ENHANCING THE COST EFFECTIVENESS OF PUBLIC SPENDING: EXPERIENCE IN OECD COUNTRIES

Isabelle Joumard, Per Mathis Kongsrud, Young-Sook Nam and Robert Price

TABLE OF CONTENTS

This paper is a revised version of a document prepared for a meeting of the Working Party No. 1 of the OECD Economic Policy Committee held on 16-17 October 2003. The authors are indebted to participants to this meeting but also to Jean-Philippe Cotis, Jørgen Elmeskov, Michael P. Feiner, Christopher Heady, Peter Hoeller, Hannes Suppanz and many other colleagues for their useful comments. They are also grateful to Chantal Nicq for statistical assistance. The opinions expressed in this paper are those of the authors and are not necessarily shared by the OECD.

INTRODUCTION AND SUMMARY

Public spending rose steadily as a share of OECD-area GDP up to the mid-1990s, but this trend has since abated. The spending pressures stemming from the continued expansion of social programmes have been partly compensated by transient or one-off factors. Pressures on public spending, however, appear likely to intensify, in particular as a consequence of ageing populations. Although public spending has a role to play in pursuing key national objectives (such as supporting productivity gains and growth prospects, as well as promoting equity), most OECD economies now have very little scope for raising taxation or debt to finance higher spending. In such a situation, reforms to curb the growth in public spending while raising its cost effectiveness are required. This paper presents a reform strategy for progress in this direction, based on detailed country reviews of over two-thirds of OECD countries.[1] Three main areas for action are identified: the budget process; management practices and the use of market mechanisms in the provision of public services.

To enhance the efficiency of the *budget process*, many countries have introduced or strengthened fiscal rules – direct limits on expenditure or indirect ones through tax, budget balance or debt ceilings – since the latter half of the 1990s. Effective use of such rules, however, requires that they be accompanied by budget principles and institutions conducive to an efficient allocation of funds across spending programmes. In particular, there is a need to extend planning horizons, both to account properly for the future costs associated with current spending programmes and to avoid arbitrary short-term spending adjustments. To be truly effective, medium-term budget planning needs to be accompanied by reduced budget fragmentation (for example, by incorporating tax expenditure in the budget framework and by a closer monitoring of extra-budgetary funds and contingent liabilities, such as those stemming from loan guarantees and public pension schemes), together with an increased focus on public spending outcomes.

The reform of *management practices* has embraced a trend towards a results-oriented management approach in several OECD countries, whereby policy-makers define output or outcome objectives while managers decide on how best to reach them. Implementation difficulties have, however, been important in this area. In particular, identifying good performance indicators and designing appropriate incentive mechanisms to encourage public entities to achieve desired outcomes are critical to the success of these new public management approaches. In parallel, faced with the ongoing need to adapt skills to changing demands, there have been moves in many OECD countries to reform human resource management in the public sector, by introducing greater flexibility in public employee job status and compensation. The introduction of performance-related incentive schemes for government employees is, perhaps, the most controversial element in this transition.

M*arket signals* have a strong role to play in enhancing the effectiveness of public spending. On the supply side, competitive pressures can be strengthened to force providers of public-funded goods to improve cost-efficiency while better responding to the citizens' needs. Several instruments can be used in this respect: benchmarking; subcontracting combined with open and transparent tendering; and giving users the choice among alternative providers, through the use of voucher schemes for instance. The demand for publicly-funded services can, however, be spurred by the provision of higher quality and more diversified services and the absence of appropriate price signals to users, and avoiding an adverse effect on the public purse may require introducing or raising user charges . In exploiting the role of market signals, a trade-off between efficiency and equity objectives may emerge, either because user fees deny some population groups access to public services or because compensation mechanisms for providers create an incentive to concentrate on the most lucrative segments of the market (to "cream-skim").

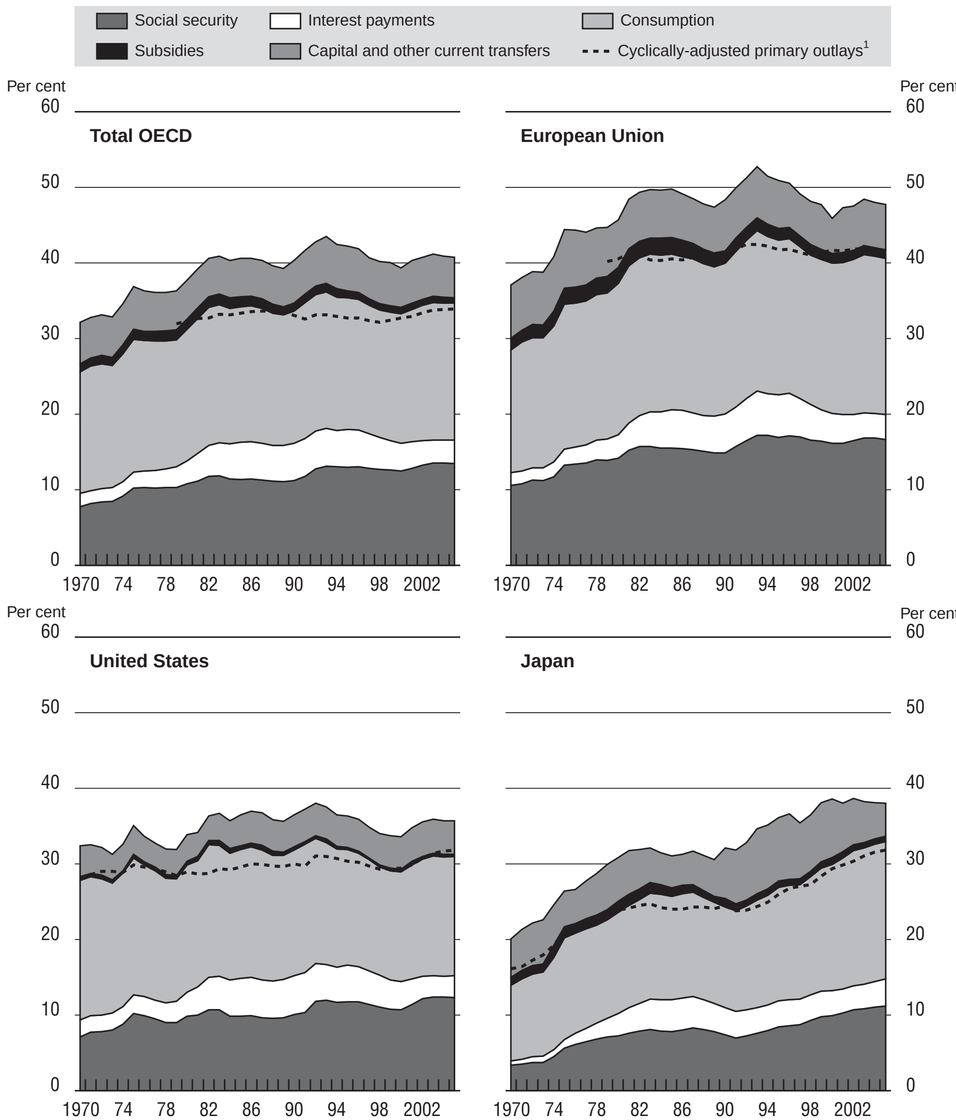
These considerations have given rise to a series of policy recommendations in the individual country reviews, which have been stylised and grouped around the three main sets of issues identified above (See Tables 2, 5 and 6 for synopses). The absence of an explicit recommendation in a specific area does not imply that a country has already adopted the appropriate approach, but may instead reflect the fact that other more important problems need to be tackled first. Conversely, where recommendations for improvement have been given, the reform process may already be quite advanced or has taken place since an individual country review took place.[2]

FORCES SHAPING RECENT TRENDS AND LEVELS OF PUBLIC SPENDING

The long-standing rise in public spending ratios has abated since the mid-1990s

Having risen steadily over several decades, the public spending to GDP ratio in the OECD area has declined mildly since its peak in 1993, to stand at slightly over 41 per cent in 2003 (Figure 1). This profile has largely been shared across OECD countries, Korea and Japan being the main exceptions. There is, however, little scope for complacency, since the decline in the public spending-to-GDP ratio largely reflects the prolonged economic and employment boom over the

Figure 1. **Trends in general government outlays**
As a percentage of GDP



Note: From 2003 onwards, data are based on OECD estimates and projections.
1. Expressed as a percentage of potential GDP.
Source: OECD.

second half of the 1990s, which triggereda decline in transfers to households. In cyclically-adjusted terms, general government primary outlays have remained broadly constant in the OECD area at large.

Several one-off or transient factors have choked off pressures on public spending…

Although some governments have implemented ambitious reforms to achieve fiscal sustainability, the steadiness of the cyclically-adjusted ratio has been largely achieved because of several "one-off" or transient factors, which have temporarily offset more persistent underlying pressures on public spending. The principal factors involved have been:

- *Lower debt-servicing costs*. The disinflation process has gradually been reflected in lower nominal and real interest rates, contributing to a reduction in debt servicing costs, especially in the highly indebted economies which became founder members of the Economic and Monetary Union. Debt service ratios are now historically low but are set to rise as interest rates move back up.
- *Privatisation and public enterprise restructuring*. The use of privatisation proceeds to reduce public debt has contributed to falling debt servicing costs (for instance in Italy, Mexico and the United Kingdom). In addition, subsidies to businesses have been reduced in many OECD countries (including France, Greece, Iceland, Italy, Mexico, Portugal, New Zealand, Sweden and the United Kingdom).
- *The "peace dividend"* meant that defence spending fell steadily up to the late 1990s. In the case of the United States, such spending declined to 3 per cent of GDP in 2000, compared with a peak of over 6 per cent of GDP in the mid-1980s. Parallel, though smaller, developments have been observed in a number of OECD countries. The dividend was partially reversed after the terrorist attacks of 11 September 2001. In 2002, global military expenditure was 14 per cent higher in real terms than at its post-cold war low in 1998, with substantial increases in France, the United Kingdom and the United States.[3]
- Discretionary action has often relied on "one-off" interventions, including public employment and wage freezes (Czech Republic, Greece, Italy, Slovak Republic and Spain) and cuts and/or deferrals to capital outlays (Czech Republic, Italy, Portugal and Spain). These tend to be followed by a subsequent "catch-up" round.[4]

… stemming from the continued expansion of social programmes

Demands on social transfer systems have remained intense over the past two decades, with spending on pensions, poverty alleviation programmes and core merit goods (education and health) continuing on a clear upward trend during that period.

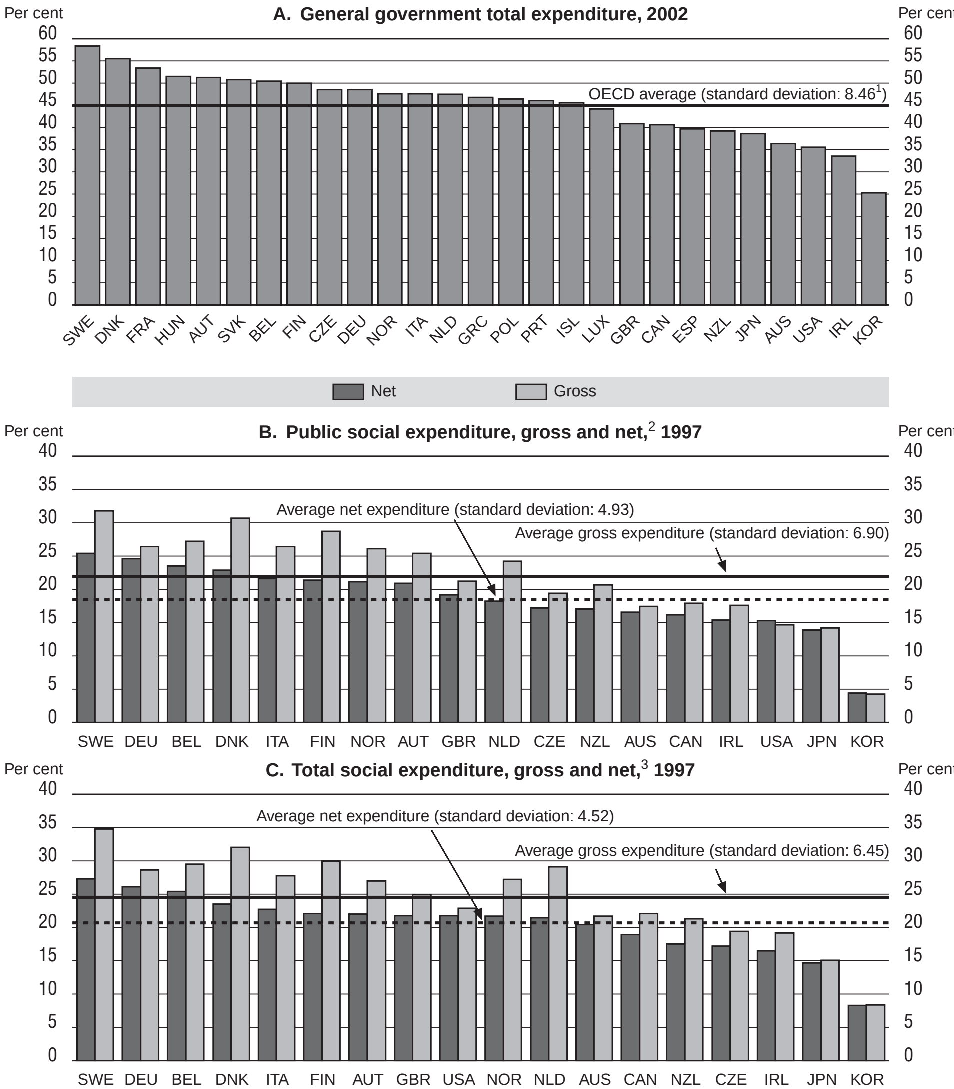
- Demographic pressures, combined with the maturing of earnings-related public pension systems, led to increases of more than 2 percentage points in the ratio of old-age cash benefits to GDP between the early 1980s and the late 1990s in over a third of OECD countries.[5] In parallel, early-retirement, disability and unemployment programmes have often been used as a means of premature exit from the labour force (France, Finland, Germany, Italy, Norway and Poland).

- New schemes to fight poverty have been introduced, while existing schemes have sometimes been made more generous (*via*, for example, a minimum guaranteed income in France, Italy and Portugal; the extension of child allowances for low income families to all pre-school children in Japan; the establishment of a right to social benefits in Korea and the creation and extension of an innovative poverty alleviation programme in Mexico).[6] In parallel, several countries have introduced provisions to facilitate the transition from welfare to work (Finland, France, the United Kingdom and the United States). On the other hand, measures to cut welfare spending, by reducing benefit rates and tightening eligibility conditions were implemented over the 1990s in a number of countries, notably New Zealand and Sweden.
- In the health care sector, technological changes, and increased demands for access to the new forms of care they generate, have added to the upward pressures stemming from population ageing.[7] Also reflecting to some extent ageing population pressures, spending on services for the elderly and disabled has been rising, notably Australia, Finland, the Netherlands, Norway and Sweden.
- In the education sector, spending has also continued on an upward trend since the mid 1990s in most OECD countries, despite the fact that student numbers have been declining in several of them (in particular Greece, Japan, Poland and Spain).[8] This continued upward momentum has partly reflected the expansion of primary education in some countries (as in Norway and Sweden), given the expectation of a high social rate of return from early childhood education, and an increase in spending on family services (*e.g.* formal day-care services) since the early 1980s in several countries (Denmark, Finland, France and Norway).

