an important example in this regard.

- *Economic services.* This refers to the provision or co-funding of private goods or services by the government. Intervention has often been felt to be desirable in markets for goods and services that are prone to natural monopolies, where externalities are judged to result in inefficient supply if provision is left to the market, or where particular groups of providers are felt to warrant assistance. Prominent examples include public utilities (where entry barriers are associated with the sunk cost of distribution networks) and financial support for specific activities such as research and development, small and medium-sized enterprises and agriculture. It should be noted that where these services are provided by public enterprises their cost is not consolidated with the general government accounts. Hence their operations will only be reflected in public expenditure to the extent that the government subsidises them.
- *Social transfers.* These are transfers that provide support for income and living standards. Beneficiaries may include those whose market income is low or has declined sharply, or who face exceptional expenses due to old age, disability, sickness, unemployment, etc.<sup>6</sup>.

Unfortunately, the functional breakdown in Table 3 covers a narrower range of countries and a shorter period than the breakdown by economic categories due to data constraints. In particular, the series only start in 1980 and, for most countries, the latest year for which data are available is 1995, due to problems associated with the adoption of the new national accounting standards, SNA93 and ESA95. Moreover, as the data are drawn from a range of sources aside from the national accounts, they are not always comparable across countries. Nevertheless, a few broad patterns emerge from Table 3. First, the share of “pure” public goods in GDP has remained fairly stable in most countries in the sample during both the 1980s and the first half of the 1990s. Major exceptions are the United Kingdom, where the expenditure share of public goods sharply declined during the 1980s, and the United States, where a marked drop in

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<sup>6</sup> Obviously, this functional category largely overlaps with the economic category of income transfers. However, there are differences; the latter category includes income transfers to other countries (for example contributions to international institutions and development aid), whereas the former includes both cash transfers and imputed transfers in kind.

defence spending after the end of the cold war led to a fall in public goods expenditure in the 1990s. In most countries the share of economic services in GDP has remained broadly constant as well, although significant falls were recorded in Japan and Norway in the 1980s and in Germany, Italy, the United Kingdom and Australia in the 1990s. By contrast, the main spending hikes have been registered in the social policy area (merit goods and social transfers), both in the 1980s and 1990s.

Although functional spending patterns have thus been subject to change in the past two decades, the overall picture has remained that in those countries with large amounts of government spending relative to GDP, much of that spending is on social transfer and merit goods (Figure 2). Most European countries are in the upper range of total expenditures, as well as merit goods and social transfer expenditures, whereas the United States, Japan, Australia, Korea and New Zealand are in the lower range. On average public spending on social transfers and merit goods in the countries in the sample in 1995 amounted to nearly 30 per cent of their GDP. Moreover, the range from 7½ per cent of GDP in Korea to nearly 40 per cent of GDP in Sweden was wide (but see below for a comparison which includes private spending). Meanwhile, public goods on average represented around 7 per cent of GDP in 1995, with the Netherlands, France and Spain being at the upper end of the scale. Economic services spending is relatively small and varies little across countries.

### *2.3 Some measurement issues: the limits to general government data*

Notwithstanding the advantages of general government data drawn from national accounts in terms of availability and cross-country comparability, classification and measurement issues are likely to make it necessary to draw on other data sources. Institutional arrangements and the borders of the public sector do not always correspond well to the general government. In particular, financial relationships with state-owned enterprises are an important element of public finances in some countries. Moreover, the assessment of policies that motivate government spending may not be possible without reference to any private spending that supplements or accompanies it. Two issues stand out.

**Table 3**  
**Structure of government outlays by function**  
*(percent of GDP<sup>1</sup>)*

|                  | Total expenditure | Public goods |                  |                       | Merit goods |           |        |                       | Income transfers |          |            |          |                      |              | Economic services | Public debt interest |                            |     |
|------------------|-------------------|--------------|------------------|-----------------------|-------------|-----------|--------|-----------------------|------------------|----------|------------|----------|----------------------|--------------|-------------------|----------------------|----------------------------|-----|
|                  |                   | Total        | Defence services | Other public services | Total       | Education | Health | Other social services | Total            | Pensions | Disability | Sickness | Family cash benefits | Unemployment |                   |                      | Housing and other benefits |     |
| <b>Australia</b> |                   |              |                  |                       |             |           |        |                       |                  |          |            |          |                      |              |                   |                      |                            |     |
| 1980             | 34.8              | 7.8          | 2.5              | 3.0                   | 2.3         | 10.5      | 5.9    | 4.4                   | 0.2              | 6.8      | 3.8        | 0.8      | 0.1                  | 0.9          | 0.7               | 0.4                  | 5.9                        | 3.1 |
| 1990             | 36.4              | 8.1          | 2.0              | 2.9                   | 3.2         | 10.4      | 4.3    | 5.3                   | 0.8              | 7.8      | 3.2        | 1.2      | 0.2                  | 1.3          | 1.4               | 0.6                  | 6.4                        | 3.7 |
| 1995             | 37.7              | 8.2          | 1.9              | 3.0                   | 3.3         | 10.5      | 4.5    | 5.5                   | 0.5              | 9.0      | 3.2        | 1.2      | 0.1                  | 2.2          | 2.0               | 0.3                  | 5.6                        | 4.1 |
| <b>Austria</b>   |                   |              |                  |                       |             |           |        |                       |                  |          |            |          |                      |              |                   |                      |                            |     |
| 1990             | 48.3              | 3.9          | 1.0              | 2.9                   | 0.0         | 11.0      | 5.2    | 5.2                   | 0.6              | 17.9     | 12.3       | 1.7      | 0.2                  | 2.1          | 1.2               | 0.4                  | 3.1                        | 4.0 |
| 1995             | 52.2              | 4.5          | 0.9              | 3.6                   | 0.0         | 11.9      | 5.3    | 5.7                   | 0.8              | 19.2     | 13.1       | 1.7      | 0.2                  | 1.9          | 1.8               | 0.4                  | 3.1                        | 4.4 |
| <b>Canada</b>    |                   |              |                  |                       |             |           |        |                       |                  |          |            |          |                      |              |                   |                      |                            |     |
| 1980             | 39.6              | 4.0          | 1.6              | 2.4                   | 0.0         | 10.5      | 5.0    | 5.4                   | 0.1              | 8.1      | 3.1        | 0.7      | 0.0                  | 0.7          | 1.6               | 2.0                  | 2.6                        | 5.4 |
| 1990             | 46.7              | 3.2          | 1.7              | 1.5                   | 0.0         | 12.2      | 5.4    | 6.7                   | 0.1              | 10.8     | 4.3        | 1.0      | 0.1                  | 0.5          | 2.4               | 2.5                  | 2.6                        | 9.5 |
| 1995             | 46.3              | 2.9          | 1.4              | 1.5                   | 0.0         | 12.3      | 5.8    | 6.5                   | 0.0              | 11.5     | 4.8        | 1.0      | 0.1                  | 0.8          | 1.8               | 3.1                  | 2.4                        | 9.6 |
| <b>Denmark</b>   |                   |              |                  |                       |             |           |        |                       |                  |          |            |          |                      |              |                   |                      |                            |     |
| 1980             | 55.6              | 7.4          | 2.5              | 4.1                   | 0.8         | 17.8      | 7.7    | 5.7                   | 4.5              | 16.8     | 6.0        | 1.9      | 2.0                  | 1.1          | 5.3               | 0.4                  | 6.0                        | 3.9 |
| 1990             | 57.4              | 6.1          | 2.0              | 4.1                   | 0.0         | 15.7      | 6.2    | 5.1                   | 4.4              | 17.7     | 6.3        | 1.8      | 1.2                  | 1.5          | 5.4               | 1.5                  | 5.9                        | 7.3 |
| 1995             | 59.9              | 6.0          | 1.7              | 4.3                   | 0.0         | 16.5      | 6.5    | 5.1                   | 4.9              | 20.8     | 7.4        | 2.2      | 0.6                  | 1.9          | 6.3               | 2.3                  | 5.6                        | 6.4 |
| <b>Finland</b>   |                   |              |                  |                       |             |           |        |                       |                  |          |            |          |                      |              |                   |                      |                            |     |
| 1980             | 35.4              | 3.3          | 1.4              | 1.8                   | 0.1         | 11.5      | 4.8    | 5.0                   | 1.7              | 11.7     | 5.5        | 2.9      | 0.2                  | 1.1          | 1.6               | 0.4                  | 0.9                        | 1.0 |
| 1990             | 44.4              | 3.4          | 1.4              | 1.9                   | 0.1         | 15.2      | 6.4    | 6.4                   | 2.5              | 15.9     | 7.4        | 3.3      | 0.6                  | 1.9          | 2.1               | 0.6                  | 1.0                        | 1.4 |
| 1995             | 54.3              | 3.3          | 1.6              | 1.6                   | 0.1         | 15.2      | 6.6    | 5.6                   | 3.0              | 22.5     | 8.9        | 3.9      | 0.5                  | 2.7          | 5.5               | 1.1                  | 1.1                        | 4.0 |
| <b>France</b>    |                   |              |                  |                       |             |           |        |                       |                  |          |            |          |                      |              |                   |                      |                            |     |
| 1990             | 50.2              | 10.1         | 3.1              | 3.9                   | 3.1         | 12.6      | 5.1    | 6.5                   | 1.0              | 18.7     | 10.9       | 1.5      | 0.5                  | 2.1          | 2.6               | 1.1                  | 3.3                        | 2.9 |
| 1993             | 55.4              | 9.2          | 2.9              | 4.5                   | 1.8         | 14.1      | 5.9    | 7.1                   | 1.1              | 20.9     | 12.0       | 1.5      | 0.6                  | 2.2          | 3.3               | 1.3                  | 3.1                        | 3.5 |
| <b>Germany</b>   |                   |              |                  |                       |             |           |        |                       |                  |          |            |          |                      |              |                   |                      |                            |     |
| 1991             | 47.4              | 6.4          | 1.9              | 4.6                   | 0.0         | 12.7      | 4.4    | 7.1                   | 1.2              | 16.3     | 9.7        | 1.2      | 0.4                  | 1.3          | 3.0               | 0.6                  | 5.3                        | 2.9 |
| 1995             | 49.7              | 5.2          | 1.4              | 3.9                   | 0.0         | 13.9      | 4.5    | 8.0                   | 1.3              | 18.2     | 10.7       | 1.4      | 0.5                  | 1.2          | 3.7               | 0.8                  | 4.5                        | 3.7 |

1. Expenditure by function may not add up to total expenditure as these are derived from different sources. In particular, expenditures by function refers to fiscal years and total expenditure to calendar year; moreover, total expenditure is net of capital transfers received.

Source: OECD National Accounts, Social Expenditure Database, *Education at a Glance*, OECD, and *Survey of Current Business*.

**Table 3 (continued)**  
**Structure of government outlays by function**  
*(percent of GDP<sup>1</sup>)*

|                    | Total expenditure | Public goods |         |                         | Merit goods |           |        | Income transfers      |       |          |            |          |                      | Economic services | Public debt interest |              |                            |     |      |
|--------------------|-------------------|--------------|---------|-------------------------|-------------|-----------|--------|-----------------------|-------|----------|------------|----------|----------------------|-------------------|----------------------|--------------|----------------------------|-----|------|
|                    |                   | Total        | Defence | General public services | Total       | Education | Health | Other social services | Total | Pensions | Disability | Sickness | Family cash benefits |                   |                      | Unemployment | Housing and other benefits |     |      |
| <b>Italy</b>       | 1980              | 42.3         | 5.3     | 1.7                     | 3.4         | 0.2       | 10.7   | 4.8                   | 5.6   | 0.3      | 12.4       | 9.0      | 1.5                  | 0.3               | 1.0                  | 0.6          | 0.0                        | 6.4 | 5.0  |
|                    | 1990              | 53.2         | 6.5     | 1.9                     | 4.2         | 0.4       | 12.4   | 5.8                   | 6.3   | 0.3      | 16.3       | 11.9     | 1.9                  | 0.2               | 0.6                  | 1.5          | 0.0                        | 6.2 | 9.4  |
|                    | 1995              | 52.2         | 6.5     | 1.7                     | 4.5         | 0.3       | 10.2   | 4.5                   | 5.3   | 0.3      | 17.9       | 13.5     | 1.8                  | 0.1               | 0.4                  | 2.0          | 0.0                        | 4.6 | 11.5 |
| <b>Japan</b>       | 1980              | 32.8         | 4.1     | 0.9                     | 3.3         | 0.0       | 9.9    | 4.9                   | 4.6   | 0.4      | 9.6        | 4.0      | 0.4                  | 0.1               | 0.2                  | 0.0          | 2.4                        | 6.0 | 3.2  |
|                    | 1990              | 31.6         | 4.4     | 0.9                     | 3.4         | 0.0       | 8.9    | 3.7                   | 4.7   | 0.5      | 10.0       | 5.0      | 0.5                  | 0.1               | 0.2                  | 0.3          | 2.2                        | 4.3 | 3.9  |
|                    | 1995              | 36.5         | 4.5     | 0.9                     | 3.6         | 0.0       | 10.1   | 3.8                   | 5.6   | 0.6      | 12.8       | 6.2      | 0.5                  | 0.1               | 0.2                  | 0.5          | 2.9                        | 5.3 | 3.8  |
| <b>Korea</b>       | 1990              | 18.3         | 6.7     | 3.9                     | 2.0         | 0.8       | 1.8    | m                     | 1.7   | 0.1      | 1.3        | 0.8      | 0.3                  | ..                | 0.0                  | 0.1          | 0.2                        | 2.8 | 0.5  |
|                    | 1995              | 19.2         | 5.7     | 2.9                     | 2.0         | 0.8       | 5.6    | 3.6                   | 1.8   | 0.2      | 1.8        | 1.3      | 0.3                  | ..                | 0.0                  | 0.1          | 0.1                        | 3.7 | 0.5  |
| <b>Netherlands</b> | 1980              | 57.6         | 12.6    | 2.9                     | 9.7         | ..        | 13.0   | 6.3                   | 5.7   | 1.1      | 20.6       | 7.6      | 4.4                  | 3.3               | 2.0                  | 2.3          | 1.0                        | 6.1 | 3.8  |
|                    | 1990              | 54.9         | 11.7    | 2.4                     | 9.2         | ..        | 11.4   | 4.6                   | 5.8   | 1.0      | 21.7       | 8.4      | 4.6                  | 2.9               | 1.2                  | 3.4          | 1.2                        | 6.3 | 5.9  |
|                    | 1995              | 52.2         | 11.6    | 1.8                     | 9.8         | ..        | 12.0   | 4.6                   | 6.5   | 1.0      | 19.2       | 7.5      | 3.9                  | 1.9               | 1.0                  | 4.0          | 1.0                        | 6.4 | 5.9  |
| <b>New Zealand</b> | 1990              | 46.2         | 6.5     | 1.8                     | 4.7         | 0.0       | 11.4   | 5.5                   | 5.8   | 0.1      | 16.3       | 7.6      | 2.0                  | 0.9               | 2.6                  | 2.8          | 0.3                        | 0.0 | 8.5  |
|                    | 1994              | 38.9         | 5.3     | 1.1                     | 4.2         | 0.0       | 10.6   | 5.2                   | 5.3   | 0.1      | 13.5       | 6.0      | 1.7                  | 1.1               | 2.0                  | 2.0          | 0.7                        | 0.0 | 4.8  |
| <b>Norway</b>      | 1980              | 45.0         | 4.9     | 2.6                     | 2.2         | 0.1       | 13.5   | 5.9                   | 5.9   | 1.7      | 10.9       | 5.1      | 1.9                  | 1.5               | 1.3                  | 0.4          | 0.8                        | 9.1 | 3.1  |
|                    | 1990              | 50.6         | 6.2     | 3.1                     | 3.0         | 0.2       | 17.1   | 6.4                   | 6.5   | 4.2      | 15.8       | 6.3      | 2.8                  | 1.6               | 1.9                  | 2.1          | 1.1                        | 7.6 | 3.6  |
|                    | 1993              | 52.0         | 6.3     | 2.6                     | 3.1         | 0.6       | 18.4   | 6.8                   | 6.6   | 5.1      | 15.9       | 6.2      | 2.7                  | 1.2               | 2.3                  | 2.4          | 1.1                        | 7.2 | 2.8  |
| <b>Portugal</b>    | 1990              | 45.0         | 8.0     | 2.3                     | 2.7         | 3.1       | 8.8    | 4.3                   | 4.2   | 0.3      | 9.5        | 5.3      | 1.9                  | 0.6               | 0.7                  | 1.0          | 0.1                        | 5.7 | 8.1  |
|                    | 1995              | 49.9         | 8.3     | 2.2                     | 2.0         | 4.1       | 10.6   | 5.4                   | 4.7   | 0.5      | 12.1       | 7.3      | 1.7                  | 0.6               | 0.7                  | 1.7          | 0.1                        | 6.3 | 6.3  |

1. Expenditure by function may not add up to total expenditure as these are derived from different sources. In particular, expenditures by function refers to fiscal years and total expenditure to calendar year; moreover, total expenditure is net of capital transfers received.

