



OECD Journal on Budgeting

Special features

- The politics of fiscal austerity
- Short- and long-term forecasting by the Netherlands Bureau for Economic Policy Analysis (CPB)
- Capital budgeting and procurement practices

OECD Journal

OECD Journal on Budgeting

Volume 2013/1

The OECD Journal collection comprises six periodicals: *OECD Journal: Economic Studies*, *OECD Journal: Financial Market Trends*, *OECD Journal: Competition Law and Policy*, *OECD Journal: General Papers*, *OECD Journal on Budgeting*, *OECD Journal: Journal of Business Cycle Measurement and Analysis*. Each periodical within OECD Journal retains its own ISSN, volume and issue numbering. The volume numbering of each journal corresponds to the calendar year, e.g. Volume 2012. Volume 2012 of *OECD Journal on Budgeting* contains three regular issues.

This work is published on the responsibility of the Secretary-General of the OECD. The opinions expressed and arguments employed herein do not necessarily reflect the official views of the Organisation or of the governments of its member countries.

This document and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

Series: OECD Journal on Budgeting, Volume 2013 Issue 1
ISSN 1608-7143 (print)
ISSN 1681-2336 (online)
<http://dx.doi.org/10.1787/budget-v13-1-en>

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Corrigenda to OECD publications may be found on line at: www.oecd.org/publishing/corrigenda.

© OECD 2013

You can copy, download or print OECD content for your own use, and you can include excerpts from OECD publications, databases and multimedia products in your own documents, presentations, blogs, websites and teaching materials, provided that suitable acknowledgment of OECD as source and copyright owner is given. All requests for public or commercial use and translation rights should be submitted to rights@oecd.org. Requests for permission to photocopy portions of this material for public or commercial use shall be addressed directly to the Copyright Clearance Center (CCC) at info@copyright.com or the Centre français d'exploitation du droit de copie (CFC) at contact@cfcopies.com.

Foreword

The OECD Journal on Budgeting is a unique resource for policy makers, officials and researchers in public sector budgeting. Drawing on the best of the recent work of the OECD Working Party of Senior Budget Officials (SBO), as well as special contributions from finance ministries of member countries and from other practitioners, the Journal provides insights on leading-edge institutional arrangements, systems and instruments for the effective and efficient allocation and management of resources in the public sector.

We welcome feedback from our readers. Your views on how to improve the Journal can be sent to:

The Editors, The OECD Journal on Budgeting, OECD, 2, rue André-Pascal, F-75775 Paris Cedex 16, France. Fax: (33 1) 44 30 63 34; e-mail: sbo.news@oecd.org.

The Editors

Public Governance and Territorial Development Directorate, OECD

Rolf Alter

Director

Jón R. Blöndal

Head of Budgeting and Public Expenditures Division

OECD Journal on Budgeting

Jón R. Blöndal

Editor-in-Chief

OECD Advisory Panel on Budgeting and Public Expenditures

The OECD established an Advisory Panel on Budgeting and Public Expenditures in 2012. Its role is to offer insights on the directions of the OECD work in this crucial area. The Panel is composed of recent former chairs of the Working Party of Senior Budget Officials (SBO) and distinguished academics and experts associated with the SBO.

The members of the Panel:

Mr Ian WATT

*Secretary, Department of the Prime Minister and Cabinet, Australia
Former Secretary, Department of Finance and Deregulation, Australia
Former SBO Chair (2006-09)*

Mr Richard J. EMERY

*Former Assistant Director, White House Office of Management and Budget, United States
Former SBO Chair (2003-05)*

Mr Geert VAN MAANEN

*Secretary-General, Ministry of Health, Welfare and Sport, Netherlands
Former Secretary-General, Ministry of Finance, Netherlands
Former SBO Chair (2000-02)*

Mr Barry ANDERSON

*Deputy Director, National Governors Association, United States
Former Assistant Director, White House Office of Management and Budget, United States
Former Acting Director and Deputy Director, Congressional Budget Office, United States
Former SBO Chair (1995-97)*

Mr Matt ANDREWS

Associate Professor, John F. Kennedy School of Government, Harvard University, United States

Mr Andreas BERGMANN

*Professor of Public Finance and Director – Public Sector, School of Management and Law,
Zurich University of Applied Sciences, Switzerland
Chair, International Public Sector Accounting Standards Board (IPSASB)*

Mr Philippe BURGER

*Professor of Economics and Head of Economics Department, University of the Free State,
South Africa*

Mr John BURNS

*Chair Professor of Politics and Public Administration and Dean of Faculty of Social Sciences,
The University of Hong Kong*

Mr John KIM

Senior Fellow, Korea Institute of Public Finance

Mr LU Mai

Secretary-General, China Development Research Foundation

Mr Paul POSNER

*Professor and Director of the Public Administration Program, George Mason University,
United States*

Mr Ricardo REIS

Assistant Professor of Accounting, Católica-Lisbon School of Business and Economics, Portugal

Mr Marc ROBINSON

Partner, PFM Results Consulting, Switzerland

Mr Allen SCHICK

*Distinguished University Professor, School of Public Policy, University of Maryland,
United States*

Mr Hideaki TANAKA

Professor, Graduate School of Governance Studies, Meiji University, Japan

Mr Joachim WEHNER

*Senior Lecturer in Public Policy, London School of Economics and Political Science (LSE),
United Kingdom*

Ms Christine WONG

*Professor of Chinese Public Finance, Fellow and Chair, Chinese Studies,
School of Interdisciplinary Area Studies, University of Oxford, United Kingdom*