Cross-country differences partly reflect the organisation of the welfare system

There are marked differences in the ratio of spending to GDP across major OECD countries, with the Nordic and most continental European countries having ratios above the OECD average while Australia, Korea, Japan, New Zealand and the United States are below (Figure 2, panel A). Several factors should, however, be taken into account in drawing cross-country comparisons (Box 1). The nature and coverage of the social insurance and assistance system are of particular importance.[9] Gross public expenditure data may fail to reflect the true relative

Figure 2. **Comparing public spending to GDP ratios across OECD countries**



1. The standard deviation is calculated using only the countries shown in Panels B and C.
2. Net public social expenditure is equal to gross public social expenditure, less direct taxes and social contributions paid out of public cash benefits and indirect taxes on private consumption financed by net cash transfers, plus tax breaks for social purposes (not including pensions).
3. Total social expenditure is made of public social expenditure and private programmes which serve a social purpose and contain an element of inter-personal redistribution.

Source: OECD; Adema (2001).

Box 1. **Public spending measurement issues in drawing cross-country comparisons**

It is difficult to draw solid cross-country comparisons from public finance data, either with respect to the level or the composition of public spending. Particular issues to be taken into account include:

- The extent to which countries rely on *tax expenditures* as opposed to direct expenditure. Tax expenditures are substantial in some countries. As an illustration, in the United States, income tax expenditures amounted to about 8 per cent of GDP at the federal level in 2002, while in Denmark and Norway, total tax expenditures amount to about 5 per cent of GDP. Fully adjusting data for this factor is, however, difficult since there is no consistent information on the amount of tax expenditure across countries. This largely reflects the absence of an agreed operational framework for measuring tax expenditures.[1]
- The *taxation of social benefits*. In some OECD countries, transfers are subject to broadly the same tax treatment as wage income (Italy and the Nordic countries). In others they are predominantly untaxed (Mexico, Austria, Germany and Portugal for unemployment cash benefits; Germany and Portugal for sickness benefits). For a given amount of net social transfers paid by the public sector and received by households, the level of public outlays will be higher in the first group of countries. Differences in levels of indirect taxes often add to those resulting from income taxes, with the proportion of benefit income which comes back to the government indirectly through taxes on consumption being much larger in European countries than in Australia, Canada, Japan, Korea and the United States. Adema (2001) provides estimates for net public social expenditures, adjusting for the impact of the taxation of social benefits and tax allowances for social purposes as well as for indirect taxes (see Figure 2).
- The reliance on (mandatory and/or voluntary) *private insurance schemes* for pensions, unemployment, and/or health care system. In particular, the earnings-related elements of the pension system, which are a feature of public pension systems in a large number of countries (including France and Spain), are almost entirely organised as private pension funds in Denmark, although they are largely mandatory by nature, being embodied in collective agreements. Benefits associated with mandatory contributions to privately-owned and managed insurance funds are also important in Korea (mainly sickness benefits) and Switzerland (health care insurance). On the other hand, benefits associated with voluntary contributions to social security funds (amounting to 1.2 per cent of GDP in Germany in 2000) are counted as public expenditure.
- Financing projects through *public-private partnerships* as opposed to conventional public investment. Several countries are increasingly relying on public-private partnerships (PPPs) to finance investment projects (see below).[2] As far as public finance data are concerned, conventional public investment

Box 1. **Public spending measurement issues in drawing cross-country comparisons** (*cont.*)

is reflected in public accounts statistics as and when projects are undertaken, whereas in the case of PPPs the cost is spread over a much longer period, in particular when the service of infrastructure utilities are purchased by the government (a feature of the Private Finance Initiative in the United Kingdom). Thus, there will be a transitory decline in public expenditure in periods when reliance on PPPs is increasing.

- T*he use of guarantees on loans* as a substitute for direct capital transfers or subsidies. Guarantees issued by state-owned enterprises (as in the Czech Republic and Poland) are not reflected in general government expenditure in the year they are extended although they may enter as a "below-the-line" item as the government assumes full responsibility for the debt in the future.[3]

1. For instance, tax advantages for married people are often considered as an inherent feature of a country's tax system, and not as tax expenditures. They are, however, significant in a number of countries, including France, Germany, Ireland and the United States, whereas they are virtually non-existent in others (*e.g.* Sweden).
2. In the United Kingdom, investment financed through PPPs amounted to about ½ per cent of GDP in fiscal year 2000-01.
3. In the Czech Republic, contingent liabilities grew very rapidly over the past decade and now represent close to 15 per cent of GDP (Burns and Yoo, 2002). Of the 39 loan guarantees outstanding at the end of 2000, the state expected to be called upon to cover either interest or principal payments on all but four during the course of 2001.

extent of a country's "social effort" because they do not adjust for differences in tax regimes. Adjusting for taxation, to obtain net public social expenditure data (Figure 2, panel B), and for the reliance on private insurance schemes (some of which are mandatory), differences in spending levels across countries are much less pronounced. Overall, the dispersion of the total net social spending ratio is almost half that of general government total gross expenditure (Figure 2, Panel C).

Pressures on public spending will probably intensify

Ageing will have severe fiscal consequences…

Over the next few decades, the progressive ageing of the population will put significant pressures on public spending in virtually all OECD countries. Expenditures on health and elderly care are the most sensitive to demographic shifts, with highly uncertain projections suggesting an average increase of 3½ percentage points of GDP over the 2000-50 period (Table 1 and Dang *et al.*, 2001).[10] Public pension programmes account for most of the remaining pressures on public spending, despite the measures already taken in many OECD countries to improve the long-term sustainability of their public pensions system.[11] These reforms – of which the projections presented in Table 1 take account except for the most recent – will, however, go only part of the way toward absorbing the extra-burden. Furthermore, these projections often assume increasing employment ratios as a result of higher female participation rates. They do not take account of the fact that increasing labour-force participation rates and smaller family size are likely to limit the scope for families to care for children and other dependents, thus raising pressure for state involvement, especially in those countries where the family is still the first line of social care (*e.g.* Italy, Korea and Portugal).

... while public investment is scheduled to rise

Efforts to develop public infrastructure are a national priority in those countries where there is currently a perceived deficiency (Germany in the New Länder, Hungary, Ireland, Italy in the Mezzogiorno, Mexico, Poland and the United Kingdom).[12] Investment in support of sustainable development may be another source of public spending growth, in particular for countries acceding to the European Union, which will have to meet the minimum environmental standards for membership. As an example, the costs of environmental clean-up in Poland are expected to exceed 3 per cent of GDP over the next three years.

MAKING THE BUDGET PROCESS MORE RESPONSIVE TO PRIORITIES

Strategies to contain the growth in spending and establish priorities across expenditure programmes have been based on three policy elements:

- Fiscal rules – applying variously to limits on budget deficits, expenditures, taxes or debt – have been introduced or strengthened over the past decade in many OECD countries in order to facilitate fiscal consolidation and halt the upward drift in general government outlays. They are, however, difficult to enforce throughout the cycle, and OECD country experience suggests that they do not *per se* lead to an efficient allocation of funds across spending programmes if decision-makers lose sight of future costs of decisions.
- Strengthening the medium-term perspective of the budget process can help mitigate these problems by identifying both the current and future impacts and costs associated with spending programmes.
- Since aligning budget allocations with policy priorities may also be hampered by a piecemeal budget process or a lack of transparency with respect to the costs and benefits of spending programmes, reforms have been required to strengthen the focus on policy priorities and to reduce budget fragmentation.

Table 1. **Age-related public spending**

Levels in per cent of GDP, changes in percentage points

	Total age-related spending		Old-age pension		"Early retirement" programmes		Health care and long-term care		Child/Family benefits and education	
	Panel A		Panel B		Panel C		Panel D		Panel E	
	Level	Change	Level	Change	Level	Change	Level	Change	Level	Change
	2000	2000-50	2000	2000-50	2000	2000-50	2000	2000-50	2000	2000-50
Australia	16.7	5.6	3.0	1.6	0.9	0.2	6.8	6.2	6.1	–2.3
Austria[1]	16.2	5.4	9.5	2.2	. .	. .	5.8	3.1	. .	. .
Belgium	22.0	4.6	8.8	3.3	1.1	0.1	6.1	2.4	6.0	–1.3
Canada	17.8	8.7	5.1	5.8	. .	. .	6.3	4.2	6.4	–1.3
Czech Republic	22.2	8.1	7.8	6.8	1.8	–0.7	6.6	3.2	6.0	–1.2
Denmark[2]	30.7	6.5	6.1	2.7	4.0	0.2	8.0	3.5	6.3	0.0
Finland	17.5	8.6	8.1	4.8	3.1	–0.1	6.2	3.9	. .	. .
France[3]	. .	. .	12.1	3.9	. .	. .	. .	. .	. .	. .
Germany	18.7	7.5	11.8	5.0	. .	. .	6.9	2.5	. .	. .
Hungary[4]	7.1	1.6	6.0	1.2	1.2	0.3	. .	. .	. .	. .
Italy	19.7	1.8	14.2	–0.3	. .	. .	5.5	2.1	. .	. .
Japan	13.3	5.6	7.9	0.6	. .	. .	5.4	5.0	. .	. .
Korea	3.1	8.5	2.1	8.0	0.3	0.0	0.7	0.5	. .	. .
Netherlands[5]	19.0	9.0	5.2	4.8	1.2	0.4	7.2	3.8	5.4	0.0
New Zealand	17.7	8.2	4.8	5.7	. .	. .	5.7	3.8	7.2	–1.3
Norway	17.9	13.4	4.9	8.0	2.4	1.6	5.2	3.2	5.5	0.5
Poland[4]	12.2	–2.6	10.8	–2.5	1.4	–0.1	. .	. .	. .	. .
Spain	. .	. .	9.4	8.0	. .	. .	. .	. .	. .	. .
Sweden	29.7	3.3	9.2	1.6	1.9	–0.4	8.8	3.3	9.8	–1.2
United Kingdom	16.3	0.9	4.3	–0.7	. .	. .	6.3	2.5	5.7	–0.9
United States	11.1	5.5	4.4	1.8	0.2	0.3	2.6	4.4	3.9	–1.0
Average of countries above[6]	**17.3**	**5.8**	**7.4**	**3.4**	**1.6**	**0.2**	**5.9**	**3.4**	**6.2**	**–0.9**
Average of countries which provide all or nearly all spending components	**18.6**	**7.0**	**5.7**	**4.2**	**1.7**	**0.2**	**5.9**	**3.5**	**6.2**	**–0.9**
Portugal[7]	15.6	4.3	8.0	4.5	2.5	–0.4	. .	. .	. .	. .

1. Total age-related spending includes other age-related spending which does not fall within the definition in Panels B to E. This represents 0.9 per cent of GDP in 2000 and rises by 0.1 percentage point in the period to 2050.
2. Total includes other age-related spending not classifiable under the other headings. This represents 6.3 per cent of GDP in 2000 and increases by 0.2 percentage points from 2000 to 2050.
3. For France, the latest available year is 2040.
4. Total includes old-age pension spending and "early retirement" programmes only.
5. "Early retirement" programmes only include spending on persons 55+.
6. OECD average excludes countries where information is not available and Portugal which is less comparable than other countries.
7. Portugal provided an estimate for total age-related spending but did not provide expenditure for all of the spending components.

Source: OECD (2001c).

The three elements of reform are closely connected and have complementary effects on the prioritisation process. Countries introducing spending caps and/or top-down budgeting methods have often needed to make significant efforts to reduce budget fragmentation, to improve fiscal transparency and to anchor the budget process in a medium-term perspective. Table 2 gives a brief summary of country recommendations given in individual country surveys.

Controlling public spending growth more effectively

Expenditure constraints may be explicit or indirect…

Many OECD countries have either adopted some form of fiscal rule, or reinforced existing ones, since the early 1990s, with the aim of safeguarding fiscal sustainability (Table 3).[13] Expenditure ceilings, placing an explicit cap on public spending, have been introduced or tightened in a number of countries (including Finland, Japan, Spain, Sweden, Switzerland and the United States up to 2002). In several other countries, deficit targets and/or tax ceilings have put an indirect constraint on public expenditures. In Denmark, for example, the combination of a tax freeze, a balanced budget requirement at the sub-national level and a commitment to sustain central governments' fiscal surpluses around 2 per cent of GDP in the medium-term puts an indirect cap on expenditures. Similarly, the decision to consolidate the budget without raising taxes in the United Kingdom up to 1997 made public spending the main adjustment variable.

Biased economic assumptions can result in fiscal slippages and sub-optimal resource allocation. Overly optimistic economic assumptions have hindered progress in fiscal consolidation (as in Canada and the Netherlands up to the early 1990s and, more recently, in France), and have often required subsequent *ad hoc* adjustments. Conservative assumptions as to the rate of economic growth or of revenues may also have adverse effects, especially in a situation of budget surplus, with positive revenue "surprises" being used to boost spending demands (as in Ireland over the 1990s). Recognising that economic forecasting deserves greater scrutiny and a higher degree of independence, measures to improve forecast reliability have been taken in several OECD countries (Matheson, 2002 and Kraan and Kelly, 2003). For instance, in Germany and the United States, the task of drawing up macroeconomic assumptions is given to a Committee that is to some degree autonomous of the control of the Budget Office, while in Austria, Canada and the Netherlands, this task is given to an independent bureau.

… but a short-term focus can have adverse allocative effects

Efforts to control the growth of public spending may have adverse allocative effects if the budget horizon is too short and if some spending programmes

Table 2. **Making the budget process more responsive to priorities**

Summary of country recommendations[1]

	CAN	CZE	DEN	FIN	FRA	DEU	GRC	HUN	ISL	IRL	ITA	JPN	KOR	MEX	NZL	NOR	POL	PRT	SWE	CHE	GBR	Total[2]
Control public spending growth more effectively																						
Introduce a binding expenditure framework		X	X	X				X	X	X			X			X	X	X				11
Scrutinise the macroeconomic assumptions					X			X					X					X			X	5
Anchor the budget process in a medium-term perspective																						
Introduce or strengthen multi-annual budgeting procedures	X	X	X	X	X			X	X	X	X	X		X	X	X				X		14
Present the medium-term budget impact of new measures in the budget	X				X													X				3
Introduce sunset clauses		X			X					X			X		X		X					6
Prepare infrastructure investment programmes and/or put capital decision making under more scrutiny								X							X						X	3
Reduce budget fragmentation and increase transparency																						
Increase the focus on overall priorities, programme outputs and evaluations	X	X	X		X	X	X	X	X	X	X	X	X	X	X		X	X	X		X	18
Institute a top-down budget approach				X					X	X			X									4
Strengthen the role of the Parliament in setting and evaluating resource allocation					X			X		X		X		X								5
Improve the information made available in the budget paper and assess more carefully the pros and cons of:																						
• Tax expenditures		X																		X		2
• Extra-budgetary funds		X						X					X				X					4
• Loan guarantees and contingent liabilities		X						X				X					X					4
Introduce accrual accounting and budgeting		X						X				X	X			X	X	X		X		8
Strengthen fiscal co-ordination across levels of government																						
• By improving the availability, consistency and timeliness of sub-national government public finance data		X			X	X						X	X				X					6
• By improving consistency between sub-national government fiscal policy and national objectives		X	X			X		X	X		X				X		X	X				9

1. These policy recommendations are derived from the public spending chapter for individual OECD country reviews published in 2000 for Japan and Mexico; 2001 for Canada and Czech Republic; 2002 for Denmark, Germany, Greece, Hungary, Italy, New Zealand, Norway, Poland, Sweden, Switzerland and the United Kingdom; 2003 for Finland, France, Iceland, Ireland, Korea and Portugal.
2. Number of countries for which these recommendations were spelled out among the 21 countries for which in-depth public expenditure chapters in final form are available.