Source: OECD National Accounts, Social Expenditure Database, *Education at a Glance*, OECD, and *Survey of Current Business*.

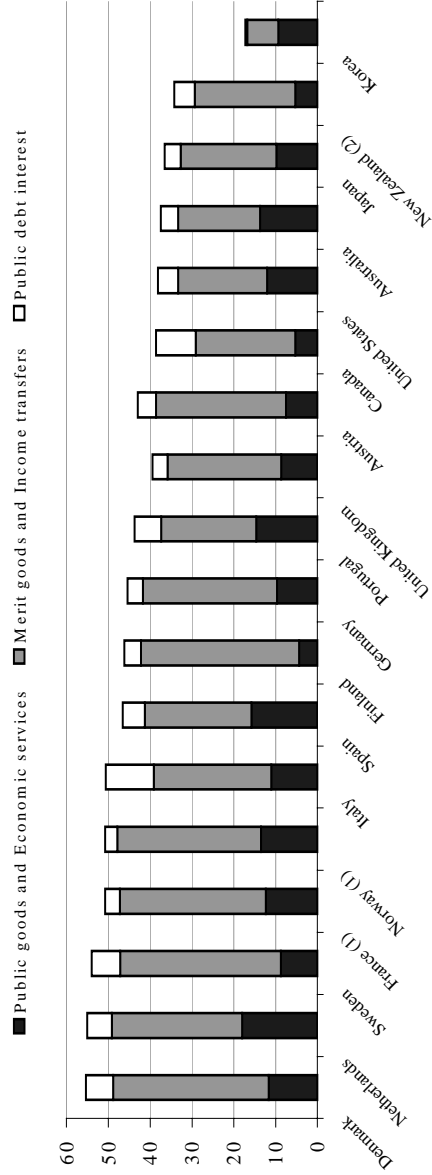
**Table 3 (continued)**  
**Structure of government outlays by function**  
*(percent of GDP<sup>1</sup>)*

|                       | Total expenditure | Public goods |                         |                       |                 | Merit goods |           |        | Income transfers      |          |            |          |                      |               | Economic services | Public debt interest |                            |     |     |
|-----------------------|-------------------|--------------|-------------------------|-----------------------|-----------------|-------------|-----------|--------|-----------------------|----------|------------|----------|----------------------|---------------|-------------------|----------------------|----------------------------|-----|-----|
|                       |                   | Total        | General public services |                       | Other functions | Total       | Education | Health | Other social services | Pensions | Disability | Sickness | Family cash benefits | Unemploy-ment |                   |                      | Housing and other benefits |     |     |
|                       |                   |              | Defence                 | Other public services |                 |             |           |        |                       |          |            |          |                      |               |                   |                      |                            |     |     |
| <b>Spain</b>          | 1980              | 41.8         | 8.6                     | 1.5                   | 1.7             | 5.3         | 9.7       | 4.2    | 5.2                   | 0.3      | 13.4       | 7.8      | 1.3                  | 0.9           | 0.2               | 3.0                  | 0.2                        | 5.5 | 3.8 |
|                       | 1985              | 45.2         | 9.9                     | 1.4                   | 1.8             | 6.7         | 10.6      | 4.8    | 5.5                   | 0.3      | 14.9       | 8.9      | 1.3                  | 1.1           | 0.3               | 3.2                  | 0.2                        | 5.9 | 5.2 |
| <b>Sweden</b>         | 1980              | 60.0         | 6.9                     | 3.3                   | 2.9             | 0.7         | 20.0      | 7.6    | 8.4                   | 3.9      | 16.5       | 7.2      | 2.1                  | 2.3           | 1.7               | 1.6                  | 1.5                        | na  | 3.9 |
|                       | 1980              | 59.1         | 5.6                     | 2.6                   | 2.9             | 0.1         | 18.8      | 6.8    | 7.6                   | 4.4      | 19.2       | 7.9      | 2.8                  | 2.5           | 2.2               | 2.6                  | 1.2                        | 2.8 | 4.9 |
| 1985                  | 64.5              | 5.4          | 2.3                     | 3.0                   | 0.1             | 17.2        | 6.6       | 5.7    | 4.9                   | 21.2     | 8.6        | 2.7      | 1.1                  | 2.0           | 4.5               | 2.1                  | 3.4                        | 6.8 |     |
| <b>United Kingdom</b> | 1980              | 45.3         | 8.1                     | 5.0                   | 1.9             | 1.3         | 10.8      | 4.6    | 5.1                   | 1.1      | 12.8       | 7.1      | 1.1                  | 0.3           | 1.8               | 1.7                  | 1.0                        | 4.0 | 4.7 |
|                       | 1980              | 41.4         | 6.5                     | 4.1                   | 1.9             | 0.5         | 10.2      | 4.3    | 5.0                   | 0.9      | 13.7       | 7.1      | 1.8                  | 0.4           | 1.6               | 1.3                  | 1.5                        | 4.1 | 3.4 |
| 1985                  | 43.6              | 5.4          | 3.2                     | 1.9                   | 0.2             | 11.5        | 4.6       | 5.7    | 1.2                   | 15.6     | 7.3        | 2.8      | 0.2                  | 1.9           | 1.3               | 2.1                  | 3.3                        | 3.6 |     |
| <b>United States</b>  | 1980              | 32.5         | 10.6                    | 7.1                   | 2.5             | 1.0         | 9.7       | 5.3    | 4.0                   | 0.5      | 9.3        | 6.3      | 0.9                  | 0.3           | 0.5               | 0.9                  | 0.5                        | 3.7 | 3.2 |
|                       | 1980              | 34.9         | 10.9                    | 7.0                   | 2.8             | 1.0         | 10.8      | 5.3    | 5.2                   | 0.3      | 8.5        | 6.2      | 0.8                  | 0.3           | 0.2               | 0.7                  | 0.4                        | 3.1 | 5.1 |
| 1985                  | 34.3              | 9.2          | 5.2                     | 2.9                   | 1.0             | 11.9        | 5.0       | 6.5    | 0.4                   | 9.4      | 6.5        | 1.0      | 0.3                  | 0.3           | 0.6               | 0.6                  | 2.8                        | 4.8 |     |

1. Expenditure by function may not add up to total expenditure as these are derived from different sources. In particular, expenditures by function refers to fiscal years and total expenditure to calendar year; moreover, total expenditure is net of capital transfers received.

Source: OECD National Accounts, Social Expenditure Database, *Education at a Glance*, OECD; and *Survey of Current Business*.

**Figure 2**  
**Structure of government outlays by function, 1995**  
*(percent of GDP)*



1. Data are for 1993.  
 2. Data are for 1994.  
 Source: OECD National Accounts, Social Expenditure Database; *Education at a Glance*, OECD; and *Survey of Current Business*.

First, obtaining comparative data on public employment, an item which may importantly influence public spending, proves to be problematic. Given the range of employment statuses, activities in which the public sector is engaged as provider, and institutional arrangements for doing so within and across countries, not to mention the changes that have taken place over time, there are many obstacles to constructing a consistent data set. In particular, the new national accounts system (SNA93/ESA95) classifies employment by activity and not by employer, and does not (at least at this stage) allow large parts of public employment in sectors such as health and social work, education and other community social and personal services to be identified. The Public Management Service (PUMA) in OECD has devoted considerable effort to addressing these problems and has constructed a database for 21 countries on the basis of responses to a regular questionnaire. The figures reported in Table 4, which are in terms of full-time equivalents for all levels of government, *i.e.* the general government sector as defined in the national accounts but excluding social security administrations, indicate that a wide range exists across countries. Trends over time during the past decade have in most cases been either steady or slightly declining, suggesting that public employment restraint has made some contribution to the success most countries have had in holding down spending<sup>7</sup>.

Second, public expenditure may not be the only way to deliver certain services or to achieve particular objectives. Private spending may have a role to play and, if government intervention is felt to be warranted, a mix of regulatory arrangements, mandates and tax incentives may be used to encourage such spending. Social policy areas in particular are managed in ways that differ substantially across countries so that international comparisons of resources devoted to achieving policy objectives in these areas will be highly misleading if no account is taken of private spending. Furthermore, the extent to which social benefits are taxed varies across countries, distorting comparisons. The OECD has recently addressed these problems by estimating the amount of social expenditure covering social transfers (net of taxation of benefits) and merit good expenditures but excluding those on education, by the private sector in response to regulations, mandates and tax incentives (Table 5). Overall

<sup>7</sup> PUMA has also on occasion collected data for a wider definition of the public sector, including state-owned enterprises (whose financial performance impinges on the government's overall financial position), but these are not maintained on a continuing basis.

the data suggest that while public social expenditure as a share of GDP, as reported in national accounts, varies widely across countries (in the range of 15 to 40 per cent) differences in total social expenditure, including policy-induced private expenditure, are much smaller (they range from 18 to 28 per cent)<sup>8</sup>.

### 3. Assessing public expenditure

The purpose of this section is to provide broad criteria for the assessment of public expenditure in OECD countries. Since government expenditure reflects collective choices that emerge from the political process and vary across countries, there will be limits to what economic analysis alone can provide. However, it should be possible to evaluate the economic consequences of the way these choices interact with institutional arrangements and other elements of the economic environment and to make judgements about the extent to which the apparent objectives which underlie these choices are in fact being achieved in a cost-effective way. This can be done at three levels *(i)* its macroeconomic consequences; *(ii)* the allocation of resources within the economy; and *(iii)* the technical or operational efficiency with which it is carried out.

#### 3.1 *The macroeconomic consequences*

High or rising public expenditure raises two major issues from a macroeconomic perspective:

- First, it poses financing problems that make it difficult to ensure fiscal discipline and thus tends to make macroeconomic policy management difficult, depending on how well the processes of budget formulation and implementation operate. A lack of adequate planning and evaluation procedures incorporated in the formulation process, such as safeguards against the use of unrealistic economic assumptions, have often led countries to overestimate how much spending could be afforded. Insufficient controls at the implementation stage have had

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<sup>8</sup> These estimates also correct for the fact that in some countries (*e.g.* Germany) social transfers are not subject to taxation whereas in others they are. To make numbers comparable, tax payments by social security recipients have been netted out in the latter group of countries.



**Table 4**  
**Public employment as a percentage of total employment**

|                | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 199 |
|----------------|------|------|------|------|------|------|------|------|------|-----|
| Australia      | 14.8 | 15.4 | 15.3 | 14.9 | 14.6 | 14.3 | 14.2 | 14.3 | 14.0 | 15. |
| Austria        | 10.6 | 10.5 | 10.6 | 10.8 | 11.0 | 11.0 | 11.0 | 10.1 | 10.0 | ..  |
| Canada         | 20.3 | 21.1 | 21.4 | 21.1 | 20.4 | 19.8 | 19.3 | 18.5 | 17.9 | 17. |
| Czech Republic | ..   | ..   | ..   | ..   | 13.8 | 14.6 | 14.7 | ..   | ..   | ..  |
| Denmark        | 26.6 | 26.4 | 26.6 | 27.3 | 27.8 | 27.5 | 26.5 | 26.6 | ..   | ..  |
| Finland        | 23.2 | 24.3 | 25.3 | 25.5 | 25.7 | 24.7 | 25.0 | 25.0 | 24.3 | ..  |
| France         | 20.4 | 20.7 | 21.0 | 21.5 | 21.6 | 21.6 | 21.7 | 21.4 | 21.7 | ..  |
| Germany        | 15.1 | ..   | 14.1 | 13.8 | 13.5 | 13.2 | 13.0 | 12.9 | 12.6 | 12. |
| Hungary        | 0.0  | 0.0  | 0.0  | 0.0  | 24.8 | 24.6 | 23.4 | 22.8 | 22.5 | ..  |
| Iceland        | 14.6 | 15.2 | 15.4 | 15.6 | ..   | ..   | ..   | ..   | ..   | ..  |
| Ireland        | 17.4 | 17.7 | 17.6 | 17.7 | 17.3 | 16.8 | 16.4 | 15.9 | 14.6 | 14. |
| Italy          | 17.3 | 17.2 | 17.5 | 18.0 | 17.5 | 17.5 | 17.3 | 17.0 | ..   | ..  |
| Korea          | 4.5  | 4.6  | 4.7  | 4.7  | 4.6  | 4.4  | 4.5  | 4.4  | 4.5  | ..  |
| Luxembourg     | 8.1  | 8.1  | 8.0  | 6.9  | ..   | ..   | ..   | ..   | ..   | ..  |
| Netherlands    | 12.9 | 12.2 | 12.9 | 12.7 | 12.4 | 11.8 | ..   | ..   | ..   | ..  |
| New Zealand    | 14.2 | 14.5 | 14.1 | 13.9 | 13.4 | 12.4 | 12.2 | 11.9 | 12.2 | ..  |
| Portugal       | 0.0  | 11.9 | 15.1 | 15.0 | 14.8 | 15.2 | 15.3 | 15.5 | 15.2 | ..  |
| Spain          | 14.0 | 14.3 | 14.9 | 15.6 | 16.0 | 16.2 | 16.0 | 15.7 | ..   | ..  |
| Sweden         | 28.4 | 28.9 | 28.8 | 28.6 | 26.8 | 26.2 | ..   | ..   | ..   | ..  |
| United Kingdom | 16.1 | 16.2 | 15.9 | 14.0 | 12.5 | 11.6 | 10.9 | 10.4 | 10.2 | 10. |
| United States  | 14.9 | 15.2 | 15.2 | 15.1 | 15.0 | 14.9 | 14.8 | 14.4 | 14.4 | ..  |

*Notes:* Public employment in general covers all individuals paid by government funds at all levels of government, and corresponds to the general government excluding public enterprises and social security administrations.

Australia Excludes financial and trading government enterprises. Full-time + Part-time

Austria Excludes public corporations. Full-time Equivalent

Canada Does not include government business enterprises. Full-time + Part-time + Casual  
Does not include First Nations and Inuits Government.

Czech Republic Full-time Equivalent

Denmark Full-time Equivalent

Finland Excluding state enterprises. Full-time + Part-time

France Excluding public operators of the Posts and telecommunication since 1991. Full-time Equivalent

Germany Includes military. This total does not match with the summation of the 3 levels (federal + Länder + municipalities), but this is the total sent by the country. The total may include the indirect public sector. Full-time + Part-time

Hungary Excludes military. Headcount

Ireland The public service comprises Civil Service, Garda Síochána (Police Force), Education Sector, Defence Forces, Health Sector, non-commercial State-sponsored Bodies and Local Authorities. Actual Members

Italy Post and telecommunication services have been excluded since 1994. Full-time Equivalent

Korea Provisional data.

Netherlands Data are low in comparison to other countries as there are many individuals working part-time. Full-time Equivalent

New Zealand Excludes public enterprises. Full-time Equivalent

Portugal Includes public and other employees in central administration and only public employees in Local and Regional administrations. Full-time + Part-time Excludes Social security. Before 1994, data do not include Regional autonomous administrations.

Spain Includes social security employment managed at the central level.

Sweden Full-time Equivalent

United Kingdom Excludes NHS Trusts and public corporations. Full-time Equivalent

United States Annual averages. Includes part-time and season workers. Actual Members

*Source:* OECD/PUMA PSPE- Public Sector Pay and Employment Database (2000).