Table of contents

Budget governance in Canada: Comparing practices within a federation by Benoît Rigaud and Paul-Émile Arsenault	9
The reconciliation of primary accounting data for government entities and balances according to statistical measures: The case of the European Excessive Deficit Procedure Table 2 by Giovanna Dabbicco	31
Short- and long-term forecasting by the Netherlands Bureau for Economic Policy Analysis (CPB): Science, witchcraft, or practical tool for policy? by Frits Bos and Coen Teulings	45
Capital budgeting and procurement practices by Philippe Burger and Ian Hawkesworth	57
Budgeting levers, strategic agility and the use of performance budgeting in 2011/12 by Ian Hawkesworth and Knut Klepsvik	105
The politics of fiscal austerity: Democracies and hard choices by Paul L. Posner and Matthew Sommerfeld	141

Budget governance in Canada: Comparing practices within a federation

by

Benoît Rigaud and Paul-Émile Arsenault*

Canada is a federal country with 14 governments: federal, provincial and territorial. This article presents the results of a survey of institutional arrangements for budgeting that was conducted in 2010 among representatives of those governments. The pan-Canadian survey draws on an OECD questionnaire used in 2007 as part of the OECD International Budget Practices and Procedures Database. The analysis of sub-national government budget practices gives insights on fiscal federalism as well as the methodology for comparing.

JEL classification: H610, H700, H720

Keywords: Canada, budget practices and procedures, fiscal discipline, public service delivery, sub-national governments, fiscal federalism, federal-provincial relations, distribution of fiscal responsibilities, budgeting

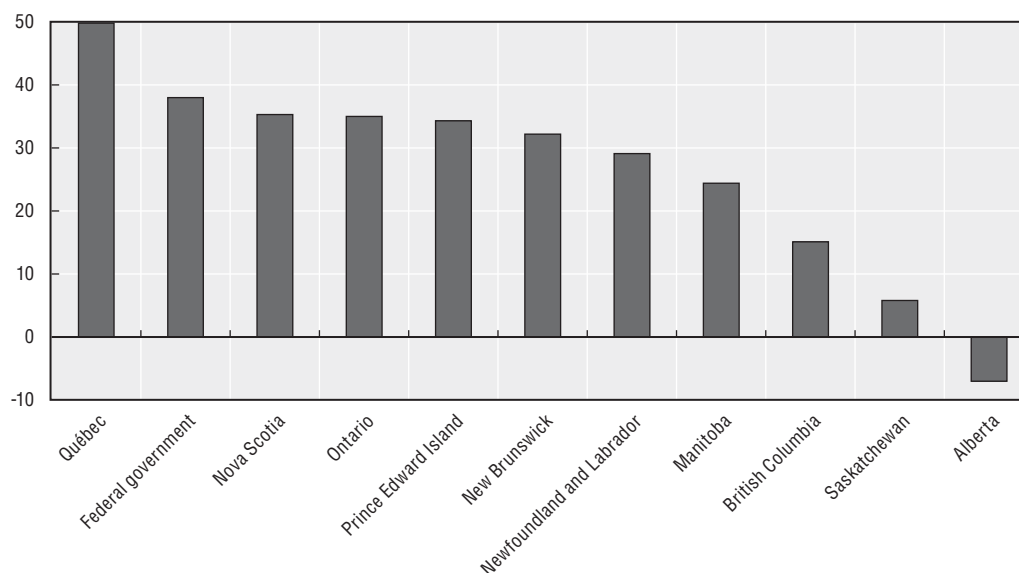
* Benoît Rigaud is a Research Fellow at the École nationale d'administration publique (ENAP, National School of Public Administration), Québec, Canada. Paul-Émile Arsenault is a Research Fellow and senior consultant on public budgeting at ENAP. The opinions expressed and arguments employed in this article do not necessarily reflect the official views of the OECD or of the governments of its member countries.

1. Insights on fiscal federalism through the case of Canada

The goal of this article on budget governance in Canada is to illustrate how the study of sub-national governments can improve our understanding of public management and complement the international comparison of outputs.

The autonomy of both federal and provincial levels of government is enshrined in the Canadian Constitution. This allows the expression of diversity and enables the establishment of different public management practices throughout the federation dedicated to handling specific governance issues. The institutional design of the Canadian federation has thus favoured disparate patterns of state-building and political cultures (Wiseman, 2007) which, notably, result in significant variations concerning public debt, as shown in Figure 1.¹ In this article, the comparison focuses on the federal government level and the provincial government level.

Figure 1. **Public debt within Canada (net debt as a per cent of own GDP in 2011)**



Source: Institut de la statistique du Québec et Secrétariat aux affaires intergouvernementales du Québec (2012), *Tableau statistique canadien*, Vol. 10, No. 2, p. 70, www.stat.gouv.qc.ca.

Nevertheless, autonomy must not be confused with independence in the sense that the ability of both federal and provincial governments to establish their own norms must comply with common institutions broadly defined as the “rules of the game”. At the federal and provincial levels, major political institutions are indeed basically identical in Canada. This is particularly clear concerning the conventions and general rules dealing with the budget process.² Budget processes for both federal and provincial government levels must be in harmony with constitutional principles such as the obligatory legislative consent to

raise taxes and make expenditures, the exclusive power of the executive to initiate actions having an impact on public finances, and the obligation of accountability before the legislature (Cliche, 2009:111). Thus, there are no significant variations within the federation concerning the constitutional constraints on budgeting. Those constitutional principles and the relationships between the executive and the legislature are specified by the wording of laws concerning unity, universality, specification and annuality, but also by the budgetary principles of fiscal balance, transparency, and efficiency. By contrast with the constitutional principles, the implementation of those budgetary principles theoretically allows great variations.