Source: Individual country in-depth chapter on public expenditure.

Table 3. **Fiscal rules in selected OECD countries**

Country/region	Year of implementation	Summary
Australia	1998	**Charter of Budget Honesty** • No legislated numerical rules. The Charter requires the government to spell out objectives and targets but places no constraints on their nature.
Austria	2000	**Domestic Stability Pact Law** • Negotiated floors on the budget balance for each government level (a surplus of 0.75 per cent of GDP for the *Länder*, zero for municipalities and the federal government balance should be such that the Stability Programme target is met). Outcomes are assessed by an independent auditor. The law embodies financial sanctions in case of non-compliance.
Belgium	1999	**Co-operation agreement** • Permissible deficits are established for the federal government plus Social Security on the one hand, and for the regions and the local governments on the other.
Canada	1998	**Debt Repayment Plan** • There are no legislated rules at the federal level but the government has a "balanced budget or better" policy. Most provinces have some form of balanced budget legislation.
Denmark	2001	**A medium-term fiscal strategy for the period until 2010** • Structural general government surpluses of around 2 per cent of GDP. • A "tax freeze" covering both central and sub-national governments (introduced in 2002).
Euro area/ EU countries	1992	**Maastricht Treaty; extended in 1997 under the Stability and Growth Pact** • 3 per cent of GDP ceiling on general government net borrowing. • "Close to balance or surplus" target applying in cyclically-adjusted term each year. • 60 per cent of gross government debt-to-GDP ratio norm.
Finland	2004	**Medium-term objectives** • Balanced central government finances in structural terms by 2007. • Central government expenditure (excluding interest payments, unemployment benefits and a few other items) is subject to a cap over the period 2004 to 2007.
Germany	2002	**Domestic Stability Pact** • Golden rule: the budgeted deficit of the federal government must not exceed federal investment spending. Most *Länder* constitutions have a similar law. • Both the central government and sub-national governments should aim at balanced budgets.
Japan	2002	**A Reform and Perspective Programme (revised in 2003)** • Maintain general government expenditures at or below the 2002 level of 38 per cent of GDP. • Achieve primary budget surplus by early 2010s.

Table 3. **Fiscal rules in selected OECD countries** (*cont.*)

Country/region	Year of implementation	Summary
Netherlands	1994	**Multi-year expenditure agreements** • Separate expenditure ceilings on central government, social security, and labour market and health spending. • Automatic stabilisers are allowed to work fully on the revenue side, except if the deficit came close to the Maastricht Treaty's 3 per cent ceiling.
New Zealand	1994	**Fiscal Responsibility Act** • Maintain debt and net worth at "prudent" levels and run operating surpluses on average over a "reasonable" period of time. The government sets its own numerical targets consistent with these principles.
Norway	2001	**Fiscal Stability Guidelines** • Structural non-oil central-government budget deficit should not exceed 4 per cent of the Government Petroleum Fund over the cycle. • In the event of major revaluations of the Fund's capital or statistical revisions of the structural deficit, corrective action should be spread over several years.
Poland	1999	**Act on Public Finance** • The Constitution sets a limit of 60 per cent of GDP for total public debt.
Spain	2003	**Fiscal Stability Law** • Accounts should balance or show a surplus at all levels of government (central, social, territorial and local) as well as for public enterprises and corporations. • A cap is put on central government expenditure and a contingency fund (2 per cent of expenditure) is set up to cover unscheduled non-discretionary expenditure.
Sweden	1997	**Fiscal Budget Act** • Set nominal expenditure limits for the subsequent three years on 27 expenditure areas (including social security). • Maintain a general government surplus of 2 per cent of GDP on average over the business cycle.
Switzerland	2003	**Debt Containment rule** • Sets a ceiling for expenditures which is equal to total revenues adjusted for the cycle and for *ex post* deviations of out-turns from the norm laid out in the rule.
United Kingdom	1997	**Code for fiscal Stability** • Golden rule: over the business cycle, the Government will borrow only to invest and not to fund current spending. • Sustainable investment rule: net debt as a proportion of GDP must be held stable over the business cycle at a prudent level (defined so far as net debt below 40 per cent of GDP).
United States	1990 to 2002	**Budget Enforcement Act** • Medium-term nominal caps for discretionary spending. • Legislated changes to revenues or mandatory spending programmes should be budget neutral over a five-year horizon.

Source: OECD (2002b) and individual country surveys.

escape this control. Fiscal consolidation efforts carried out within a short time-frame tend to squeeze that discretionary spending which is most easily cut, in particular investment, and fail to promote structural reforms. The relatively sharp decline in public investment in EU countries during the consolidation period of the 1990s is illustrative of this trait (European Commission, 2003). Ceilings on public spending may also create incentives to channel expenditure through the tax system via tax expenditures, or to use off-budgetary funds, public-private partnerships and loan guarantees, which all tend to hide spending commitments and may be subject to less scrutiny, all of which may hinder an optimal allocation of resources across competitive demands.

Anchoring the budget process in a medium-term perspective

Fiscal rules need to be defined over the cycle

Avoiding the potentially adverse effects of strategies to control spending growth requires that the annual budget process be anchored in a medium-term perspective, and OECD countries rely on a wide variety of strategies in this respect. Some have tried to shift the emphasis to cyclically-adjusted fiscal rules, which enhance the role of automatic stabilisers by allowing deficits during recessions while requiring that surpluses be achieved during upswings. In 2003, for instance, Switzerland introduced the "debt containment rule" which states that, at the confederation level, public expenditure cannot surpass cyclically-adjusted revenue. Within the context of the Stability and Growth Pact also, emphasis has gradually shifted from the actual deficit to a cyclically-adjusted measure. Allowance for the business cycle may, however, come at the expense of simplicity and transparency since estimating the economy's cyclical position and structural budget balances is based on an element of judgement. This may make the fiscal framework less binding and reduce its credibility.

Fiscal rules may also discourage public investment if they do not distinguish between current and capital outlays (Buti *et al.*, 2002 and Le Cacheux, 2002). It is politically more difficult to cut current expenditure, the bulk of which comprises transfers to households and public employee wages, than public investment. Accounting practices also play a role, since, contrary to the practice in the private sector, the entire cost of an investment project is attributed to a single year in standard public accounts, whereas benefits accrue over a longer period of time.[14] It may be argued that only that spending component which covers depreciation and nominal interest payments needs be tax-financed, while the net addition to public capital could be financed via borrowing. The so-called "golden rule" relies on this principle. Golden rules, nevertheless, have serious drawbacks, which have restricted their adoption. In particular, the distinction between current and capital outlays is not always relevant from an economic point of view, as these expenditures are often complementary (*e.g.* building hospitals and paying for health professionals). Furthermore, to the extent that the golden rule favours fixed over human capital formation, it may bring a risk of misallocation of resources, away from more intangible capital investment (in education or health care, for example).

Medium-term budgeting takes various forms…

Strategies to raise awareness of the longer-term trade-offs implicit in the annual budget process, and thus promote fiscal discipline and resource reallocation, have been widely implemented (Table 4). Medium-term budget projections are presented regularly in a number of countries, although they take various forms. In some, projections include only aggregate fiscal variables (Poland), while others provide more detailed budget projections (Canada, Denmark, Ireland and New Zealand).[15] Furthermore, a number of countries now present long-term budget projection covering 10-50 years and/or generational accounts (Australia, Norway, New Zealand, the United States and EU countries).[16] Taking another approach, some countries have introduced multi-year budgeting (see Box 2) or multi-year plans in specific areas (such as police and defence services in Denmark, and selected investment projects in the Czech Republic, Ireland, Japan, Korea and Norway), although there are important differences with regard to their coverage and binding status.

While an extended planning horizon has clear advantages, the use of medium-term projections and multi-year budgets has some drawbacks. Most seriously, forecasts of fiscal variables are subject to great uncertainty, in particular since they require an assessment of the economy's potential growth as well as its position in the cycle. Medium-term projections are indeed often revised substantially, as illustrated by the successive vintages of the Stability Programmes for euro-area countries. Furthermore, medium-term planning could also make it more difficult to adjust spending if expenditure forecasts are viewed by spending agencies as an entitlement to future funds, a problem encountered with the medium-term framework in place in Canada in the early 1990s.[17] Taking a less ambitious approach, some countries have opted for a strategy which consists of providing information on the longer-term budget impact for any new spending initiative to the Parliament (including the Czech Republic and Switzerland). In the context of the OECD *Country Surveys*, this approach has been recommended for several countries, including Canada, France and Portugal.

Table 4. **The use of medium-term budgeting, projections and plans**[1]

	Budget horizon	Medium-term projections	Other plans
Canada	Two-year rolling horizon	Five-year projections	
Czech Republic	Annual	Three-year projections (presented after the budget)	Multi-year funding for selected investment projects
Denmark	Annual	Three-year projections and longer-term projections up to 2010	Multi-year funding for certain activities (*e.g.* police, defence)
Finland	Annual	Three-year projections (presented early in the budget process)	
France	Annual	Medium-term projections annexed to the state budget	
Germany	Annual	Five-year projections	
Greece	Annual	Two-year projections	
Hungary[2]	Annual	Three-year projections	
Ireland	Annual	Two-year projections	A five-year funding allocation for public transport was made in 2001
Italy	Annual	Three-year projections	
Japan	Annual	Medium-term projection is presented in the Reforms and Perspectives programmes	Multi-year plans for public investments in roads and railroads
Korea	Annual		Multi-year appropriations for large projects
Mexico	Annual		
New Zealand	Annual	Detailed budget projections for five-year and broad aggregates for 10-50 years	
Norway	Annual	Three-year projections to be introduced from 2005	Medium-term plans in specific areas
Poland	Annual	Three-year projections of aggregated revenues and expenditures	
Portugal	Annual	Indicative expenditure ceilings for the three-year after the budget year	
Sweden	Overall expenditure ceiling and 27 envelopes are set on a rolling three-year-ahead basis		

Table 4. **The use of medium-term budgeting, projections and plans**[1] (*cont.*)

	Budget horizon	Medium-term projections	Other plans
Switzerland	Annual		
United Kingdom	Three-year plans for discretionary spending. Other expenditures are managed on an annual basis		

1. All EU countries are also obliged to produce annual reports on their medium and long-term budgetary strategy.
2. A two-year budget for 2001-02 was decided on in Parliament.

Source: Individual country surveys.

Reducing budget fragmentation and increasing transparency

The budget process should be less fragmented…

An efficient allocation of resources among competing demands has sometimes been more difficult to achieve by a shift to less direct types of expenditure, such as tax expenditures, loan guarantees, extra-budgetary funds and private-public partnerships. In Sweden for instance, the implementation of expenditure ceilings has been accompanied by an increasing recourse to tax expenditures since the late 1990s, while the use of loan guarantees and/or extra-budgetary funds have increased in countries like Czech Republic, Hungary, Japan, Korea and Poland.[18] Although these instruments may have some merits, they are often subject to less scrutiny and can be more difficult to terminate. They may thus hamper an efficient control on public spending and an optimal allocation of resources across competing demands, and should only be restricted to areas where they offer clear net advantages.[19] To mitigate these potential drawbacks, budget papers need to provide information on tax expenditures on a regular basis (a recommendation made for the Czech Republic and Switzerland), on extra-budgetary funds (Czech Republic, Hungary, Korea and Poland), as well as on contingent liabilities and failure risks associated with loan guarantees and/or public-private partnerships (Czech Republic, Hungary and Japan).

The use of accrual accounting also helps to make the true cost of government activities more transparent.[20] An increasing number of countries are adopting an accruals approach in their financial reporting, though often only partially, while few use accruals for their budgeting process. It should however be recognised that a full and consistent application of the accruals principle is not an easy task, as it relies on a certain element of judgement. It would, for instance, imply attributing

Box 2. **Multi-year budgeting frameworks**

Multi-year budgeting frameworks are implemented in several OECD countries although the extent to which they are actually binding varies. The following country cases provide examples:

Canada: The federal government moved to a two-year rolling budget in 1993-94. Detailed budgets are presented for both years in nominal terms. The second year is not legally binding, but sets out the governments' priorities and plans.

Sweden: A multi-year budgeting framework has been in place since 1997. Parliament approves a nominal ceiling for total expenditure excluding interest payments, and the budget envelope for each of 27 different expenditure areas, reflecting the committee structure in the Parliament. The ceilings are set on a rolling three-year-ahead basis but can be changed by a new decision by Parliament.

Netherlands: A multi-year budgeting framework was adopted in 1994, covering the cabinet term in office. Expenditure ceilings are determined for each year in real terms for each of the following sectors: the central government budget; social security; and labour market and health expenditure. During the cabinet period, the ceilings are indexed by the actual deflators. On the expenditure side, overspends for a specific item in a given sector have to be compensated by lower expenditure on other items within the same sector. Windfalls may be spent only to the extent that they do not result from better-than-expected cyclical conditions and should not be used for new policies. On the revenue side, automatic stabilisers are allowed to work fully, *i.e.* windfalls or setbacks relative to reference amounts fully affect the fiscal balance except if the deficit came close to the Maastricht Treaty's 3 per cent ceiling, which would require discretionary fiscal tightening on either the revenue or the expenditure side.

United Kingdom: The fiscal planning regime in place since 1997 is divided into two parts. The first is "Departmental Expenditure Limit " (DEL) spending, which includes most departmental programme expenditure, and is planned and controlled on a three year basis through a spending review process. Within DEL, current and capital spending are planned and managed separately. The other part consists of "Annually Managed Expenditure" (AME), which is expenditure that cannot reasonably be subject to firm, multi-year limits in the same way as DEL. It includes social security benefits, local authority self-financed expenditures, payments under the Common Agriculture Policy, debt interest, and net payments to EU institutions. AME is reviewed twice yearly as part of the budget and pre-budget report process, but is still part of the overall envelope for public expenditure.

United States (*up to* 2002): The Budget Enforcement Act (BEA), first enacted in 1990 and extended in 1993 and 1997, divided spending into two types – discretionary and mandatory. Discretionary spending, which encompasses almost all defence outlays, salaries and other governmental operating expenses, was divided into categories with separate spending caps for each. If the annual spending limits were exceeded, the BEA called for a sequestration procedure, reducing the spending for most programmes in that category by a uniform percentage. The

Box 2. **Multi-year budgeting frameworks** (*cont.*)

BEA also stipulated that legislated changes affecting mandatory spending programmes (such as health care and unemployment benefit, but excluding social security) should be budget-neutral. Otherwise a sequestration would be triggered requiring a uniform reduction in mandatory programmes not exempted or subject to special rules. Both provisions applied over a five-year period.

the pension costs of government employees to the time period when they are employed, rather than having this as an unrelated expenditure once they have retired. Evaluating these implicit liabilities is fraught with serious conceptual and technical difficulties.[21] A similar problem arises with infrastructure assets where, in the absence of a transparent and verifiable framework, the selection of valuation methods (historic *versus* current value) and depreciation approaches will significant affect the picture.