Table 5

**Net social expenditure by source<sup>1</sup>, 1995**  
(per cent of GDP)

|                | Private            |                         |           |           | Memorandum item:                             |
|----------------|--------------------|-------------------------|-----------|-----------|--|
|                | Total <sup>2</sup> | Net Public <sup>3</sup> | Mandatory | Voluntary | Gross public social expenditure <sup>4</sup> |
| Australia      | 21.6               | 18.7                    | 0.3       | 2.7       | 20.3   |
| Belgium        | ..                 | ..                      | ..        | ..        | 30.1   |
| Canada         | 21.2               | 17.9                    | ..        | 3.5       | 20.8   |
| Denmark        | 24.4               | 23.6                    | 0.3       | 0.5       | 37.6   |
| Finland        | 25.7               | 25.1                    | 0.0       | 0.7       | 35.7   |
| Germany        | 27.7               | 25.9                    | 1.0       | 0.8       | 30.4   |
| Ireland        | 18.7               | 17.4                    | ..        | 1.5       | 21.8   |
| Italy          | 22.3               | 20.9                    | ..        | 1.4       | 21.8   |
| Netherlands    | 25.0               | 21.2                    | 0.5       | 3.4       | 30.1   |
| Norway         | ..                 | 21.9                    | 0.6       | ..        | 31.5   |
| Sweden         | 27.0               | 25.4                    | 0.2       | 1.4       | 36.4   |
| United Kingdom | 26.0               | 22.3                    | 0.3       | 3.6       | 25.9   |
| United States  | 24.5               | 17.5                    | 0.5       | 7.8       | 17.1   |

1. Social expenditure covers: cash-benefits for old age, disability, occupational injury and disease and sickness; services for the elderly and disabled; survivors' pensions; family cash benefits; family services; active labour market programmes; unemployment benefits; health care expenditure; housing benefits.

2. The total is a consolidated figure and may be less than the sum of the components.

3. Calculated as gross public social expenditure less direct taxes and social security contributions levied on social transfers and benefit income claimed back through taxes on consumption, plus tax breaks for social purposes.

4. General government social expenditure (for definition, see note 1).

Source: Adema (2000).

similar effects. Another element is processes that work to encourage the reversal of any spending increases designed to mitigate cyclical downswings, either via automatic stabilisers or of a discretionary nature, once the cycle turns up. But it is also an issue of relationships between various government entities. These include both horizontal relationships, *i.e.* between finance ministries and sectoral, or spending, ministries and agencies, and vertical ones, *i.e.* between central and lower levels of government.

- Second, the disincentives and distortions created by the tax burden required to meet the government's financing needs may carry high economic cost. To some degree this can be seen as an issue of resource allocation and income distribution. But since the tax burden is largely driven by the overall level of government spending and often impinges on overall economic performance, it also has a macroeconomic dimension.

At this stage, the fiscal situation and outlook in most OECD countries is better than for many years, implying that financing expenditure without heavy recourse to borrowing has generally been achieved. This has been facilitated by the expenditure restraint that most countries have been able to exercise during the 1990s and contrasts with the persistent budgetary problems which emerged during the 1970s, at a time when public expenditure was rising rapidly. Nonetheless, tax burdens are now very high in many countries, especially in Europe, and have led to concerns about the fairness of their incidence, their impact on economic behaviour (particularly in labour markets) and the sustainability of potentially mobile tax bases. Importantly, public expenditure control will become more challenging now that fiscal positions are improving throughout the area. In a surplus environment political pressures could lead to uncoordinated tax cuts and spending increases, which might eliminate options of financing structural reforms or retiring debt. Indeed, countries with budget surpluses are already showing signs that fiscal management can be difficult in these situations. If government expenditure starts to rise from current levels, the tax implications and the associated distortions further down the road may prove very problematic, the more so since demands from spending and pressures on the revenue base may continue to increase in the future as populations in most OECD countries age.

Against this backdrop the assessment of the macroeconomic impact of public expenditure needs to consider the following questions:

- Are processes of evaluation and planning in place to ensure that public expenditure decisions are based on a realistic view of their cost and overall affordability? Do these processes work to encourage the reversal of spending increases to mitigate cyclical downturns, whether discretionary or arising from the operation of automatic stabilisers, once cyclical conditions improve?

- Is public expenditure sufficiently well controlled so that the implementation of budgetary plans is not frequently undermined by unpleasant “surprises” on the spending side?
- Is spending by lower levels of government either adequately overseen and controlled by the Finance Ministry or dependent on their ability to finance it without recourse to the central government?
- Is the tax burden needed to finance expenditure likely to be (1) acceptable in terms of its consequences for economic behaviour and (2) sustainable in terms of the ability to avoid the erosion of major tax bases?
- Do periods of buoyant revenues and strong fiscal positions encourage rises in expenditure that are difficult to reverse?

### 3.2 *Allocative efficiency*

Government spending is an important vehicle for implementing collective choices about resource allocation and income distribution that emerge from the political process. Several objectives behind decisions to intervene in the market economy and their rationale can be identified. These include the need to provide public goods, a view that merit goods should be made more widely available than would result without intervention, concern to influence income distribution in some way, environmental considerations, the desire to limit the exercise of monopoly power or to address other forms of market failure.

However, where government intervention of some kind is warranted, reliance does not necessarily have to fall exclusively on public expenditure, which should be reserved for cases in which it has advantages in terms of simplicity, transparency, fairness or cost-effectiveness. As noted earlier, intervention often involves a mix of expenditure, regulatory arrangements, mandates and tax incentives. In addition, the government engages in bilateral or tri-partite agreements and acts through the provision of information and moral suasion. Such instruments may, in turn, be reinforced by or replaced with self-regulatory codes of conduct and standards in the private sector<sup>9</sup>. For example, whereas in many countries

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<sup>9</sup> See for examples and case studies OECD (1997a) and OECD (1997b).

government agencies (often converted into state-owned enterprises) have been widely created to provide services that are prone to abuse of monopoly power or to ensure universal service, in others that objective has been pursued more through regulatory mandates or administrative guidance. Moreover, in some countries, notably the United States, regulatory mandates and tax incentives have been designed to prompt the private sector to provide social protection such as pensions and health care coverage in the government's place. The estimates described earlier (Table 5) suggest that, at least in the area of social protection, the degree to which public and private spending act as substitutes is substantial: while total, *i.e.* public and private, policy-induced social expenditure in Denmark, the Netherlands and the United States is essentially identical, at around 25 per cent of GDP, the private share ranges from less than 1 per cent of GDP in Denmark to 4 per cent in the Netherlands and more than 8 per cent in the United States.

Intervention is not always necessary or desirable and simply ensuring that private markets work well is often the best way to pursue objectives. Spending and other policy measures are too often undertaken without an adequate and objective assessment of their costs and impact<sup>10</sup>. In some cases this may reflect inadequate evaluation systems embedded in the policy formulation process. But it may also reflect the tendency for benefits of policy action to create significant political constituencies in their support while the costs -- in terms of, say, higher taxes, interest rates or regulatory compliance burdens -- are spread thinly over a large number of people without impinging enough on any to generate real opposition. Moreover, even if the balance of costs and benefits shifts over time as economic and social conditions change, beneficiaries may still be able to protect their interests through political action policies and programmes<sup>11</sup>.

On the other hand, in assessing the mix of public expenditure, regulatory arrangements, mandates and tax incentives, it should be recognised that regulation and tax measures are not costless alternatives to public expenditure since these affect economic incentives and behaviour. Indeed, a risk associated with tightened spending control is that more of the policy agenda shifts onto off-budget mandates and other instruments

<sup>10</sup> See Martin (2000).

<sup>11</sup> See Persson and Tabellini (2000) for a survey of normative theories of the determinants of public expenditure.

whose incidence and effects are difficult to identify and to assess. This shifting reliance away from spending risks reducing the transparency of the overall set of policy interventions. Tax incentive schemes are less transparent than expenditures and may give rise to tax planning activities, especially if the overall tax burden is high. Government regulations that are poorly designed impede innovation or create unnecessary barriers to trade, investment and innovation and may have considerable costs in terms of the capability of markets to adjust to changing circumstances.

Where public expenditure appears to be warranted as a way of achieving objectives, evidence needs to be sought of not only over-provision but also evidence of failure to deliver due to under-provision. Some forces which encourage over-provision in the form of programmes that are unnecessary or that fail to adapt to changing circumstances are noted above. But there are also reasons why public expenditure may be insufficient even in essential areas. The adoption of top-down cash limits or failure to prioritise in the face of fiscal austerity may have led to unintended rationing. In less mature market economies tax bases may not be sufficiently exploited, or may be underdeveloped, due to a large informal economy; the economy may have experienced a major financing crisis with important and long-lasting social effects; or it may be in transition from a centrally planned system. In some cases, improvements in the framework conditions in which the private sector operates, tax incentives, mandates or regulatory changes may be helpful. But in areas where the government has assumed responsibility for certain activities -- *e.g.* publicly-run education and health care, or public goods such as police protection and administration of justice -- there may be no alternative to an adequate level of public spending.

In view of these considerations the following questions are relevant for the assessment of allocational efficiency of public expenditure:

- Is government intervention warranted in all areas where public expenditure is taking place? Is there significant scope for increasing the role of the private sector?
- Where it is warranted, is the mix of public expenditure, regulation and tax incentives appropriate?
- Is a country's performance in achieving public policy goals such as an appropriate level and equitable distribution of income, health status,

school enrolment, quality of the environment and safety commensurate with the resources allocated to them across government functions and programmes?

- Are there domains of economic activity or social policy where performance is clearly below par, and is a lack of public expenditure at the root of this problem? If so, what is the reason for any under-funding and how can such problems be eased?

### 3.3 *Technical efficiency*

The discussion so far has focused on the extent to which public expenditure is consistent with satisfactory macroeconomic management and performance and whether its role has been properly identified. However, countries also have a clear interest in ensuring that public expenditure is “technically efficient”, *i.e.* avoids waste. While conceptually different from allocational efficiency, technical efficiency has important implications for many of the issues raised above: avoiding technical inefficiencies will free up available resources to help achieve public policy goals by promoting the efficient allocation of resources across programmes and items. At the same time, it will facilitate macroeconomic policy management by making expenditure easier to control. With fiscal discipline heightening, technical efficiency in the production of public goods and services has received growing attention among budget officials in OECD Member countries.

Unfortunately, there are many obstacles to achieving higher levels of operational efficiency. Particularly where bureaucratic structures are complex or responsibility for decisions is highly centralised, managers may lack the authority to take measures that would improve performance. In addition, entrenched work and management habits, rigid seniority-based pay scales and strong union power in the public service may operate to limit flexibility, for example to make the most cost-effective use of new technology. Furthermore, the incentives for managers in the public administration to enhance efficiency may be weak since efficiency gains risk leading to less, rather than more, resources being available to them or may not translate into improved pay or other advantages.

The following questions are relevant for the assessment of technical efficiency of public expenditure:

- What evidence is available on the technical efficiency of public spending? Is comparative information concerning technical efficiency (benchmarking) available and is it used as an input to policy changes?
- Can areas be identified where there is significant scope for efficiency gains?

#### **4. Main areas of reform**

This part of the paper sets out a number of broad areas in which reforms designed to improve the cost-effectiveness of public expenditure have been considered or implemented in several countries. It must be recognised that many policy initiatives are unlikely to be easily transferable across countries in view of differing political contexts. But countries' experience may offer a useful starting point for international benchmarking and peer reviews. The various reform areas considered here have been grouped under four main headings: *(i)* budgetary processes and control; *(ii)* fiscal relations between central and lower levels of government; *(iii)* market-based provision and other allocation mechanisms; and *(iv)* flexible incentive and control mechanisms.

##### *4.1 Budgetary processes and control*

Three main aspects of budgetary processes and control are being considered here: fiscal transparency, the adoption of medium term frameworks and fiscal rules, and fiscal risks of financial transactions and the wider public sector.

##### *4.1.1 Fiscal transparency*

A high level of transparency in budgetary matters -- involving accurate and objective information on how government money is used, the cost of government programmes and, to the extent possible, their benefits -- provides a basis for informed debate about budgetary policy among the public and within the government resources. By increasing the chances that sound policy options will be identified and strengthening political support for them, fiscal transparency is therefore likely to



encourage fiscal discipline and a more satisfactory allocation. Furthermore, it also improves the basis for households, business and financial market participants to make wise consumption, saving and investment decisions. To encourage transparency, the IMF has developed its *Code on Good Practices on Fiscal Transparency*, and the OECD's Working Party of Senior Budget Officials is now in the process of finalising a reference document to assist governments in making improvements, *OECD Best Practices for Budget Transparency* (See Box 1). Three OECD countries which have undertaken significant reforms in many aspects of their budgetary process and management systems -- the United Kingdom, Australia and New Zealand -- have published self-evaluation reports under the IMF Code<sup>12</sup>. These reports, together with the guidance offered by the *OECD Best Practices* will be used as benchmarks in assessing practices in the country under review and in motivating proposals for improvement.

A number of countries have moved to increase the amount and quality of information they make widely available, facilitating better public analysis and debate. Fiscal policy statements have been introduced in some countries in order to prompt the legislature to discuss aggregate government finances (often in a medium-term framework, see below) prior to the presentation of the budget itself, while Annual Reports or Performance Reports that are separate from the Budget offer improved outcome and output information by reporting expected and actual performance. For example, "Value for money" reports like those prepared by the National Audit Office in the United Kingdom have an important role in increasing the transparency of public spending and enhancing parliamentary oversight of the budget process. Generational accounts, which typically show that older generations benefit at the expense of younger ones, were introduced in the United States in 1993, followed by Germany, New Zealand, Norway, Sweden and the United Kingdom. These provide important supplementary information, even if many of the assumptions which underpin them raise questions about their overall value. Finally, greater resources (e.g. in the form of supporting secretariats) are

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<sup>12</sup> Greece has also completed a report and is expected to publish it soon.

### **Box 1. Best Practices on Fiscal Transparency**

The IMF's *Code on Good Practices on Fiscal Transparency* is based on four principles:

- *Clarity of roles and responsibilities*: establishing clear boundaries between the public and private sectors; and within the public sector between fiscal, monetary and government business enterprise activities.
- *Public availability of information* -- i.e. a commitment to publish comprehensive financial information at clearly specified intervals.
- *Open budget preparation*, execution and reporting, according to published statistical and accounting standards for government reporting.
- *Independent assurances of integrity* -- e.g. through external audit and statistical independence.

The draft list of *OECD best practices* includes the following items:

- Governments should publish a pre-budget statement outlining the aggregate levels of revenues, expenditure, surplus or deficit and debt several months prior to the release of the government's budget proposal. The objective is to cast budget policy in a macroeconomic and medium-term setting, thereby establishing a top-down fiscal policy anchor.
- The budget should contain explicit detail on the economic assumptions used and statements of tax expenditures, financial liabilities and financial assets, non-financial assets, employee pension obligations and contingent liabilities. Several tracking and update reports should be available. These could include monthly out-turn reports and mid-year updates.
- The annual financial statements (or government accounts) serves as a compliance report for parliamentary and wider accountability purposes and should be certified by the auditor. Transparent financial statements should include information on the budgetary out-turn, debt structure and borrowing, commitments, contingent liabilities, trust moneys held by the government and accounting policies.

**Table 6**  
**Accounting systems in OECD countries' central governments**

| Full cash basis                       |                          | Full accrual basis       |   | Accrual basis except for capital expenditure |                                | Both full cash basis and full accrual basis |           | Cash basis except for certain transactions        |   |
|---------------------------------------|--------------------------|--------------------------|---|--|--------------------------------|---|-----------|---|---|
| Budgeting                             | Reporting                | Budgeting                | Reporting   | Budgeting                                    | Reporting                      | Budgeting                                   | Reporting | Budgeting   | Reporting                                   |
| Austria<br>Czech Rep.                 | Austria<br>Czech Rep.    | Australia<br>New Zealand | Australia<br>Greece                                 | Canada <sup>1</sup><br>Denmark <sup>4</sup>  | Canada<br>Denmark <sup>4</sup> | Italy                                       | Italy     | United States <sup>2</sup><br>Sweden <sup>3</sup> | Finland <sup>3</sup><br>France <sup>6</sup> |
| France                                | Germany                  |                          | New Zealand<br>Sweden<br>United States <sup>7</sup> | Iceland                                      | Iceland                        |   |           | Finland <sup>3</sup>                              | Poland <sup>5</sup>                         |
| Germany<br>Greece                     | Hungary<br>Ireland       |                          |   |  |                                |   |           |   |   |
| Hungary<br>Ireland                    | Japan<br>Korea           |                          |   |  |                                |   |           |   |   |
| Japan<br>Korea                        | Mexico<br>Netherlands    |                          |   |  |                                |   |           |   |   |
| Mexico<br>Netherlands                 | Norway<br>Portugal       |                          |   |  |                                |   |           |   |   |
| Norway<br>Poland                      | Spain<br>Switzerland     |                          |   |  |                                |   |           |   |   |
| Poland <sup>1</sup>                   | Portugal <sup>1</sup>    |                          |   |  |                                |   |           |   |   |
| Spain<br>Switzerland                  | Turkey<br>United Kingdom |                          |   |  |                                |   |           |   |   |
| Turkey<br>United Kingdom <sup>1</sup> |                          |                          |   |  |                                |   |           |   |   |

1. Moving to full accrual budgeting.

2. Interest on government debt, certain civil service pension plans, loan and guarantee programmes are on an accrual basis.