Despite a certain evolution toward asymmetrical federalism in Canada, comparing provincial budget practices is always relevant thanks to the sharing of responsibilities between the federal and the respective provincial governments. According to the Constitution, provincial responsibilities include health, education, property and civil rights, social security and municipal administrations. Alternatively, the federal government is notably responsible for monetary policy, defence, foreign relations, trade, and criminal law. Given that provincial governments deliver key public services and have authority over local and municipal administrations, they represent a large share of total public spending. Among OECD countries, the distribution of fiscal responsibilities in Canada is the most decentralised. This was illustrated by a recent study which pointed out that, in 2010, Canada was actually the country where the relative share of sub-central government spending in total public spending was the highest, at 68% (OECD/Korea Institute of Public Finance, 2012:90).

2. Research question

In the aftermath of the 2008-09 financial and budgetary crises in Europe and the United States, the Canadian federal government was seen throughout the industrialised countries as an example concerning fiscal discipline (OECD, 2010). Indeed, this good reputation is a positive outcome of the Canadian *Program Review* exercise in the 1990s that resulted in a decline of the federal debt-to-GDP ratio. Moreover, since then, there has been a continuing commitment in Ottawa to attain fiscal balance and to improve the overall financial situation of the Canadian federal government. The implementation of *Program Review* also benefitted from a positive economic cycle starting in the late 1990s.

In addition to benefitting from adequate political and economic conditions, the Canadian federal government adopted several changes in its budget procedures and practices. These changes include the ability within a ministry to keep any savings gained through internal efficiency measures, and the use of “prudent” economic assumptions (Blöndal, 2001; Joyce, 2011). The Canadian federal experience thus confirms Blöndal’s assertion of the three factors needed for good fiscal outcomes: a strong political commitment, a satisfactory general performance of the economy, and proper institutional arrangements for budgeting (Blöndal, 2003).

Considering that the quality of institutional arrangements is a necessary but not a sufficient condition for good fiscal outcomes (Blöndal, 2003:9), this first pan-Canadian study of budgeting³ seeks to determine whether all Canadian governments adopted proper institutional arrangements. Answers to this research question will allow a better insight on budget governance in Canada by integrating federal and provincial governments within the same framework. This question is especially crucial in Canada due to the size of provincial

Table 1. **Distribution of the Canadian population between provinces**

	Number of persons	Per cent (Canada = 100)
Newfoundland and Labrador	509 348	1.5
Prince Edward Island	146 070	0.4
Nova Scotia	944 968	2.7
New Brunswick	755 381	2.2
Québec	8 028 434	23.1
Ontario	13 472 438	38.8
Manitoba	1 261 498	3.6
Saskatchewan	1 072 082	3.3
Alberta	3 847 119	11.1
British Columbia	4 606 451	13.1

Source: Institut de la statistique du Québec et Secrétariat aux affaires intergouvernementales du Québec (2012), *Tableau statistique canadien*, Vol. 10, No. 2, p. 6, www.stat.gouv.qc.ca. The three territories (Yukon, Northwest Territories, Nunavut) represent 0.3% of the Canadian population.

public finances and the major public services delivered by provincial governments.⁴ This question is also relevant because of the seriousness of the debt problem at the provincial level.⁵

3. Adapting and improving methodological breakthroughs resulting from international comparisons

Comparative analysis of public management is mostly international in the sense that it usually concerns sovereign states. For purposes of comparison, the act of selecting sovereign states is coherent with a view of global politics structured by entities formally recognised as being able to co-operate in organisations like the OECD. Since public management features are embedded in a specific political context partially framed by the “central” government, international comparisons are well designed to outline national traditions of governance (Bevir and Rhodes, 2003) or converging processes (Bennett, 1991). International comparisons are also feasible thanks to the role played for many years by intergovernmental arenas or transnational organisations which facilitate exchanges of ideas and practices (Mahon and McBride, 2008).

Despite their obvious contributions to a better understanding of governance and public administration, one limit of international comparisons, in the case of federations, is to strictly focus on the institutional arrangements of the federal governments and then to subsume the inner political and administrative diversity of federations (Tellier, 2011). This precision is particularly significant for federations like Canada where constituent entities are largely autonomous in their ability to legislate the adoption and implementation of public management procedures and practices.

Another limit of international comparisons is associated with the tremendous heterogeneity of political regimes. Indeed, it is difficult to explain why public management practices and procedures vary, because governing is itself influenced by very disparate institutions. Imbeau et al. (2000:782) state: “In a study comparing countries of the Organisation for Economic Co-operation and Development (OECD), for example, one must take into account variables like constitutional constraints [...] because they have an impact on government policies and they vary widely from one case to the next.” If these studies illustrate how political regimes can be diverse, a comparative analysis of heterogeneous political entities would however lessen the explicative leverage of a comparative analysis (King, Keohane and Verba, 1994). Taking account of this methodological reserve,

comparative research designs tend to deal with “most similar cases” in order to highlight significant differences (Przeworski and Teune, 1970). The popularity of studies comparing Westminster political systems should be seen as illustrative of this tendency.