... and the focus on overall priorities strengthened

Efforts to restrain the growth of public spending have often been accompanied by initiatives to strengthen the focus on overall priorities in the budget process and make them more visible. Pre-budget reports, or reports presenting the policy platform for the government's term in office, have been introduced in a number of countries (including Canada, Finland, France, Hungary, Italy, New Zealand, Norway, Sweden and United Kingdom). In addition, the number of budget lines has been, or is being, reduced in several OECD countries.[22]

Further to enhance strategic prioritisation, many countries have given greater emphasis to programme results (Kristensen *et al.*, 2002). While Australia, Canada, the Netherlands, New Zealand and the United Kingdom have been front-runners in this area, budget papers have been restructured according to programmes defined by objectives in a majority of OECD countries. Over three-quarters of OECD member countries now include performance information and targets in their core budget documents or in separate documents accompanying the budget. Sunset clauses can, in this context, provide an opportunity to ensure regular reviews of the costs and benefits of spending programmes, since they imply that spending programmes are abandoned after a set period of time unless Parliament renews their mandate. They are rarely explicitly used, but have been recommended for consideration in several spending chapters (Czech Republic, France, Korea, New Zealand and Poland).

Sound fiscal management also requires political willingness

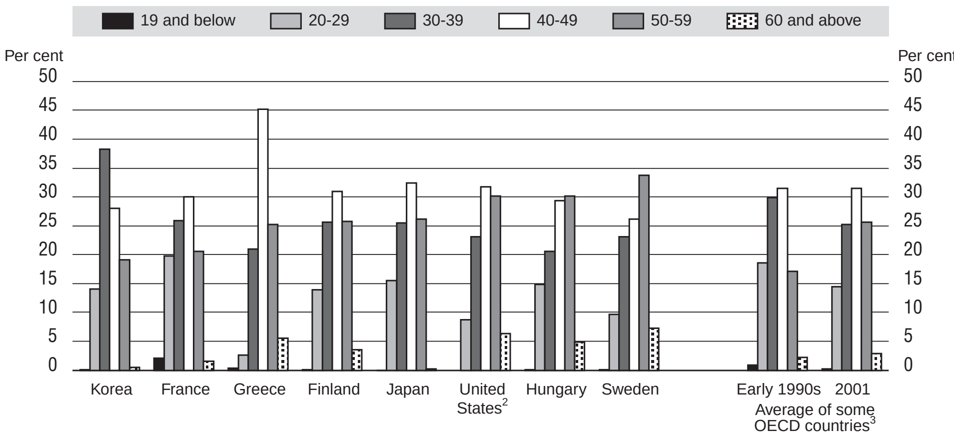
Although countries have taken significant steps to strengthen fiscal discipline and facilitate reallocation, fiscal frameworks have not been proof against fiscal slippages and the use of *ad hoc* measures. In the euro area, the Stability and Growth Pact did not prevent some member states from easing fiscal policy during the upswing in the late 1990s and, while the Stability Programmes presented in 2001 envisaged balanced budget to be broadly achieved by 2002, this goal has been put off by at least 4 years. In addition, some countries have breached the Maastricht Treaty's 3 per cent ceiling. They are now subject to an enhanced surveillance procedure but are still allowed a long time span before complying with the deficit ceiling. In the United States, the discipline of the Budget Enforcement Act in place up to 2002 was circumvented in the late 1990s by designating funds as emergency spending and by using advance appropriations to spread budget authority over more than one year.[23] Experience thus illustrates that applying and enforcing fiscal frameworks is a political-economy issue as well as a technical one.

REFORMING MANAGEMENT PRACTICES TO IMPROVE PUBLIC SPENDING EFFECTIVENESS

To improve public spending outcomes, many countries have reassessed public sector management practices. The main focus has shifted from the amount of resources used by a programme or ministry to the services delivered and outcomes achieved. This has entailed clarifying desired or targeted results for public bodies and agencies charged with supplying public services, with heightened emphasis on user-orientation, while entrusting the managers of spending agencies with more flexibility in their day-to-day operations. In particular, constraints on the timing of spending appropriations have been somewhat relaxed through carry-over provisions in a large number of countries and the line-item management approach has been gradually abandoned, with managers now receiving a single appropriation for all their operating costs in many OECD countries (Australia, Canada, Denmark, Finland, Iceland, Netherlands, New Zealand, Norway and Sweden). Such approaches have allowed public bodies to respond better to client needs while improving cost-efficiency (*e.g.* by avoiding end-year spending splurges).[24] Measuring performance and creating the appropriate incentives has, however, been difficult. Furthermore, while the shift of focus from control of inputs to outcomes may deliver efficiency gains, it is important to recognise that this can also create an upward drift in public spending.

Since labour is the principal input to public services, implementing a results-oriented management approach has made personnel management reform in the public sector more pressing. In several countries, the public sector is already suffering from serious skill or personnel shortages while a significant proportion of

Figure 3. **Age structure of public employees in selected OECD countries**
2001[1]



1. 1998 for Greece and Korea; 2000 for France and the United States.
2. Age groups are slightly different from those shown for the other countries: less than 31, 31-40, 41-49, 50-59 and 60 and above.
3. Australia, Finland, Hungary, Japan, the Netherlands and Switzerland.

Source: OECD Public Management Service, 2002.

public employees will soon reach the retirement age (Figure 3) – an acute problem in Canada, Denmark, Finland, Ireland, New Zealand, Portugal and Sweden. Until recently, job security, reduced working hours, and more generous pension provisions have often been part of the attraction of the public sector as an employer. But, by locking workers into life-long public sector employment, these practices have contributed to making public spending behaviour asymmetric, with public employment adjusting upwards when a new demand emerges but failing to adjust downwards when demands wanes.

This section discusses the main initiatives taken to reform public sector management, the benefits achieved, and the main issues and trade-offs involved, as identified in individual country reviews. Table 5 provides a summary of policy recommendations presented in individual country chapters concerning public management practices.

Table 5. **Reforming budgeting and management practices to improve public spending effectiveness**

Summary of country recommendations[1]

	CAN	CZE	DEN	FIN	FRA	DEU	GRC	HUN	ISL	IRL	ITA	JPN	KOR	MEX	NZL	NOR	POL	PRT	SWE	CHE	GBR	Total[2]
Adopting a results-focused budgeting and management approach																						
Move towards results objectives																						
• Improve the quality and encourage the use of performance indicators…		X				X		X	X				X				X	X	X		X	9
• … putting more emphasis on outcomes (as opposed to outputs)															X	X					X	3
• Increase commitment to service improvements and client satisfaction	X			X								X										3
• Improve consistency across objectives and co-ordination between agencies															X				X		X	3
• Move to performance-based budgeting…		X						X	X	X							X					5
... extending it to sub-national governments			X		X								X							X		4
Increase managerial autonomy																						
• By giving managers enhanced discretion as to how they reach objectives		X											X	X			X					4
• By increasing the ability of public agencies to carry over unused appropriations												X				X						2
Strengthen accountability frameworks																						
• Develop appropriate instruments to evaluate outcomes						X										X				X		3
• Strengthen performance evaluation and auditing	X				X	X		X		X	X	X	X	X	X		X			X	X	13
• Rely more on activity-based funding systems for public entities[3]…																X		X		X		3
… while safeguarding against cost overruns																X						1
Reforming human resource management																						
Modernise staffing policies																						
• Streamline recruitment procedures…	X													X								2
… and use more open recruitment										X							X					2
• Encourage mobility of staff within public service							X				X			X				X				4

Table 5. **Reforming budgeting and management practices to improve public spending effectiveness** (*cont.*)
Summary of country recommendations[1]

	CAN	CZE	DEN	FIN	FRA	DEU	GRC	HUN	ISL	IRL	ITA	JPN	KOR	MEX	NZL	NOR	POL	PRT	SWE	CHE	GBR	Total[2]
• Rely more on fixed-term contracts				X														X				2
Allow wages to reflect market conditions…		X				X					X					X	X					5
… and allow for more functional and regional flexibility in public sector pay schemes										X												1
Rely more on performance-related approaches to personnel management…	X	X	X	X		X	X		X	X	X			X		X	X	X			X	14
… while taking measures to limit wage overruns	X								X													2

1. These policy recommendations are derived from the public spending chapter for individual OECD country reviews published in 2000 for Japan and Mexico; 2001 for Canada and Czech Republic; 2002 for Denmark, Germany, Greece, Hungary, Italy, New Zealand, Norway, Poland, Sweden, Switzerland and the United Kingdom; 2003 for Finland, France, Iceland, Ireland, Korea and Portugal.
2. Number of countries for which these recommendations were spelled out among the 21 countries for which in-depth public expenditure chapters in final form are available.
3. In the case of Portugal and Switzerland, this recommendation applies to the hospital sector.

Source: Individual country in-depth chapters on public expenditure.

Issues in the implementation of results-oriented management approaches

Successful implementation of results-oriented management requires identifying "good" targets,…

The success of performance-oriented budgeting approaches depends critically on a well-developed framework for specifying performance targets. However, identifying good performance indicators is not an easy task, with countries frequently undergoing a learning-by-error process. In the United Kingdom for instance, the first set of targets embodied in the 1998 Spending Reviews failed to be "smart" (specific, measurable, achievable, relevant and timed) and had to be reformed. They were also too numerous, as was the case for those set in 2002 for the Norwegian public employment service, which carries the risk of blurring priorities and making it difficult to establish a link between actual performance and budget appropriations.

Performance targets may produce adverse effects if poorly formulated. In the United Kingdom, the National Audit Office found an excessive use of more easily quantifiable targets at the expense of those that, while important, cannot be easily measured, producing adverse incentives. A striking example has been the former Public Service Agreement concerning the National Health Service, which set a target for the reduction of the number of patients waiting for treatment for more than a year. This gave an incentive for the priority treatment of newer patients, while keeping patients who had been on a waiting list for over a year waiting even longer.[25] The need to strengthen performance evaluations by independent auditors and to compare actual performance with targets has been identified for several countries (France, Hungary, Iceland, Japan, Korea, Poland, Switzerland and the United Kingdom).

... designing appropriate incentives...

Designing appropriate incentives to encourage public bodies to meet their performance targets has become an issue in several countries. The lack of a reward and sanction system has been considered a problem in some (including Finland and the United Kingdom). For specific services, there is an increasing recourse to performance-based funding, which directly acts as a reward and sanction system. This entails that providers of publicly-funded services are compensated according to their performances, often measured by the volume of activities. In the health care sector, prospective payment systems and fee-for-services are examples. In the education sector also, several countries have made institutions' resources conditional on students or degrees passed (*e.g.* universities in Denmark, Norway, New Zealand and Switzerland).[26] One major difficulty, however, lies in defining what should happen if the approved performance level is not achieved. In the case of essential goods and services, it is doubtful whether poor performers could be sanctioned, especially if there is no alternative supplier, as this could lead to further cut-backs in service provision.

... and keeping total spending under control

Relaxing input controls in favour of results-based financing may spur efficiency gains but may also put aggregate spending control at risk. As an illustration, the move to a prospective payment system for hospitals in Sweden led to a rapid increase in service output and to the re-imposition of a budget cap in the mid-1990s. The surge in public spending may be only temporary if it reflects pent-up demand in the presence of productivity reserves. In the longer-run, several conditions need to apply for results-based financing to deliver efficiency gains while also controlling total spending. In particular, it entails setting appropriate prices for publicly-funded goods in order to contain excessive demand pressures, while ensuring adequate and fair competition across providers to reward good performers (see below). Even under such circumstances, designing payment systems which limit incentives to oversupply has been difficult, in particular in the health care sector where providers are typically better informed than patients and insurers about the true need and scope for medical treatment. Setting an overall envelope for a given publicly-funded service and allowing providers to compete for market shares within this envelope – as implemented in the hospital sector in Austria and for research activities in Norwegian universities – could mitigate the potential problems from an over-supply of services.

Reforming human resource management

Demographic developments have resulted in changing needs for public services, and this is likely to continue (for instance, declining demand for primary education but increased demand for health and elderly care services, both of which are rather labour intensive). Unless accompanied by a reallocation of resources and more efficient working practices, the overall demand for labour in the public sector will increase steadily. To address this challenge, OECD countries are reforming their approach to public sector personnel management, with the objective of better adapting the labour force to changing needs, attracting the people with the necessary skills, and strengthening the performance of public employees. The retirement of a significant share of public employees should be taken as an opportunity to progress further in this direction.

Introducing more flexibility while making public services an employer of choice

Many OECD countries have recently introduced measures to enable human resources to react to the changing public-service requirements. Life-long job contracts are used less frequently, and have even been abolished, in a number of countries (Canada, Denmark, Finland, Iceland, Italy, New Zealand, Portugal and Switzerland).[27] Reducing barriers to mobility within the public sector so as to avoid both duplication and understaffing should, however, be considered in several countries (Austria, Greece, Italy, Mexico and Portugal). In addition, measures to encourage the mobility of staff between public and private sectors (*e.g.* by equalising pension arrangements and facilitating the portability of pension rights between public and private employers) would often be desirable. Recruitment practices should also be improved in some countries, by overhauling costly and cumbersome recruitment systems (Canada and Mexico).

Measures have also been introduced to enhance the attractiveness of the public sector as an employer in sectors and regions characterised by serious shortages. Training opportunities for public employees have been improved in some countries (the Czech Republic and Italy) and working time made more flexible (Germany, Italy, Portugal and Switzerland). Pay arrangements have been reviewed, with automatic seniority bonuses and fringe benefits being reconsidered (Canada, Finland, Ireland, Mexico and Switzerland). Often in parallel, public sector wages have been adjusted to reflect market conditions better (including Finland and Ireland) or regional differences in costs of living (*e.g.* the United Kingdom for the London area) so as to mitigate specific recruitment problems.[28] The need to allow more flexibility in public sector wages in order to reflect regional conditions has also been identified in countries such as Germany and Italy.

Introducing performance-related incentive schemes

To improve motivation, elements of incentives-based promotion and pay have been strengthened in many countries. Political and other *ad hoc* appointments have been restricted in the Czech Republic, Italy and Greece, where they were a particular problem. A large number of countries have adopted performance evaluation systems for public employees, linking career advancement to performance (*e.g.* Canada, Denmark, Iceland, Ireland, Italy, Mexico, New Zealand and United Kingdom). Performance-related pay has also become more common. In particular, performance agreements between the heads of departments/units and senior officials have been increasingly used (Canada, Denmark, Italy, New Zealand, Switzerland and the United Kingdom).[29]

As with performance management at the organisational level, performance-related pay has often run into a number of implementation difficulties. *First*, specifying individual objectives and measuring performance is often difficult. *Second*, it remains an open question whether performance-related pay stimulates efficiency gains. When wage gains are spread over a large proportion of staff these may be seen as a "quasi-normal" pay supplement, reducing incentives to outperform. On the other hand, restricted to a small group of high-performers, rewards may result in a majority of dissatisfied "losers" who could be de-motivated. In practice, managers often appear unwilling to differentiate among their subordinates and most employees tend to receive similar, and lenient, rating (Reichard, 2002). *Third*, performance-based pay can put pressure on public finances without necessarily delivering clear efficiency gains. Country experiences illustrate how the implementation of the performance-related pay system can sometimes contribute to wage pressures in the public sector, with likely trickle-down effects onto the private sector.[30] In addition, it may fail to deliver efficiency gains for the public sector as a whole if it is not accompanied by adjustment in employment levels.[31] Mitigating these potential adverse effects would argue for applying performance-related pay rather selectively in the public sector, initially targeting those sectors where outputs and outcomes are clearly specified and measurable (as, for example, with hospital employees where outputs can be identified through the use of a case-mix system).