3. Salaries and wages are on an accrual basis.

4. And certain other minor exceptions to full accruals.

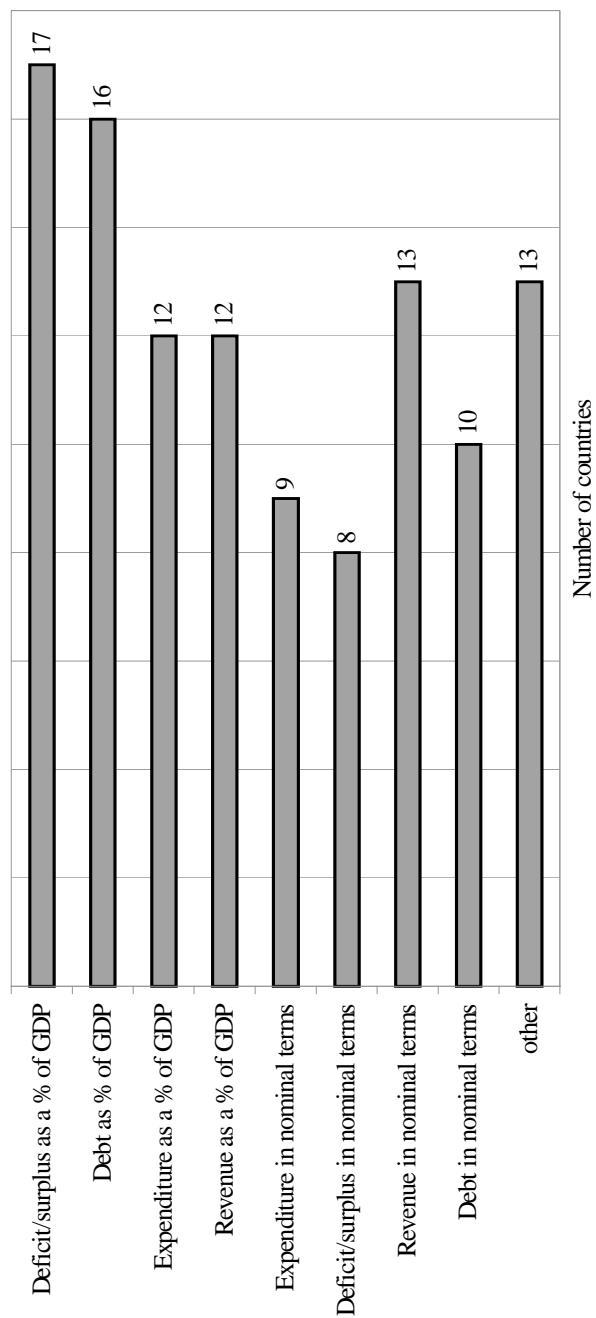
5. Civil service pensions are on an accrual basis.

6. Interest on government debt is on an accrual basis.

7. "Non-exchange revenue", most of which is taxes, is recognised on a modified cash basis.

Source: OECD, based on country submissions.

**Figure 3**  
**Number of OECD countries that spell out their medium-term fiscal objectives**



Source: OECD, based on country submissions.

being devoted by the legislature to evaluation of the budget (e.g. as France, Italy, Mexico and Sweden; the United States has for many years devoted large resources in this area). Other aspects of transparency are the publication of rules on the granting of subsidies and transfers (e.g. as required by EU rules), and the disclosure of public procurement practices (e.g. as in the United Kingdom).

An important element of fiscal transparency is an accounting system that delivers as fair and accurate a picture, on a consistent basis at both budgeting and reporting stages, of the impact of the government's activities on its overall financial positions as is possible. This has led several countries -- Australia and New Zealand have moved furthest (Table 6) -- to make increased use of accrual accounting methods<sup>13</sup>. Accrual accounting recognises the financial implications of transactions when they occur, irrespective of when cash is paid or received. Traditional cash accounting, in contrast, can more easily lead to a misleading picture of commitments undertaken when payments can be accelerated or deferred. This makes it an unsatisfactory basis, at least by itself, for monitoring recent developments or for the assessment of long-term sustainability of public finances. Important differences include the recognition under accruals systems of (i) capital costs through charging for depreciation; (ii) accruing interest obligations on discounted or zero coupon debt instruments; and (iii) future commitments accrued under pay-as-you-go civil service pension plans.

#### *4.1.2 Medium-term frameworks and fiscal rules*

Many OECD member countries (Japan is an important exception) have adopted medium-term frameworks for aggregate government spending, usually covering three to five years, and support this with medium-term objectives for one or more fiscal variables (Figure 3). This development stems from the recognition that annual budgeting may exacerbate the natural short-term focus of political decision-makers and cause authorities to lose sight of future costs of decisions, the best

<sup>13</sup> As budgetary management philosophy has shifted towards encouraging decentralisation of day-to-day decision-making, accrual accounting has also served as a management tool by providing a better basis for accountability than cash accounting. More is said about this in Part 4.3 below. Greater budget transparency therefore is likely to support improved technical efficiency in addition to its benefits in terms of fiscal discipline and allocative efficiency.

allocation mix and the appropriate timing of expenditures. Medium-term frameworks, moreover, aim to anchor annual expenditure appropriations in medium-term projections. They oblige governments to recognise the implications of current budgetary decisions for government finances in the future and to take account of changes in structural and demographic factors and rising government debt levels, as well as the evolving cyclical situation. At the same time, they limit inefficiencies that arise from annual appropriations for multi-year capital projects. To be successful in facilitating expenditure control and fiscal discipline, it is important that these frameworks be supported by systems for evaluating spending programmes objectively and they are carried out on the basis of realistic economic assumptions, as these are a major determinant of the overall “affordability” envelope.

In several countries rules have been adopted that automatically trigger sanctions when certain targets or ceilings set by the medium-term framework are breached. The best-known example is the Budget Enforcement Act (BEA) of 1990 in the United States, which formulates caps on spending which, once they have been accepted by elected officials, are enforced by requiring any extra spending to be offset by spending cuts without reference to the overall fiscal position. This is widely seen as having contributed significantly to improved fiscal discipline, although spending caps are proving more difficult to enforce now that surpluses are mounting. An earlier, and somewhat different, rules-based approach in the United States was incorporated in the Gramm-Rudman-Hollings (GRH) laws of 1985 and 1987. These specified deficit targets, rather than expenditure targets, which were to be enforced by “sequestration” (uniform percentage reductions) in selected spending programmes. GRH was ultimately discredited because the objective of declining deficits was repeatedly deferred, as it was not reinforced by agreements about where the necessary adjustments should take place and the violations of deficit targets were substantially influenced by factors outside the control or influence of the political process (*e.g.* recession). As a result sequesters required to eliminate deficit increases were very large and politically unfeasible. Another example of a rules-based fiscal framework, also formulated in terms of budget balances and not expenditure alone, is the Stability and Growth Pact (SGP) in the European Union. This has a distinguishing feature in that it uniformly applies to several countries at once, which may encourage compliance since failure to meet an international commitment is more difficult than just announcing a change

in domestic policies. Like the GRH laws, the SGP's focus on budget balances makes compliance vulnerable to unexpected changes in the cyclical position of the economy, so its success requires that policies in most times be designed to achieve positions significantly better than the deficit ceilings that lead to sanctions (ultimately, in this case, fines).

A limitation of rules-based approaches is that unless a Parliament is constrained by constitutional limits, a government cannot commit either itself or a successor to a future course of action. The persistent deferral of action under the Gramm-Rudman-Hollings laws, without bringing the sequestration provisions into effect, is a case in point. This has led some countries to a less ambitious alternative which legislates principles rather than rules, emphasises transparency and relies on these to frame public debate and encourage market discipline in a way that pushes government to respect legislated principles. The most comprehensive effort in this direction has been made in New Zealand, where the Fiscal Responsibility Act sets out "principles of responsible fiscal management". No specific targets are set in the Act, but it obliges the government to explain any departures from legislated principles, how long they will persist and how it intends to return to these principles. Similar legislation has been introduced in the United Kingdom (Code for Fiscal Stability) and in Australia (Charter of Budget Honesty).

#### *4.1.3 Fiscal risks of financial transactions and the wider public sector*

The operations of public sector entities not subject to the constraints that arise in the normal budget processes affect public finances and resource allocation in the economy more widely. Many countries, at one time or another, have had bad experiences with these as poor performance has led problems to build up over time whose consequences eventually had to be recognised on the budget, if only in terms of higher debt servicing costs. Prudent management of public finances therefore requires comprehensive attention to the whole public sector.

There are a number of operations which usually fall outside the budget process that entail risks to public finances<sup>14</sup>, but five in particular stand out:

<sup>14</sup> See Blejer and Cheasty (1991) for an overview.

- First, *extra-budgetary funds* may be created to circumvent the ordinary budget process, say to implement financial support quickly. These tend to reduce fiscal transparency and it may be difficult to exercise oversight over their expenditures. A well-known example is the complex build up of unification-related funds in Germany before they were taken on-budget in 1995.
- Second, *state-owned enterprises* (SOEs) have often performed badly and proved to be a drain on public finances. Sometimes the problems have been reflected merely in poor returns on capital but there have been many instances of SOEs requiring subsidies (often disguised as a “capital injection”), or the need to take over debts as part of financial restructuring (the assumption in Japan of the debt of the Japan Railway Settlement Corporation and the National Forest Special Account in 1998, amounting to 5.4 per cent of GDP, is an example). Many countries have made progress --the United Kingdom and New Zealand stand out but Mexico, Australia and many euro area countries have also made important advances -- reorganising and changing governance arrangements to improve the operations of SOEs by subjecting them more fully to market disciplines by privatising them wholly or partially. Nevertheless, improving the management of SOEs remains an important challenge in Turkey, the European transition countries and some EU countries, while much of the restructuring that has occurred, for example in the airline industry, has yet to be tested by a recession.
- Third, *state-owned financial institutions* are normally off-budget but generally come under government direction. This may result in lending at reduced interest rates or investment in assets not selected on the basis of sound market considerations. Even where the government avoids applying direct pressure, disciplines on management are often weak. In a number of countries state ownership has often led to fiscal problems. In countries as diverse as France and New Zealand, the insulation from market disciplines that arises with state ownership and difficulties ensuring effective supervision led to the collapse of major banks (Crédit Lyonnais, Bank of New Zealand) with ultimately large fiscal consequences. The trend in OECD countries has been almost universally toward greater reliance on market forces and disciplines in financial markets, which should limit the risks in the future, but state ownership is still significant in some countries and, in some, provides a vehicle for circumventing normal budgetary processes. In Mexico,



notably during the run-up to the 1994 election and the subsequent financial crisis, and in Turkey state-owned financial institutions have effectively been used as instruments for fiscal expansion. In Japan, the channelling of retail savings deposits from the Post Office through the Trust Fund Bureau to state-owned enterprises -- although subject to Parliamentary approval -- is not transparent in terms of its impact on public finances and questions exist as to the quality of the resulting allocation of resources.

- Fourth, *contingent liabilities associated with guarantees* normally affect the budget only when cash payments are required. The variety of these liabilities is wide. Examples include: insolvent or under-funded deposit insurance systems (the Savings and Loan collapse in the United States); the programme of guarantees in Japan for lending to small and medium-sized enterprises; the commitment in the United Kingdom in the late 1960s and 1970s to guarantee the dollar value of certain sterling liabilities; and New Zealand government guarantees on international loans to finance a series of major projects designed to cope with high oil prices that were expected to rise further in the early 1980s. Some have proved very costly.
- Fifth, the *management of official financial assets and liabilities* may result in capital losses or gains. This primarily concerns foreign exchange reserves and government debt. However, financial asset portfolios may also be established to cover specific obligations such as public employee pension reserves (Canada) or catastrophic losses (New Zealand), and various lending programmes may also generate financial assets of considerable value. Since the amounts involved are large, the financial risks they entail -- particularly in the areas of foreign currency exposure for countries with large foreign reserves or substantial government debt raised in foreign currencies -- are also large. Two general principles have been proposed in this area. First, financial management should be determined in the context of the government's overall financial position. This should involve taking account of reasonably expected future cash flows, and requiring that any subsidy element in government lending programmes be identified and taken into account. Second, the government should construct its overall financial asset and liability portfolio to hedge permanent shocks to its financial position, *i.e.* pursue an "insurance" objective rather than an independent return objective. Implementing such a strategy require a

centralised policy-setting function, although centralising operational functions is not likely to be appropriate.

#### *4.2 Fiscal relations between central and lower levels of government*

The public sector of nearly all countries includes more than one level of government and there is a wide variation across countries in relations between the different levels, both in terms of allocation of responsibilities and financing arrangements. Achieving effective management of total public expenditure is greatly facilitated if these responsibilities ensure that decision-making authority rests where it can best be exercised and if these financing arrangements ensure that spending decisions take account of the full costs that they entail.

A number of OECD countries have either confronted the need for change in their arrangements in the recent past or are now doing so. In the United States longstanding federal entitlement programmes entailing detailed rules and matching grants have recently been replaced with a system of block grants to enable the states to provide a number of social services and develop social transfer programmes on a local basis. While there are risks of migration and a “race to the bottom” undermining this policy, it represents an effort to deal with the widely-recognised failure of previous federal programmes<sup>15</sup>. Considerable experimentation is involved here, but it is hoped that innovative programmes at local levels may prove to offer models that operate more effectively, and as such contribute to enhance the efficiency of social policy. In the United Kingdom, Scotland and Wales have recently opted for their own local parliaments; and in Spain the regional financing system was revised in 1997 with a view to better matching spending responsibilities with revenue raising powers of the regions. In both cases, it is too early to assess the effects. The European Union incorporated the “principle of subsidiarity”, *i.e.* that public policy and its implementation should be assigned to the lowest level with the capacity to achieve objectives, in the Maastricht Treaty as a guide for future integration efforts. Nevertheless, debate has continued on the extent to which defence and social policy should be moved from national governments to the EU, or federal, level.

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<sup>15</sup> Oates (1999).

According to the basic principles of fiscal federalism, the central governments should have the responsibility for the macroeconomic stabilisation and income redistribution functions. Local governments simply lack the means for macroeconomic control while the spatial mobility of economic units limits the scope for regions to redistribute income -- as greater ambition in this field would risk encouraging an exodus of wealthy citizens and an influx of poorer ones. In addition to the stabilisation and redistribution functions, it is natural for the central government to provide certain "national" public goods (like national defence) that provide services to the entire population of the country. In contrast, local governments are often well placed to ensure the provision of certain merit goods and services, particularly where consumption is limited to their own jurisdictions. By matching the supply of such goods and services with the particular preferences and circumstances of their constituencies, local provision may raise economic welfare above that which results from more uniform levels of such services that are likely under national provision. The empirical record broadly confirms these patterns of vertical distribution of tasks (Table 7).

So long as any significant decision-making responsibility for expenditure is devolved to lower levels of government it is important that they face a hard budget constraint. Otherwise, the incentives could well be for them to spend excessively, and overall fiscal discipline may be difficult to ensure. Since they do not have access to monetary instruments of public financing, in principle they do face a hard budget constraint<sup>16</sup>. However, for this constraint to be binding, lower level governments should not be able to rely on transfers from above to bail them out of fiscal difficulties and, at the margin, they should be required to fund their own expenditures fully through local taxes or by borrowings whose debt servicing they have to ensure themselves. Where it is not deemed possible to make lower governments responsible for their own relations with financial markets or to allow them to suffer the consequences of mismanagement without being rescued, there is little alternative to retaining tight control at the central level over their spending and borrowing<sup>17</sup>. Efficient exercise of such tight control at the central level, in turn, requires good provision of information to the central authorities and strong financial reporting systems.

