

Improving Public Sector Efficiency: Challenges and Opportunities

by

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This article examines key institutional drivers that may contribute to improving public sector efficiency and focuses on one of them in more detail: performance information and its role and use in the budget process (“performance budgeting”).

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Executive summary

Governments of OECD countries are under pressure to improve public sector performance and at the same time contain expenditure growth. While factors such as ageing populations and increasing health care and pension costs add to budgetary pressures, citizens are demanding that governments be made more accountable for what they achieve with taxpayers' money. This article briefly reviews key institutional drivers that may contribute to improve public sector efficiency, and focuses on one of them in more detail: performance information and its role and use in the budget process.

There is no blueprint for enhancing public sector efficiency. OECD countries have thus adopted diverse approaches to reforming key institutional arrangements, which include: increasing devolution and decentralisation; strengthening competitive pressures; transforming workforce structure, size, and HRM arrangements; changing budget practices and procedures; and introducing results-oriented approaches to budgeting and management. Although the majority of OECD countries have engaged in some institutional reforms, the empirical evidence of their impact on efficiency is so far limited due to: the lack of resources to conduct evaluations; the lack of pre-reform measures of performance; the complexities in measuring efficiency¹ in the public sector; and the problem of isolating the effects of specific institutional reforms on efficiency from other external influences.

Empirical evidence nevertheless suggests that the following three institutional factors may improve public sector performance:

- Decentralisation of political power and spending responsibility to sub-national governments.
- Appropriate human resource management practices.
- In the education and health sectors, there is evidence that increasing the scale of operations may improve efficiency.

Increasing the use of **performance information in budget processes** is an important initiative that is widespread across OECD countries. It is part of an ongoing process that seeks to move the focus of decision making in budgeting away from inputs (how much money can I get?) towards measurable results (what can I achieve with this money?).

OECD countries have reported a number of benefits from the use of performance information (PI):

- It generates a sharper focus on results within the government.
- It provides more and better information on government goals and priorities, and on how different programmes contribute to achieve these goals.
- It encourages a greater emphasis on planning and acts as a signalling device that provides key actors with details on what is working and what is not.
- It improves transparency by providing more and better information to parliaments and to the public, and has the potential to improve public management and efficiency.

OECD countries, however, continue to face a number of challenges with the use of PI in the budget process, including how to improve the measurement of activities, the quality of information, and getting politicians to use it in decision making.

Despite these challenges, countries are evolving their approaches, not discarding them. The OECD has developed general guidelines for countries as they adopt and evolve initiatives to improve the use of PI in budgeting processes. Some important factors to consider in this respect are:

- There is no one model of performance budgeting; countries need to adapt their approach to the relevant political and institutional context.
- A common whole-of-government planning and reporting framework is important.
- PI should be integrated into the budget process.
- Designing government-wide systems that automatically link performance results to resource allocation should be avoided, because they may distort incentives and because it is difficult to design systems that take account of the underlying causes of poor performance.
- Independent assessments of performance information should be carried out.
- The support of political and administrative leaders is vital for implementation.
- The staff and resource capacity of the ministry of finance (MOF) and spending ministries is critical.
- Reform approaches need to be adapted to evolving circumstances.
- It is important to develop incentives to motivate civil servants and politicians to change their behaviour.

As citizens continue to demand better value for money for their tax payments, there will be a continuing need for PI. Although the speed and methods of reforms will vary across countries, it is vital that countries recognise that a long-term approach is necessary, that implementing PI in budgeting is clearly a learning-by-doing process, and that the journey can be as important as the destination.

This article was produced for the German Presidency of the European Union. The article is divided into two sections.² The first briefly examines efficiency measurement issues across countries and provides a review of the literature on potential institutional drivers. The second examines one of these drivers in more detail – the use of performance information in the budget process across OECD countries – as this is considered a particularly important factor for public sector efficiency.

1. Institutional drivers of efficiency

1.1. Introduction: setting the scene

Providing more public services with less public spending is an ongoing challenge for all OECD member countries which is becoming increasingly important in the context of ageing. Cross-country comparisons could be useful to identify best practices in delivering public services in a cost-effective manner. In practice, the paucity of data often makes it difficult to benchmark countries, but recent attempts at doing so in the education sector – where the lack of output data is a less severe constraint – reveal that efficiency shortfalls can be large. Also, the variety of OECD country approaches to managing public spending programmes provides useful insights about possible strategies for improving value for money. In that respect, stepping up the use of performance information in budget processes – “performance budgeting” – is an important dimension of the reforms undertaken by OECD countries since the early 1990s.

Recent developments in public spending leave no room for complacency. Ratios of public spending to GDP have fallen below their historical high in the early 1990s in the OECD area, Japan being a notable exception. However, the factors behind this positive development – improving cyclical conditions, privatisation and enterprise restructuring, and lower debt servicing costs, for example – are unlikely to exert the same influence going forward.³ Meanwhile, demands on social transfer systems have remained intense over the past two decades; spending on pensions, poverty alleviation programmes and core merit goods (education and health) continued on a clear upward trend during that period. Population ageing will put further significant pressures on public spending in virtually all OECD countries over the next few years.

Making cross-country comparisons of public spending efficiency requires corresponding measures of the value of public service outputs and inputs. On the input side, even the public spending data available from the national accounts – which are the best internationally comparable source – are fraught with problems. Cross-country comparisons based on public spending-to-GDP ratios suggest significant differences across OECD countries. However, many of these variations reflect the different approaches to delivering public goods and providing social support rather than true differences in resources spent

on public services. For example, if support is given via tax breaks rather than direct expenditure, expenditure-to-GDP ratios will naturally be lower.

Measuring public spending outputs is even more complex. The coverage and scope of public services differ across countries, partly reflecting societal priorities. These disparities require that public spending effectiveness be assessed by spending area, at least for the key components, including health care, education and social assistance. Even for each of these spending areas, public involvement often has various objectives (or output targets). And the outcomes of public services also depend on a number of factors that are outside the control of policy makers, at least in the short run. (Life expectancy, for example, depends to a large extent on lifestyle and diet.) Although most OECD countries have introduced performance targets and measurement tools in some parts of general government, they employ different methods. Thus, assembling a data set on public service outputs suitable for cross-country comparisons is, for many sectors, more an ideal than a possibility. Education is the sector where existing data allow some comparisons to be drawn on cost efficiency across countries, and the OECD has recently made a comparative assessment of performance in this area.

Most OECD countries have carried out reforms to contain the growth in public spending and improve spending outcomes since the early 1990s. Reforms can be classed under three broad headings:

- making the budget process more responsive to priorities;
- making management practices more flexible, such that defined priorities are easier to achieve;
- strengthening competitive pressures among providers of public services and, where not incompatible with equity considerations, containing the demand for public services.

Because of important synergies among the three areas, getting the most out of these reforms would require that they be internally consistent. Further, since the early 1990s there has been a substantial transfer of spending responsibilities (particularly in education and health care) to sub-national governments in many OECD countries. This has had two effects. It has left central governments with responsibility for pension systems and other entitlement programmes, as well as debt-servicing costs, that are largely unaffected by these reforms. And since effective reform cannot be confined to central government, fiscal relations across levels of government must be such as to ensure that sub-national governments have the right incentives to deliver cost-effective public services. This is an issue for all countries, whether or not they are formally federal or unitary. The remainder of this section explores different reforms to key institutional arrangements within government which may improve public sector efficiency.

Figure 1. Trends in general government outlays in the OECD area and large EU countries
As a percentage of GDP

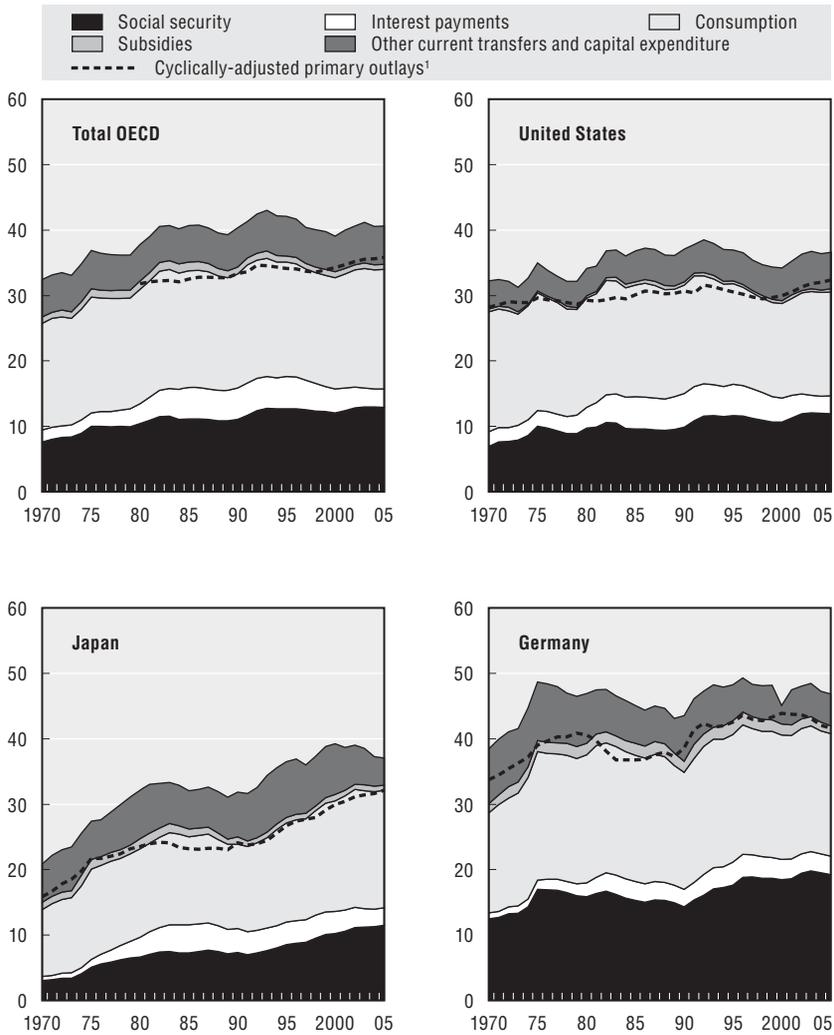
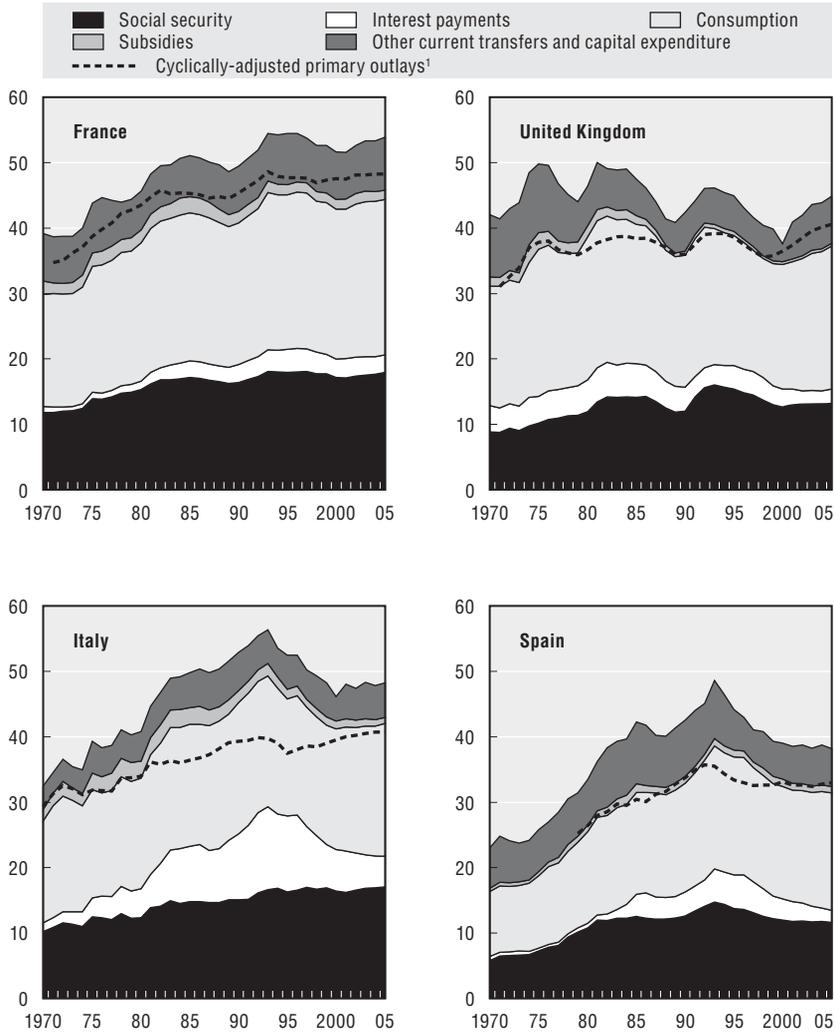