EXTENDING MARKET SIGNALS FOR PUBLICLY-FUNDED GOODS

Market signals have a strong role to play in enhancing the effectiveness of public spending. On the supply side, competitive pressures can raise cost-efficiency, while on the demand side, user charges may help to contain the excessive demand (and reduce the need for queuing) associated with the free delivery of goods and services. While acknowledging the progress made by OECD countries in raising cost-effectiveness by increasing the role of market signals, the following review highlights important barriers to their more extensive use, in particular the potential trade-offs inherent to market approaches. Again, a key concern is that greater responsiveness to evolving customer preferences, as a result of increased competition among providers, could actually boost the demand for publicly-funded goods. Enhanced reliance on user charges can mitigate this risk, but it may also deny some population groups access to core public services and raises serious equity concerns. Means-testing approaches or the implementation of a two-tier system, through which users are offered the possibility of accessing higher quality services by topping up the public sector's contribution through voluntary insurance or out-of-pocket payments, may help to protect groups at risk. But they may create poverty traps and in some sectors overall performance may be affected, as for example in education, where the separation of students according to means may impair the human capital formation of those from disadvantaged backgrounds.

Based on these considerations, Table 6 provides a summary of policy recommendations for extending market signals for publicly-funded goods as presented in individual country in-depth chapters on public spending. The following section discusses the main instruments used in OECD countries to increase the role of market signals, their pros and cons, as well as constraints to their wider use.

Encouraging competition in publicly-funded goods

Governments are significant producers and purchasers of goods and services and have devoted increasing efforts to making them available at a lower cost. General government consumption and investment expenditure makes up close to 20 per cent of OECD-area GDP (Figure 4). While a clear case may exist for the government to fund certain goods and services, this does not require that it must provide all of them or shelter providers from competition. Raising competitive pressures on providers of publicly-funded goods can promote cost-efficiency and responsiveness to evolving customer preferences. In this respect, various instruments have been used in OECD member countries, including benchmarking, competitive tendering for public procurement and promoting user choice among alternative suppliers. The choice of instruments, and their effectiveness, depends

Table 6. **Extending market signals for publicly-funded goods**

Summary of country recommendations[1]

	CAN	CZE	DEN	FIN	FRA	DEU	GRC	HUN	ISL	IRL	ITA	JPN	KOR	MEX	NZL	NOR	POL	PRT	SWE	CHE	GBR	Total[2]
Raise competitive pressures on providers of public-financed goods and services																						
Make greater use of benchmarking								X		X			X									3
• Develop better quality indicators[3]	X			X					X										X	X		5
• Make benchmarking results more widely available				X																		1
Make greater use of outsourcing…				X					X	X	X		X	X	X			X				8
• Enforce existing regulations			X																			1
• Facilitate their implementation at a sub-national level			X													X						2
• Redress existing tax rules favouring in-house provision				X												X						2
… and encourage competitive tendering										X		X	X									3
• Simplify and standardise rules on public procurement																	X			X	X	3
• Apply public procurement rules to the wider public sector								X														1
• Review policies aimed at supporting local SMEs												X										1
Exploit cautiously the potential advantages of public-private partnerships								X														1
• Maintain competitive pressures over the life cycle of the project											X										X	2
• Better insulate the budget from the risk of failure										X			X								X	3
Strengthen user choice…			X	X									X			X		X				5
• Reconsider zoning restrictions[4]															X		X			X		3
• Remove undue restrictions on private operators' entry into the market[5]							X								X	X		X				4
• Apply more consistently the "money follows the user" principle, effectively mimicking a voucher system[6]				X											X	X	X		X	X		6
… and develop risk-sharing system so as to avoid adverse selection of risks[7]						X																1
Set appropriate prices for publicly-funded goods																						
Make greater use of price signals to contain excessive demand for publicly-funded goods			X						X	X	X	X	X	X	X							8
Health care																						
Consider expanding co-payments to discourage precipitate demand for services…		X				X				X								X	X			5

Table 6. **Extending market signals for publicly-funded goods** (*cont.*)

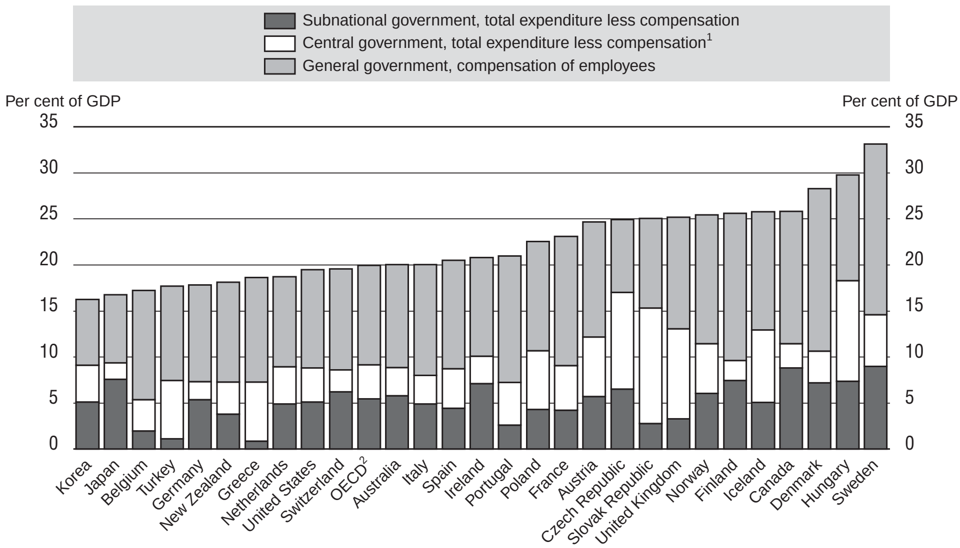
Summary of country recommendations[1]

	CAN	CZE	DEN	FIN	FRA	DEU	GRC	HUN	ISL	IRL	ITA	JPN	KOR	MEX	NZL	NOR	POL	PRT	SWE	CHE	GBR	Total[2]
… and examine the pros and cons of expanding the role of private insurers…					X												X		X			3
… while taking measures to mitigate adverse equity effects…																		X				1
… and avoiding poverty traps associated with means-testing										X												1
Elderly care																						
Consider raising, and/or modifying the structure of user charges for elderly care to reduce the bias toward high cost-institutional care…				X								X				X						3
… and reinforce resource-testing elements																						
Early childcare and education																						
Reconsider the setting of parental fees by public and private kindergartens to avoid cream-skimming and ensure that the level of fees does not discourage labour supply and investment in human capital																X						1
Tertiary education																						
Increase or introduce tuition fees…		X	X	X		X			X	X						X		X	X	X		10
… complemented with means-tested mechanisms – either grants, tuitions fees or subsidised loans – to mitigate the potential adverse distributional impacts		X				X	X			X						X		X		X		7
Water distribution and treatment																						
Charge households for the volume of water consumed										X												1
Transportation																						
Introduce road-pricing mechanisms to help urban traffic management												X			X					X		3

1. These policy recommendations are derived from the public spending chapter for individual OECD country reviews published in 2000 for Japan and Mexico; 2001 for Canada and Czech Republic; 2002 for Denmark, Germany, Greece, Hungary, Italy, New Zealand, Norway, Poland, Sweden, Switzerland and the United Kingdom; 2003 for Finland, France, Iceland, Ireland, Korea and Portugal.
2. Number of countries for which these recommendations were spelled out among the 21 countries for which in-depth public expenditure chapters in final form are available.
3. This recommendation applies to health care in the case of Canada, Finland and Sweden, also to education in the case of Sweden, and to public employment services in the case of Switzerland.
4. This recommendation applies to health care in the case of New Zealand, to compulsory education and hospitals in the case of Portugal, to compulsory education in the case of Switzerland.
5. This recommendation applies to tertiary education in the case of Greece and New Zealand, to schools and hospitals in the case of Norway and to pharmacies in the case of Portugal.
6. This recommendation applies to child and elderly care in the case of Finland, to schools, hospitals and employment services in the case of Norway, to compulsory education in the case of Portugal and Switzerland and to tertiary education in the case of New Zealand and Sweden.
7. This recommendation applies to health care insurance in the case of Germany.

Source: Individual country in-depth chapters on public expenditure.

Figure 4. **Total public procurement markets in the OECD area**
Average 1990-1997



1. Including social security.
2. Weighted average.
Source: Audet (2002).

on several factors. If permanent contracts for public employees predominate, outsourcing and user choice may not be financially attractive options, at least in the short run. Likewise in a decentralised setting, the presence of very small government units and large geographical distances between them may not permit efficient market solutions because transaction costs may be high (with respect to competitive tendering, for example), competition may fail to develop or scale economies may be difficult to achieve. In both cases, allowing comparisons of quality and costs to be made across providers of similar services could provide a promising avenue.

Appropriate cost-accounting is often a prerequisite for effective competition to develop. It is required for benchmarking the performances of providers and to guarantee a level playing field between potential competitors, in particular to prevent cross-subsidisation within the public sector driving potential competitors out of the market. Where there are difficulties in assessing the quality of publicly-funded services, a "market test" may be imposed by allowing users to choose among alternative providers. Taking due account of the differences in delivery costs across user groups would further help to avoid "cream-skimming" by providers because they perceive insufficient incentives to cover population groups characterised by higher costs or risks.

Benchmarking

Benchmarking can help identify both best practices and inefficiencies, and thus be an effective means of exerting competitive pressures. Several countries have recently developed indicators of quality and cost for publicly-funded services, particularly for hospital care and/or education (including the Czech Republic, Finland, France, Hungary, Iceland, Japan and Portugal).[32] In some decentralised countries, there has also been a conscious effort to provide local citizens with information on the coverage and costs of public services across municipalities (Norway and Sweden), leading to pressures on local administrations to raise the cost-effectiveness of their spending programmes.[33]

There is, however, a need for further efforts to strengthen the potential competitive pressures stemming from benchmarking. In the case of Finland, Ireland, Italy and Sweden, in particular, individual country reviews have recommended improving the quality of the information system and/or disseminating more widely the results of the evaluations. There is a reluctance to do so, particularly in the education and health care sector in some countries, partly reflecting the low quality of the performance measures. In the education sector, for instance, making crude measures of school results public could have adverse effects, by encouraging schools to focus efforts for improvements on those aspects that can easily be measured. Publication of results can also make parents more aware of the variations in the social and academic profiles of students and lead privileged families to shun schools with a "worse" intake (Hirsch, 2002). In a number of countries (such as the Netherlands and the United Kingdom), attempts are being made to replace crude measures of school results with those that look at the value a school adds to each pupil's performance. It is not easy to design valid measures of this type, either in education or in several other sectors, such as preventive health care.

The benchmarking process also needs to enable the identification of best practices, as was recognised by the Swiss authorities in the recent reform of their benchmarking approach for regional placement offices. The lack of transparency within the existing ranking system, which is based on a synthetic indicator and econometric work to account for specific circumstances potentially affecting an office's performance, has not allowed management to identify inefficiencies, making it difficult to improve performance.[34]

Contracting out and competitive tendering

Sub-contracting and competitive tendering have increased…

Many OECD countries have tended to rely increasingly on sub-contracting and competitive tendering to obtain the provision of constant quality services at lower costs. Indeed, empirical studies generally find that competitive tendering results in lower costs than uncontested public provision. The estimated savings vary greatly across countries and services, but tend to be concentrated in the 10 to 30 per cent range.[35] They derive from economies of scale and specialisation, which can be exploited through outsourcing, while open and transparent tendering processes mean more competition and stronger safeguards against corruption. Contracting out, however, also implies costs, especially when the output being purchased is complex, and may entail the risk of cost overruns which may be borne by the public sector, if the contractor fail to deliver or threatens to go into bankruptcy.

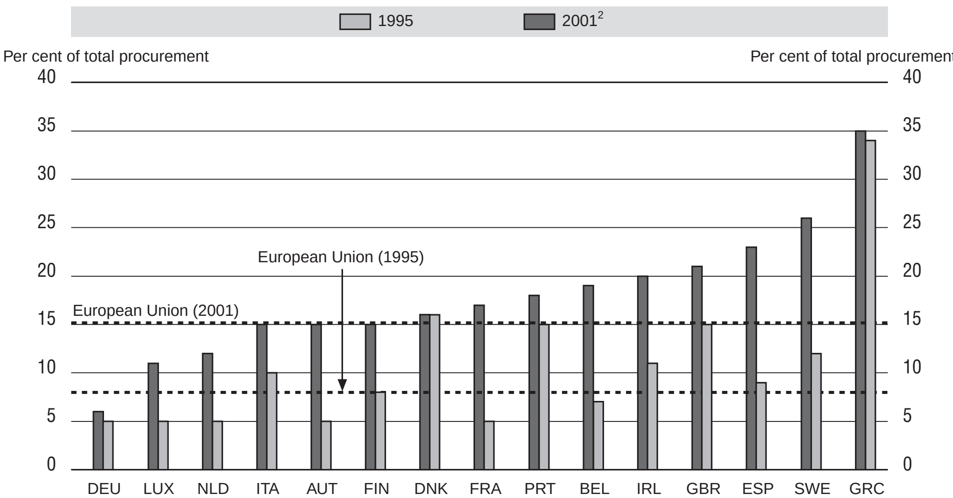
Measures recently adopted to boost the use of sub-contracting and competitive tendering include: implementing international and regional agreements on government procurement;[36] removing the obligation for public bodies to buy services from public enterprises (Norway); simplifying the legislation and procedures on public procurement (France, Italy and Norway); standardising the procedures associated with the tendering process (Poland); introducing uniform public procurement rules across government levels (Austria, and to some extent Switzerland); introducing a separate body for settling disputes over public procurement (Norway); and using ICT to improve the information publicly available on public procurement and/or to allow participation in the tendering process (Finland, Italy, Mexico, Norway, Switzerland and at the EU level). The increasing share of public procurement which is openly advertised at the EU level provides evidence that public procurement markets have become more transparent and open to competition (Figure 5). There are still significant differences across countries, Germany and the Netherlands lagging behind other EU countries.

… but a number of constraints on their development remain

To exploit the potential gains from more sub-contracting and competitive tendering more fully, remaining regulatory barriers need to be reduced. Public procurement policies have often been used to protect local and/or small enterprises (Czech Republic, Japan and Switzerland), thus reducing effective competitive pressures.[37] Tendering rules for public procurement in a number of countries do not apply to large segments of the public sector (exemptions are made for large-scale public works and utility companies in Hungary and for extra-budgetary funds in Poland) or are routinely violated (Czech Republic). The over-complexity and the associated lack of transparency of existing rules, combined with the low level of

Figure 5. **Share of public procurement advertised for tender in the European Union**[1]

Per cent of total procurement



1. The Audet and EC's definitions of public procurement differ in various respects. First, the coverage differs, since Audet's data concern the general government sector while the EC's data also include public utilities. Second, Audet's data used in this paper include employee compensation, while the EC's data exclude them (Audet, 2002, also provides estimates for government procurement excluding employee compensation). Third, core military (warlike) expenditure is excluded from EC's data but not in Audet's data.
2. Provisional data.