<sup>16</sup> See Eichengreen and Von Haagen (1996).

<sup>17</sup> See for this argument OECD (1996), pp. 12-8.

The desirability of ensuring that lower levels of government face a hard budget constraint to the extent that they have decision-making authority over expenditures does not preclude providing central government financial support for activities carried out by other levels of government. Several rationales for such support exist:

- *The internalisation of spillover benefits to other jurisdictions.* Conditional, or “matching”, grants are best employed to fund the provision of local services, which generate benefits for residents of other jurisdictions. It is important that these be structured with clear limits in order that they not turn into entitlements that undermine the hard budget constraint. A possible alternative way to deal with spillover effects, but which may be politically difficult, is to enlarge the geographical extent of local jurisdictions to internalise all the benefits and costs, e.g. by bringing central cities and suburbs into a single jurisdiction (Toronto provides a recent example).
- *Fiscal equalisation across jurisdictions.* Unconditional or “block” grants are typically the appropriate vehicle for purposes of fiscal equalisation -- i.e. to channel funds from relatively wealthy jurisdictions to poorer ones. Such transfers, which are often based on an equalisation formula that measures the “fiscal need” or “fiscal capacity” of each jurisdiction, play a major role in countries such as Germany, Canada and Australia, and can be justified by equity considerations. From an efficiency perspective they raise questions, however, since they may impede changes in cost differentials and flows of resources that regional adjustment requires.
- *A more equitable and efficient overall tax system.* Central government general taxes with a single (progressive) rate structure applying to the whole nation are less likely to create fiscal incentives for relocation. This would thus argue for “tax sharing”, as in countries such as Germany, Austria, Mexico and Norway, under which tax bases and rate schedules are defined on a nation-wide basis while the proceeds are split between the central government and local constituencies.

Table 7

Functional distribution of public expenditure by level of government<sup>1</sup>

|                                 | Per cent of functional category |       |               |       |          |       |           |       |         |       |         |       |         |       |         |       |                             |       |  |
|---------------------------------|---------------------------------|-------|---------------|-------|----------|-------|-----------|-------|---------|-------|---------|-------|---------|-------|---------|-------|-----------------------------|-------|--|
|                                 | General administration          |       | Law and order |       | Security |       | Education |       | Health  |       | Welfare |       | Housing |       | Leisure |       | Transport and communication |       |  |
|                                 | Central                         | Local | Central       | Local | Central  | Local | Central   | Local | Central | Local | Central | Local | Central | Local | Central | Local | Central                     | Local |  |
| Federal countries:              |                                 |       |               |       |          |       |           |       |         |       |         |       |         |       |         |       |                             |       |  |
| Australia                       | 52                              | 48    | 15            | 85    | 100      | 0     | 28        | 72    | 51      | 49    | 91      | 9     | 32      | 68    | 29      | 71    | 22                          | 78    |  |
| Canada                          | 59                              | 41    | 0             | 100   | 100      | 0     | 8         | 92    | 17      | 83    | 66      | 34    | 19      | 81    | 16      | 84    | 31                          | 69    |  |
| Germany                         | 46                              | 54    | 0             | 100   | 100      | 0     | 5         | 95    | 71      | 29    | 77      | 23    | 5       | 95    | 4       | 96    | 50                          | 50    |  |
| United States                   | 70                              | 30    | 16            | 84    | 100      | 0     | 6         | 94    | 55      | 45    | 73      | 27    | 67      | 33    | 16      | 84    | 29                          | 71    |  |
| Switzerland                     | 40                              | 60    | 0             | 100   | 84       | 16    | 10        | 90    | 43      | 57    | 82      | 18    | 8       | 92    | 7       | 93    | 37                          | 63    |  |
| Average <sup>2</sup>            | 53                              | 47    | 6             | 96    | 99       | 1     | 11        | 89    | 47      | 53    | 78      | 28    | 26      | 74    | 14      | 86    | 34                          | 66    |  |
| Unitary Countries: <sup>2</sup> |                                 |       |               |       |          |       |           |       |         |       |         |       |         |       |         |       |                             |       |  |
| Denmark                         | 64                              | 36    | 86            | 14    | 99       | 1     | 51        | 49    | 8       | 92    | 47      | 53    | 41      | 59    | 42      | 58    | 52                          | 48    |  |
| France                          | 70                              | 30    | 76            | 24    | 100      | 0     | 63        | 37    | 97      | 3     | 92      | 8     | 20      | 80    | 27      | 73    | 60                          | 40    |  |
| Norway                          | 67                              | 33    | 82            | 18    | 100      | 0     | 49        | 51    | 44      | 56    | 81      | 19    | 40      | 60    | 38      | 62    | 64                          | 36    |  |
| Netherlands                     | 69                              | 31    | 67            | 33    | 100      | 0     | 80        | 20    | 85      | 15    | 82      | 18    | 38      | 62    | 14      | 86    | 55                          | 45    |  |
| United Kingdom                  | 78                              | 22    | 58            | 42    | 100      | 0     | 0         | 100   | 100     | 0     | 91      | 9     | 0       | 100   | 0       | 100   | 67                          | 33    |  |
| Average <sup>3</sup>            | 70                              | 30    | 74            | 26    | 100      | 0     | 49        | 51    | 67      | 33    | 78      | 22    | 27      | 73    | 24      | 76    | 60                          | 40    |  |

1. 1992, or latest available. In all countries, central government includes the social security system while local expenditure shares do not always reflect local decision making power.

2. Local includes sub-central (state) levels.

3. Unweighted.

Source: Pöhl (1999).

### *4.3 Market-based provision and other allocation mechanisms*

One way to support efforts to keep aggregate expenditure in, is to enhance the allocative efficiency of public expenditure. This raises a number of issues that are covered below, notably the choice between targeting or universal provision, the greater use of market mechanisms for provision and funding, and a market-based approach towards public infrastructure investment.

#### *4.3.1 Targeting versus universal provision*

As noted, social spending in the form of transfer payments and provision of merit goods, mainly in the areas of income support, health and education, is a very large share of government expenditure in most countries. Issues of the desirability of targeting versus wider free or subsidised provision of benefits or services arise in virtually all domains of social policy. Targeting has the advantage of ensuring that the funds used are provided cost-effectively since it allows the most serious problems arising from low income or lack of access to be addressed at reasonably modest cost. In countries such as Australia and New Zealand, where social security systems give priority to assistance schemes designed to protect the poorest groups, targeting plays an important role in an effort to reconcile fiscal discipline and equity objectives. Targeting, however, is not without problems. The means testing that it often involves implies high marginal effective tax rates, especially on labour income, as the withdrawal of benefits may proceed rapidly and limit the gains from work once income rises beyond the means threshold. Where targeting is applied, therefore, care must be taken to minimise the extent to which it discourages work effort and creates poverty traps.

While there is considerable variation across programmes and across countries, most income transfer programmes and other forms of social services are based more along general insurance lines, with eligibility for benefits widespread or even universal. When building programmes along insurance lines and widespread access is an important objective, reducing intended population coverage is not a feasible approach to controlling costs. However, there may be scope for reducing moral hazard associated with the programmes and for better monitoring of beneficiaries and their

fulfilment of eligibility criteria<sup>18</sup>.

Although the general case for public intervention in the financing of merit goods is clear, the boundary between where this intervention should end and where users should bear the full costs themselves is not. The issues may vary across different types of merit goods (Box 2 illustrates some of the issues that arise in the case of tertiary education), and different countries will draw the boundaries differently. Many of the issues involved come down to the extent to which users can pay for these services and appropriate the benefits but attitudes towards different concepts of equity are also important. In this regard, many of the considerations are similar to those influencing attitudes to the targeting of benefits. The demand for goods and services which fall close to the boundary in many countries, such as cosmetic and lifestyle-enhancing medical care, child care, long-term care for the disabled and personal services for the elderly may prove to be highly elastic as societies age, labour force participation rises and technology advances. Assessments of where the limits to public financing of merit goods should be will have to be founded on hard evaluations of their costs and their impacts on government finances.

Fourth, where merit goods and services are to be publicly financed, governments must address the issue of how the delivery of the goods and services can be achieved most cost-effectively. The major areas are health and education, but similar issues arise with other merit goods. One general consideration is the need to ensure that the design of the eligibility conditions corresponds to equity concepts influencing the decision to provide public financing. However broadly or narrowly these conditions are defined they need to be maintained and enforced. Beyond this the main issues are similar to many of those raised elsewhere in Part 4 of this paper.

#### *4.3.2 Enhancing the role of market mechanisms*

Many governments have found it increasingly useful to test the boundaries of government provision. They question whether certain goods and services are so distinctive that their provision must remain in the public sector and, where provision remains public, have developed rationing mechanisms which allow targeting the provision of such goods

<sup>18</sup> For a thorough discussion of possible reforms of social transfer programmes see MacFarlan and Oxley (1996).

and services within a commercial setting without compromising fundamental policy goals. A number of examples follow.

*Contracting-out* has been tried both in the provision of local consumer goods and services (e.g. operating city bus services, waste collection and child-care services) and in the purchase of inputs for public sector agencies (e.g. maintenance and cleaning of public buildings, information technology and financial services). It is not always easy to write the contract and manage it effectively, but where these difficulties can be overcome contracting it has often led to substantial savings to the public purse and an improvement in the quality of the services provided.<sup>19</sup> Even when production ends up being retained in-house, the efficiency of public sector agencies is likely to improve through an effective “threat” of competition outside.

OECD Member countries are coming under increased pressure to liberalise *public procurement* markets<sup>20</sup>. While some countries have become more receptive, many others are still restrictive in opening their public procurement market to foreign suppliers. Moreover, since goods and services purchased by the government often cannot be delivered “off-the-shelf”, cost-plus contracts tend to prevail. This weakens the incentives for producers to prevent cost over-runs and delays. In the key area of defence procurement there has been a movement away from cost-plus contracts towards competition among a selected number of suppliers and contracts where suppliers take some part of the risk of cost over-runs. There has also been some move away from preferential purchasing arrangements. However, complicated and opaque procedures for tendering persist, which give rise to serious entry barriers and raise the bargaining position of “insider” suppliers. In order to level the playing field both among (potential) suppliers and between suppliers and the

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<sup>19</sup> Examples surveyed in OECD (1997e) range from social policy functions such as residential treatment homes for children with behavioural and emotional problems (Iceland) and case management services for the unemployed (Australia) to skilled professional services such as audit functions (New Zealand Audit Office), information technology functions (Inland Revenue Department, in the United Kingdom) and airport management (City of Indianapolis), to low technology operations such as cleaning services (National Hospital, Copenhagen) and catering operation (Turkish Ministry of Finance). Since evidence is accumulating that contracting out can lead to efficiency gains while service quality levels are maintained or improved, its use is generally increasing.

<sup>20</sup> For example, the European Union has already issued directives that have formally liberalised public procurement and made tendering transparent, although import penetration of publicly procured goods generally remains low. In addition, the international framework regarding public procurement has also been strengthened in the WTO.



government, best practice principles as those for contracting out also apply to public procurement. In particular, the team responsible for the purchase should maintain careful scrutiny of cost, possess the technical skills for overseeing the quality of goods or services delivered, and be held accountable<sup>21</sup>.

*User charging* has become widespread with the objective of reducing excess demand and improving public services through the introduction of market signals<sup>22</sup>. User charges aim to create a sustainable basis for revenue raising to finance certain services, while relieving the general taxpayer of costs properly born by the users who benefit directly from them. The discipline this imposes on users promotes allocational efficiency and, by subjecting the government organisations providing services to a market test user charging is expected to encourage customer-oriented management and improve the financial and service performance of the public supplier. However, social considerations may limit the extent to which setting user charges in line with costs is acceptable and user charging will be viable only if the transaction costs of collection of charges are lower than the efficiency gains that result from market-type provision.

*Vouchers* constitute an emerging instrument for the distribution of merit goods and services in a number of OECD countries (Box 3). They aim to remove undesirable distributional effects associated with user charging and/or private provision. Through vouchers individuals receive entitlements to a good or service which they may “cash in” at some specified set of suppliers, which redeem them for cash from a funding body. The value of vouchers can be varied in order to pursue distributional objectives and/or to target the aid to specific groups. Designation of the recipient ensures that they are not tradable across consumers and designation of the services that they are not equivalent to cash.

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<sup>21</sup> OECD (1994).

<sup>22</sup> The range of government services which can be subject to user charging that covers all or part of the costs of providing them is wide, and several case studies are reported in OECD (1998*d*). The United States Nuclear Regulatory Commission is now fully financed by user charges. In Barcelona, the Fire Department charges for its services. Its motivation is to increase public awareness of the need to maintain facilities and buildings properly, and in fact it only levies charges when there is evidence of negligence. When the Attorney-General’s legal practice in Australia moved to a user charging regime client service improved dramatically. Other examples are numerous, usually for services which for one reason or another full commercialisation of the activity, say by creating a state-owned enterprise or by privatising it altogether, is not feasible.

### **Box 2. Who should pay for tertiary education?**

The part of educational expenses on tertiary education covered by individuals or other private sources varies widely throughout the OECD -- from negligible amounts in many European countries (*e.g.* in Denmark, Sweden and Austria) to more than 50 per cent in Korea and Japan.

A priori, those who benefit from higher education<sup>1</sup> should and, financial markets permitting, could pay for it. Therefore, a high share of private financing does not necessarily lead to low investment in tertiary education. On the contrary, in some OECD countries with high spending on tertiary education relative to GDP, the share of private finance is among the highest (*e.g.* in the United States and in Korea; see OECD, 1998*b*). Tertiary education does not have the characteristics of a public good, as there is some rivalry in consumption and consumers are excludable. The fact that the bulk of tertiary education is nevertheless publicly financed in most OECD countries therefore seems to be motivated by the existence of substantial externalities, (other) market imperfections or certain policy objectives associated with higher education.

*Positive externalities of tertiary education?* If tertiary education leads to positive externalities, the market would provide less than efficient amounts. However, the degree of these externalities is controversial. Some have emphasised a positive impact on productivity. Johnson (1984) argued, for example, that even the low-skilled might benefit from subsidising higher education if high- and low-skilled work are complementary<sup>2</sup>. Others have stressed externalities beyond potential increases in GDP, such as greater social cohesion, reduced crime rates and more appreciation for cultural goods. Furthermore, it is often suggested that investment in tertiary education would alleviate employment problems and contribute to a necessary increase in the qualification of the workforce. Nevertheless, it is relatively difficult to identify (or even measure) "pure" externalities that would neither accrue to the individual nor to its current or future employers and that could therefore not be reflected in present or prospective wages.

*Correcting (other) market failure?* While wage negotiations could in principle internalise the benefits -- and thus achieve

efficient levels of provision if no pure externalities are present -- market imperfections might inhibit these outcomes<sup>3</sup>. Among these obstacles are the risk and uncertainty that surround human capital investment, liquidity constraints for low-income households<sup>4</sup> and information asymmetries (e.g. hidden knowledge). Many of these impediments are particularly pronounced for high-cost studies (e.g. sciences, engineering, medicine). Furthermore, certain forms of non-university education that require co-operation with employers might not be provided in an optimal amount, as employers could refrain from training in skills that would benefit the employee or future employers in case of a workplace change. Labour market restrictions (e.g. limited scope for productivity-based pay or for individual contracts) could also prevent efficient levels in the absence of public support<sup>5</sup>.

*Contribution to achieving equity goals?* The impact of public support for tertiary education on various concepts of equity is ambiguous<sup>6</sup>. On the one hand, it facilitates the access of low-income households, which might otherwise not be able to afford higher education, thereby promoting social mobility. On the other hand, those who tend to profit most from post-secondary education have already a relatively high level of education. Furthermore, the average recipient can expect an above average lifetime income. In addition, low social and income groups tend to participate under-proportionally<sup>7</sup>. However, empirical evidence indicates that increases in net private post-secondary education cost lead to decreases in enrolment rates for lower income students (for the United States, see e.g. McPherson/Schapiro, 2000). Finally, financing of public expenditure on education through general taxation leads to a transfer from those having no children to families. It could be argued that this contributes to equity if the cost of raising children is not fully compensated by other family/children support, though not all families profit from tertiary education.