Taking into account the benefits and drawbacks of international comparisons, l'Observatoire de l'administration publique de l'ENAP (the “public administration observatory” of ENAP) elaborated a research project pursuing two objectives:

1. To compare budget practices and procedures in Canada, including the budgets of the provincial governments, with data produced by the OECD (2009) or other international surveys (Economic Policy Committee and European Commission, 2007; CABRI, 2008).
2. To build a partnership between university researchers and delegates to one of the Canadian intergovernmental conferences, namely the annual Intergovernmental Budget Conference (IBC), in order to produce knowledge whose dissemination could ultimately foster social innovations in public administrations.⁶

To pursue our study, we received permission to use the 2007 OECD questionnaire that is part of the OECD *International Budget Practices and Procedures Database* available at www.oecd.org/gov/budget/database. In the fourth quarter of 2010, following their participation in a bilingual (English and French) survey, delegates to the IBC were asked to fill in the questionnaire and to validate data in cases of misunderstanding or discrepancies between answers. With the exception of a few adaptations linked to the Canadian context, the following cross-Canadian data can be compared with data presented in the *International Budget Practices and Procedures Database* of the OECD. Since July 2011, preliminary research results in the form of a database and a report are available on the “Canadian Governments Compared” website.⁷

4. A common framework for comparing

Keeping in mind that a comparative analysis is an activity by which different objects (in the present case, public administrations) are assimilated or differentiated to a criterion or a property (Sartori, 1991:246), the first task is to define the criteria. In this article, we will mostly use features defined in *Government at a Glance 2009* (OECD, 2009). Indeed, Chapter 7 of that publication gives numerous insights as to how to proceed when comparing some aspects of the budget process. Furthermore, Annex C in that publication gives some details about the scoring methodology and ensures a certain degree of reproducibility.

We also made two other methodological choices. First, we adopted the conceptual framework elaborated by Blöndal (2003), but modified it in a small way.⁸ This choice was motivated by the wish to facilitate comparisons between the governments of OECD countries and the Canadian governments. Hence the five features that will be considered in this article are the following:

- prudent economic assumptions;
- medium-term budget frameworks;
- top-down techniques and budget flexibility;
- focus on results;
- budget transparency.

The second choice was to follow the methodological guidelines of two other publications: the survey realised in Africa by CABRI (2008), and the special report of *European Economy* (Economic Policy Committee and European Commission, 2007). These

two publications give details on how to build composite indexes. The use of such indexes is helpful, as they summarise data furnished by the IBC delegates and make it easier to highlight similarities and differences.⁹

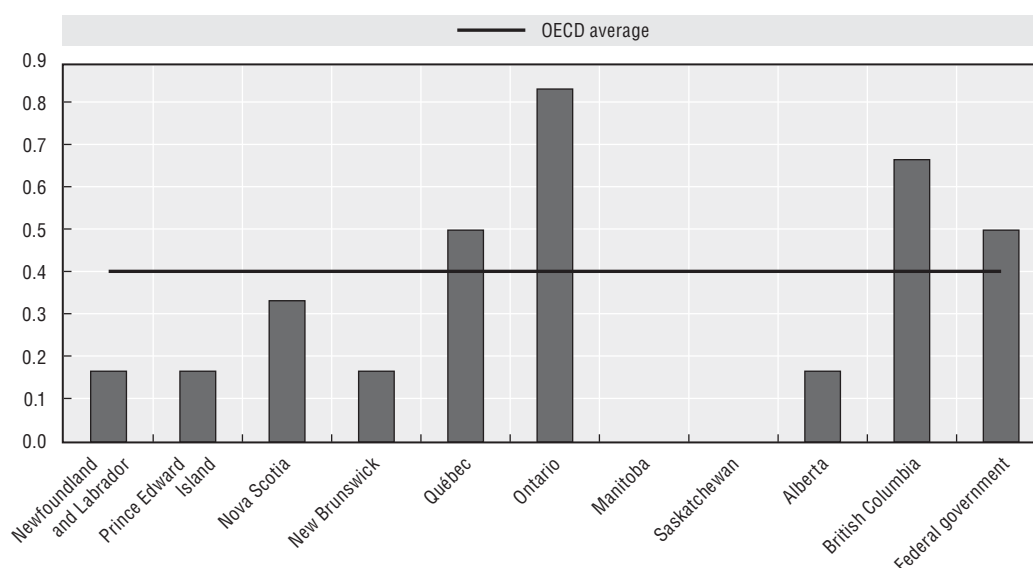
5. Prudent economic assumptions

Considering the size and importance of government budgets, seemingly small errors in forecasts can result in significant variations in the budget balance. Thus one of the major risks confronting the public authorities when developing the government's fiscal stance consists in basing their spending and revenue projections on faulty economic assumptions. Three innovations can mitigate this risk according to Blöndal (2003):

- To extensively consult various experts for determining the degree of uncertainty of economic conjuncture and therefore to what extent assumptions could be seen as prudent. Consultation with experts may be institutionalised by setting up permanent independent panels.
- To carry out a fiscal sensitivity analysis of the economic assumptions to estimate the impact of discrepancies between forecasts and actual fiscal outputs.
- To establish a contingency reserve fund to meet major forecasting errors in assumptions underlying the budget.

In the 2007 OECD questionnaire and the 2010 ENAP questionnaire, four questions (5, 6, 8 and 61) were dedicated to outlining similarities and differences related to this institutional feature. Thus, after assigning scores to the answers given by the IBC delegates and applying the same methodology to the *International Budget Practices and Procedures Database* of the OECD, results are presented in Figure 2.

Figure 2. **Prudent economic assumptions index**¹



1. On a scale of 0 to 1 – see Table A.1 in Annex 1. The OECD average is not based on official OECD statistics, but is calculated by the authors for the purpose of this article.