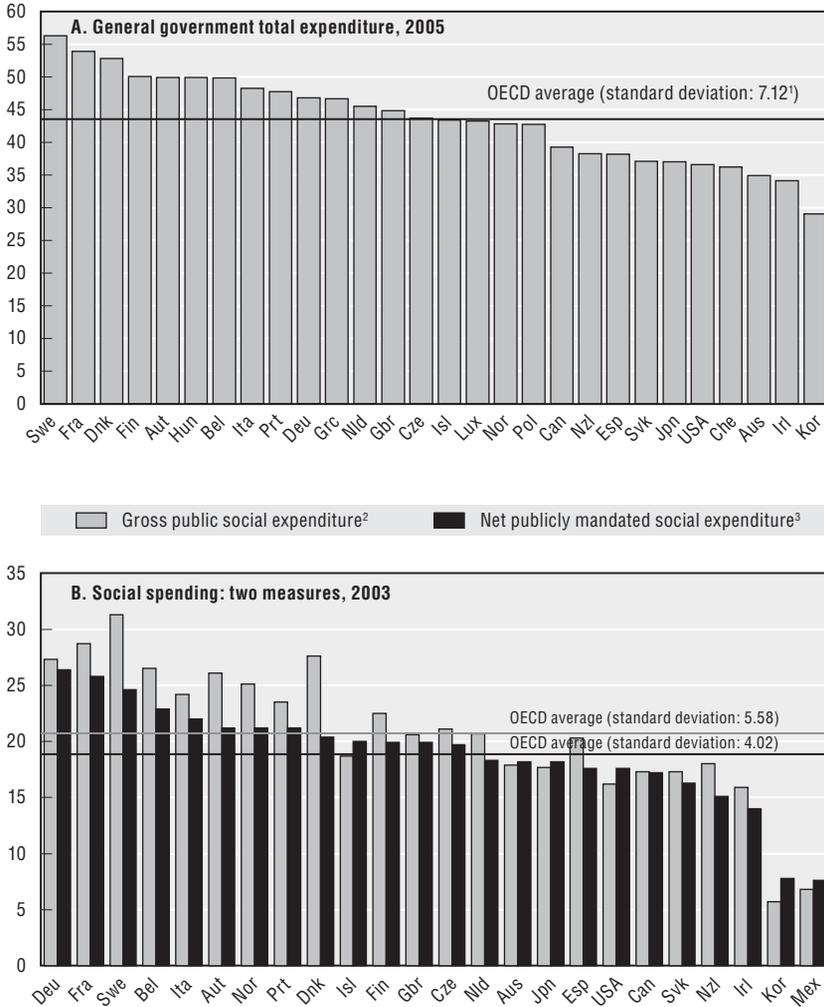
Figure 1. **Trends in general government outlays in the OECD area and large EU countries (cont.)**

As a percentage of GDP



1. Expressed as a percentage of potential GDP.
Source: OECD Economic Outlook 80 database.

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



1. The standard deviation is calculated using only the data for the 23 countries shown in both Panel A and Panel B.
2. Gross public social expenditure is the sum of all social cash benefits and services provided by general government.
3. Net publicly mandated social expenditure is equal to gross public social expenditure plus mandatory private 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).

Sources: OECD Economic Outlook 80 database; OECD Social Expenditure database (SOCX 2007).

1.2. Institutional drivers of efficiency in the public sector⁴

This section briefly summarises the findings of the literature regarding the potential institutional drivers of efficiency. The institutional arrangements that have been reviewed in the literature summarised here include: i) practices ensuring increased **results orientation**, such as budget practices and procedures and performance measurement arrangements; ii) arrangements that increase **flexibility**, including devolution of functional and fiscal responsibilities from central to sub-national governments, agencification, intra-governmental co-ordination, human resource management arrangements and e-government; iii) methods for **strengthening competitive pressures** through privatisation and other means; and iv) various **workforce issues**, including workforce size, its composition, the extent and nature of unionisation and the attractiveness of the public sector. Overall, the evidence is surprisingly scant. Available research is inconclusive with respect to the impact on efficiency of varying the mix of inputs used or of changing structural and managerial arrangements.

However, some findings emerged in three areas. First, it seems that efficiency gains could be obtained by **increasing the scale of operations**, based on evidence collected mainly in the education and health sectors. This effect is attributed to economies of scale that result from savings in overhead costs and fixed costs in tangible assets. However, the impact on other public sector values such as equity, access to services, and the quality of services needs to be taken into account.

Second, **functional and political decentralisation** (i.e. spending responsibility) to sub-national governments also seems beneficial for efficiency. In principle, devolution of functional responsibilities, if accompanied by appropriate fiscal and political decentralisation, provides incentives for sub-central governments to deliver locally preferred services more efficiently, as the burden and the benefits of public service delivery both accrue in the communities. Evidence from federal countries shows that decentralised taxation reduces the size of government; however, evidence on the comparison of countries is inconclusive in this regard.

Third, **human resource management practices** also matter a great deal. The soft aspects of human resource management, such as employee satisfaction and morale, are considered to be the most important drivers of performance. While wages are still important for staff, non-monetary incentives are also essential. High wage levels – compared to similar work in the private sector – could lead to inefficiencies, although governments often are model employers and their wage policies reflect equity concerns as well. Wages are also important for attracting and retaining qualified staff, especially in case of skill shortages. Performance-related pay initiatives appear to have a low impact on staff motivation.

There is extensive literature on wage differences between public sector workers and otherwise comparable private sector workers covering many OECD countries. In many countries wages in the public sector are higher than in the private sector although they vary over time and across countries. The public sector wage difference is the highest at the lower end of the wage distribution (i.e. low-salaried or poorly-skilled workers are paid better in the public sector) and decreases as one moves up the wage distribution. Significant differences have also been found in the differential by various worker characteristics, such as occupation and gender. For example, in Germany wages for men were lower in the public sector than in the private sector, but the opposite was found for women.

The strict division between career-based systems and position-based systems does not reflect the reality of OECD countries. Many fall in between, with systems characterised by a relatively high level of delegation of HRM functions to ministries and a relatively low level of individualisation (lifelong careers and minimum lateral entry). These hybrid systems are often termed department-based systems. There are also countries with a high level of individualisation and a low level of delegation.

Findings are more inconclusive on the impact of **ownership, competition and agencification**. While private ownership is not a guarantee of higher efficiency, public ownership does not necessarily lead to higher inefficiencies either. Rather than ownership *per se* it is the importance of competitive pressure on efficiency that matters. However, there is a need to further explore for what and with whom public organisations compete. The nature of service delivery, e.g. whether it has features such as low asset specificity (high levels of alternative uses for resources) and low information costs, is crucial for successful competition in public services.

Regarding agencification, there is some evidence that a reduction of input controls combined with steering for results, financial incentives and competition could lead to increased efficiency. However, the impact on the quality of service delivery and policy effectiveness is unclear. The literature also calls attention to the major risks of agencification, including the exposure of government to financial and employment risks and opportunities for political patronage and corruption. The effects of new intra-governmental co-ordination mechanisms are also not known.

Surprisingly, the impact of e-government has also not been thoroughly evaluated by researchers. A survey on e-government among United States municipalities concluded that it has been adopted by many municipal governments, but is still at an early stage and has not obtained many of the expected outcomes such as cost savings and downsizing. Few cities have experienced savings or reductions in the numbers of staff, while many cities

have observed changing roles of staff and changes in business processes. It appears that e-government practices reduce time demands but increase task demands on staff members and require more technical skills.

There is growing empirical evidence about the negative effects of performance measurement/management, although the question of whether it does lead to better performance is largely unanswered. As will be discussed in the next section, performance information is typically not used in political budgetary decision-making processes, or by a majority of political actors. Rather, its impact is in the internal management of departments and agencies.

There is very little evidence of the impact of **workforce diversity and representativeness** on efficiency. Little research exists on the impact of diversity on workforce performance, and the findings are contradictory. A public administration study based on a survey of front-line supervisors found that high-performing agencies tend to strive towards workforce diversity. Some studies point to higher creativity and implementation ability in diverse organisations. Others find no link between diversity and performance. Furthermore, there are studies that find negative effects of diversity, such as increased absenteeism.

Assessment of the **unions' role in public sector efficiency** is also relatively uncharted territory, although union representation is rather high in the public sector in most countries. There is some empirical evidence from local school districts and fire services in the United States that suggests that high levels of unionisation constrain both flexibility and productivity. It has been found that collective bargaining in local government in the United States led to increased municipal expenditures. However, the impact of unions on issues of efficiency and effectiveness is unclear. European studies find no relationship, either positive or negative. This observation points to the importance of national differences in the nature of unionisation, including differences in the level of bargaining. The scarcity of research on public sector unions is all the more remarkable because, in all probability, the role of unions in the public sector differs from the private sector substantially, as public sector unions are more prominent, bargaining is not strictly managerial, it is also a political affair, and many of the public services are considered essential.

In terms of attractiveness of the public sector, its image plays an important role. The relatively unattractive image that the public service is considered to have in the United States encourages many talented students to pursue careers in the private sector. The denigration of the public sector and public servants can produce a self-fulfilling prophecy that drives out the most able. Overall, the empirical evidence on this issue is surprisingly scant. Available research provides a very limited assessment of the impact on efficiency of varying the mix of inputs used or of changing structural and managerial arrangements.

In summary, while there has been a plethora of public sector reforms in many OECD countries, the research evidence shows fewer success stories than have been claimed by practitioners. There are several reasons for this. First, research in this area is extremely complicated due to data availability issues, measurement difficulties, and the potential effect of many external factors on efficiency and productivity (the attribution problem). Second, reforms are often driven by ideological considerations and management fads rather than by efficiency concerns. Third, practitioners often have a vested interest in the success of the reforms and may over-claim their impact. Fourth, governments launch reform initiatives with great fanfare but often devote few or no resources to evaluating them. Finally, there could be substantial differences between the short-run and long-run effects of these reforms, such as efficiency gains dissipating over time.