*Tertiary education as a merit good?* The merit good argument is often seen as justifying the generally free and compulsory provision of primary and secondary education. While it seems reasonable to argue that children might not be fully aware of the benefits, it is much less clear why this argument should apply to higher education as well. After all, the choice of whether or not to pursue post-secondary education is *per se* only open to people with

considerable prior education, some of which might have already experienced the benefits of education in general. Furthermore, even if higher education is considered to be a merit good, it is not clear whether high levels of government support lead to an increase in the aggregate consumption of this good<sup>8</sup>.

*The impact of taxes and unemployment benefits.* Taxes in general, and progressive income taxation in particular, introduce a wedge between private and fiscal rates of return<sup>9</sup>. Higher education leads to higher income and, thus, net additional tax revenue. This might, even when discounted, outweigh the public costs of financing tertiary education. Thus, financing tertiary education could be an acceptable investment from a pure budgetary point of view, even in the absence of externalities<sup>10</sup>. As higher education enhances the opportunity cost of not working, it could furthermore lower the adverse effects associated with unemployment benefits.

The above analysis indicates that some government expenditure on tertiary education seems to be warranted, though it is questionable whether the current high levels in many OECD countries can be justified by these arguments. In addition, public support is often not targeted to the above-mentioned failures that could justify intervention. Furthermore, public financing also entails inefficiencies, particularly in the case of generally free provision. In particular, the signalling function of the tertiary education market is severely undermined and neither the study combinations desired by students nor those demanded by the labour market nor those that provide the most externalities are reflected in the price to the students. This also entails the danger that part of the support for tertiary education might be captured by the education institutions and that flexibility in the tertiary education market is severely hampered.

OECD member countries have responded to these challenges by introducing new financing approaches that move from free provision and grants towards tuition and loans, while trying to influence student behaviour to make tertiary education more cost-effective and ensuring that the participation of low-income households is not discouraged. These approaches include *inter alia* the time-limiting of student aid (e.g. the Netherlands, Finland), means tested tuition fees (e.g. the United Kingdom), income-contingent student loan repayment (e.g. New Zealand) and

differentiated student contributions by field (e.g. Australia)<sup>11</sup>. Nevertheless, most of these approaches also entail inefficiencies (e.g. they might lead to high marginal effective tax rates), and may not be equally apt for other countries. In any case, the policy implications vary with the type of imperfection that public support is intended to correct. If, for example, capital market access of low-income households is the primary problem, providing student loans would be a better remedy than free provision for all groups (see e.g. Creedy, 1995).

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1. The terms “higher education”, “tertiary education” and “post-secondary education” are used interchangeably in this box. For a definition and distinction of the latter two terms see OECD (2000).
  2. The increase in productivity would then normally lead to higher wages for both high- and low-skilled workers.
  3. For an overview of the discussion, see e.g. Stern and Ritzen (1991).
  4. Financial institutions might be particularly reluctant to lend to these households since the building of human capital is not separable from the effort of the individual and not well observable.
  5. Furthermore, minimum wage restrictions might inhibit contracts in which low-skilled workers pay for the benefits of their training through reduced pay.
  6. Tsakloglou and Antoninis (1999), for example, provide empirical evidence for Greece, where tertiary education is provided free of charge (according to the Greek constitution). They conclude that the distributional impact of providing free tertiary education is negligible and could even be regressive.
  7. See OECD (1997d) and OECD (1999d) for a discussion of access and equity issues in tertiary education.
  8. Testing whether or not public support meets the merit objective, Becker (1974) assumes a reciprocal interdependence between taxpayers and tertiary education recipients (i.e. the behaviour of each actor influences the decision of the other) and concludes that public spending could even lead to a decrease in overall spending and consumption of higher education. However, Arcelus and Levine (1986) assume reciprocal interdependence and arrive at the opposite conclusion.
  9. Fiscal rates of return are calculated on the “life-time value of additional income-tax receipts and employee social-security contributions less social transfers, for those who complete university education, compared with the public costs of educating of a university student and the taxes lost on earnings forgone during the time of study” (OECD, 1998c).
  10. This however would not be socially optimal. OECD (1998c) provides estimates of fiscal rates of return to university level education for males and females in seven OECD countries, ranging from four per cent for women in Sweden to 13 per cent for their Belgian counterparts. Still, government spending on tertiary education does not per se lead to higher net fiscal revenue, as at least a part of tertiary education might have been undertaken as well in the absence of financial support.
  11. For an overview, see OECD (1998b).

### **Box 3. Vouchers as a means of distributing public services**

Voucher systems are regimes in which individuals receive entitlements to a good or service which they “cash in” at some specified set of suppliers, which then redeem them from a funding body. They may be explicit or implicit, but must provide a margin of choice to some or all consumers. They potentially have considerable flexibility as a device for allocating public services as they can be made universally available, means-tested, or structured to permit or prohibit top-ups for particular recipients. Moreover, by providing targeted groups of consumers with purchasing power, vouchers facilitate and complement the introduction of user charges. However, concerns exist that they may work against the objective of co-ordinated provision since they encourage competitive behaviour by suppliers. Furthermore, because they increase the choice they allow users of public services, vouchers often elicit resistance from established providers. Given these considerations, voucher schemes are often controversial and experience with them has been limited. Most of the concrete examples come from the United States and the United Kingdom. These cover areas such as primary and secondary schooling (several experiments in US municipalities; widespread reforms in England and Wales culminating in the 1988 Education Reform Act), non-compulsory education and training (“Youth Credits” in England and Wales, later replaced by “Learning Credits” in the United Kingdom), higher education (the introduction of competitive tendering into the allocation of block grants in the United Kingdom in the 1980s), food stamps (United States) and social care (the Independent Living Fund for the severely disabled in the United Kingdom). Overall the results have been mixed and further experimentation will be needed to separate what works well from what does not. But some conditions for vouchers to realise efficiency gains appear to be the following:

- Some degree of competition between providers should exist. If not, the rationale for vouchers disappears. Therefore, vouchers are less suited for public services that by their nature must be provided in the geographical vicinity of the consumer as this entails a risk of local monopoly.
- Since capacity constraints create a “sellers market” that may prompt providers to adopt or maintain non-price-rationing mechanisms, the authorities need to make sure that the provision capacity is adequate.
- It may be useful in some cases to allow vouchers to be topped up with out of pocket payments. This may be efficient to the extent it allows price differentiation and competition among providers and facilitates a mix of private and public provision.

### 4.3.3 *Managing public infrastructure projects*

Significant amounts of resources, both in budgetary and economy-wide terms, are devoted to capital expenditure by governments (Figure 4) and state-owned enterprises dependent on government financial support. Much of this investment consists of large projects which generate construction and procurement contracts involving large sums of money, in turn creating vested interests in such investment. The benefits, or returns, on such investment are often hard to measure -- indeed the impossibility or inappropriateness of simply applying a market test may explain why the activity is in the public sector -- making objective assessment of proposals for government investment very difficult. An influential paper by Aschauer (1989) argued that benefits from public investment (based on US data) are very high and, by implication, that more spending would be desirable. However, the empirical literature that this paper stimulated is not uniformly supportive of this view and many studies call attention to the fact that investments are costs whose impact is negative unless there is an adequate return.

In view of the difficulties involved, the OECD in 1998 reviewed the main issues involved on the basis of submissions from thirteen countries in response to a questionnaire which led to the following policy conclusions:

- Large-scale, diffuse programmes of infrastructure development cannot be relied upon to increase output or welfare in the long run.
- The key to effective public investment lies in which infrastructure projects are chosen. Proper targeting of public investment requires effective institutions.
- The sectoral policy environment in which physical investment decisions are made is crucial to the effectiveness of government investment.
- Cost-benefit analysis can provide a useful indicative input to the public investment process. Many countries use it in one form or another and its role could be usefully strengthened.
- Effective public investment requires an environment of fiscal discipline.
- Many countries are exploring various forms of public-private partnership for investment projects.

These conclusions point to the need for persuasive evidence that projects are needed, rather than presuming it; the need to find ways to discriminate among projects in order to single out those that will have a high return; the usefulness of cost-benefit analysis in this regard (Table 8); and the desirability of involving the private sector (Table 9).

#### *4.4 Flexible incentives and control mechanisms into management of the government*

Maintaining fiscal discipline requires enforcement mechanisms to ensure that budgets are implemented along intended lines. Most countries have traditionally relied on highly centralised financial and personnel control to achieve this and some (*e.g.* Japan and Germany) continue to regard this as the best way to proceed. Such centralised control can be a source of inefficiency by limiting the authority of managers outside the control ministries to exercise their judgement, however, and many OECD countries have sought improvements by allowing these managers more autonomy and flexibility in their day-to-day operations (Box 4 describes several case studies). By empowering and motivating managers to improve performance, this offers scope for efficiency gains reflected in lower staffing levels and reduced operating expenditures, as well as improved public services. But achieving these gains requires strategic controls and the ability to define clear objectives to enable performance assessment that ensures that accountability goes hand-and-hand with greater autonomy. This is substantially more easy where activities can be subjected to a market test than with core government activities such as provision of public goods and in the social policy domain.

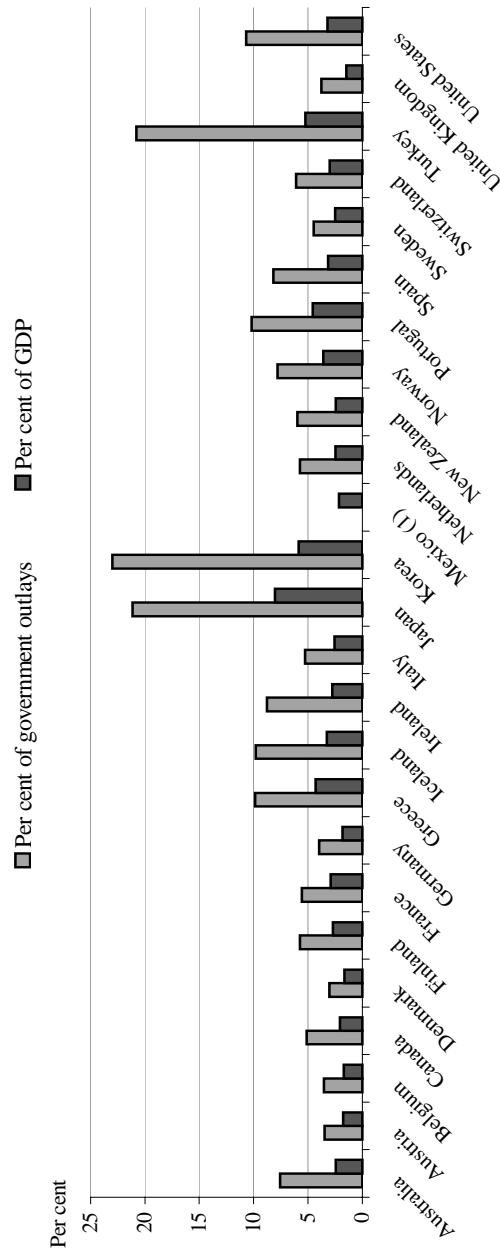
Reforms designed to introduce more flexible management systems imply important changes in the relationship between central budget offices and sectoral, or spending, ministries and agencies<sup>23</sup> and in their operations. Initiatives to date have had several main elements. One is the introduction

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<sup>23</sup> The new role of the central budget office is reflected in such activities as: *i)* devising a more effective budget system to control the budget total and establish priorities among programmes; *ii)* integrating budgeting with other management processes; *iii)* require spending agencies to measure performance and evaluate results; *iv)* developing new guidelines and methods for holding managers accountable; and *v)* promoting new information and reporting systems.



**Figure 4**  
**General Government Investment in OECD countries, 1999**



1. Data for government outlays are not available.

Source: OECD.

**Table 8**

**Use of cost-benefit analysis for public investment**

| <i>Country</i> | <i>Is cost-benefit analysis used?</i> | <i>Description of cost-benefit analysis</i>   |
|----------------|---------------------------------------|---|
| Australia      | yes, in some cases                    | Public enterprises are mainly involved in selling goods and services in markets in order to earn a commercial return. Reflecting the predominantly commercial nature of their operations, investment decisions are made on the basis of commercial viability and expected rate of return. In contrast, investment decisions in the general government sector also take into account the Government's broader expenditure priorities and budget objectives.  |
| Austria        | yes, but use is variable              | Most ministries have created a number of boards and commissions whose function is to advise on investment decisions. Usually, these advisory commissions are composed of representatives of the employers' and employees' associations and university or research institute experts. The planning procedures are of different quality and depth, ranging from relatively detailed project planning to generally worded declarations of intent.  |
| Finland        | yes, for public transport             | A socio-economic impact study is the basis for investment evaluation in transport. It includes a cost-benefit calculation as well as an assessment of impacts which cannot be valued in monetary terms. Decisions on transport investment are taken by the Parliament, where these studies provide one input into a long and complicated decision process that is largely political in nature. Cost-benefit analysis is used mainly in order to eliminate poor projects from the selection process. |
| Greece         | yes, in some cases                    | The EU co-financed projects are subject to special evaluation rules that include an assessment of the socio-economic significance of the project and its compatibility with EU policies. With the exception of subsidies for private investment in less-developed regions, cost-benefit analysis is not required.   |
| Japan          | no                                    | Although the Japanese submission recognises a need for cost/benefit analysis, it notes that such assessments pose theoretical and practical difficulties. Recently various levels of governments have initiated studies to evaluate different types of public investment analysis.  |

|                |                                  |  |
|----------------|----------------------------------|--|
| Norway         | yes                              | Cost-benefit analysis most extensively used for investment in roads, but is also used elsewhere. In general, ministries are reluctant to quantify benefits from projects on the grounds that the estimations are incomplete. The use of cost-benefit analysis by ministries appears to be increasing. Actual investment decision are made in Parliament; there is some evidence that Parliament uses cost-benefit analyses as a screening device to determine which projects should be considered, but generally the influence of such studies was variable among members of Parliament. |
| Spain          | yes                              | Cost-benefit analysis is widely used to decide which investment projects are the most appropriate. For instance, for the large public investment projects receiving aid (such as from the European Structural Funds) a cost-benefit analysis is always performed with a view to assessing the socio-economic returns. However, this type of analysis is not done in order to compare public investment projects in different sectors.  |
| Turkey         | yes                              | Cost-benefit analysis is undertaken. Other analytical techniques can be used depending on the nature and the characteristics of the project handled (e.g. technical feasibility, environmental impact analysis, social benefits). Any project that is feasible according to economic or social criteria has to be consistent with the development plans and annual programmes too. The sectoral priorities are based on the results of the project analyses, but political choices may also affect outcomes.   |
| United Kingdom | yes                              | Under new investment control arrangements, departments receive a set amount of money for investment purposes. They will have to set out in detail how these resources are to be managed so as to provide "best value for money and ensure positive social returns". HM Treasury has shared responsibility (with other departments) for monitoring these plans.   |
| United States  | yes, as part of a larger process | Capital assets are not selected on the basis of rate of return. Recently, a process called "capital programming" has been used. This involves the planning, budgeting, procurement and management of an asset. Departments may use analytical procedures that resemble cost-benefit analysis as part of the first two phases, but are not required to do so. More generally, investments are analysed with respect to how they contribute to meeting the agency's "mission, goals and objectives".   |

Source: OECD, compiled from country submissions.