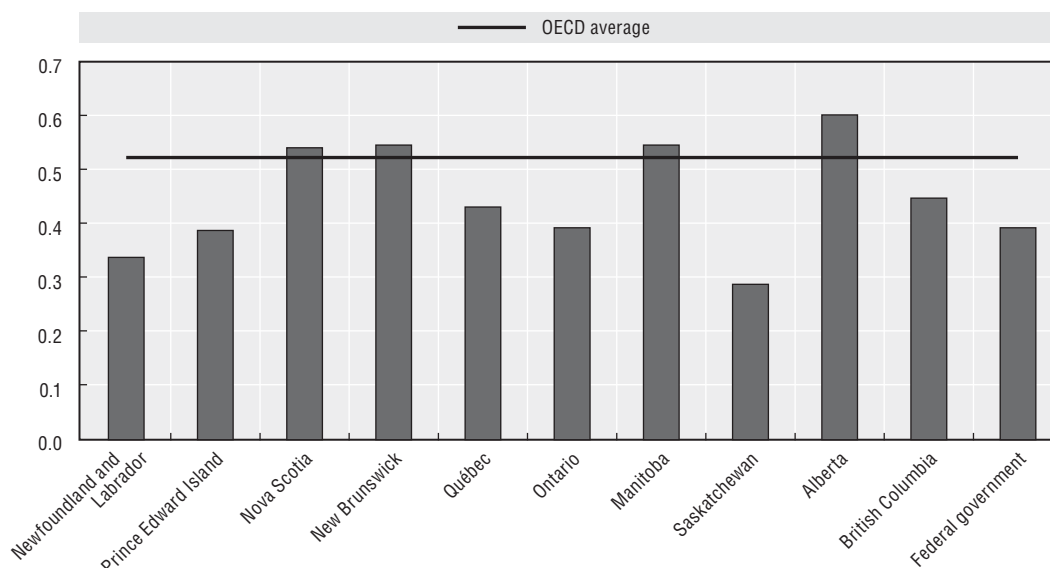
Practices related to the economic assumptions show great variations in Canada. Ontario scores the highest due to the existence of an independent panel mandated to review the budget's main economic assumptions, but also due to the comprehensiveness

of sensitivity analysis that this government is carrying out. In other words, Ontario has to be seen as an example of the prudence of economic assumptions within Canada but also at the international level. In British Columbia, a reserve fund representing 2% of the budget is strictly dedicated to meeting major forecasting errors. The federal government and the Québec government share the same practices on this topic, notably regarding consultations with experts from the private sector. Practices in Ontario then appear to be more innovative than what the Canadian federal government does. In the other Canadian governments, the Ministry of Finance is in charge of developing economic assumptions, and few or no tools have been set up for mitigating the negative consequences of optimistic forecasts.

6. Medium-term budget frameworks

The discrepancy between the traditional budget cycle within one year (see the annuality principle) and the resolution of policy problems leads to the incorporation of a medium-term perspective in the budget process. This medium-term perspective ensures that multi-year consequences of spending measures are considered in order to seek long-term fiscal objectives, and thus “lends stability and credibility to the government’s fiscal objectives” (Blöndal, 2003:10). In the 2007 OECD questionnaire and in the 2010 ENAP questionnaire, the same seven questions were asked of the OECD country delegates and of the Intergovernmental Budget Conference delegates. Those questions dealt with the characteristics of multi-year expenditure estimates and of multi-year targets or ceilings.

Figure 3. **Medium-term budget frameworks index**¹



1. On a scale of 0 to 1 – see Table A.2 in Annex 1. The OECD average is not based on official OECD statistics, but is calculated by the authors for the purpose of this article.

The analysis of the answers to the questionnaires reveals that the practice of using the medium-term perspective in budgeting was less frequent in Canada in 2010 compared to most of the OECD countries in 2007. One way of explaining this difference is that the use of multi-year targets or ceilings is not an extended practice in Canada. Governments in Canada generally took a political commitment toward fiscal moderation and refused to formally commit themselves to attain precise and quantitatively defined objectives in a

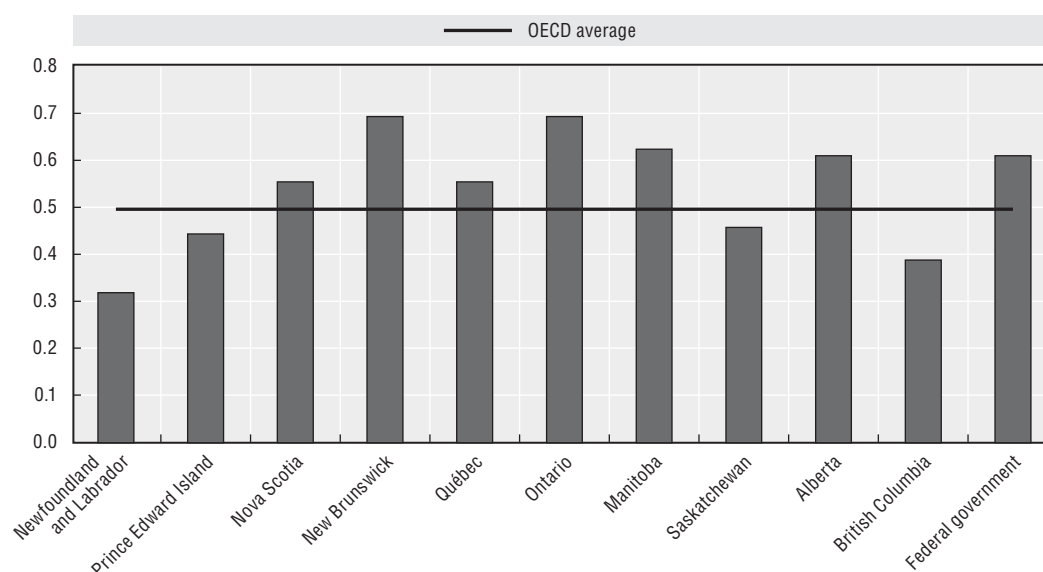
medium-term perspective. The federal government under Prime Minister Stephen Harper is notably illustrative of this tendency.