2. Incorporating and using performance information in the budget process⁵

The previous section discussed a number of institutional factors and how they contribute to enhancing public sector efficiency. This section examines in more detail the use of performance information⁶ in the budget process. The central aim of this reform is to improve decision making by providing better and more concrete information on the performance of agencies and programmes. Advocates claim that the use of performance information in budgetary decision making can contribute to improving allocative and productive efficiency as well as aggregate financial discipline.

The introduction of performance information (PI) into budgeting has been linked to wider reform efforts to improve expenditure control and/or public sector management. Performance budgeting initiatives tend to go hand in hand with performance management. These initiatives seek to shift the focus and emphasis of management and budgeting away from inputs and processes towards measurable results. The initiatives can be combined with reductions in input controls and increased flexibility for managers – in return for stronger accountability for the results – so as to enable them to decide how to best deliver public services.

The introduction of PI is widespread and well established (nearly 75% of OECD countries include non-financial performance data in their budget documents) albeit there is large variation in the approaches adopted. Nearly 80% of countries introduced their first government-wide initiative on outputs measures at least five to ten years ago, and over 40% have been working on developing outputs measures for more than ten years. Country approaches are not static but rather evolving, with 75% of countries having introduced new initiatives within the last five years. Countries follow a variety of methods

to assess non-financial performance, including performance measures, evaluations and benchmarking. In the 2005 OECD survey on the use of PI, 80% of countries reported developing both performance measures and evaluations to assess performance. Of those countries that have developed performance measures, over 50% produce a combination of output and outcome measures for most of their programmes.

Despite the widespread introduction of performance information in the budget process over the past 15 years, OECD countries continue to struggle with its implementation. There has been a significant increase in the volume of PI produced; however this has not been matched by a corresponding increase in use, especially in budgetary decision making. Key issues centre on how to improve the use of PI in budgetary decision making and to what extent it should be related to resources. Country experiences have shown that having a procedure to integrate PI into the budget process is a necessary but not sufficient condition to ensure its use. Other factors influencing use include the quality of the information, the institutional capacity of the ministry of finance (MOF) and spending ministries, and the political and economic environment.

This section is based primarily on the results of the OECD 2005 questionnaire on performance information (PI)⁷ and on country case study reports produced by the ministry of finance from Australia, Canada, Denmark, Korea, the Netherlands, Sweden, the United Kingdom, and the United States for the 2006 meeting of the Senior Budget Officials Network on Performance and Results.

2.1. Performance budgeting

Since at least the early 1990s, the majority of governments in OECD countries have been developing PI. However, performance budgeting is about more than the development of performance information: it is concerned with the use of this information in budget processes and resource allocation. Despite the fact that the idea of relating performance to resources has been debated since the early 20th century, there is no single agreed standard definition of performance budgeting.

The OECD has defined performance budgeting (PB) as a form of budgeting that relates funds allocated to measurable results. Different models and approaches to performance budgeting can be incorporated under this definition. Taking this definition as a starting point, the OECD has sought to distinguish different categories of PB based on the proposed uses of PI in the budget process, where PI is taken to refer to both performance measures (outputs and/or outcomes) and evaluations. Table 1 distinguishes three different PB categories.

Table 1. **Performance budgeting categories**

Type	Linkage between PI and funding	Planned or actual performance	Main purpose in the budget process
Presentational	No link	Performance targets and/or performance results	Accountability
Performance-informed budgeting	Loose/indirect link	Performance targets and/or performance results	Planning and/or accountability
Direct/formula PB	Tight/direct link	Performance results	Resource allocation and accountability

2.2. Integrating PI into the annual budget process

An important factor in promoting the use of PI in budgetary decision making is the method used to integrate it into the budget process. PI can be used at different stages and levels of the budget process. Countries have taken a variety of approaches to include PI in budget negotiations. These can be split broadly into formal and non-formal approaches. Some countries have followed a formal approach, in which the MOF requires spending ministries to present performance plans and/or performance results along with their spending proposals, while other countries have no formal requirements. PI can be used by the MOF for planning purposes and/or accountability purposes. In both these cases there is an ongoing discussion of how PI should be linked to funding. There are different classifications of PB: presentational, performance-informed budgeting, and direct or formula PB. Depending on the approach adopted, countries can seek to link PI to decisions on resource allocation not at all, loosely, or tightly.

2.2.1. Presentational performance budgeting

In this approach PI is presented in budgeting documents or other government documents. It does not play a role in decision making on allocations nor is it intended to do so. Some countries have taken a non-formal approach to the development and use of PI in negotiations between the MOF and spending ministries. For example, Denmark and Sweden have an informal and discretionary approach on a government-wide scale which allows individual ministries to decide whether to produce and present PI in budget negotiations. There is no formal mechanism for the systematic integration and use of the information at this stage of the budget formulation process. In the case of Canada, PI is utilised throughout the planning, monitoring and reporting phases of expenditure management. This largely takes place outside the annual budget process.

2.2.2. Performance-informed budgeting

In OECD countries when PI is part of the budget process, it is most commonly used to inform budget allocations along with other information on

political and fiscal priorities. Thus, it is only one factor in the decision-making process. There is no direct or mechanical link between performance (planned or actual) and funding. When performance information is used, it can be for planning and/or accountability purposes.

Most budget negotiations have traditionally included some output information, as budgetary estimates generally state what a spending ministry aims to achieve with its funding, *e.g.* the number of roads or hospitals. The introduction of PB has formalised this process and placed a greater emphasis on setting targets and measuring performance.

- **PI for planning purposes: loosely linking planned performance to funding.**

In countries where the MOF is involved in setting performance targets, these can be discussed and/or agreed during budget negotiations. Except for New Zealand, OECD countries do not have a systematic government-wide approach to linking expenditures to targets. Over 46% of countries do not link expenditures to outputs or outcome targets; the countries that do so only link them to a few targets. In some cases, even where there is a link, it can merely be a reflection of presentational changes in the budget structure rather than any real change in the decision-making process.

Both Australia and the United Kingdom have requirements that link increases in spending or new spending to performance targets or performance evaluations. For example, the United Kingdom has a more systematic approach in which each department develops three-year spending plans and public service agreements, which include performance targets negotiated with the Treasury.

In some countries planning is completely separated from budgeting, and strategic and performance plans are primarily presented and approved by the office of the prime minister or president, the ministry of planning or the legislature.

- **Performance results for accountability purposes: loosely linking performance results to funding.** The MOF can use performance results to hold other ministries and agencies accountable for performance. There is an ongoing debate about how tightly performance results should be linked to funding. In OECD countries, the MOF rarely uses performance results to determine budget allocations. At best, performance results can be used to inform budget allocations along with other information. Even this use of performance-informed budgeting can be sporadic. The use of PI in budget negotiations and the weight given to it varies among countries and also within countries depending on the information available, the policy area, and the wider economic and political context.

2.2.3. Direct/formula performance budgeting

The above section discussed government-wide systems of PI. In certain sectors however, PB is applied directly and explicitly links performance results to funding. This type of formula PB requires clear and explicit output measures and information on unit costs, which are not readily available in many government sectors. The approach is used only to a limited extent in OECD countries – mainly in Nordic countries and in certain sectors, e.g. higher education, research and health. Two-thirds of respondents to the 2005 OECD survey on PI stated that they do not directly link performance results to appropriations.

2.2.4. Mechanisms available to the MOF to motivate agencies to improve efficiency and performance

The MOF can use performance results to motivate agencies to improve performance; to do so, the ministry has a number of potential mechanisms at its disposal. These incentives can be financial or non-financial, and formal or informal. They can be divided into three broad categories: funding, flexibility, and public recognition. Table 2 summarises these mechanisms.

Table 2. **Potential mechanisms available to the MOF to motivate performance**

Mechanisms	Rewards	Sanctions
Funding	Increase funding to the agency.	Reduce or restrict agency funding.
	Maintain status quo on agency funding.	Eliminate agency funding.
	Increase the staff budget.	Cut the staff budget.
	Provide management and employee bonuses.	
Flexibility	Allow the agency to retain and carry over efficiency gains.	Return all funding to the centre.
	Allow flexibility to transfer funds between different programmes and/or operating expenditures.	Restrict ability to transfer funds.
	Exempt the agency from certain reporting requirements.	Increase reporting requirements.
		Order a management audit of the agency.
Public recognition	Publicly recognise the agency's achievements.	Publicly criticise the agency's performance.

In the majority of cases the MOF does not use performance results to financially reward or punish agencies. Table 3 shows the percentage of MOFs in OECD countries that often use PI – evaluations or performance measures – to eliminate programmes, to cut expenditure, or to determine pay.

The difficulty in linking funding to results reflects the fact that the issues and context surrounding budget decisions are complex. The capacity of the MOF to eliminate or even cut back programmes can be restricted by lack of

Table 3. **Percentage of ministries of finance that often use PI for action**

	Performance measures (%)	Evaluations (%)
To eliminate programmes	4	11
To cut expenditure	10	15
To determine pay	11	5

institutional capacity and power or lack of political support. In some countries, there are no procedures for the MOF to use PI in this manner and/or it is a decision of the relevant ministry. This is especially the case for determining pay, where other central agencies as well as spending ministries play a key role.

There are also a number of technical and incentive issues related to financially rewarding good performance and sanctioning bad, which make it questionable if this approach on a government-wide scale will actually motivate agencies to use PI to improve performance. It is intuitively appealing to reward good performance, but a method that automatically does this would not take into account government priorities or budgetary constraints. Performance measures do not explain the underlying causes of poor performance. Performance in any given year can be influenced by a variety of factors, both internal and external, that may or may not be within the control of an agency. The causes of poor performance can be outside an agency's control or can be related to insufficient funding. In addition, in some OECD countries it is uncertain if the PI is of sufficiently high quality to be used in budgetary decision making in this manner.

In addition, a mechanical approach can generate perverse incentives and encourage agencies to manipulate data. Incentives to provide accurate information are influenced by the expectations of how it will be used in decision making. If funding is tightly and automatically linked to results, there can be incentives to engage in gaming and to manipulate data in order to receive more money or to avoid receiving less. An observation made over 30 years ago still holds true today: it is politically irrational to expect agencies to provide objective information if it will be used to cut back their programmes.

2.2.5. PI in budget negotiations between spending ministries and their agencies

OECD research indicates that PI is more often used by spending ministries than by the MOF. A common approach to integrating PI into the budget process is through discussions on agencies' performance agreements and contracts. This is especially the case in countries with executive agencies, such as Australia, the Netherlands, New Zealand, the Nordic countries and the United Kingdom. These discussions can concentrate on either future targets or past performance, or involve a combination of both. With the exception of

the purchaser-provider model used in New Zealand, in most cases there is only a loose link between funding and targets.

Ministries can and do use PI to reallocate resources, although it tends to be only one factor in the decision-making process. Also, unlike the MOF, spending ministries can seek to link an individual's performance to that of the organisation and use performance results to reward and sanction individuals. Across OECD countries, however, there is a wide variation in the quality and use of PI by spending ministries in the budget process. Even within the same country there can be wide variations among different ministries in terms of the quality, the extent of use and the weight given to PI in budget discussions. Many OECD countries struggle with problems of developing clear objectives and high quality performance measures and collecting associated data.