**Table 9**

**Re-defining the boundaries of public and private investment activity**

| <i>Country</i> | <i>Definition of private and public roles in investment</i>  |
|----------------|--|
| Australia      | There is a growing realisation in Australia that the private sector is able to play a larger and more effective role in many areas such as electricity generation, telecommunications, the provision of education and hospital services, prisons and road funding. In many cases, this has resulted in the Government's ceasing activity in areas that can be more efficiently undertaken by the private sector and introducing measures to improve efficiency in those activities remaining in the public sector. |
| Austria        | Government intervention is taking on new forms. Less emphasis is placed on financial flows and more on regulation and on providing frameworks and incentive systems. The volume of government activity is shrinking and what is considered to be a government responsibility is changing. This is especially true for infrastructure projects in telecommunications and energy supply, which until recently were an exclusive domain of a public-sector monopoly.  |
| Finland        | A debate is taking place about the Government's role in Finnish society. For the time being, this has focused more on the transfer system and not much on public investment (which is comparatively small). There have been some attempts to "privatise" public investment. However, this approach does not extend to decision making: the Government is still responsible for making the investment decision.   |
| Germany        | It is customary practice in Germany for private enterprises to be involved in the planning and construction of public infrastructure projects. Over the past few years, greater scope has been made for private enterprise in performing public-sector tasks. This includes greater involvement of private finance and privatisation of telecommunications and postal services.  |

|                |   |
|----------------|---|
| Japan          | Co-operation between public and private actors in implementing investment projects (called “third sector” in the submissions”) is currently being looked at by the Japanese Government. The submission notes that Japan has already used these arrangements during the latter half of the 1980s, but encountered serious problems. Both the private and public sectors found it difficult to co-ordinate their different objectives and responsibilities were often unclear in third sector entities.   |
| Spain          | Several new financing techniques have been introduced recently. Private-sector participation in the construction of motorways, rail tracks and hydraulic works have been encouraged through long-term concession contracts (Build-operate-transfer). The turnkey method of payment has been used for several large projects, this shifts the risk of cost over-runs onto private partners and also pushes the public costs onto future budgets. Other public-private partnerships have been created for several new railways and water works. |
| Turkey         | Recent investment projects and plans have encouraged participation of the private sector, even in sectors traditionally dominated by the public investment. In particular, the Build Operate Transfer model has been extensively used in Turkey.  |
| United Kingdom | The Private Finance Initiative (PFI) transforms government departments from being owners and operators of assets into purchasers of services from the private sector, while private firms become long-term providers of services rather than simply up-front asset builders. Privatisation has also re-set the boundaries between private and public investment, leaving postal services and London Transport as the only two state-owned firms with large investment programmes.   |
| United States  | The line dividing public and private investment tends to be rather sharply drawn, at least as far as investment by the Federal Government is concerned. Investment partnerships between Federal and private entities are not common in the United States. However, the “capital programming process” asks departments to consider whether private entities can better undertake an activity and, if so, to forego investments related to that activity.   |

Source: OECD, compiled from country submissions.

#### **Box 4. Enhancing flexibility in public management**

In 1997, the Public Management Service reviewed the efforts of five OECD countries -- Australia, France, New Zealand, Sweden and the United Kingdom -- to reform the way they organise and manage the public sector<sup>1</sup>. The review found that in all five there is professed consensus within government that the centralised model no longer suits the needs and conditions of public management. Reform has been centred around accountability frameworks in which the government entrusts spending agencies with flexibility in using resources, in exchange for holding them responsible for results. The repertoire of devices for enforcing managerial accountability includes strategic and operational plans, performance measures and targets, contracts for personal and organisational performance, de-coupling service delivery from policy making, new accounting rules and annual reports, more active use of evaluation and auditing, and financial inducements and sanctions.

The five countries have different governing traditions and have approached reform differently. France has a long tradition of detailed supervision by financial controllers, and it has moved cautiously to enlarge the operational discretion of local managers. Sweden is at the other end of the spectrum, for it has a long history of small ministries and relatively autonomous agencies. Sweden gives managers more latitude than is found in some other countries, so that innovations have been less dramatic than elsewhere. By the early 1980s, the United Kingdom had already retreated from the doctrine of Treasury Control that it has practised for more than a century. Its financial management initiative launched in 1982, the Next Steps initiative commenced half a dozen years later, and more recent fundamental expenditure reviews have been spurred by political support at the top of the government for re-shaping the public sector. Australia entered the reform era with highly centralised controls, but it has discarded many personnel and financial restrictions and adopted a variety of political and administrative arrangements to stimulate management improvement. As a small country with an open economy, New Zealand felt its future well-being threatened by powerful international forces, and it responded by creatively adapting commercial practices to public management.

The five countries face similar problems in restructuring national administration. All must establish new relationships between the centre, which is politically accountable for governmental performance, and operating units, where services are provided and most resources are spent. Defining the new relationship has been difficult because strategic controls must be devised in place of the discredited *ex ante* controls.

All of the countries must motivate managers to take initiative and responsibility over what they spend and produce and to accept that the performance of their organisation depends on their personal performance.

There has been an enormous turnover of senior and middle managers in New Zealand and the United Kingdom, as many officials discomfited by the new managerialism have left on their own accord or have been encouraged to depart. The importation of new managers appear to be inconsequential in France and Australia. Each government must determine what is acceptable risk, as operating agencies are given discretion to spend resources and take other actions that may have important political or financial ramifications. This issue is least troublesome in Sweden, where the line between ministries and agencies is well marked, and most pressing in New Zealand and the United Kingdom, where the independence of agencies has called into question the Westminster doctrine of ministerial accountability.

Each government has devised an instrument of choice to assure that performance information influences organisational behaviour. Australia relies on programme evaluation both before policies have been initiated and after they have been funded; France is emphasising responsibility centres as a means of imbuing civil servants with awareness that their actions can make a difference in the quality of service; Sweden has placed increasing reliance on annual reports that are audited for reliability of financial and performance statements; the United Kingdom looks to framework documents and performance targets to concentrate managerial attention on key objectives and results; New Zealand invests considerable resources in negotiating performance agreements for chief executives and purchase agreements for agencies. Every country faces the problem that no matter how much it generates by way of performance information, decisions may be taken and resources allocated in disregard of objectives and results.

Because of the difficulty of implanting a performance culture, every country has had a spate of disappointments; none has accomplished everything it set out to do. The United Kingdom found that the financial management initiative had produced better information, but had done little to liberate managers at operating levels; it subsequently appeared that Next Steps had energised the newly established agencies but had not yet transformed the central departments. Australia has been vexed by the problem of packaging performance information into a useful format, and it has also been disappointed by the less than optimal use of the programme structure. New Zealand has made relatively little headway in measuring outcomes, and the relationship between ministers purchasing services and agencies supplying them has not been sufficiently clarified. Sweden has been disappointed by the failure of the multi-year budget frames to deepen the quality of budget work. France has found that, despite government guidelines, some important ministries have dragged their feet in devolving responsibility to local agencies.

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1. This box is a condensed version of the Executive Summary that appears in OECD (1997f).

of top-down spending ceilings, consistent with the medium-term expenditure frameworks (see above), with the elected officials retaining an important role in designing the overall budget and stating spending priorities. Several countries, including the United Kingdom, Australia, New Zealand, the Netherlands and all Nordic countries allow almost complete discretion in spending within cash limits on running costs. Operating units are allowed to shift funds among items of expenditure and between fiscal years. In several countries (Australia, Denmark, the Netherlands, New Zealand and Sweden) agencies notionally earn or pay interest on carried-forward or pre-spent funds, although typically carry-over and pre-spending is limited to a certain percentage of appropriated funds<sup>24</sup>. This allows increased flexibility to shift funds between fiscal years which reduces incentives for end-of-year spending hikes and poor resource use. An important element of this set-up is that future funding is not reduced by under-expenditure in a previous year.

Second, financial information systems similar to those required to ensure fiscal transparency (*cf.* Part 4.1) are also needed to allow control ministries and elected officials to monitor performance and to ensure overall financial control. These should include: reliance on accrual-based accounting to the extent feasible, in order to identify when, where and how many resources are being used; cost data that are complete; budgets (*i.e.* exact spending plans) and financial reporting (*i.e. ex post* expenditures) that are on the same basis; and auditing to ensure the integrity of the accounts.

Third, several countries have made efforts to reinforce the use of market mechanisms, such as privatisation, contracting out, and exposing activities to private competition, by the development of “internal markets” as a device for enhancing accountability. New Zealand has gone furthest in this direction, making the split between the government’s role as an owner and a purchaser explicit; levying a capital charge for the government’s investment; contracting for the services of chief executives of ministries and agencies along the lines of contractual relationships in the private sector; and negotiating purchase agreements for the “sale” of output from agencies to ministries. The difficulty of defining and measuring the “output” of ministries and government agencies has been a major challenge for this approach, and it has proved difficult in a simulated

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<sup>24</sup> OECD (1997).



market to clarify relationships between purchasers and suppliers. Furthermore, performance contracts between public sector agencies are unlike arms-length agreements between unrelated parties. A major dilemma relates to the efficiency dividend. Unlike in real markets, there is no incentive to lower prices when efficiency increases. Taking away the dividend would penalise managers or agencies for being efficient, while allowing them to keep the dividend would enable them to spend on services that were not contracted for in the budget. Overall, developing market-type discipline through contracting and development of quasi-markets remains at an experimental stage.

Finally, some countries have sought more market oriented and flexible approaches to public sector pay determination, conditions of employment and staffing levels (notably the United Kingdom, Australia, New Zealand and the Nordic countries). Growing use is being made of workers under contract rather than permanent civil servants while salary scales and job classifications have been revised to allow greater use of promotions as an incentive and to link pay to performance indicators. In some cases (*e.g.* New Zealand and Sweden) broader reforms include giving each government department autonomy to bargain with its own employees over pay rates, working conditions and other matters. In some instances managers have been given flexibility in staffing -- selection, hiring, deployment and performance management. But in many countries considerable rigidities persist in public sector wage structures and staff management is less flexible than in the private sector. Such reforms, coupled with top-down expenditure ceilings, may be more durable means of increasing productivity and controlling costs than centrally imposed wage restraint<sup>25</sup>.

## 5. Monitoring progress: a checklist

Based on the above discussion of main reform areas, a comprehensive checklist of criteria has been compiled to assess the policy efforts to enhance the cost-effectiveness of public expenditure in individual countries. The range of criteria put forward is probably much

<sup>25</sup> See for a recent comparison of wage determination in the public sector in two countries, France and Italy, OECD (1998e).

too wide to be considered for every single OECD country, and, dependent on the situation, their importance will vary from country to country.

With regard to *budgetary processes and control*, the following questions look relevant:

- How well does the country adhere to principles of transparency put forward in the IMF's Code on Good Practices on Fiscal Transparency and the OECD Best Practices for Budget Transparency?
- What is the scope for improving fiscal transparency? Are budget documents clear and unambiguous? Are contingent liabilities reported? To what degree has accrual accounting been adopted?
- Have medium-term expenditure frameworks been adopted and what has been the experience to date? Have budget targets or spending ceilings been adhered to? If not, what have been the main causes? Have cyclical factors importantly affected the ability to achieve targets?
- Are systems in place to ensure that the economic assumptions that underlie budget plans are realistic and that the future implications of spending programmes are objectively evaluated and reflected in medium-term planning?
- What enforcement mechanisms have been adopted in circumstances where rules-based approaches are in place? Are these deemed to be credible? Do they exert a genuine impact on expenditure discipline?
- What are the risks to public finances from financial operations and from the activities of public sector entities outside the usual budget process?
- Should the mandating and reporting of off budget expenditure and the operations of public entities outside the general government become more transparent and comprehensive? Do they include estimates of any subsidy element that is not appropriated from the budget and gains or losses arising from market risks such as from foreign currency exposures?
- Are the governance arrangements that apply to public entities outside the general government well designed to encourage good performance and to trigger changes when such performance is not delivered? What improvements should be made?

On fiscal relations between central and lower levels of government relevant questions are the following:

- What mechanisms are in place to enforce local governments' spending discipline?
- If local governments have discretion to raise money in financial markets are they required to do so on the basis of their own credit-worthiness? To what extent does such borrowing enjoy an explicit or implicit guarantee from the central government?
- How are intergovernmental grants or transfers determined? Are they designed to ensure that they do not operate as an entitlement which encourages low quality expenditure?

To assess the role of *market-based provision and other rationing mechanisms* the following questions are important:

- Does the design of social programmes in the country under review take account of their interaction with the tax system and their economy-wide impact, notably on the labour market?
- Is there scope for gains to be achieved by more careful targeting of social policies involving income transfers and financing the provision of merit goods?
- Where is the boundary in the country under review between these benefits and social services financed publicly and those left to individuals to cover from their personal resources?
- Are the longer-term financial implications of the balance between targeted assistance and more universally available programmes and services been carefully evaluated and factored into budget planning?
- Are eligibility conditions for social benefit programmes enforced well?
- Are systems for provision and financing health care, education and other social services delivering satisfactory outcomes on a cost-effective basis?
- To what extent are market-type mechanisms of provision, such as contracting-out, user fees and vouchers employed in the country under review? What has been the experience to date and to what extent have the above basic conditions for success been met?

- Has the scope for using market mechanisms without compromising social policy goals been fully exploited? For which areas could the introduction of market mechanisms be considered?
- Is there evidence of large pent-up demand for public infrastructure or important areas where under-provision is hurting economic performance? Alternatively, is there evidence of over-investment in public capital goods?
- Is the decision making process behind public infrastructure investment transparent? How extensive is the use of cost-benefit analysis? To the extent that formal cost-benefit methods are not used, are there ways of ensuring that the full costs of projects are taken into account? Are external effects sufficiently taken into consideration?
- What is the private sector's involvement in public investment policy? Is extensive use made of public-private partnerships and how are these being governed? Is there scope for increased reliance on the private sector and market forces? Is public procurement open to competition and transparent?

Finally, progress in the introduction of *flexible incentives and control mechanisms* into management of the government could be assessed on the basis of the following questions:

- How much progress has been made with devolution of day-to-day decision making to the operational levels of the public administration? Is there scope for further moves in this direction?
- Is there scope for greater use of market mechanisms, contracting or development of simulated markets which might enhance technical efficiency?
- Have modern accounting and reporting systems been introduced to facilitate performance assessment?
- To what degree has market-oriented human resource management been adopted? What are the obstacles for reforms in this area?

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## ANNEX

### Tables

- A1. General government outlays by economic category: income transfers
- A2. General government outlays by economic category: subsidies
- A3. General government outlays by economic category: interest payments
- A4. General government outlays by economic category: consumption
- A5. General government outlays by economic category: net capital outlays

**Table A1**  
**General government outlays by economic category: Income transfers**  
*(percent of GDP)*

|                             | 1965 | 1970 | 1975 | 1980 | 1985 | 1990 | 1995 | 2000 |
|-----------------------------|------|------|------|------|------|------|------|------|
| Australia                   | 4.2  | 3.9  | 5.9  | 6.8  | 7.4  | 6.9  | 8.5  | 8.3  |
| Austria                     | 12.9 | 14.1 | 14.9 | 16.2 | 17.9 | 17.7 | 19.5 | 18.3 |
| Belgium                     | 11.9 | 11.0 | 14.5 | 16.1 | 17.2 | 15.1 | 15.5 | 14.4 |
| Canada                      | 5.2  | 6.5  | 8.6  | 8.3  | 10.5 | 11.2 | 12.6 | 10.9 |
| Denmark <sup>1</sup>        | 6.8  | 10.5 | 13.5 | 16.2 | 16.1 | 17.8 | 20.4 | 17.2 |
| Finland                     | 7.6  | 5.9  | 8.7  | 9.5  | 11.8 | 12.6 | 16.1 | 12.6 |
| France                      | 11.5 | 12.0 | 14.1 | 15.5 | 17.7 | 16.9 | 18.5 | 18.1 |
| Germany                     | 13.0 | 13.0 | 17.2 | 16.6 | 16.0 | 15.2 | 18.1 | 18.6 |
| Greece                      | 6.8  | 7.6  | 7.1  | 8.9  | 14.4 | 14.4 | 15.1 | 16.1 |
| Ireland                     | 10.0 | 10.0 | 10.0 | 10.7 | 12.9 | 11.9 | 12.6 | 9.7  |
| Italy                       | 11.9 | 11.8 | 14.4 | 14.2 | 17.1 | 18.1 | 16.7 | 17.3 |
| Japan                       | 4.7  | 4.6  | 7.7  | 10.1 | 10.9 | 11.4 | 13.4 | 15.7 |
| Korea                       | 0.9  | 0.6  | 0.7  | 1.3  | 1.5  | 2.0  | 2.1  | 3.3  |
| Mexico                      | ..   | ..   | ..   | ..   | ..   | ..   | 2.6  | ..   |
| Netherlands                 | 10.0 | 10.8 | 14.3 | 16.4 | 15.5 | 15.5 | 15.3 | 11.8 |
| Norway                      | 6.6  | 9.0  | 10.0 | 11.3 | 11.8 | 16.0 | 15.8 | 13.7 |
| Portugal <sup>1</sup>       | 2.3  | 2.1  | 5.2  | 7.0  | 7.8  | 8.5  | 11.8 | 12.5 |
| Spain                       | 4.5  | 5.9  | 7.4  | 10.9 | 12.7 | 12.7 | 13.9 | 12.4 |
| Sweden                      | 7.7  | 10.1 | 13.8 | 17.1 | 17.7 | 19.3 | 21.3 | 18.3 |
| United Kingdom <sup>1</sup> | 6.9  | 8.0  | 10.2 | 11.6 | 13.7 | 11.9 | 15.4 | 13.1 |
| United States               | 5.0  | 7.1  | 10.2 | 9.8  | 9.8  | 10.0 | 11.8 | 10.5 |
| Euro area                   | 10.9 | 11.2 | 14.0 | 14.7 | 15.8 | 15.5 | 17.0 | 16.7 |
| OECD                        | 6.5  | 7.5  | 10.2 | 10.7 | 11.4 | 11.5 | 13.2 | 12.8 |

1. Prior to 1988 in the case of Denmark, 1995 for Portugal and 1987 for the United Kingdom data are backward extrapolations based on earlier National Accounts series.