7. Top-down techniques and budget flexibility

For Kim and Park (2006:90): “In the top-down system, the first priority of the finance ministry lies in setting the fiscal management target for fiscal sustainability and ensuring compliance with this target, in contrast to the emphasis on allocating financial resources to individual appropriations in the bottom-up system.” In the meantime, experts recommend conciliating the top-down budgeting approach with the empowerment of line ministers and agency managers. Economic Policy Committee and European Commission (2007:136) assert, for instance: “The idea is that by giving the line ministers/agency managers wide latitude to operate as they find best within their ceilings, the right incentives are provided to allocate funds more efficiently.” In consequence, the implementation of the top-down approach has to be analysed as a counterpart of the flexibility given during the budget’s execution.

In 2010, six questions were asked concerning budget flexibility and top-down techniques as two sub-features. Top-down budgeting techniques can be observed on the basis of the ability of the central budget authority “to concentrate on setting the expenditure ceilings and controlling additional requests by setting rules, while line ministries are able to devote themselves to allocating financial resources efficiently to individual programmes within their assigned spending ceilings” (Kim and Park, 2006:91-92). Budget flexibility refers notably to the ability to reallocate funds between line items or to carry over any remaining budget allocations from one year to the next.

Figure 4. **Top-down techniques and budget flexibility index**¹



1. On a scale of 0 to 1 – see Table A.3 in Annex 1. The OECD average is not based on official OECD statistics, but is calculated by the authors for the purpose of this article.

On the basis of the 2010 ENAP questionnaire, most of the Canadian governments have a higher index concerning top-down techniques and flexibility than the average situation encountered in OECD countries. Scoring details give a more precise insight on how Canadian governments integrate both top-down budgeting and flexibility (see scoring

details in Annex 1). Except for the federal government and Québec, top-down techniques are significantly more valued than budget flexibility in Canada. This situation is due to the role played by the central budget authorities as guardians (Good, 2007). In Québec, both sub-features represent an equal part of this index, which means that top-down techniques and flexibility are identically present in the management practices of this government. The federal government is the most distinctive here because of the relative weakness of its top-down techniques compared to the high flexibility given to ministries and their managers. For example, in the federal government, reallocation between line items does not require any approval by the central budget authority.

8. Focus on results

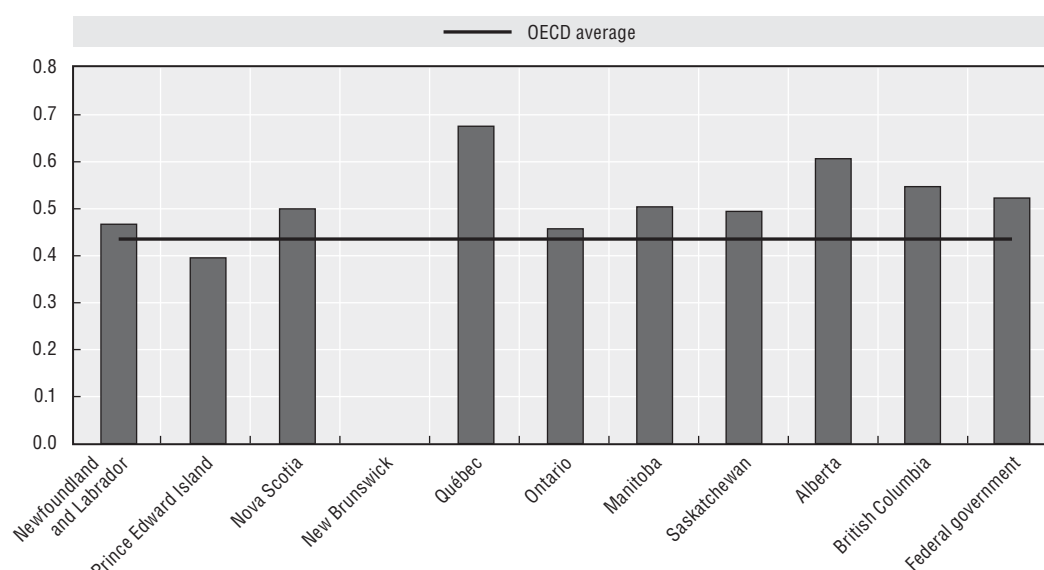
Performance-oriented budgeting refers to a set of procedures and practices whose objectives are to enhance the efficiency of public services, to use information in decision making and to guide the allocation of resources. The development of performance-oriented budgeting is closely linked with the will to evaluate public policies and programmes.

Following the OECD approach (OECD, 2007:20-21), different categories of performance-oriented budgeting shall be distinguished based on the proposed uses of formal performance information. Performance-oriented budgeting may be presentational in the sense that performance information is simply presented in budgeting documents or other government documents, and “does not play a role in decision making on allocations nor is it intended to do so”. Performance-informed budgeting is the second category where “resources are related either to proposed future performance or to performance results in an indirect manner. [...] Performance information is important in the decision-making process but it does not necessarily determine the amount of resources allocated. In this case, formal performance information is used to inform budget decisions along with other information pertaining to macro restrictions on fiscal policy and political and policy priorities.” The third category is direct performance budgeting where “funding is directly based on results achieved. This form of performance budgeting is used only in specific sectors in a limited number of OECD countries.”

Consistent with the latter observation, performance-oriented budgeting is generally of the second category in Canada – namely, performance-informed budgeting. For the purpose of highlighting the contrasts between Canadian governments, we retained only a few questions from the 2007 OECD questionnaire.¹⁰ We focused on the distribution of power related to performance-oriented budgeting and whether these practices are or are not coherently implemented on a government-wide scale.