In summary, PI does not tend to have a significant impact on resource allocation. When performance information is used by the MOF in budgetary decision making, it is one factor in the decision-making process that is used along with other information to inform rather than determine budget allocations. Rarely on a government-wide scale is there any mechanical link between performance and funding. The MOF rarely uses PI to cut or eliminate programmes. It does, however, use this information as a signalling device to monitor agencies' performance and to highlight when further action is needed in the case of poorly performing agencies. The PI most used by MOFs for funding decisions comes from reviews conducted by the ministries themselves or in conjunction with other ministries as part of expenditure review exercises. PI is most often used by spending ministries, and they most frequently use it to manage programmes.

2.3. Benefits and challenges

It is difficult to measure the success of government initiatives to introduce PI into budgeting and management processes. As already noted in Section 1, there is a gap in the literature in terms of evaluating the impact of reforms. Given the lack of systematic evaluation within and across OECD countries, there are no comparative quantitative data measuring the impact of these reforms on efficiency, effectiveness or performance. There are, however, qualitative data available from the case study reports of the countries that participated in this study, and from the results of OECD surveys and secondary sources in the academic literature on individual countries and departmental and agency experiences.

2.3.1. The benefits

OECD countries reported a number of benefits from these reforms which are discussed below.

Improving the setting of objectives. These reforms provide a mechanism that enables politicians to clarify objectives. It has proved a useful tool for setting priorities over the short and medium term and can clarify what results are expected from the public sector. Most OECD member countries now present performance objectives to parliament and the public, either in government-wide performance plans or in ministerial or agency-level plans. For example, in Australia, Canada, the United Kingdom and the United States, all individual ministries are required to produce strategic plans, including medium-term performance goals. These initiatives, if successfully implemented, can provide more information on government goals and priorities, how programmes fit in with these goals, and actual progress and results in achieving them.

Improving the monitoring of performance: PI as a signalling device. Reforms of this kind have provided a mechanism for monitoring agencies' performance and progress. PI provides key actors with details concerning what is working (and what is not) within government. Also, in the case of evaluations, an explanation can be given as to why programmes are not working. PI acts as a signalling device that highlights problems with programmes and with service delivery, as well as good practice. Once a problem or poor performance is identified, different steps can be taken to improve performance. As discussed in the previous section, however, this rarely involves cutting expenditure or eliminating programmes. A more common course of action is that poor performance is discussed with the agency in question, to identify steps to be taken to address the problems and to improve each programme's performance.

Greater emphasis on planning. The introduction of PI has resulted in a greater emphasis on planning in management and budgeting, and a move towards outcome focus in policy design and delivery. There is more emphasis on long-term planning through the introduction of three-year to five-year strategic plans. The use of planning in budgeting has become more systematic. Combined with medium-term expenditure frameworks, which in theory inform agencies of their funding for the next two or three years, this makes it easier to plan the spending available to achieve goals. It can also provide a clear and logical design that ties resources and activities to expected results.

Improving management. PI is most often used by ministries and agencies to manage programmes. Adopting a results-focused approach allows managers to ask fundamental strategic questions about how to deliver services. In designing these systems agencies can address fundamental issues such as: Is this service necessary? Is it appropriate for the problem being addressed? What is the intended objective of this service? What is the proposed outcome? How can the service be best designed to achieve that outcome? If agencies are given the flexibility and authority to do so, they can organise their structure and operations to achieve their goals more effectively.

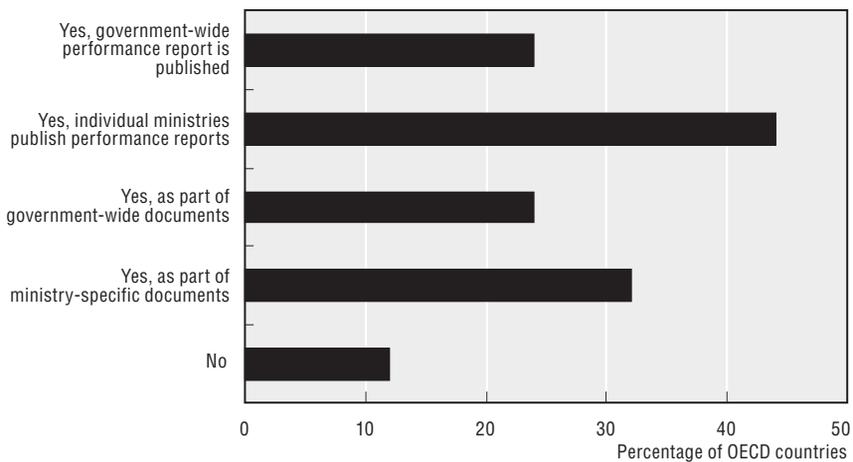
Across OECD countries there has been widespread implementation of the performance-based management approach. Approximately 50% of countries report having a system of performance management which incorporates the setting of and reporting on performance targets and their subsequent use in the internal decision-making processes of ministries and agencies. This includes internal decisions on changing work processes, setting programme priorities and reallocating resources within programmes.

In terms of the actual development of PI within countries, there is wide variation. While some agencies have used this approach to transform how they operate and to improve delivery of service, others have paid mere “lip service” to the reforms and have resisted change, viewing performance guidelines and requirements as a paper exercise.

There is little systematic analysis within countries on the impact of these policy measures on performance. The literature does, however, provide case studies of individual agencies using PI in their budget process to help improve management and service delivery. In a recent OECD survey, MOFs named spending ministries and certain agencies that had made good use of PI in their budget formulation process. The most important factors explaining the perceived successful use of PI to manage programmes and to improve performance were the type of good or service, followed by the support of top management of the respective ministry, and political pressure to reform.

Improving transparency. Many countries set improving accountability to the legislature and to the public as one of the key objectives of their reform initiatives. These reforms have improved transparency by increasing the

Figure 3. **Are performance results made available to the public?**



Source: OECD/World Bank Budget Practices and Procedures database, 2003.

amount of information provided to the legislature and to the public on the performance of the public sector, as was found in 24 out of 30 OECD countries.

There has been a renewed interest in providing objective performance information to show that the government's efforts are becoming more efficient, effective and accountable. Politicians' interest in these initiatives in some countries stems from the hope that the provision of more quantitative information on performance will provide a visible affirmation that they are fulfilling electoral promises of improving public sector performance.

While there is strong evidence that transparency has increased, the provision of information is not an end in itself. Supporters of this approach have argued that the provision of objective information in the public domain should shift the nature and quality of public debate. It should move debate beyond subjective self-serving assessment of interest groups and value judgments based on anecdotal evidence and scandals, and towards the use of more objective criteria from which to make rational decisions about policies and programmes and the allocation of resources.

Despite the claim that the government's presentation of information on its performance is objective, questions will be raised about its true objectivity. This is especially the case when the media's view is sceptical, or when results are generally aggregated outcomes for the country as a whole. In the latter case, even if the information is accurate, the general results may be at odds with regional and individual experiences. This problem is exacerbated when there is no independent audit of PI. Despite these problems, it is arguably better to have some form of quantitative and/or qualitative PI than to continue to base discussions on inputs, anecdotes and weak evidence.

Informing citizens' choices. Some governments, such as Australia and the United Kingdom, have provided PI evaluations to citizens and have also benchmarked the provision of local services, *e.g.* schools and hospitals. League tables and benchmarking that provide explanations and more detailed information than just raw numbers can help citizens choose among local schools and hospitals. This information, while not perfect, can at least provide some guidance with regard to the level of performance and service provision. The public availability of this information, and citizens' action based on these data, can serve to place the spotlight on underperforming service providers and thereby serve as a motivator for future action to improve performance. Previously, this type of non-formal comparative performance data was not available to citizens.

2.3.2. *Improving efficiency*

PI has much potential if it is of good quality, relevant and timely, and if it is actually used to improve programmes. There is evidence that some

ministries and agencies use PI in budgetary decision making to help improve programme performance. All these factors can contribute to improve operational efficiency. While there are individual ministry or agency case study examples, it is more difficult to pinpoint **systematic** use of PI on a government-wide scale by ministries and agencies to improve operational efficiency. There is a gap in the literature in terms of assessing the impact of government-wide systems of performance budgeting on efficiency. This gap is a reflection of the methodological difficulties already discussed.

For nearly all countries, one of the main objectives of these reforms is to improve the efficiency and effectiveness of programmes. For example, the United Kingdom has recently announced that performance measures are used to assist the Treasury and departments to obtain more than GBP 20 billion in annual efficiency gains over the years from 2005 to 2008. To improve efficiency, countries generally combine PI with other initiatives. In Denmark, for example, ministries have been asked since 2004 to publish efficiency strategies to ensure co-ordination between different efficiency tools such as performance contracts, outsourcing and procurement. Countries can follow a variety of methods, but the strategies should focus on achieving results.

It is argued in the literature that certain types of performance budgeting – mainly direct or formula performance budgeting, which is applied at a sectoral level – can improve operational efficiency. In the health sector, this type of budgeting has been based on the measurement of activity by diagnostic related groups (DRG). In higher education, these models are applied to teaching (for example, in Denmark, Sweden and Finland) and research (for example, in the United Kingdom). In the case of Denmark, it has been claimed that the application of what is termed the “taximeter model” in higher education and health has created incentives that – combined with the increased financial flexibility for universities and hospitals – generated efficiency gains.

These models are, however, controversial: three primary concerns have been expressed. First, they can create financial incentives for hospitals to engage in dysfunctional and gaming behaviour, mainly skimping (not providing the full service), dumping (avoiding the high cost of difficult cases) and creaming (over servicing low-cost, “easy” patients). Second, these initiatives can impact the quality of service provision. In the area of higher education, there have been issues with “dumbing down” of exams, and grade inflation. The fear is that universities will engage in these activities in order to ensure that students pass and that they then receive their payment. Third, concerns have been raised about the impact of these initiatives on overall aggregate fiscal discipline. In the case of health care in Norway, the introduction of activity-based financing did not increase the budget constraint.

Allocative efficiency involves the efficient allocation of public expenditure in accordance with government priorities. PI should in theory help to improve allocative efficiency by providing the government with information that facilitates the allocation of funds towards high-performing programmes and which are preferred by the citizens. The first question is if PI is actually used in the allocation of resources. And the second is if it is used as part of government expenditure prioritisation exercises, which seek to reallocate resources towards high-priority areas and away from lower-level priorities.

As already discussed, PI when used in budget negotiations is meant to inform but not determine budget allocations. Some countries, such as Canada, Denmark and Sweden, reported that PI was not used during the annual budget process at a central level in decisions on budget allocations. Both Australia and the United Kingdom have a process that seeks to integrate PI into decision making on the allocation of new funding and priorities and to ensure performance returns in exchange for increases in expenditure.

The second question relates to reallocation exercises. For example, the Canadian programme review exercise in the 1990s resulted in cuts of 21.5% over a number of years. The Dutch interdepartmental policy reviews exercise initially required a 20% reduction in expenditures. In both countries these initiatives were introduced during times of fiscal stress. For the Canadians it was an *ad hoc* exercise, which finished in the late 1990s with the advent of budget surpluses. While the Netherlands continued with a revised version of their review process, given more favourable economic circumstances, the 20% cut requirement was dropped.