Source: Eurostat.

sanctions in case of misconduct, also hinder effective competition from developing.[38] Lastly, tax rules, and in particular VAT regulations, may create a competitive distortion in favour of in-house production (*e.g.* Finland and Norway).[39]

A decentralised government structure and the job status of public employees further limit the potential gains of outsourcing and competitive tendering. While sub-national governments account for more than one-half of total government procurement, outsourcing and competitive tendering at the municipal level remains low (Denmark, Finland, Italy, Japan and Norway). Diseconomies of scale may hamper the diffusion of outsourcing (Denmark and Finland). Moreover, a lack of professional experience among sub-national government staff may act as an important barrier to its wider adoption. The absence of cost-accounting for services supplied by sub-national government makes it difficult to assess the benefits of alternative arrangements (Finland and Norway). Under these circumstances, seizing the benefits of competitive outsourcing could require greater co-operation across sub-national governments (so as to exploit scale economies) and technical help from the central government (so as to overcome the lack of technical know-how at the sub-national level). Finally, the predominance of permanent contracts in the public sector and problems in transferring pension rights from the public to the private sector may also make outsourcing politically unpopular and/or too expensive, at least in the short run. Indeed, in most OECD countries employee compensation accounts for more than one-half of government current and capital expenditure. To overcome these problems, outsourcing contracts in some countries have been accompanied by a transfer of public employees to the company winning the bid, under the terms and conditions in place in the public sector and the creation of new pension schemes with benefits broadly comparable to those of the civil service.[40]

Public-private partnerships have advantages but also drawbacks

For large infrastructure projects, private sector involvement and competitive pressures have been extended through public-private partnerships (PPPs). PPPs often involve the financing and/or operation and management of public infrastructure projects by the private sector.[41] As noted above, the need for fiscal retrenchment in a number of OECD countries has further helped to making PPPs attractive, since in accounting terms government investment is reduced while current outlays only gradually increase. In this context, an increasing number of OECD countries have relied on such partnerships (Czech Republic, Hungary, Iceland, Ireland, Italy, Japan, Korea, Mexico, Portugal and the United Kingdom), mostly in the field of transport infrastructure and, to a lesser extent, for energy projects and the health and education sectors. The United Kingdom has taken the lead in implementing PPPs, with about one-third of net public investment currently carried out under this regime.

Experience with public-private partnerships has been mixed so far, and the potential benefits need to be weighed against the costs. Some projects have been considered a success, having been completed promptly and having proved to be a cost-effective method of delivering public services (*e.g.* Iceland, and some projects in the United Kingdom). Others have failed to deliver the expected gains. There have been significant delays associated with the interpretation of relevant contracts in the Czech Republic and cost overruns have been experienced because parts of the project had not been fully submitted to competitive pressures (Czech Republic, Hungary and Mexico). They have also entailed bail-outs by the public sector in a number of countries (Hungary, Mexico and the United Kingdom).

Giving users a choice between alternative providers

Allowing users a choice among alternative providers of publicly-funded services can strengthen competitive pressures, trigger innovation and result in services which respond better to citizens' needs. Consumer welfare is improved, in particular, when the demand for publicly-funded services is diversified (as in the case of childcare services or tertiary education). One important condition for competitive pressures to be effective is the implementation of the "money follows the user" principle, which either implies or effectively mimics an explicit voucher system.

Promoting user choice has become an important policy objective in a number of countries, though its effective implementation varies significantly. The ability of patients to choose their health provider or insurer has been increased in several countries (Docteur and Oxley, 2003). The Czech Republic, Hungary, Poland and Sweden previously assigned patients to physicians or featured community clinics in which patients saw the first doctor available, but patients are now allowed to select a primary care physician. Belgium, Germany, the Netherlands, and Switzerland also allow some degree of competition among insurers.[42] In parallel, countries have increasingly implemented the principle according to which "money follows the patient", as when providers are compensated by the insurance system through standard fee-for-services and when hospitals are managed under diagnosis-related group (DRG) payment systems. User choice for employment services (both placement and/or training services), with the co-existence of public and private providers, has also been introduced in several countries including Australia, Denmark, the Netherlands and the St Gallen Canton of Switzerland (Fay, 1997). In the education sector, an increasing number of countries are running implicit voucher models, making institutional resources conditional on the number of students or degrees passed (including universities in Denmark, Norway, New Zealand and Switzerland; primary schools in the Czech Republic, Denmark, Hungary, the Netherlands, Sweden and the United Kingdom; kindergartens in Norway). Recent studies on the impact of this voucher model are generally positive about the educational outcome, though school choice is no magic solution to school quality.[43]

Restrictions on choice of service provider persist

User choice between alternative providers, public or private, is frequently restricted, limiting competitive pressures and gains in cost-effectiveness. Restraints include:

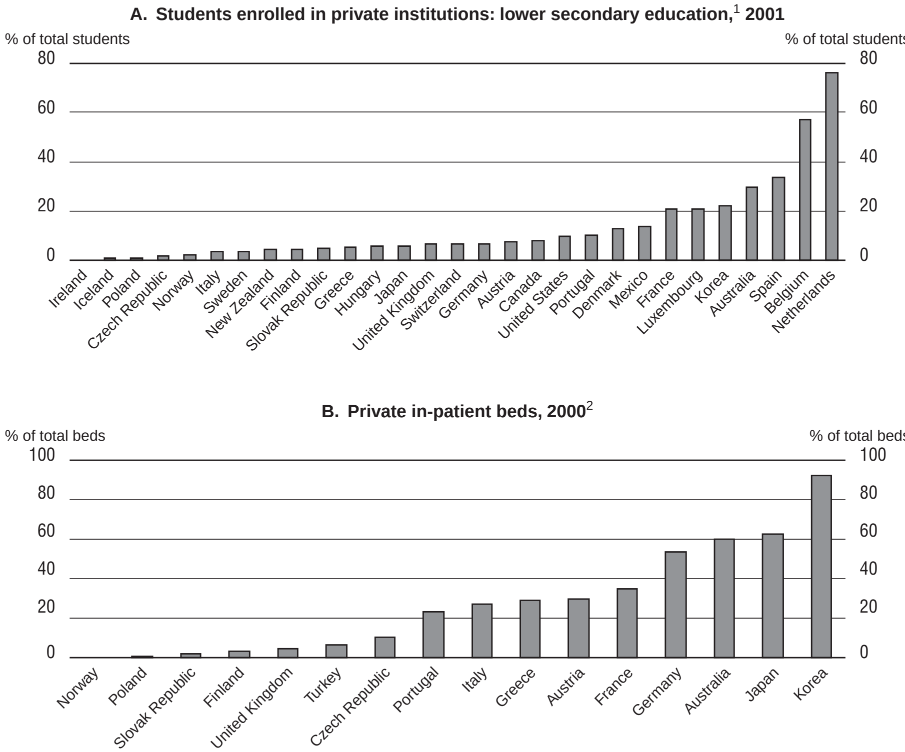
- *Zoning restrictions*. In the education sector, pupils residing in one jurisdiction may not be entitled to go to a public school in another (*e.g.* France and Portugal), contrasting with the freedom of parental choice in several countries (including the Czech Republic and Sweden). Likewise, in the health care sector, the assignment of patients to public doctors on the basis of location of residence in Finland contrasts with the freedom of choice in the French, German, Japanese and Swedish health care systems, which are all characterised by a universal coverage. Transport considerations and the size of potential markets and populations in rural areas can also severely limit the feasible number of producers, so that measures to increase choice and reap efficiency gains from competition between them are less effective.

- *Restrictions on market entry*. Severe restrictions on, or prohibition of, private providers are in place in several countries, most frequently in the health care and education sectors. For instance, Japanese for-profit enterprises are not allowed to run hospitals, while in Greece private universities are prohibited. In addition, tight restrictions on establishing private schools and hospitals are in place in Norway and restraints on advertising have been imposed in Japan for doctors and hospitals.
- *Discriminatory financial arrangements*. In several countries, funding arrangements for public providers do not properly reflect the number of users (*e.g.* Norwegian and Portuguese schools) and/or private providers do not receive the same amount of money for providing the same service to users. In particular, private schools receive less money per pupil in the Czech Republic, Denmark, New Zealand and Norway. Private hospitals in Denmark do not receive any public subsidies, except if maximum waiting periods in public hospitals have been exceeded. Such discriminatory funding arrangements between public and private providers are partly reflected in the low share of the private sector in some countries (Figure 6).[44]
- *Limited disclosure of performance information*. The absence of public information on relative performance across alternative suppliers can inhibit user choice. School choice has become more active in the Netherlands, partly as a result of the publication of comparative performance tables and inspection reports on all schools, although regulations and funding arrangement governing user choice are unchanged (Hirsch, 2002).

Policy issues associated with greater user choice

User choice may increase the risk of social segmentation and "cream-skimming". If providers in high demand are not prepared to adjust their supply to meet demand, they may respond by attracting healthier or less risk-prone individuals ("cream skimming") and by "shunting" those for whom it is more costly to provide. Cream skimming will be more likely if incentives to deliver services to the subgroups of the population carrying more risks or higher costs are not properly provided for. In New Zealand, for instance, the introduction of parental choice for schools in the early 1990s was not matched by the required responsiveness on the supply side, partly because the money only partially followed the students, encouraging oversubscribed schools to select their students. A similar issue frequently arises in the health care sector, where public hospitals may assume the role of an agent of last resort, taking care of the more costly patients (as in France and the United States).[45] Public health insurance schemes have also often been left with the most unhealthy segments of the population. As a result, they have run into a large deficit (*e.g.* Czech Republic), or have had to increase contribution rates (Germany).

Figure 6. **Private providers: market share for selected services**



1. Lower secondary education in compulsory and lasts around three years.
2. 1999 in the case of Australia, Greece, Italy, Portugal and the United Kingdom.

Source: *Education at a Glance*, OECD 2003; OECD Health database, 2002.

Risk adjustment systems have been implemented to avoid the danger of cream-skimming. In the Netherlands, for instance, the credit received by a school for each pupil is weighted in favour of disadvantaged families – the children of asylum seekers and poor couples bring nearly twice as much money to schools as middle-class children. In Australia, the introduction of competition in the delivery of labour market assistance for the long-term unemployed in the mid-1990s was complemented by the setting of fees for services which reflect the characteristics of this population: the riskier the case, the larger the fee paid (Fay, 1997). Risk-adjustment systems have also been introduced for health care insurance schemes in many countries. Insurers with participants that have high risk profiles receive a cross-subsidy from funds with lower risks to allow for higher expected health costs. However, so far risk-adjustment systems fail to account for much more than 10 per cent of the variance in risk (Van de Ven and Ellis, 2000), leaving substantial scope for profitable cream skimming.

Allowing for more user choice, if accompanied by services which better respond to the users' needs, may spur demand for these services and thus increase overall budget costs. The early 1990s reform in the New Zealand tertiary education system, which embodied freedom of choice for students and funding of institutions based on the number of students enrolled, provides an illustration. It led to a surge in the number and range of providers, significant innovation in the way students were taught and much better access and outcomes by minority groups who had previously found it difficult to succeed at university. But the rapid rise in supply of, and demand for, private vocational training was considered to be unsustainable, leading the government to freeze their funding in 2001. Denmark has had a similar experience in the area of adult education, the introduction of client choice and abandonment of budget envelopes prompting a surge in demand and public spending in 1997-98, which led to the discontinuation of the scheme. Similar tensions are likely to emerge in areas where supply is not yet sufficient and/or not diversified enough to respond fully to the users' needs. Such circumstances are rather frequent, in particular for elderly, health and child-care services, as well as in the tertiary education sector.

Introducing user charges to contain excessive demand

Free delivery of goods and services carries the risk of stimulating excessive demand, especially when coupled with improved incentives for providers to respond to the demands of users. Increased reliance on co-payments may make users more cost-conscious. Country evidence suggests that demand for some publicly-funded goods adjusts to changes in cost-sharing arrangements. In Denmark for instance, the reduction in user charges for childcare facilities in the early 1990s was reflected in a higher demand. User charges for care of the elderly in the Nordic countries are low by international standards (Denmark does not have such charges) while public spending on elderly care is high and a higher share of the population stays in specialised institutions or receives formal help at home. The pressure to ration supply has, however, become considerable and has raised concerns about legitimate demand being suppressed (in Denmark and Finland). In the health care system too, demand for services often exceeds the capacity of the system to supply services on a timely basis. Delays in treatment, particularly for non-urgent elective procedures, are common in a significant number of OECD countries.[46] Price signals could be a more efficient rationing device in some cases although co-payments may prevent access to services for some population groups, with regressive distributional effects.

Fees can affect reliance on more expensive publicly-funded services…

Designing the appropriate fee structure remains an issue. In the health care sector, studies tend to show that increased cost-sharing arrangements have at least some influence on the demand for care, although the size of the impact varies on the type of care involved (Docteur and Oxley, 2003). The most elastic components are ambulatory and outpatient care and pharmaceuticals. The lowest elasticities concern specialist visits and hospital treatment. Emergency room care, which is relatively expensive, tends to be overused in many countries, either because the costs for the patient are lower than for ambulatory care or because there are longer waiting lists for ambulatory care (Greece, Iceland and Spain).[47] A similar concern has emerged in Norway, where primary health care is primarily financed by the municipalities, while hospital care for their residents is paid from the central government budget. This funding principle has generated incentives for the municipalities to overuse more expensive hospital care, for example by postponing the reintegration of patients from hospital-based medical treatment into the ambulatory and elderly services that they themselves finance. Similar concerns have emerged about elderly care in a number of countries (in particular Nordic ones), where an increase in user charge for home care could be desirable to contain demand pressures but care should be taken, in the process, not to provide too strong incentives to rely on high-cost institutional care.