In 2010, there was no performance-oriented budgeting in New Brunswick. There was no authority in charge of producing and disseminating information related to performance in this province. At the opposite end of the spectrum, the government of Québec has implemented several measures, following the enactment of the Law on Public Administration in 2001, to use performance-related information in its budgeting process. With the exception of these two most contrasting cases, the other Canadian governments were close to or above the OECD average.¹¹

Those data confirm a certain moderation in Canada toward performance budgeting: even though the great majority of Canadian governments have developed processes to better manage the efficiency of their public services, those processes are decentralised at the level of the ministries and agencies, which limits the ability of the various Canadian

Figure 5. **Focus on results index**¹

1. On a scale of 0 to 1 – see Table A.4 in Annex 1. The OECD average is not based on official OECD statistics, but is calculated by the authors for the purpose of this article.

governments to truly monitor their budgeting performance. The federal government is representative of this moderate approach about performance budgeting. Federal delegates to the Intergovernmental Budget Conference stated that between 81% and 100% of ministries and federal agencies were using performance targets and programme evaluations. But the collected information was dedicated to guide decision making at the departmental level (reallocation of resources within departmental credits) and not at the governmental level. Performance-oriented budgeting is thus a management issue in Canada principally concerning line ministers and their deputy ministers.

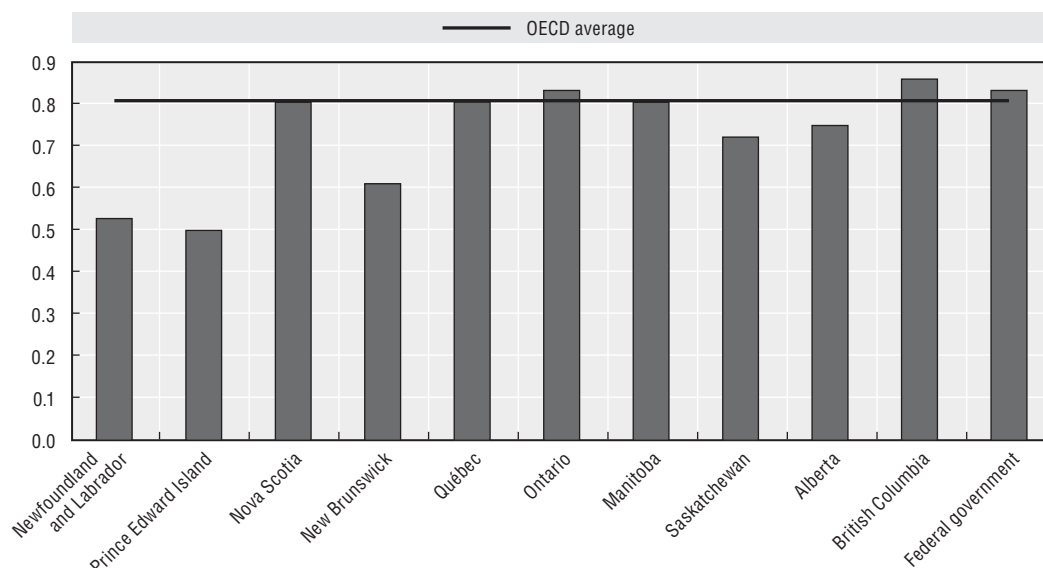
9. Budget transparency

Budget transparency refers to the extent to which the public is informed of the fiscal policies and spending priorities so that they can be understood, monitored and evaluated. In the 2007 OECD questionnaire and the 2010 ENAP questionnaire, budget disclosures act as indicators of budget transparency. More precisely, four types of disclosures were examined to better understand whether the public is properly informed:

- the documents presented by the executive to the legislature for approval;
- the frequency of in-year reporting;
- the public availability of audit reports;
- the delay in the publication of audit reports.

In the 2010 ENAP questionnaire, each of these four types of disclosures refers to a question. Since *Government at a Glance 2009* (OECD, 2009) does not give any indication on how to calibrate results through a scoring table, we determined a scoring scale based on CABRI (2008).

The performance of Canadian governments relating to budget transparency can be deemed as surprising. On the one hand, some Canadian governments score high, and close to the average situation observed among OECD countries. This is consistent with the

Figure 6. **Budget transparency index**¹

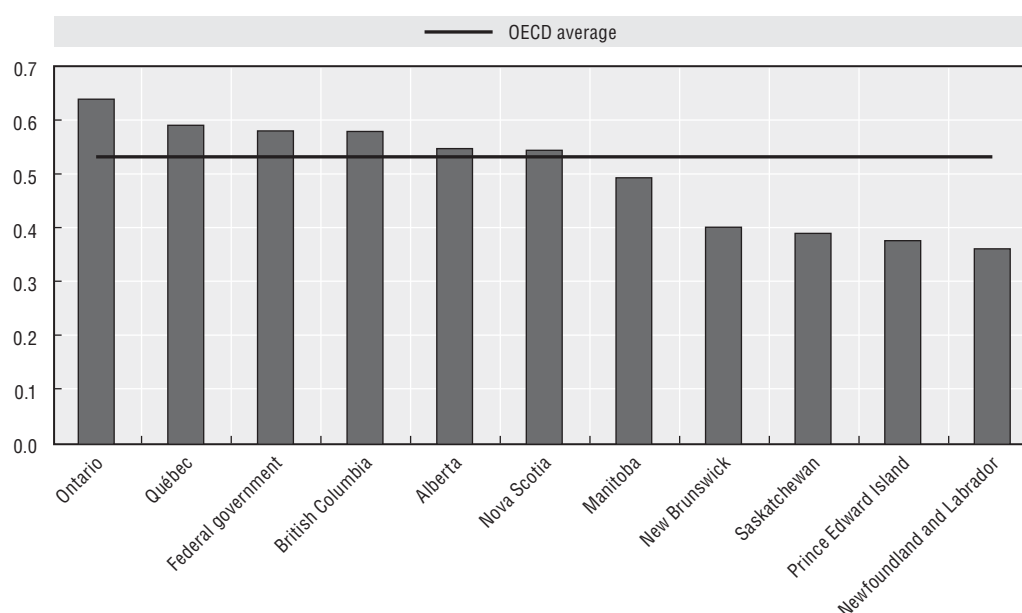
1. On a scale of 0 to 1 – see Table A.5 in Annex 1. The OECD average is not based on official OECD statistics, but is calculated by the authors for the purpose of this article.