Despite these examples, significant central reallocation across government is not common. In OECD country budgets, there is little room for manoeuvre, given the extent of mandatory spending, entitlement programmes and prior commitments. Except in conditions of fiscal abundance, the funds available for reallocations are generally considered to be marginal. In this sense, much of the annual budget process in many OECD countries remains incremental, and inputs still play a significant role. PI does not tend to be used in a systematic manner for reallocation. In making decisions on marginal funding, performance is only one of many factors that can be taken into consideration. PI must compete for attention with other priorities, mechanisms and sources of information in the budget process. The MOF and the budget office have the objective of improving allocative efficiency; however, their primary role is to maintain aggregate fiscal discipline.

In theory, PB can contribute to **aggregate financial discipline** through improvements in operational efficiency. In practice, at a central government level it has been difficult to find empirical data to support the claim that PB contributes to aggregate financial discipline. Certainly no country in this study

perceived the improvement of aggregate financial discipline as the main aim of a PB system, nor did any country provide evidence in support of its contribution to this objective. Countries use other instruments to achieve this goal, such as fiscal rules and medium-term expenditure frameworks.

In summary, countries have reported that ministries and agencies have used these reforms to improve the management of their programmes and as a signalling device to highlight poor performance. For some agencies they have contributed to improving efficiency and effectiveness. In terms of allocative efficiency, there are a few examples of PI being used to assist with reallocation exercises, but generally it is not used at a government-wide level systematically in reallocation. There is no evidence to support the thesis that PB has an impact on aggregate fiscal discipline; other mechanisms are more suitable for this task.

2.3.3. Challenges

Most OECD member countries continue to struggle with these reforms. Some common challenges, regardless of approach, include: improving measurement; finding appropriate ways to integrate PI into the budget process; gaining the attention of key decision makers; and improving the quality of the information. Although there are exceptions, most governments are finding it difficult to provide decision makers with good quality, credible and relevant information in a timely manner, let alone incentives to use this information in budgetary decision making. This section examines these challenges in more detail.

Measurement. Countries continue to face challenges with issues of measurement, especially with outcomes. Even with outputs it can be difficult to find accurate measures for specific activities. Governments carry out a wide variety of functions, from building roads to providing advice on foreign travel. Performance measures are more easily applied to certain types of functional and programme area than others. Problems especially arise with regard to intangible activities such as policy advice. The functional areas with the most developed performance measures are education and health.

Output and outcome measures each present a different set of challenges. Systems which only concentrate on outputs can result in goal displacement. Outcomes are technically more difficult to measure; they are complex and involve the interaction of many factors, planned and unplanned. It can also be problematic to relate what an agency or programme actually contributes towards achieving specific outcomes. There are also problems with time-lag issues, and in some cases the results are not within the control of the government. Outcomes, however, have a strong appeal for the public and politicians.

Resistance from public servants: changing behaviour and culture. Nearly all reforms encounter resistance, especially when they have to do with

long-term budgeting practices that impact on the whole of government. Motivating key actors to move away from traditional and familiar budget practices proves to be difficult.

Managers in spending ministries can resist change, particularly when it is not clear whether or how PI will be used by the MOF and politicians. In many cases they fear the information will be misused to either publicly criticise programmes or to cut funding. They fear being held accountable for results that are not within their control. Alternatively, they can resist reform because of increased demands for the collection of data and burdensome paper requirements. This is especially true if the information is not used at all by the MOF or politicians. The MOF can also reject change by favouring the familiar systems of input control over concentration on PI. The ministry may fear that change will give it less control over expenditure and spending. In some cases, the PI presented is in fact not relevant or of good enough quality to be used in decision making.

Developing the institutional capacity of the MOF and spending ministries. Countries have experienced problems with developing the necessary institutional capacity at the level of the MOF and spending ministries to support these reforms. That capacity is influenced by the wider institutional structure and resources in terms of staff and expertise. PI is different from financial information. In order to make judgments and compare performance, the MOF needs the relevant expertise to be able to analyse and evaluate the information received from different spending ministries. Spending ministries depend on agencies for information. Therefore they, like the MOF, will need the capacity to understand and evaluate information they receive if they are to make judgments about how realistic the proposed targets are and the quality of the performance measures and data. Even if the interest is there, ministries in some cases – dependent on the country – do not have the expertise or knowledge to develop performance measures or even effectively monitor performance. This can lead to the passive provision of data that has no real weight in the decision-making process.

Changing the behaviour of politicians. Politicians have an important role to play in promoting the development and use of PI in the budget process. That role involves applying pressure on other actors to implement PB, playing an active role in setting objectives, and using PI in budgetary decision making. Their role in the legislature and the executive will vary depending on the nature of the legislative-executive relationship in the budget process, which in turn is influenced by the type of political system in place: presidential, semi-presidential or parliamentary.

The aim of most models of PB and the management-for-results approach is to have politicians set clear goals and objectives for agencies and create

formal mechanisms for them to monitor progress in achieving these goals. However, politicians have not always availed themselves of this opportunity. Setting clear objectives is one of the challenges that OECD countries continue to encounter. In any system with multiple principals, or lack of agreement on the role of an agency, there can be competing and even conflicting goals and demands. This problem is more pronounced in separation-of-powers systems with joint control of the bureaucracy, like in the United States.

For PB, the key issue is whether and how politicians who make budgetary decisions use PI. With the exception of individual sectoral ministries in most countries it has been difficult to get politicians, especially those in the legislature, to pay attention to PI and to use it. Only 19% of OECD legislatures use PI in decision making. The percentage is even lower (8%) for those politicians in the budget committees.

In many cases however, politicians complain about receiving too much information of variable quality and relevance. Often the information is presented in an unclear or incomprehensible manner. Politicians in the legislature and the executive have different informational needs; to be useful, the information must be tailored to their requirements. It should also be provided at the right time for the relevant decision. A key challenge is to create good quality and relevant information that takes account of the timing and capacity constraints under which political decision makers operate.

Politicians face other competing priorities when making budgetary decisions. They are concerned with elections and with demonstrating to citizens that they understand and are responding to their needs. They operate on short-term time horizons often requiring quick results before the next elections, and they take decisions and use information in a fast-paced environment. Meeting these political needs is not necessarily conducive to using PI in budgetary decision making. In some political contexts, programmes and agencies are continued even though their existence is questionable on grounds of efficiency and effectiveness.

The budget process is by nature political, and PI will not change it into a rational decision-making process. Rather, it is an issue of how to provide the right incentives so that PI can be taken more into account. The type of incentives needed, and for whom, will be influenced by contextual variations such as the economic situation and wider political and institutional structures.

2.4. OECD guidelines on designing and developing budget systems that use PI

Based on OECD research and the experiences of member countries, some general insights are discussed below that are helpful to consider when designing, implementing or changing systems of performance budgeting.

2.4.1. Designing budget systems that use performance information

Context is important. There is no single approach to performance budgeting that can succeed in all countries; rather, each model needs to be adapted to the relevant political and institutional context and be seen as part of a learning process. Institutional and political factors help to explain the different country approaches, but also influence the ability of these reforms to achieve their objectives. These factors include: the nature of the political system, especially the respective role of the legislature and the executive in the budget process; the state structure, federalist or unitary; the degree of centralisation of the public administration system; and the relative power of the MOF in the wider institutional structure. The two latter institutional factors influence the capacity of governments to adopt different implementation strategies.

Have clear reform objectives. From the outset, the main objective and the implementation strategy for achieving it need to be clearly stated to all participants in the reform process. There should be clarity of purpose and of expectations. Too often, reforms are introduced with multiple and even competing objectives without any clear consideration of how these will be achieved, how they relate to each other or what is to be the key priority.

Align financial and performance information. The architecture of information structures and systems needs to be consistent. In many countries it is difficult to alter these systems. Nonetheless, it is important to consider how the existing budget classification and accounting systems can be aligned to fit with the adopted performance approach. Budgets tend to be structured in accordance with institutional and functional boundaries and not according to result categories, which makes it difficult to relate true costs to results. Proper cost accounting and a solid programme budget structure will help maximise the benefits of the performance system.

PI should be integrated into the budget process. A vital factor in ensuring the use of PI is a method for integration that helps achieve objectives. Countries have taken different approaches: PI can be part of the annual budget cycle and feed into decision making at different levels and stages of the process.

Design reforms with the end user in mind. Too often systems are developed and information is collected without a clear understanding of how this information will be used, or by whom. If it is to be used in the budget process, the information should be provided to the different users at different stages of the budget process. Also, in order to avoid fear and mistrust, the intended use of the information must be clear. Will it be used in budgetary decision making? How is PI to be linked to resources?

Government-wide systems of PI that tightly link performance results to resource allocation should be avoided. It is not recommended that a direct or tight linkage between funding and performance results be applied on a systematic government-wide scale. Such automatic linkages distort incentives, ignore the underlying causes of poor performance, and require a very high quality of PI that is rarely available. Direct linkage may be possible in certain sectors, but should be decided on a case-by-case basis rather than by establishing a government-wide system.

Involve key stakeholders in the design of reforms. Politicians and civil servants should be consulted and involved in the design phase of the reforms in order to gain their interest and support. It is important to maintain effective communication throughout the process.

Develop a common whole-of-government planning and reporting framework. Such a framework is needed if governments wish to engage in government-wide strategic planning and reporting. It can facilitate the setting of government-wide objectives that cut across organisational boundaries and assist with the prioritisation of goals and the comparison of PI.

Develop and use different types of PI. It is necessary not only to develop different types of PI, but also to understand the potential and limitations of each one. It can be problematic to have a system that concentrates solely on one type of PI. The different types of PI should feed into each other and, if possible, be seen and used in conjunction with each other. For example, failure to achieve a target could serve as a signal to conduct a more detailed review.

Have independent assessments of PI. Regardless of the type of PI, one factor that can help to improve quality is the presence of an independent element in the process. This can take the form of independent agencies or individuals to conduct or participate in evaluations or the collection of performance data. In addition, it is important to have an independent “check” or an independent system to audit performance results data and processes.

2.4.2. Implementing budget systems that use performance information

Find an implementation approach appropriate to the wider governance and institutional structures. What role do central agencies play and how centralised should the implementation approach be? The answers to these questions will vary according to, among other things, the wider institutional context, the approach to PB, the degree to which the administrative structure is centralised, and the relative power of the MOF. Efforts should be made to balance centralised and decentralised aspects of implementation approaches. While the institutional framework imposes limits, countries can take steps to counteract negative tendencies. For example, those countries with a tendency towards a centralised approach should seek to engage in consultation with

ministries and agencies so as to avoid problems of over-centralisation. Those following a decentralised approach need to develop strategies and create incentives that encourage uniformity in the development and submission of PI, and to actively engage political leadership at all levels.

Have flexibility in implementation; one size does not fit all. Whatever implementation approach is adopted, it needs to allow enough flexibility to take account of the differences in the functions performed by government agencies while ensuring sufficient uniformity in approach and presentation of performance data to enable some comparability. In addition, if the reforms are seeking to apply a management-by-results approach, it is vital that the agencies have enough flexibility to achieve their goals.

Leadership is important. The support of political and administrative leaders is vital for pushing the implementation of these reforms. Politicians have an important role to play in their development. Strong political leadership can create momentum and impetus for change and help to overcome bureaucratic resistance. Nearly all countries stressed the importance of strong leadership at the ministerial or agency level. It is vital to promote the development and use of PI throughout the organisation and to ensure its use to improve performance.

Develop the capacity of the MOF and spending ministries. It is important that the MOF and spending ministries have the authority and the analytical and administrative capacities to implement these reforms. This has resource implications in terms of staffing and information systems. Staff need to have the relevant training and expertise.