… and have adverse effects on welfare and equity objectives

Enhanced reliance on user fees can have adverse effects on welfare outcomes and equity objectives. In the health care sector, recent studies have revealed that the impact of cost-sharing on the demand for care is non-linear. The impact of a given change in co-payments on demand is estimated to be larger when the co-payments are near zero, while the effect weakens where cost-sharing is already high. The level of cost-sharing for health care varies significantly across countries. In a number, visits to general practitioners, specialists and in-patient care are virtually exempt from cost-sharing (including Czech Republic, Canada, Denmark, Germany, Spain and the United Kingdom), though most have co-payments for pharmaceuticals. In a majority of countries, however, out-of-pocket payments already account for over 15 per cent of total health expenditure (Table 7).[48] Given the low elasticities of demand at this level of user payment, they would thus need to be raised significantly if demand were to be contained. This would risk denying some population groups access to core health care services, with potentially adverse effects on health outcomes. A key concern is that individuals reduce preventive care by more than regular care when cost-sharing is raised, as partial evidence tends

Table 7. **Public and private financing sources for health expenditure**
Percentages of total health expenditure, 2001[1]

	Public financing sources	Private financing sources			*Memorandum item:*
	Total public	Private health insurance	Out-of-pocket spending	Total private	Total health expenditure per cent of GDP
Australia	68.9	7.3	18.5	31.1	8.9
Austria	69.7	7.0	18.6	30.3	8.0
Canada	70.9	11.4	15.8	29.1	9.2
Czech Republic	91.4	..	8.6	8.6	7.3
Denmark	82.4	1.6	16.0	17.6	8.6
Finland	75.6	2.5	20.2	24.4	7.0
France	76.0	12.7	10.2	24.0	9.5
Germany	74.9	12.6	10.6	25.1	10.7
Hungary	75.1	0.3	21.3	24.9	6.8
Iceland	84.4	..	15.2	15.6	9.1
Ireland	76.0	6.8	13.3	24.0	6.5
Italy	75.3	0.9	20.3	24.7	8.4
Japan	78.3	0.3	16.8	21.7	7.6
Korea	44.4	8.7	41.3	55.6	5.9
Luxembourg	87.8	1.6	7.7	10.5	5.6
Mexico	45.9	2.5	51.6	54.1	6.6
Netherlands	63.3	15.5	8.8	36.7	8.9
New Zealand	76.7	6.2	16.8	23.3	8.2
Norway	85.5	0.0	14.0	14.5	8.3
Slovak Republic	89.3	0.0	10.7	10.7	5.7
Spain	71.4	4.0	23.7	28.6	7.5
Switzerland	55.6	10.5	32.9	44.4	10.7
United States	44.4	35.6	14.8	55.6	13.9
Simple average of countries above	72.3	7.0	18.6	27.6	8.2

1. Data refer to 2000 for Australia, Austria, Canada, Iceland, Japan, Korea, Luxembourg and Switzerland.
Source: OECD Health Database, 2003.

to indicate for dental care (Docteur and Oxley, 2003). Hence, the impact on public finances is not clear, since the absence of early treatment may lead to higher overall costs. Cost-sharing could also have potentially adverse effects on policy outcomes and equity in sectors other than health care. In the environmental sector, for instance, user charges on waste can create incentives for illegal dumping (O'Brien and Vourc'h, 2001).

To mitigate the potential adverse effects of user fees on equity and policy outcomes, countries have adopted various strategies, but none have proved to be a panacea.

- Many countries have introduced "stop-loss" provisions in the health care sector which provide full or higher reimbursement rates by the public sector above a given ceiling (*e.g.* Denmark, New Zealand, Norway, Sweden and the United Kingdom for pharmaceuticals). Price signals thus operate up to these ceilings, leaving incentives unchanged above them.

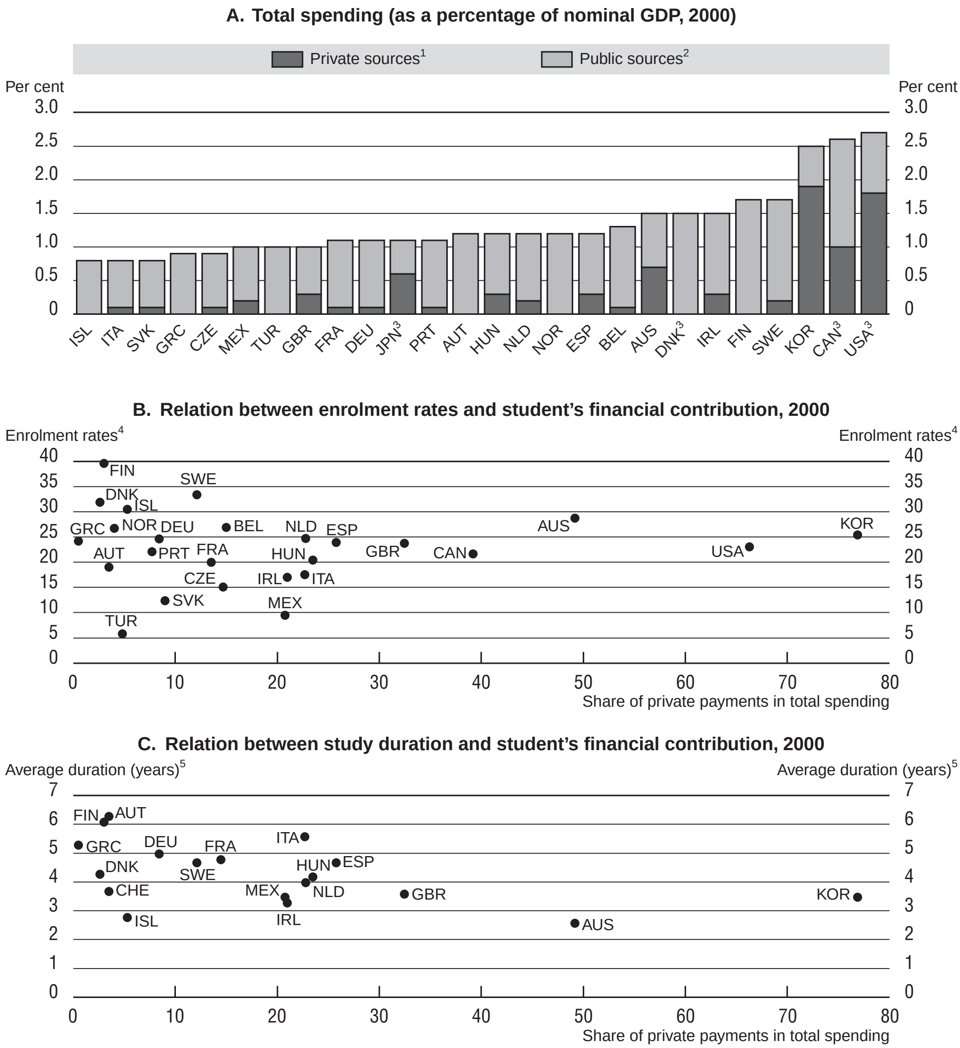
- Means-testing approaches have been introduced in many sectors, including health care and elderly care. However, these risk creating poverty and unemployment traps.
- Another frequent and related approach has consisted of protecting groups at risk, in particular low-income families, by guaranteeing access to core public services at low cost in the case of "reserved" providers (usually public). Meanwhile, the better-off are given the possibility of topping up with higher quality or faster services. This situation is found frequently in the health care sector, where private providers are competing to attract patients and where private insurance schemes cover the extra-cost of private care (*e.g.* Australia, Ireland, New Zealand and the United Kingdom).[49] However, such a two-tier system may have adverse effects, especially in the education sector, where it may foster social polarisation since interactions between students from different socio-economic backgrounds matter for the cognitive process.[50] To avoid this adverse selection, several countries have severely restricted, or even removed, the ability of privately-managed education institutions receiving public subsidies to raise tuition fees (*e.g.* Hungary, Finland and Sweden).[51]

The absence of a clear trade-off between efficiency and equity objectives in tertiary education

Raising user fees need not always create a conflict between efficiency and equity objectives, the tertiary education sector being a core example. Total (private and public) spending on tertiary education amounted to close to 1½ per cent of GDP in the OECD area in 1999. Cost-sharing arrangements vary significantly across OECD countries (Figure 7, panel A). Tuition fees are low, or non-existent, in a large number of countries and generous further support is provided to students in the form of loans and grants in several of them (Denmark, Finland, Germany, Iceland, Ireland, Norway, Sweden and Switzerland). This is often accompanied by not just high enrolment rates but also long study duration (Figure 7, panels B and C). This causes significant fiscal costs because of the implied extra spending on education and the tax revenue foregone with the postponed entry into the workforce. By reducing the duration of study, higher user fees would also increase the number of entrants to tertiary education in countries where queuing or restrictions on access exist (Greece and Sweden).

Country evidence suggests that low or zero co-payments have often failed to promote access to tertiary education for students from less-favoured social backgrounds (Blöndal *et al.*, 2002). Public subsidies to tertiary education tend to benefit well-off families most, the rate of admission to tertiary education being highly

Figure 7. **Tertiary education: public and private spending, enrolment rates and study duration**



1. Excluding public subsidies attributable for educational institutions except in the case of Austria, Denmark, Greece, Iceland, Poland, Portugal and the Slovak Republic.
2. Including public subsidies to households attributable for educational institutions (except for countries listed in note 1) and direct expenditure on educational institutions from international sources.
3. Post-secondary non-tertiary included in tertiary education.
4. Enrolment rates are defined as the percentage of students aged 20-29 in the population of 20-29 year olds.
5. In the case of Denmark, France, Korea, Mexico, the Netherlands, Spain and Switzerland data concern the academic year 1995. In the case of Hungary, Iceland, Italy and Switzerland data apply to public institutions only.

Source: *Education at a Glance*, OECD 2003.

correlated with family socio-economic background in most countries. In these circumstances, raising tuition fees could create incentives for studies to be completed in more expeditious manner, with only muted distributional effects. It might not result in a significant decline in the overall education level if students were able to mortgage future earnings capacity and private returns to investment in tertiary education are high. In that respect, though, capital market imperfections, and in particular the difficulty students from low-income families may face in obtaining loans from commercial banks, may warrant some public intervention. Under such circumstances, promoting access to tertiary education for students from low-income families, who are likely to be more risk-averse, could require supporting measures, such as making the reimbursement of student loans conditional on income.[52] Where private returns to tertiary education are low (as may be the case where policies lead to compressed wage structures and/or high tax progressivity), increased tuition fees and/or lower levels of financial support could, however, have adverse impacts on educational attainment.

NOTES

1. The chapter draws extensively on OECD individual country E*conomic Surveys*, in particular on in-depth public expenditure chapters prepared for 21 OECD countries. For many of these chapters, a revised version is available for free on the OECD website. Although other sources of information have been used, country references in this paper largely reflect this non-exhaustive coverage.
2. In any case, policy recommendations contained in individual country spending chapters are not all reported here, either because they may be too country-specific and thus of limited relevance for others or because more in-depth examinations and recommendations have already been presented by the Economics Department or elsewhere in the Organisation. This is the case with respect to fiscal relations between different government layers (see Joumard and Kongsrud, 2003) and public pension systems (see for instance Blöndal and Scarpetta, 1998; Casey *et al.*, 2003; Cotis, 2003).
3. According to the Stockholm International Peace Research Institute (SIPRI), world military expenditure has been increasing since 1998. The increase in 2002 is dominated by a 10 per cent real term increase by the United States. France and the United Kingdom have also announced substantial increases in military expenditure from 2003.
4. In addition, sales of Universal Mobile Telecommunications Systems (UMTS) licences have been reflected in one-off, but sometimes substantial, declines in general government spending, since in a majority of countries the allocation of the licence has been treated as a sale of an asset when the licence is granted (*i.e.* a negative investment). Revenues from the sales of UMTS licences amounted to about 2½ per cent of GDP for Germany and the United Kingdom in 2000. A smaller, though significant, impact on public spending data in the early 2000s was recorded in other countries, including Greece, Italy, the Netherlands and Portugal.
5. This was the case in Canada, Finland, France, Greece, Italy, Japan, Portugal, Spain, Switzerland, Turkey and the United Kingdom (see the OECD Social Expenditure database for more details).
6. In Korea, the government launched the "productive welfare system" in 2000, which made social benefits under the Basic Livelihood Security Programme a right for those who qualify, rather than making them dependent on the availability of funds. On the other hand in Italy, the 2003 Budget Law put an end to the minimum guaranteed income experiment introduced in 1998.
7. With the exception of Mexico, Turkey and the United States, all OECD countries had achieved universal (or near universal) health care coverage by the early 1990s. In Mexico, a 2003 law will progressively extend health insurance to the currently non-covered population, with universal coverage to be achieved by 2010. See Docteur and Oxley for an in-depth discussion of developments and reforms in the health care sector.

8. The Czech Republic is the main exception to the rise in public spending on non-tertiary education. Enrolments in primary and lower secondary education dropped by more than 9 per cent in Greece, Ireland, Japan, Poland, the Slovak Republic and Spain between 1995 and 2000. See E*ducation at a Glance* (2001 edition).
9. As an illustration, in 1997 the differences in public spending to GDP ratios between Denmark on the one hand, and Korea, Japan and the United States on the other hand amounted to 35, 23 and 23 percentage points. Taking public social expenditure to GDP ratios, these differences amounted 26, 17 and 16 percentage points, respectively.
10. Baseline projections assume that health care is stable per age group over time. Other approaches can, however, be used. For example, it can be assumed that improved health will delay the costs of care that often occur in the final years of life. Under this scenario, projections for a few countries (Italy, Netherlands and Sweden) lead to a smaller increase in spending: the percentage point increase in health care costs over the period 2000 to 2050 would be roughly one-third or more below the baseline scenario.
11. Several countries have increased the retirement age (in particular Austria, Germany, Italy and Poland). Measures to reduce benefit rates have included a shift of indexation for pensions from wages to prices (Finland, France, Hungary, Italy, Japan and Korea), or from pre-tax to after-tax wages (Germany). It may also involve a lengthening of the reference period for calculating pensions (Belgium, Czech Republic, Finland, France, Italy, Portugal and Spain). Some countries have also introduced mechanisms for the pre-funding of the future costs of pensions (Canada, Iceland, Ireland, New Zealand and Slovak Republic).
12. Under the Irish National Development Plan 2000-06 – a major investment programme aimed at alleviating some of the infrastructure bottlenecks on growth – spending of some € 52 billion is envisaged (about 70 per cent of GNP in 1999).
13. See OECD (2002b) for a discussion of the use of fiscal rules in OECD countries.
14. This accounting practice is usually referred to as "cash" accounting. In the context of private accounting terminology, a full implementation of "accrual" accounting in the budget process would mean that, instead of spikes in expenditure when individual capital projects are undertaken, these are incorporated into the annual operating expenditure through an allowance for depreciation. Capital projects would be presented and adopted on the basis of their depreciation costs rather than their full cost. Cash *versus* accrual accounting is discussed in more detail below.
15. All EU countries are also obliged to produce annual reports on their medium and long-term budgetary strategy. The reports are called "Stability Programmes" for euro-zone countries and "Convergence Programmes" for the others. These programmes must include a medium-term objective for the budgetary position of close to balance or in surplus, the adjustment path and the expected path of the general government debt ratio.
16. All EU countries present long-term budget projections in the context of Stability and Convergence Programmes (generally debt projections up to 2050).
17. Revenue forecasts were overly optimistic and Ministers viewed the expenditure forecasts as future funds they were entitled to spend. This led the government to move to conservative planning assumptions in 1993, a policy later abandoned (OECD, 2001a).
18. In Korea local governments have set up some 2 000 extra-budgetary funds, while in Poland, more than 3 000 extra-budgetary funds have been created at the central and sub-central level.

19. The OECD has carried out an in-depth review of tax policies for several OECD countries. The synthesis of these surveys (Van den Noord and Heady, 2001) suggests that tax expenditures often introduce important distortions in the tax system or contribute to an overly complex tax system.

20. Accrual accounting is a system of accounting in which revenues are recorded when earned and outlays are recorded when goods are received or services performed, even though the actual receipt of revenues and payment for goods or services may occur, in whole or in part, at a different time. Cash accounting is a system of accounting in which revenues are recorded when actually received and outlays are recorded when payment is made.

21. Some countries have recognised these implicit and unfunded liabilities in their national accounts (including Australia, Canada and New Zealand). In Canada, implicit liabilities of the government employee pension plan amounted to about 18 per cent of GDP in 2001 and are included in Statistics Canada debt data. Most other OECD countries have not adopted such practice. Thus, to ensure cross-country comparability, the OECD general government data do not include liabilities associated with government employee unfunded pension plans.