Source: OECD Analytical Database figures underlying OECD *Economic Outlook* 68, December 2000 and OECD National Accounts.

**Table A2**  
**General government outlays by economic category: Subsidies**  
*(percent of GDP)*

|                             | 1965 | 1970 | 1975 | 1980 | 1985 | 1990 | 1995 | 2000 |
|-----------------------------|------|------|------|------|------|------|------|------|
| Australia                   | 0.7  | 0.9  | 1.1  | 1.5  | 1.7  | 1.3  | 1.3  | 1.2  |
| Austria                     | 2.3  | 1.8  | 3.0  | 3.1  | 3.2  | 3.1  | 2.9  | 2.5  |
| Belgium                     | 2.3  | 2.3  | 2.6  | 2.8  | 2.4  | 1.7  | 1.5  | 1.5  |
| Canada                      | 0.9  | 0.9  | 2.5  | 2.7  | 2.5  | 1.5  | 1.1  | 1.1  |
| Denmark <sup>1</sup>        | 1.8  | 2.6  | 2.7  | 3.1  | 2.9  | 2.2  | 2.5  | 2.3  |
| Finland                     | 3.2  | 2.8  | 3.8  | 3.3  | 3.1  | 2.9  | 2.8  | 1.5  |
| France                      | 2.5  | 2.2  | 2.2  | 2.1  | 2.6  | 1.8  | 1.5  | 1.3  |
| Germany                     | 1.2  | 1.7  | 1.9  | 2.0  | 2.0  | 2.0  | 2.1  | 1.7  |
| Greece                      | 1.4  | 1.0  | 3.2  | 3.0  | 3.7  | 1.2  | 0.4  | 0.2  |
| Ireland                     | 2.7  | 3.4  | 2.5  | 2.6  | 2.3  | 1.1  | 1.0  | 0.7  |
| Italy                       | 1.7  | 1.9  | 2.8  | 2.9  | 2.6  | 2.0  | 1.5  | 1.2  |
| Japan                       | 0.7  | 1.1  | 1.5  | 1.5  | 1.1  | 1.1  | 0.8  | 0.6  |
| Korea                       | 0.3  | 0.3  | 1.4  | 0.9  | 0.6  | 0.6  | 0.7  | 0.3  |
| Mexico                      | ..   | ..   | ..   | ..   | ..   | ..   | 0.7  | ..   |
| Netherlands                 | 0.9  | 1.0  | 1.2  | 1.7  | 2.0  | 1.7  | 1.1  | 1.6  |
| Norway                      | 3.4  | 3.8  | 4.6  | 5.2  | 4.2  | 4.5  | 3.7  | 2.5  |
| Portugal <sup>1</sup>       | 1.0  | 1.3  | 1.7  | 6.0  | 4.2  | 1.8  | 1.4  | 1.2  |
| Spain                       | 0.5  | 0.5  | 0.7  | 1.1  | 1.3  | 1.1  | 1.1  | 1.0  |
| Sweden                      | 1.1  | 1.3  | 2.5  | 3.3  | 3.9  | 3.6  | 3.8  | 1.8  |
| United Kingdom <sup>1</sup> | 1.6  | 1.7  | 3.6  | 2.5  | 2.0  | 0.9  | 0.7  | 0.5  |
| United States               | 0.2  | 0.5  | 0.5  | 0.5  | 0.5  | 0.4  | 0.3  | 0.2  |
| Euro area                   | 1.6  | 1.7  | 2.0  | 2.1  | 2.2  | 1.8  | 1.7  | 1.4  |
| OECD                        | 0.8  | 1.0  | 1.4  | 1.4  | 1.4  | 1.1  | 0.9  | 0.8  |

1. Prior to 1988 in the case of Denmark, 1995 for Portugal and 1987 for the United Kingdom data are backward extrapolations based on earlier National Accounts series.

Source: OECD Analytical Database figures underlying OECD Economic Outlook 68, December 2000 and OECD National Accounts.

**Table A3**  
**General government outlays by economic category: Interest payments**  
*(percent of GDP)*

|                             | 1965 | 1970 | 1975 | 1980 | 1985 | 1990 | 1995 | 2000 |
|-----------------------------|------|------|------|------|------|------|------|------|
| Australia                   | 2.4  | 2.4  | 2.3  | 3.2  | 4.8  | 4.0  | 4.2  | 2.0  |
| Austria                     | 0.8  | 1.1  | 1.3  | 2.4  | 3.5  | 4.0  | 4.3  | 3.5  |
| Belgium                     | 2.8  | 3.6  | 4.2  | 6.6  | 11.1 | 11.9 | 9.3  | 6.7  |
| Canada                      | 2.9  | 3.7  | 3.8  | 5.4  | 8.4  | 9.5  | 9.6  | 7.4  |
| Denmark <sup>1</sup>        | 1.1  | 1.3  | 1.2  | 3.9  | 9.6  | 7.3  | 6.4  | 4.5  |
| Finland                     | 1.0  | 1.0  | 0.6  | 1.0  | 1.8  | 1.4  | 4.0  | 3.1  |
| France                      | 0.0  | 1.1  | 1.2  | 1.4  | 2.8  | 2.9  | 3.7  | 3.3  |
| Germany                     | 0.7  | 0.9  | 1.3  | 1.9  | 2.9  | 2.5  | 3.7  | 3.4  |
| Greece                      | 0.6  | 0.8  | 1.1  | 2.0  | 4.4  | 8.7  | 11.1 | 7.2  |
| Ireland                     | 5.0  | 5.0  | 5.0  | 6.4  | 10.0 | 7.9  | 5.4  | 2.2  |
| Italy                       | 1.1  | 1.5  | 3.3  | 5.0  | 7.8  | 9.4  | 11.5 | 6.5  |
| Japan                       | 0.4  | 0.6  | 1.2  | 3.2  | 4.5  | 3.9  | 3.8  | 4.0  |
| Korea                       | 0.0  | 0.3  | 0.4  | 0.6  | 0.7  | 0.5  | 0.4  | 1.6  |
| Mexico                      | ..   | ..   | ..   | ..   | ..   | ..   | 4.9  | ..   |
| Netherlands                 | 2.7  | 2.9  | 3.1  | 3.8  | 6.3  | 5.9  | 5.9  | 3.9  |
| Norway                      | 1.4  | 1.6  | 1.5  | 3.1  | 3.2  | 3.6  | 2.8  | 1.6  |
| Portugal <sup>1</sup>       | 0.6  | 0.5  | 0.6  | 2.2  | 6.7  | 6.6  | 5.2  | 3.2  |
| Spain                       | 0.4  | 0.3  | 0.3  | 0.4  | 1.9  | 3.8  | 5.2  | 3.6  |
| Sweden                      | 1.8  | 2.0  | 2.3  | 4.1  | 8.4  | 5.0  | 7.1  | 4.1  |
| United Kingdom <sup>1</sup> | 3.8  | 3.9  | 3.9  | 4.7  | 4.9  | 3.4  | 3.6  | 2.7  |
| United States               | 1.9  | 2.2  | 2.4  | 3.2  | 5.0  | 5.1  | 4.8  | 3.6  |
| Euro area                   | 0.8  | 1.3  | 1.8  | 2.6  | 4.5  | 4.9  | 5.9  | 4.2  |
| OECD                        | 1.4  | 1.8  | 2.1  | 3.1  | 4.7  | 4.8  | 5.0  | 3.8  |

<sup>1</sup>. Prior to 1988 in the case of Denmark, 1995 for Portugal and 1987 for the United Kingdom data are backward extrapolations based on earlier National Accounts series.

Source: OECD Analytical Database figures underlying *OECD Economic Outlook* 68, December 2000 and *OECD National Accounts*.



**Table A4**  
**General government outlays by economic category: Consumption**  
*(percent of GDP)*

|                             | 1965 | 1970 | 1975 | 1980 | 1985 | 1990 | 1995 | 2000 |
|-----------------------------|------|------|------|------|------|------|------|------|
| Australia                   | 13.4 | 14.4 | 18.9 | 18.6 | 20.0 | 18.5 | 18.6 | 18.5 |
| Austria                     | 14.6 | 16.1 | 18.2 | 18.4 | 19.5 | 18.8 | 20.4 | 19.4 |
| Belgium                     | 16.7 | 17.6 | 21.4 | 23.0 | 23.0 | 20.3 | 21.5 | 21.0 |
| Canada                      | 15.6 | 20.5 | 21.8 | 21.3 | 21.9 | 22.4 | 21.4 | 18.4 |
| Denmark <sup>1</sup>        | 16.7 | 20.4 | 25.1 | 27.2 | 25.8 | 25.6 | 25.8 | 25.3 |
| Finland                     | 14.2 | 15.1 | 17.8 | 18.7 | 20.6 | 21.6 | 22.8 | 20.8 |
| France                      | 16.9 | 17.4 | 19.5 | 21.5 | 23.7 | 22.3 | 23.9 | 23.4 |
| Germany                     | 15.0 | 15.5 | 20.1 | 19.9 | 19.7 | 18.0 | 19.8 | 18.8 |
| Greece                      | 8.2  | 8.8  | 10.6 | 11.4 | 14.2 | 15.1 | 15.3 | 15.0 |
| Ireland                     | 13.3 | 14.3 | 18.2 | 19.4 | 18.1 | 15.1 | 14.9 | 11.8 |
| Italy                       | 16.2 | 14.9 | 16.1 | 16.8 | 18.6 | 20.2 | 17.9 | 17.9 |
| Japan                       | 8.2  | 7.4  | 10.0 | 9.8  | 9.6  | 9.0  | 9.8  | 10.1 |
| Korea                       | 9.5  | 9.7  | 11.3 | 11.9 | 10.4 | 10.5 | 9.7  | 9.7  |
| Mexico                      | ..   | ..   | ..   | ..   | ..   | ..   | 10.5 | ..   |
| Netherlands                 | 23.6 | 24.9 | 28.2 | 29.1 | 26.4 | 24.3 | 24.0 | 22.6 |
| Norway                      | 14.6 | 16.4 | 18.7 | 18.7 | 18.1 | 20.8 | 20.9 | 18.8 |
| Portugal <sup>1</sup>       | 11.5 | 13.3 | 14.4 | 14.0 | 15.0 | 16.4 | 18.6 | 21.0 |
| Spain                       | 9.1  | 10.2 | 11.3 | 14.3 | 15.9 | 16.9 | 18.1 | 16.9 |
| Sweden                      | 17.9 | 22.5 | 25.2 | 29.6 | 28.2 | 27.7 | 26.3 | 26.5 |
| United Kingdom <sup>1</sup> | 17.2 | 18.0 | 22.4 | 21.6 | 20.9 | 19.9 | 19.8 | 18.3 |
| United States               | 16.4 | 18.5 | 18.1 | 16.8 | 17.1 | 16.6 | 15.3 | 14.1 |
| Euro area                   | 15.4 | 15.8 | 18.5 | 19.5 | 20.3 | 19.7 | 20.4 | 19.7 |
| OECD                        | 14.6 | 15.7 | 17.3 | 17.0 | 17.3 | 16.8 | 16.6 | 15.7 |

T. Prior to 1988 in the case of Denmark, 1995 for Portugal and 1987 for the United Kingdom data are backward extrapolations based on earlier National Accounts series.

Source: OECD Analytical Database figures underlying *OECD Economic Outlook* 68, December 2000 and *OECD National Accounts*.

**Table A5**  
**General government outlays by economic category: Net capital outlays**  
*(percent of GDP)*

|                             | 1965 | 1970 | 1975 | 1980 | 1985 | 1990 | 1995 | 2000 |
|-----------------------------|------|------|------|------|------|------|------|------|
| Australia                   | 3.8  | 3.6  | 3.1  | 2.3  | 3.8  | 2.4  | 2.8  | 1.4  |
| Austria                     | 6.0  | 4.8  | 7.0  | 7.0  | 6.1  | 4.9  | 5.3  | 5.1  |
| Belgium                     | 1.3  | 5.3  | 4.9  | 4.9  | 3.5  | 1.8  | 2.5  | 3.1  |
| Canada                      | 3.1  | 2.3  | 2.2  | 1.4  | 2.1  | 1.4  | 0.6  | 0.0  |
| Denmark <sup>2</sup>        | 5.4  | 5.4  | 4.7  | 4.6  | 3.6  | 0.7  | 1.5  | 2.0  |
| Finland                     | 4.3  | 4.9  | 6.1  | 4.7  | 5.0  | 5.8  | 8.6  | 6.7  |
| France                      | 6.7  | 5.0  | 5.3  | 4.9  | 5.1  | 5.7  | 6.0  | 5.1  |
| Germany                     | 5.4  | 6.0  | 6.4  | 6.1  | 4.9  | 6.1  | 2.6  | 0.4  |
| Greece                      | 5.1  | 5.1  | 5.1  | 4.3  | 5.5  | 8.3  | 4.6  | 5.2  |
| Ireland                     | 5.0  | 5.0  | 5.0  | 8.5  | 7.2  | 3.6  | 3.7  | 3.2  |
| Italy                       | 2.0  | 2.5  | 4.4  | 2.9  | 4.5  | 3.5  | 4.7  | 3.7  |
| Japan                       | 5.0  | 5.2  | 6.3  | 7.5  | 5.6  | 6.0  | 7.9  | 7.8  |
| Korea                       | 3.8  | 3.8  | 2.9  | 4.6  | 4.4  | 4.8  | 6.4  | 8.6  |
| Mexico                      | ..   | ..   | ..   | ..   | ..   | ..   | 2.7  | ..   |
| Netherlands                 | -2.5 | -2.7 | -1.0 | -0.1 | 1.8  | 1.9  | 1.4  | 1.5  |
| Norway                      | 3.2  | 4.1  | 4.9  | 5.6  | 4.2  | 4.9  | 4.4  | 4.1  |
| Portugal <sup>2</sup>       | 2.7  | 0.8  | 3.4  | -1.2 | 9.3  | 10.9 | 4.3  | 4.2  |
| Spain                       | 5.0  | 4.7  | 4.6  | 4.6  | 7.6  | 6.9  | 5.7  | 4.6  |
| Sweden                      | 4.9  | 5.9  | 3.6  | 2.7  | 1.6  | 0.2  | 3.6  | 3.2  |
| United Kingdom <sup>2</sup> | 4.1  | 5.1  | 4.4  | 2.6  | 2.4  | 5.9  | 4.9  | 3.8  |
| United States               | 2.0  | 1.3  | 1.1  | 1.0  | 1.4  | 1.4  | 0.7  | 0.9  |
| Euro area                   | 4.3  | 3.9  | 4.6  | 4.1  | 4.3  | 4.4  | 4.2  | 3.0  |
| OECD                        | 3.5  | 3.2  | 3.4  | 3.3  | 3.3  | 3.8  | 3.8  | 3.4  |

1. Net fixed investment plus net capital transfers.

2. Prior to 1988 in the case of Denmark, 1995 for Portugal and 1987 for the United Kingdom data are backward extrapolations based on earlier National Accounts series.

Source: OECD Analytical Database figures underlying *OECD Economic Outlook* 68, December 2000 and *OECD National Accounts*.

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