Focus on outcomes, not just outputs. While outputs are easier to measure, they may lead to a too narrow focus on efficiency and to the exclusion of the wider issue of effectiveness. There may also be risks of goal distortion. According to experience in a number of countries, agencies that focused only on outputs were not sufficiently oriented towards the needs of the citizens and the wider societal outcomes. Ultimately, while they are more difficult to measure, outcomes are the main concern of politicians and citizens.

Have precise goals and measure and monitor progress towards achieving them. It is important to set clear goals and priorities and to consider what programmes contribute towards achieving these goals. If it is not possible to measure how a programme is performing, it is not possible to improve delivery. Performance should be evaluated regularly; many countries recommended an annual assessment.

Good knowledge of the programme base is important. This is especially the case if the focus is on outcomes. Clear, detailed understanding of the programme base requires a clear definition of what a programme is and knowledge of what programmes exist, how they align with intended whole-of-government outcomes, how much they cost, and the results achieved.

Limit the number of targets, but use many measures. Many OECD countries have experienced that it is better to have a few targets for which there are many measures than the reverse. Too many targets can create information overload and make it difficult to prioritise targets, resulting in an unclear focus.

Have information systems that communicate with each other. Information systems need to be developed for planning purposes, for the collection of PI, and for relating performance and financial information. These systems should have the ability to collect, update and disseminate financial and non-financial performance information over a range of programmes. It is important that systems implemented at a central and departmental level can operate together – and creating that capacity can require extensive planning and investment.

Cross-organisational co-operation is vital. The introduction of PI into the budget process requires the co-operation of many different actors. If PI is to be used in decision making and to improve performance, it is important that all levels of government co-operate in the development and implementation. That co-operation needs to be both horizontal and vertical. Vertical co-operation is needed between the MOF, ministries and agencies to deliver improvements in services. When outcomes and targets cut across organisational boundaries, co-operation between ministries and agencies is essential to achieve goals.

Consultation and ownership are important. It is important to develop a dialogue with relevant parties. Consulting and working with agencies, local authorities and those on the front line to establish a performance framework and set targets helps ensure that the framework has buy-in. This not only alleviates problems of gaming, but also helps create ownership which can motivate agencies and employees to achieve the target.

Consider how changes to budget rules can influence behaviour, in both positive and negative ways. Gaming is the norm in budgeting; it pre-dates the system of performance targets. However, introducing a system that tightly links funding to performance results creates new rules and a new dynamic that can give rise to a different type of gaming. Possible solutions include taking a cautious approach and engaging in rigorous consultation and analysis, and “piloting” performance budgeting schemes and creating a sense of ownership of the relevant target. Given that it is not possible to predict all unintended behaviour, there is a need for the capacity to adjust systems and rules as they evolve.

2.4.3. Obtaining continued use of PI in evolving budget systems

A performance system evolves over time and creates different challenges at each stage. At the initial stage, merely developing relevant PI is the main challenge. As the performance system moves forward, other

challenges become more important: mainly behavioural change, how to make various actors use PI in the decision-making process, and how to monitor the performance of the system itself.

Reform approaches need to be adapted to evolving circumstances.

Implementation approaches are not static, and countries alter them in practice. This is a learning exercise, and countries have to allow their method to evolve based on the experiences of previous reforms or in reaction to changes in the wider political or administrative structures.

Have incentives to motivate civil servants to change behaviour. These reforms seek to change the behaviour of civil servants in both the MOF and the spending ministries. Civil servants should at a minimum have a proper understanding of the system of performance budgeting and their given role in that process. It is important to motivate ministries and agencies to use this information in decision making and to move them away from traditional processes. Country experiences highlight the importance of having the support of top leadership and the buy-in of managers. This can be promoted through a mixture of formal and informal incentives. It is also important that the incentives are positive and not just negative. These can vary from simply communicating the benefits of using PI as a managing and budgeting tool to increasing the flexibility of managers to get the job done; incorporating programme performance into managers' and employees' performance appraisals; and linking performance to bonuses and pay. It is important for the MOF to signal that performance is taken seriously by using PI in budget discussions. It is also necessary to address fears that the PI will be used for punishment only or to cut staff or budgets.

Have incentives to motivate politicians to change their behaviour. If they are to succeed, these reforms need to change the behaviour of politicians. Politicians should be consulted and involved in the reform process, and at a minimum be made aware of the importance and potential benefits of using PI in decision making. This is a delicate balancing act. It is important not to oversell the benefits: the approach is not a substitute for difficult budget decisions or the hard political choices that governments face. The key issue is use: it is important to provide incentives that will motivate politicians to use PI in decision making. PI must be tailored to their needs. Many OECD countries continue to struggle with behavioural changes. There should be a realisation that changing behaviour is more complex and requires a long-term approach.

Improve the presentation and reporting of performance information. To encourage the use of this information in decision making, it is important that it be relevant, of high quality, credible and timely. PI should be presented in a simple and integrated manner. At a minimum there needs to be a clear link between planning and performance reporting documents and/or between

programmes, resources and results. If possible, the planned and actual results should be presented (ideally in a time series) in the same document along with financial information.

Recognise the limits of PI. There is no such thing as perfect government or perfect PI. The costs of developing and maintaining systems for collecting and reporting on PI need to be considered. These costs relate to both operational expenses and the time of civil servants. No OECD country has provided information on the total costs of developing and maintaining performance systems.

Remember the journey is as important as the destination. Some of the benefits of this approach come from reviewing existing systems, asking a different set of questions, and seeking to shift thinking and focus from inputs towards results. It is also a continuously evolving process – there is no end point and one will never get it “right” – because countries are adapting and learning from existing reforms, and also because the issues that governments deal with and the operational environment within which they work are continuously changing.

Manage expectations. Previous incarnations of performance budgeting in many countries began with expectations that were too high and unrealistic, ensuring disillusionment when the predicted results failed to materialise. It is important from the outset to manage expectations in terms of the length of time it takes for the reforms to produce results. There are no quick fixes. Some countries estimated that it took 3-5 years to establish a government-wide performance measurement framework. There can be expectations that PB will create an environment of rational decision making and will enable governments to financially reward good performance and punish bad. While this is a simple and appealing idea it does not take account of the fact that budgetary decision making takes place in a political context, or that the issues and context surrounding budget decisions are complex. In most cases such an approach is not desirable. The more realistic expectation is that, at best, countries will engage in performance-informed budgeting.

3. Conclusion

This article briefly examined potential key institutional drivers that may contribute to improving public sector efficiency. There is indeed evidence that some institutional variables help improve efficiency, mainly: functional and political decentralisation to sub-national governments; certain human resource management practices; and increasing the scale of operations. The most notable conclusion, however, is that there is a lack of empirical evidence and systematic evaluation of the impact of institutional variables on efficiency.

The article mostly examined one variable in depth: the development and use of performance information in the budget process. In case studies and through an OECD questionnaire, countries reported a number of benefits from this reform, including the fact that for some agencies it contributed to improving efficiency and effectiveness. Most MOFs using PI engage in performance-informed budgeting. PI acts as a monitoring and signalling tool that tells decision makers what is working with government programmes and what is not. This information is essential to improving performance. Countries continue to struggle with aspects of these reforms, and a key issue is improving the use of PI. Integrating PI into the budget process is a necessary but insufficient condition for assuring its use. Other factors influencing use include the quality of PI itself, the capacity of the MOF and spending ministries, and the wider institutional and political context.

The road from incremental budgeting towards results-based budgeting is proving to be long and difficult. In the governments of OECD member countries, a great deal of the annual budget process remains incremental and inputs still play a key role. Results information will never completely replace inputs. These reforms are, however, slowly shifting the thinking of decision makers at all levels – politicians, the MOF, spending ministries and agencies, and the general public – towards a greater focus on results. There is a clearer understanding of the need to see public policy and government actions in terms of achieving results. As long as citizens demand results from their governments for their tax dollars, there will be a continuing need for performance information. A long-term approach and patience are necessary as countries go down this road. Despite the challenges encountered, countries are continuing to move forward with reforms to improve the use of PI in budgetary decision making.

Several lessons clearly emerge from this study. First, there is a need for future research and analyses into the actual impact of key institutional variables on public sector efficiency, both within and across countries. More research is also needed into how the individual country context and political economy influence the capacity to adopt certain institutional drivers and their chances of success. Second, regardless of the type of PI – evaluations, performance measures or international benchmarking of public sector efficiency – consideration needs to be given to whether and how it will be used by decision makers. It is a matter not just of process, but also of having the right incentives to motivate decision makers to use the information.

Notes

1. Efficiency is here defined as costs per unit of output. The measurement of efficiency requires quantitative information on costs (or physical inputs) and outputs of public service provision. Ideally, this requires an accrual accounting

system that registers costs rather than cash flows. Likewise, the measurement of outputs should ideally capture both quantitative and qualitative aspects of the services provided. The latter is especially difficult in the public sector since a large bulk of the services provided are typically intangible, e.g. policy advice. These measurement difficulties are even more pronounced for cross-country comparisons, although they are possible to overcome for some sectors.

2. Please note that this article is a shortened version of a longer paper.
3. The benefits of falling interest rates have been partially offset by increases in general government gross financial liabilities in several EU countries; these reached an historically high level in France, Germany, Greece and Portugal in 2005.
4. This section has benefited from the research carried out for the OECD by van Dooren et al. (2007).
5. An extended version of this section will be published in the forthcoming OECD publication, *Performance Budgeting in OECD Countries*.
6. Performance information is defined as evaluations and performance measures.
7. See the OECD 2005 survey on the development and use of performance information in the budget process (OECD, 2005f). This questionnaire was sent to the budget office of the ministries of finance in all OECD countries and two observer countries – Chile and Israel. There was a high response rate: 26 out of 30 OECD countries and the two observers completed the questionnaire.

References

- Aijälä, K. (2001), "Public Sector – An Employer of Choice? Report on the Competitive Public Employer Project", OECD, Paris, www.oecd.org/gov/hrm.
- Andersen, L.B. and M. Blegvad (2006), "Does Ownership Matter for the Delivery of Professionalized Public Services? Cost Efficiency and Effectiveness in Private and Public Dental Care for Children in Denmark", *Public Administration*, 84(1), pp. 147-164.
- Anderson, B., T. Curristine and O. Merk (2006), "Budgeting in Norway", *OECD Journal on Budgeting*, 6(1), pp. 7-43.
- Andrews, R., G.A. Boyne, K.J. Meier, L.J. O'Toole, Jr., and R.W. Walker (2005), "Representative Bureaucracy, Organizational Strategy, and Public Service Performance: An Empirical Analysis of English Local Government", *Journal of Public Administration Research and Theory*, 15(4), pp. 489-504.
- Arum, R. (1996), "Do Private Schools Force Public Schools to Compete?", *American Sociological Review*, 61, pp. 29-46.
- Barankay, Iwan and Ben Lockwood (2006), "Decentralization and the Productive Efficiency of Government: Evidence from Swiss Cantons", IZA Discussion Paper No. 2477, December, IZA (Institute for the Study of Labor), Bonn, Germany, www.iza.org.
- Baugh, Gayle and George Graen (1997), "Effects of Team Gender and Racial Composition on Perceptions of Team Performance in Cross-functional Teams", *Group and Organizational Management*, 22(3), pp. 366-384.
- Behn, Robert D. (1998), "The New Public Management Paradigm and the Search for Democratic Accountability", *International Public Management Journal*, 1(2), pp. 131-164.