22. For example, in Italy, the number of budget chapters and items (some 5 000, initially) was drastically reduced for the 1997 budget. In France, the current 848 budget chapters detailing the inputs allocated to each Ministry is to be replaced by some twenty-odd missions, grouping together various programmes by objectives.

23. In the United States, spending caps were lifted through a series of emergency appropriations in 1999 and 2000 and an upward revision of the caps for 2001 and 2002.

24. In Switzerland for instance, federal agencies have been given the option of moving to the new management regime – the so-called *Gestion par Mandat et Enveloppe Budgétaire* – which defines the expected outputs and allows them to decide how best to deliver them within a budget constraint. The move has been associated with a commitment to cut costs by 10 per cent over a four-year horizon. Savings are mostly expected to derive from enhanced flexibility in resource management, including the move to a global four-year budget (Joumard and Giorno, 2002). These new public management approaches have also given a boost to cost-efficiency and innovations in the hospital sector (*e.g.* in Norway and Portugal) and for universities (Norway).

25. This was corrected in the new Public Service Agreement, which targets a reduction in the maximum wait for treatment. The House of Commons (2003) recently provided an assessment of performance targets in the United Kingdom. While it reveals several potential perverse consequences, it recognises that much has been achieved by means of performance targets.

26. Altogether, about three-quarters of OECD countries link some budget appropriations to *output* targets, and over half of the countries link some budget appropriations to *outcome* targets. In Norway, the funding for universities was changed in 2002 from a block grant system (based largely on historical costs) to a combination of a block grant and grants based on activity indicators (*e.g.* the number of graduates and research and teaching indicators). On average, the activity-based components of the grant account for about 40 per cent of university financial resources. In Finland and Switzerland, the funding formula for central government grants to universities includes the number of graduations. In Iceland, funding based on performance indicators has also been introduced for upper secondary education.

27. In Denmark, some 15 per cent of public-sector managers are now employed on a fixed-term basis. The typical duration of contract is three to five years with a common pay supplement of 15 to 25 per cent. In Iceland, the 1996 Civil Service Act abolished lifetime appointments and introduced fixed-term contracts for senior civil servants. In Switzerland, a majority of cantons and municipalities have abolished the long-standing public servant status and the associated rigid pay arrangements, while a new personnel law has been implemented at the federal level and for some large public enterprises.
28. In its 2003 Budget, the UK government has envisaged the possibility of extending regional differences in the cost of living to other high cost areas, so as to recognise local and regional conditions in pay, such as the extra costs for retention and recruitment.
29. Typically, performance management systems for senior officials specify their pay and performance commitments and are often characterised by time-limited contractual appointments. In New Zealand, chief executives of departments are employed under fixed-term contracts (for up to five years) which specify the key results expected of them. Similar employment contracts are negotiated between senior and middle managers, and further down the administrative chain of command. These contracts enable managers to negotiate their own pay and terms of employment without regard to standard civil service rules. A similar arrangement prevails in the United Kingdom for the chief executives of government agencies.
30. The National Audit Office of Iceland has found that, following the devolution of management authority over pay determination, many agencies have exceeded their authority to pay salary premiums. It has also found that the introduction of merit-based pay and flexible grade levels has been seen by unions as an opportunity to increase the salary levels of all employees. Unions have re-bargained deals for their members by pointing to strong increases in other sectors.
31. In the Czech Republic, the implementation of the 2002 Civil Service Act, which establishes a set of new financial incentives and performance criteria for professional administrators, is estimated to add an amount equal to ¼ per cent of GDP to the state budget. The authorities envisage no employment cuts in the overstaffed public administration (OECD, 2003a).
32. In Japan, for instance, objective evaluations of hospital performance by a third party – the Japan Council for Quality Health Care – began in 1997. These are made at the request of hospitals. The result is published only if a hospital passes. France and several other countries have established a mandatory accreditation programme for hospitals which assesses providers against established standards.
33. Norway and Sweden have developed a comprehensive data set, available on Internet, providing indicators on the coverage and costs of public services for each municipality.
34. Swiss regional placement offices have been ranked according to their performance in securing a rapid and lasting return of the unemployed to the labour market. Assessment of performance is based on four indicators, weighted to derive a synthetic indicator. Using a sophisticated econometric approach, the indicator also accounts for the specific circumstances faced by each labour office, notably local market characteristics such as the economic situation and the composition of the unemployed population (for further details, see Joumard and Giorno, 2002). Up to 2003, the ranking was published every six months and used as a base for rewarding good performers. Since then, the ranking is still performed but it is not publicly available and no longer serves as basis for reward.

35. See Lundsgaard (2003). Evidence on the potential cost savings associated with contracting out and tendering of public procurement is also provided in some individual country chapters, including Denmark, Iceland and Mexico.

36. The WTO Agreement on government procurement, which entered into force in 1996, set rules for open and transparent bidding with regard to the purchase of goods by public entities. It was signed by Canada, the 15 member states of the European Union, Iceland, Japan, Korea, Norway, Switzerland and the United States. In addition, several regional trade agreements, such as the European Union and the North American Free Trade Agreement (NAFTA) have brought government procurement under specific and often stricter discipline for their member countries. In particular, lower threshold values exist for public procurement contracts to be awarded through transparent and non-discriminatory procedures.

37. About 90 per cent of Japanese sub-national governments have the favourable treatment of local companies and locally produced goods as a policy goal. Favourable treatment of small and medium-sized enterprises is a policy goal of the central government as well. A system of "preferential price margin" applies in the Czech Republic, whereby purchasing entities accept the bids of domestic suppliers over foreign suppliers as long as the additional cost is not above 10 per cent.

38. In Hungary, information on the winning bid is not publicly available, so that public monitoring is difficult and fines for misconduct are too low (OECD, 2002a). In Italy, the high complexity of procurement rules has been considered as limiting the scope for competition and the involvement of the private sector (OECD, 2001b). In Switzerland, the fact that regulations and procedures vary not only between the Confederation and the cantons but also from one canton to another has limited the scope for competitive pressures in tendering for public procurement (Joumard and Giorno, 2002).

39. In Norway, public bodies are exempted from VAT if less than 20 per cent of their turnover is sold to the private sector. This VAT exemption may make it cheaper to produce services in-house, rather than outsourcing, since exempted public bodies cannot deduct the VAT paid on inputs bought. A VAT compensation scheme was, however, introduced in 2004 to mitigate this bias. A similar force operates in Finland, where public producers of VAT-free services get a refund of 5 per cent, which is an estimate of the average amount spent on VAT on inputs while private producers get no such refund. Due to the VAT on inputs included in the private sector prices, it can be cheaper for municipalities to arrange the meal services in-house.

40. In the United Kingdom, the contracting out of information technology services at the Inland Revenue in the 1990s provides an example (Jayes, 1997).

41. The main distinction between PPPs and purely private projects is that the public sector plays a key role as purchaser of services.

42. There are large differences with respect to the parameters on which insurers are allowed to compete. In the United States, insurers compete both in prices and packages of risks offered. In Germany, insurers have almost no scope to compete in terms of services offered. The Swiss Parliament is considering allowing insurers to conclude agreements with all qualified providers of their choice in the ambulatory care sector. This should increase competition among health care providers (since insurers would have the possibility to pick and choose the most cost effective) but also among insurers who have the possibility to adjust their premium accordingly. Several regulations could however reduce competitive pressures (in particular if the easing of the obligation to contract applies only to new practitioners).

43. In Sweden, for instance, competition from independent schools supported by public vouchers has helped stimulate the public sector (for instance by encouraging schools to listen more to parents). However, in the United Kingdom, where competition within the public sector has been encouraged, there is little doubt that students in less socially privileged schools have in some cases suffered, for example by being stranded in under-subscribed and declining schools (see Hirsch, 2002).
44. Other factors play an important role. In particular, the degree of choice available between public providers may result in less demand for private schools (Hoxby, 2000), while the restraints preventing providers from raising user fees may reduce the supply of private schools.
45. In France, private clinics have been able to capture above three-quarters of elective surgery. Their patients most often have no important medical complications, so that the risk of cost overruns is limited. In contrast, public hospitals tend to have a high proportion of very sick patients.
46. Waiting lists for elective surgical procedures are an issue driving reform initiatives or policy debates in Australia, Canada, Denmark, Greece, Ireland, Italy, Mexico, the Netherlands, New Zealand, Norway, Spain, Sweden and the United Kingdom (Docteur and Oxley, 2003).
47. In Iceland for instance, fees to primary care doctors were introduced and fees to specialist doctors increased in the early 1990 to combat growing health care costs. The significantly higher charges for specialist services than for those of general practitioners was meant to direct patients to primary care institutions. Since access to hospital was free of charge, this system led to admissions to hospitals that would have normally been carried out in outpatient facilities. This bias was later corrected with hospitals charging the same user fee as private specialist doctors for the same procedure (Hjalmarsson, 1998).
48. In practice, cost sharing is probably higher for at least some part of the population, as many countries exempt at-risk groups such as the chronically ill or the elderly.
49. In sharp contrast, the Canadian Health Act – which guarantees free universal access to "medically necessary" hospital and physician services – and related regulations have the effect of banning private insurance for core health care services.
50. As an example, the implementation of a means-tested fee structure by public kindergartens in Norway – while private ones apply a flat rate fee – has resulted in the concentration of children with disabilities and special educational needs in public institutions.
51. In Sweden, parents have the right to choose their children's school. Concurrently, municipalities are obliged to provide funding to private schools, while the schools are required to be open to all pupils and are prohibited from raising tuition fees (Roseveare, 2002).
52. The UK government's recent proposal for a graduated contribution scheme would address the risk aversion issue by providing loans where the speed of repayment will be contingent on the graduate's income.

BIBLIOGRAPHY

ADEMA, W. (2001), "Net Social Expenditure, 2nd Edition", OECD *Labour Market and Social Policy, Occasional papers*, No. 52.

AUDET, D. (2002), "Government Procurement: A Synthesis Report", OECD *Journal on Budgeting*, Vol. 2, No. 3.

BLÖNDAL, S., S. FIELD and N. GIROUARD (2002), "Investment in Human Capital Through Post-secondary Education and Training: Selected Efficiency and Equity Aspects", OECD *Economics Department Working Papers*, No. 333.

BLÖNDAL, S., S. SCARPETTA (1998), "The Retirement Decision in OECD Countries", OECD *Economics Department Working Papers*, No. 202.

BURNS, A. and K.-Y. YOO (2002), "Improving the Efficiency and Sustainability of Public Expenditure in the Czech Republic", OECD *Economics Department Working Papers*, No. 328.

BUTI, M., S. EIJFFINGER and D. FRANCO (2002), "Revisiting the Stability and Growth Pact: Grand Design or Internal Adjustment", paper presented to a CEPII workshop on fiscal discipline, 21 November 2002, Paris.

CASEY B., H. OXLEY, E. WHITEHOUSE, P. ANTOLIN, R. DUVAL and W. LEIBFRITZ (2003), "Policies for an Ageing Society: Recent Measures and Areas for Further Reforms", OECD *Economics Department Working Papers*, No. 369.

COTIS, J-P. (2003), "Population Ageing: Facing the Challenge", OECD *Observer*, No. 239, September, Paris.

DANG T.T., P. ANTOLIN and H. OXLEY (2001) "Fiscal Implications of Ageing: Projections of Age-related Spending", OECD *Economics Department Working Papers*, No. 305.

DOCTEUR, E. and H. OXLEY (2003), "Health Care Systems: Lessons from the Reform Experience", OECD *Economics Department Working Papers*, forthcoming.

EUROPEAN COMMISSION (2003), "Public Finance in EMU", *European Economy* No. 4/2003.

FAY, R.G. (1997), "Making the Public Employment Service More Effective Through the Introduction of Market Signals", OECD *Labour Market and Social Policy, Occasional papers*, No. 25.

HIRSCH, D. (2002), "What Works in Innovation in Education – School: A Choice of Directions", OECD/CERI *Working paper*, May 2002.

HJALMARSSON, O. (1998), "User Charging for Primary and Specialist Doctor Services in Iceland", OECD *Public Management Occasional Papers*, No. 22.

HOUSE OF COMMONS, PUBLIC ADMINISTRATION SELECT COMMITTEE (2003), "On Target? Government by Measurement", Fifth Report of Session 2002-2003, *www.parliament.the-stationery-office.co.uk/pa/cm200203/cmselect/cmpubadm/62/62.pdf*.

HOXBY, C.M. (2000), "Does Competition Among Public Schools Benefit Students and Taxpayers", *The American Economic Review*, Vol. 90, No 5.

JAYES, D. (1997), "Contracting Out Information Technology Services at the UK Inland Revenue", inContracting Out Government Services – Best Practice Guidelines and Case Studies, OECD *Public Management Occasional Papers*, No. 20.

JOUMARD, I. and C. GIORNO (2002), "Enhancing the Effectiveness of Public Spending in Switzerland", OECD *Economics Department Working Papers*, No. 332.

JOUMARD, I. and P.M. KONGSRUD, "Fiscal Relations Across Government Levels", OECD *Economics Department Working Papers*, No. 375.

KRAAN, D.-J. and J. KELLY (2003), "Reallocation and the Role of Budget Institutions", OECD *Journal on Budgeting* (forthcoming).

KRISTENSEN, J.K., W.S. GROSZYK and B. BÜHLER (2002), "Outcome-focused Management and Budgeting", OECD *Journal on Budgeting*, Vol. 1, No. 4.

LE CACHEUX, J. (2002), "A Golden Rule for the Euro Area?", paper presented to a CEPII workshop on fiscal discipline, 21 November, Paris.

LUNDSGAARD, J. (2003) "Competition and Efficiency in Publicly-Funded Services", OECD *Economics Studies*, No. 35, Paris.

MATHESON, A. (2002), "Better Public Sector Governance: The Rationale for Budgeting and Accounting Reform in Western Nations" in Models of Public Budgeting and Accounting Reform, OECD *Journal on Budgeting*, Vol. 2, Supplement 1.

O'BRIEN, P. and A. VOURC'H (2001), "Encouraging Environmentally Sustainable Growth: Experience in OECD Countries", OECD *Economics Department Working Papers*, No. 293.

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

OECD (2001b), *Regulatory Reform in Italy*, Paris.

OECD (2001c), "Fiscal Implications of Ageing: Projections of Age-related Spending", OECD *Economic Outlook*, No. 69, Paris.

OECD (2002a), OECD *Economic Survey of Hungary*, Paris.

OECD (2002b), "Fiscal Sustainability: The Contribution of Fiscal Rules", OECD *Economic Outlook*, No. 72, Paris.

OECD (2003a), OECD *Economic Survey of Czech Republic*, Paris.

REICHARD, C. (2002), "Assessing Performance-oriented HRM Activities in Selected OECD Countries", PUMA/HRM(2002)9, prepared for an OECD meeting held in Paris, 7-8 October and available on the OECD website.

VAN DEN NOORD, P. and C. HEADY (2001), "Surveillance of Tax Policies: A Synthesis of Findings in Economic Surveys", OECD *Economics Department Working Papers*, No. 303.

VAN DE VEN, P., and R. ELLIS (2000), "Risk Adjustment in Competitive Health Plan Markets", in A. Culyer and J. Newhouse, *Handbook of Health Economics*, Elsevier.

TABLE OF CONTENTS