- Bertok, J., J. Hall, D.J. Kraan, J. Malinska, N. Manning and E. Matthews (2006), "Issues in Outcome Measurement for 'Government at a Glance'. OECD GOV Technical Paper 3", GOV/PGC(2006)10/ANN3, OECD, Paris.
- Bevan, G. and C. Hood (2006), "What's Measured Is What Matters: Targets and Gaming in the English Public Health Care System", *Public Administration*, 84(3), pp. 517-538.
- Blöndal, J. (2003), "Accrual Accounting and Budgeting: Key Issues and Recent Developments", *OECD Journal on Budgeting*, 3(1), pp. 43-59.
- Blöndal, J. (2004), "Issues in Accrual Budgeting", *OECD Journal on Budgeting*, 4(1), pp. 103-119.
- Blöndal, J. and T. Curristine (2005), "Budgeting in Chile", *OECD Journal on Budgeting*, 4(2), pp. 7-45.
- Boardman, A.E. and A.R. Vining (1989), "Ownership and Performance in Competitive Environments", *Journal of Law and Economics*, 32 (April), pp. 1-34.
- Bouckaert, G. and W. Balk (1991), "Public Productivity Measurement: Diseases and Cures", *Public Productivity and Management Review*, 15(2), pp. 229-235.
- Bouckaert, G. and B.G. Peters (2002), "Performance Measurement and Management. The Achilles' Heel in Administrative Modernization", *Public Performance and Management Review*, 25(4), pp. 359-362.
- Boyne, G. (2003), "Sources of Public Service Improvement: A Critical Review and Research Agenda", *Journal of Public Administration Research and Theory*, 13(2), pp. 767-794.
- Brabander, K. de and M. Vos (1992), *Kostprijsanalyse van scholen in het lager en secundair onderwijs: vrij gesubsidieerd onderwijs*, HIVA (Higher Institute of Labour Studies), Catholic University of Leuven, Leuven, Belgium, www.hiva.be.
- Brennan, G. and J.M. Buchanan (1980), *The Power to Tax: Analytical Foundations of a Fiscal Constitution*, Cambridge University Press, Cambridge, United Kingdom.
- Brewer, G.A. (2005), "In the Eye of the Storm: Frontline Supervisors and Federal Agency Performance", *Journal of Public Administration Research and Theory*, 15, pp. 505-527.
- Brewer, G.A. and S. Selden (2000), "Why Elephants Gallop: Assessing and Predicting Organizational Performance in Federal Agencies", *Journal of Public Administration Research and Theory*, 10, pp. 685-711.
- Carlin, T. (2006), "Victoria's Accrual Output Based Budgeting System – Delivering as Promised? Some Empirical Evidence", *Financial Accountability and Management*, 22(1), pp. 1-19.
- Carlin, T. and J. Guthrie (2000), "A Review of Australian and New Zealand Experiences with Accrual Output Based Budgeting", paper presented at the third bi-annual conference of the International Public Management Network, 4-6 March, Sydney, Australia, www.inpuma.net/research/papers/sydney/carlinguthrie.html.
- Coelli, T., D.S. Prasada Rao and G.E. Battese (2001), *An Introduction to Efficiency and Productivity Analysis*, Kluwer Academic Publishers, Deventer, Netherlands.
- Craft, J.A. (2003), "Future Directions in Public Sector Labor Relations: A 2020 Perspective", *Journal of Labor Research*, 14(4), pp. 545-560.
- Curristine, T. (2005a), "Performance Information in the Budget Process: Results of the OECD 2005 Questionnaire", *OECD Journal on Budgeting*, 5(2), pp. 87-131.

- Curristine, T. (2005b), "Government Performance: Lessons and Challenges", *OECD Journal on Budgeting*, 5(1), pp. 127-151.
- Daley, D.M. (1992), "Pay for Performance, Performance Appraisal, and Total Quality Management", *Public Productivity and Management Review*, 16(1), pp. 39-51.
- Dee, T. (1998), "Competition and the Quality of Public Schools", *Economics of Education Review*, 17, pp. 419-427.
- Donahue, A.K., S.C. Selden and P.W. Ingraham (2000), "Measuring Government Management Capacity: A Comparative Analysis of Human Resources Management Systems", *Journal of Public Administration Research and Theory*, 10(2), pp. 381-411.
- Donni, O. (1993), "Efficiency of Day Care Centers in Belgium", Centre de recherche en économie publique et de la population, Université de Liège, Liège, Belgium, www.ulg.ac.be/crepp.
- Dooren, Wouter van (2006), *Performance Measurement in the Flemish Public Sector: A Supply and Demand Approach*, Faculty of Social Sciences, Catholic University of Leuven, Leuven, Belgium, <http://soc.kuleuven.be>.
- Dooren, Wouter van, Miekatrien Sterck and Geert Bouckaert (2007), "Institutional Drivers of Efficiency", internal literature review, Public Governance and Territorial Development Directorate, OECD, Paris.
- Downs, A. (1967), *Inside Bureaucracy*, Scott, Foresman and Co., Glenview, Illinois, United States.
- Downs, G. (1986), *The Search for Government Efficiency: From Hubris to Helplessness*, Temple University Press, Philadelphia, Pennsylvania, United States.
- Dronkers, J. and P. Robert (2004), "The Effectiveness of Public, Private Government-dependent and Private Independent Schools: A Cross-national Analysis", European University Institute, Florence, Italy, www.iue.it.
- Duncombe, W., J. Miner and J. Ruggiero (1997), "Empirical Evaluation of Bureaucratic Models of Inefficiency", *Public Choice*, 93(1), pp. 1-18.
- Dunleavy, P. (1991), *Democracy, Bureaucracy and Public Choice*, Harvester Wheatsheaf, Hemel Hempstead, United Kingdom.
- Dunn, D.D. (1997), *Politics and Administration at the Top: Lessons from Down Under*, University of Pittsburg Press, Pittsburg, Pennsylvania, United States.
- Ebel, R.D. and S. Yilmaz (2002), "On the Measurement and Impact of Fiscal Decentralization", Policy Research Working Paper No. WPS2809, The World Bank, Washington DC.
- Ellis, Randall P. (1998), "Creaming, Skimping and Dumping: Provider Competition on the Intensive and Extensive Margins", *Journal of Health Economics*, 17(5), pp. 537-556.
- Feld, L., G. Kirchgässner and C.A. Schaltegger (2003), "Decentralized Taxation and the Size of Government: Evidence from the Swiss State and Local Governments", CESifo Working Paper No. 1087, CESifo, Munich, Germany, www.cesifo.de.
- Freeman, R. and J. Medoff (1984), *What Do Unions Do?*, Basic Books, New York, United States.
- GAO (Government Accountability Office) (2000), *Managing for Results: Continuing Challenges to Effective GPRA Implementation*, Government Printing Office, Washington DC.

- Gilmour, John and David Lewis (2006), "Does Performance Budgeting Work? An Examination of the Office of Management and Budget's PART Scores", *Public Administration Review*, 66(5), pp. 742-752.
- Gregory, R.G. and J. Borland (1999), "Recent Developments in Public Sector Labour Markets", in O. Ashenfelter and D. Card (eds.), *Handbook of Labor Economics*, Vol. 3C, pp. 3573-3630, North-Holland Publishing, Amsterdam, Netherlands.
- Hackman, J.R. and G.R. Oldham (1975), "Development of the Job Diagnostic Survey", *Journal of Applied Psychology*, 60(2), pp. 159-170.
- Hackman, J.R. and G.R. Oldham (1980), *Work Redesign*, Addison-Wesley, Reading, Massachusetts, United States.
- Halachmi, Arie (2002), "Performance Measurement: A Look at Some Possible Dysfunctions", *Work Study*, 51(5).
- Halachmi, A. and M. Holzer (1987), "Merit Pay, Performance Targeting, and Productivity", *Review of Public Personnel Administration*, 7(8), pp. 80-91.
- Hammerschmidt, M. and M. Staat (2000), "Benchmarking the Health Sector in Germany: An Application of Data Envelopment Analysis", Universität Mannheim, Mannheim, Germany, www.uni-mannheim.de.
- Herzberg, F. (1966), *Work and the Nature of Man*, The World Publishing Co., New York, United States.
- Hollingsworth, B., P. Dawson and N. Maniadakis (1999), "Efficiency Measurement of Health Care: A Review of Non-parametric Methods and Applications", *Health Care Management Science*, 2(3), pp. 161-172.
- Holzer, M. and J. Rabin (1987), "Public Service: Problems, Professionalism and Policy Recommendations", *Public Productivity Review*, 11(1), pp. 3-13.
- Hood, C. (1991), "A Public Management for All Seasons?", *Public Administration*, 69(1).
- Huther, J. and A. Shah (1998), "Applying a Simple Measure of Good Governance to the Debate on Fiscal Decentralization", Working Paper No. 1894, The World Bank, Washington DC.
- Ingraham, P.W. (1993), "Of Pigs in Pokes and Policy Diffusion: Another Look at Pay for Performance", *Public Administration Review*, 53(4), pp. 348-356.
- Jordan, M. and M. Hackbart (1999), "Performance Budgeting and Performance Funding in the States: A Status Assessment", *Public Budgeting and Finance*, 19(1), pp. 68-88.
- Joumard, I., P.M. Kongsrud, Y. Nam and R. Price (2004), "Enhancing the Cost Effectiveness of Public Spending: Experience in OECD Countries", *OECD Economic Studies*, No. 37, 2003/2, pp. 113-167, OECD, Paris.
- Kaufman, H. (1976), *Are Government Organizations Immortal?*, The Brookings Institution, Washington DC.
- Laking, R. (2005), "Agencies: Their Benefits and Risks", *OECD Journal on Budgeting*, 4(4), pp. 7-25.
- Lawarree, J. (1986), "Une comparaison des performances des secteurs privé et public: le cas des collectes d'immondices en Belgique", *Cahiers économiques de Bruxelles*, 25(109), pp. 3-31.
- Lee, S-H. (2004), "A Re-examination of Public Sector Wage Differentials in the United States: Evidence from the NLSY with Geocode", *Industrial Relations*, 42(2), pp. 448-472.

- Lewin, D. (2003), "Incentive Compensation in the Public Sector: Evidence and Potential", *Journal of Labor Research*, 14(4), pp. 597-619.
- Manning, N., D.J. Kraan and J. Malinska (2006), "How and Why Should Government Activity Be Measured in 'Government at a Glance'? OECD GOV Technical Paper No. 1", GOV/PGC(2006)10/ANN1, OECD, Paris.
- McCallion, G., D.G. McKillop, J.C. Glass and C. Kerr (1999), "Rationalizing Northern Ireland Hospital Services Towards Larger Providers: Best-Practice Efficiency Studies and Current Policy", *Public Money and Management*, 19(2), pp. 27-32.
- Melkers, J. and K. Willoughby (2005), "Models of Performance Measurement Use in Local Governments: Understanding Budgeting, Communication and Lasting Effects", *Public Administration Review*, 65(2), pp. 180-190.
- Melly, B. (2002), "Public-Private Sector Wage Differentials in Germany: Evidence from Quantile Regression", Universität St. Gallen, St. Gallen, Switzerland, www.alexandria.unisg.ch/Publikationen/15755.
- Menezes-Filho, N. and J. van Reenen (2003), "Unions and Innovation: A Survey of the Theory and Empirical Evidence", Discussion Paper No. 3792, Centre for Economic Policy Research, London, www.cepr.org/pubs/dps/DP3792.asp.
- Méthé, D.T. and J.L. Perry (1980), "The Impacts of Collective Bargaining on Local Government Services: A Review of Research", *Public Administration Review*, 40(4), pp. 359-371.
- Mobley, L.R. and J. Magnussen (1998), "An International Comparison of Hospital Efficiency: Does Institutional Environment Matter?", *Applied Economics*, 30, pp. 1089-1100.
- Moon, M.J. (2002), "The Evolution of E-government among Municipalities: Rhetoric or Reality?", *Public Administration Review*, 62(4), pp. 424-433.
- Moynihan, D.P. and S.K. Pandey (2005), "Testing How Management Matters in an Era of Government by Performance Management", *Journal of Public Administration Research and Theory*, 15, pp. 421-439.
- Mueller, R.E. (1998), "Public-private Sector Wage Differentials in Canada: Evidence from Quantile Regressions", *Economic Letters*, 60(2), pp. 229-235.
- Murray, R. (1992), "Measuring Public Sector Output: The Swedish Report", in Z. Griliches (ed.), *Output Measurement in the Service Sectors*, The University of Chicago Press, Chicago, Illinois, United States.
- Musgrave, R.A. (1959), *The Theory of Public Finance*, McGraw-Hill, New York, United States.
- Netherlands Ministry of Finance (2004), *Policy Budgets and Policy Accountability: Evaluation: Lessons from Practice, Inter-ministerial Consultations for Financial and Economic Affairs*, Ministry of Finance, The Hague, www.minfin.nl.
- New Zealand Treasury (2003), *Managing For Outcomes Guidance*, The Treasury, Wellington, www.treasury.govt.nz.
- Niskanen, W. (1971), *Bureaucracy and Representative Government*, Aldine-Atherton, Chicago, Illinois, United States.
- OECD (1997), *Managing Across Levels of Government*, OECD, Paris.
- OECD (2005a), *Modernising Government: The Way Forward*, OECD Publishing, Paris.
- OECD (2005b), "Using Performance Information for Managing and Budgeting: Challenges, Lessons and Opportunities", GOV/PGC/SBO(2005)3, OECD, Paris.

- OECD (2005c), *Reallocation: The Role of Budget Institutions*, OECD Publishing, Paris.
- OECD (2005d), "Trends in Human Resources Management Policies in OECD Countries: An Analysis of the Results of the OECD Survey on Strategic Human Resources Management", GOV/PGC/HRM(2004)3/FINAL, OECD, Paris.
- OECD (2005e), "Paying for Performance: Policies for Government Employees", *OECD Policy Brief*, May, OECD, Paris.
- OECD (2005f), "Performance Information in the Budget Process: Results of OECD 2005 Questionnaire. Final Report", GOV/PGC/SBO(2005)6/FINAL, OECD, Paris.
- OECD (2006), "Summary of Key Findings from the 2006 Meeting of the Senior Budget Officials (SBO) Network on Performance and Results", GOV/PGC/RD(2006)5, OECD, Paris.
- OECD E-government Task Force (2003), "The Case for E-government: Excerpts from the OECD Report 'The E-government Imperative'", *OECD Journal on Budgeting*, 3(1), pp. 61-92.
- OECD and World Bank (2003), "OECD/World Bank Budget Practices and Procedures Database", www.oecd.org/gov/budget/database.
- Osborne, D. and T. Gaebler (1992), *Reinventing Government: How the Entrepreneurial Spirit is Transforming the Public Sector*, Addison-Wesley, New York, United States.
- Paulsson, G. (2006), "Accrual Accounting in the Public Sector: Experiences from the Central Government in Sweden", *Financial Accountability and Management*, 22(1), pp. 47-62.
- Perrin, Burt (2006), *Moving From Outputs to Outcomes: Practical Advice from Governments Around the World*, IBM Center for The Business of Government, Washington DC, www.businessofgovernment.org.
- Peters, B.G. (2003), "The Capacity to Coordinate", paper presented at the international workshop on state policy capacity, 5-6 October, City University of Hong Kong, Hong Kong, China, www.cityu.edu.hk.
- Pierre, J. (2004), "Central Agencies in Sweden: A Report from Utopia", in C. Pollitt and C. Talbot (eds.), *Unbundled Government. A Critical Analysis of the Global Trend to Agencies, Quangos and Contractualisation*, Routledge Studies in Public Management No. 1, pp. 203-214, Routledge, London and New York.
- Pitt, D.W. (2005), "Diversity, Representation, and Performance: Evidence about Race and Ethnicity in Public Organizations", *Journal of Public Administration Research and Theory*, 15, pp. 615-631.
- Pollitt, Christopher (2001), "Integrating Financial Management and Performance Management", *OECD Journal on Budgeting*, 1(2), pp. 7-37.
- Pollitt, Christopher (2004), "Theoretical Overview", in C. Pollitt and C. Talbot (eds.), *Unbundled Government. A Critical Analysis of the Global Trend to Agencies, Quangos and Contractualisation*, Routledge Studies in Public Management No. 1, pp. 319-342, Routledge, London and New York.
- Pollitt, C., K. Bathgate, J. Caulfield, A. Smullen and C. Talbot (2001), "Agency Fever? Analysis of an International Policy Fashion", *Journal of Comparative Policy Analysis*, 3(3), November, pp. 271-290.
- Pollitt, C. and G. Bouckaert (2004), *Public Management Reform. A Comparative Analysis*, Oxford University Press, Oxford, United Kingdom.

- Postel-Vinay, F. and H. Torun (2005), "The Public Pay Gap in Britain: Small Differences that (Don't?) Matter", Working Paper No. 05/121, Centre for Market and Public Organisation, University of Bristol, Bristol, United Kingdom, www.bris.ac.uk/Depts/CMPO/workingpapers/wp121.pdf.
- Reddick, Christopher (2003), "Testing Rival Theories of Budgetary Decision-Making in the US States", *Financial Accountability and Management*, 19(4), pp. 315-340.
- Reichenberg, N. (2002), *Branding the Government as An Employer of Choice*, International Public Management Association, <http://unpan1.un.org/intradoc/groups/public/documents/UN/UNPAN021819.pdf>.
- Robinson, M. and J. Brumby (2005), "Does Performance Budgeting Work? An Analytical Review of the Empirical Literature", Working Paper WP05/210, International Monetary Fund, Washington DC.
- Rubin, I. and J. Kelly (2005), "Budget and Accounting Reforms", in E. Ferlie, L.E. Lynn, Jr. and C. Pollitt (eds.), *The Oxford Handbook of Public Management*, pp. 590-639, Oxford University Press, Oxford, United Kingdom.
- Ruggiero, J. and W. Duncombe (1995), "On the Measurement and Causes of Technical Inefficiency in Local Public Services", *Journal of Public Administration Research and Theory*, 5(4), pp. 403-429.
- Savas, E.S. (2000), *Privatization and Public Private Partnerships*, Chatham House Publishers, London.
- Scheers, B., M. Sterck and G. Bouckaert (2005), "Lessons from Australian and British Reforms in Results-oriented Financial Management", *OECD Journal on Budgeting*, 5(2), pp. 133-162.
- Scherer, F.M. and D. Ross (1990), *Industrial Market Structure and Economic Performance*, Third edition, Houghton Mifflin, Boston, Massachusetts, United States.
- Schick, A. (1996), *The Spirit of Reform: Managing the New Zealand State Sector in a Time of Change (A Report Prepared for the State Services Commission and the Treasury, New Zealand)*, State Services Commission, Wellington, www.ssc.govt.nz.
- Schick, A. (2001), "The Changing Role of the Central Budget Office", *OECD Journal on Budgeting*, 1(1), pp. 9-26.
- Schick, A. (2003), "The Performing State: Reflection on an Idea Whose Time Has Come but Whose Implementation Has Not", *OECD Journal on Budgeting*, 3(2), pp. 71-103.
- Selden, S. (1997), *The Promise of Representative Bureaucracy: Diversity and Responsiveness in a Government Agency*, M.E. Sharpe, Armonk, New York, United States.
- Selden, S.C., P.W. Ingraham and W. Jacobson (2001), "Human Resource Practices in State Government: Findings from a National Survey", *Public Administration Review*, 61(5).
- Shepard, L.A. (1990), "Inflated Test Score Gains: Is the Problem Old Norms or Teaching the Test", *Educational Measurement: Issues and Practices*, 9, pp. 15-22.
- Smith, M.L. and C. Rottenberg (1991), "Unintended Consequences of External Testing in Elementary Schools", *Educational Measurement: Issues and Practice*, 10(4), pp. 7-11.
- Smith, P. (1995), "On the Unintended Consequences of Publishing Performance Data in the Public Sector", *International Journal of Public Administration*, 18, pp. 277-310.
- Social and Cultural Planning Office (2004), *Public Sector Performance. An international comparison*, SCP, The Hague, www.scp.nl.

- Steinmann, L. and P. Zweifel (2003), "On the (in)efficiency of Swiss hospitals", *Applied Economics*, 35, pp. 361-370.
- Sterck, M. and B. Scheers (2006), "Trends in Performance Budgeting in Seven OECD Countries", *Public Performance and Management Review*, 30(1), September, pp. 47-72.
- Swedish Ministry of Finance (1996), *Productivity Trends in the Public Sector in Sweden*, Ministry of Finance, Stockholm.
- United Kingdom House of Commons, Public Administration Select Committee (2003), *On Target? Government by Measurement (Fifth report of Session 2002-03; Volume 1)*, The Stationery Office Ltd, London, www.publications.parliament.uk/pa/cm200203/cmselect/cmpubadm/62/62.pdf.
- Verhoest, Koen (2002), *Resultaatgericht verzelfstandigen. Een analyse vanuit een verruimd principaal-agent perspectief*, Faculteit Sociale Wetenschappen, Catholic University of Leuven, Leuven, Belgium, www.kuleuven.ac.be.
- Verhoest, Koen (2005), "Effects of Autonomy, Performance Contracting and Competition on the Performance of a Public Agency", *Policy Studies Journal*, 33(2).
- Verhoest, Koen and Geert Bouckaert (2003), "Machinery of Government: Shifting from Effectiveness of Coordination to Coordination of Effectiveness", paper presented at the international workshop on state policy capacity, 5-6 October, City University of Hong Kong, Hong Kong, China, www.cityu.edu.hk.
- Verhoest, K., B.G. Peters, G. Bouckaert and B. Verschuere (2004), "The Study of Organisational Autonomy: A Conceptual Review", *Public Administration and Development*, 24, pp. 101-118.
- Visser, J. (2000), *Trends in Unionisation and Collective Bargaining*, International Labour Office, Geneva, Switzerland.
- Weisman, C.S. and C.A. Nathanson (1985), "Professional Satisfaction and Client Outcomes. A Comparative Organizational Analysis", *Medical Care*, 23(10), pp. 1179-1192.
- West, D.M. (2004), "E-government and the Transformation of Service Delivery and Citizen Attitudes", *Public Administration Review*, 64(1), pp. 15-27.
- Wildavsky, A.B. (1974), *The Politics of the Budget Process*, Little Brown and Company, New York, United States.
- Williamson, O.E. (1975), *Markets and Hierarchies: Analysis and Antitrust Implications*, Free Press, New York, United States.
- Wilson, J.Q. (1989), *Bureaucracy: What Government Agencies Do and Why They Do It*, Basic Books, New York, United States.