significant role played by parliaments in the budgeting process in Canada and with the political status given to the budgeting process in Canadian politics. British Columbia's score is the highest (0.86), followed by Ontario (0.83) and the federal government (0.83), which are significantly higher than the average situation in Canada (0.73). On the other hand, three provincial governments (Newfoundland and Labrador, Prince Edward Island, and New Brunswick) have practices and procedures that reveal a lesser interest in diffusing information regularly and comprehensively on budget matters. Indeed, detailed analysis of the reported answers shows that in-year reporting is less frequent in these provinces.

10. Conclusion

In this article, we sought to determine whether all Canadian governments adopt proper institutional arrangements for budgeting. Even if the seriousness of fiscal issues greatly varies from province to province, this question is crucial because of the major role played by provincial governments in public governance in Canada. This question is also pertinent because the Canadian federation, by design, grants significant autonomy to the federal and provincial governments in their adoption of public management practices and procedures. Conditions are thus favourable for significant variations within Canada relative to the adoption of practices recognised at the international level as being efficient for budget performance.

Between the minima (Newfoundland and Labrador with 0.36) and the maxima (Ontario with 0.64), the data show the foreseen significant variations of the overall index. Furthermore, we observed that the link between this overall index and the size of provinces, based on their population, is strong ($r = 0.8$). Indeed, the four most-populated provinces (Ontario, Québec, British Columbia, and Alberta), representing 86% of the Canadian population, adopted budget practices and procedures compatible with general objectives of fiscal discipline as outlined in this article, thus confirming the hypothesis that governments delivering massive public services are the most innovative in institutional

Figure 7. **Overall index**¹

1. The overall index is the average of the five preceding indexes: prudent economic assumptions; medium-term budget frameworks; top-down techniques and budget flexibility; focus on results; budget transparency. The OECD average is not based on official OECD statistics, but is calculated by the authors for the purpose of this article.

budget matters. In contrast, some of the smallest provinces were shown to be less active in implementing lessons drawn by international comparisons.¹²

The governments of these four most-populated Canadian provinces are facing very different problems regarding long-term fiscal discipline. For example, Québec and British Columbia present similar overall indexes but, as shown in Figure 1, the latter has a public debt ratio three times smaller than the former. Alberta presents the best fiscal outputs in the Canadian federation, with no public debt. Its overall index is nevertheless significantly lower than that of Ontario. The comparison of Alberta and Ontario is a reminder that “well-functioning budget institutions are fundamental to supporting economic growth, improving fiscal health, and achieving stable taxes and intergenerational fairness” (OECD, 2009:85), but those institutional arrangements are not sufficient conditions for good fiscal outcomes (Blöndal, 2003).

Nonetheless, a high overall index does not necessarily mean that governments properly keep control of their finances. In the aftermath of the 2008-09 economic crisis, the estimated budget deficit in Ontario for 2011-12 was, for instance, CAD 15.3 billion (2.4% of provincial GDP) and CAD 15.2 billion for 2012-13. Notwithstanding the size of budget deficits, the adoption by the Ontario government of institutional arrangements recognised as being consistent with fiscal discipline brought credibility to its plan to balance its budget by 2017-18.¹³

In our study, the Canadian federal government regularly occupied a medium position in the adoption of good budgeting practices. Some provincial governments adopted fiscal arrangements that were more consistent with OECD best practices than those adopted by the Canadian federal government. Practices in Ontario and British Columbia relating to how economic assumptions are made could notably be a model for innovations within Canada but also at the international level.

Considering both the *Strategic Reviews* process started in 2007¹⁴ and the vitality of the Canadian economy, partly boosted by non-renewable natural resources exploitation, the good reputation of the Canadian federal government would not come from the comprehensive adoption of OECD best practices, but rather from the synergy between the three factors of good fiscal outcomes as defined by Blöndal (2003): a strong political commitment, a satisfactory general performance of the economy, and some proper institutional arrangements for budgeting. The federal government does present some significant institutional arrangements for efficient budgeting, like practices of budget transparency and of budget flexibility, but these institutional innovations reach their full potential thanks to complementary effects between the political and the economic dimensions of budgeting.

Our analysis confirms the fundamental importance of good governance and its highly contextual features (Andrews, 2010), even in a federal framework. This conclusion invites us to further our understanding of the historical patterns that encourage governments to move towards more efficient budget practices.

Notes

1. There are 14 governments in Canada: the federal government (officially called “Government of Canada”), the governments of the ten provinces (Newfoundland and Labrador; Prince Edward Island; Nova Scotia; New Brunswick; Québec; Ontario; Manitoba; Saskatchewan; Alberta; and British Columbia), and finally the governments of the three territories (Yukon; Northwest Territories; and Nunavut). Their respective acronyms are: Fed, NFL, PEI, NS, NB, Qc, On, Mb, Sk, Alb, BC, Yk, NWT, and Nu. Territorial governments enjoy a lesser degree of autonomy in the area of public management, particularly on account of federal prerogatives regarding the supervision of their management practices. In this article, the comparison therefore focuses on the federal government level and the provincial government level.
2. For more details about the political and administrative system in Canada, see OECD (2004).
3. To our knowledge, before this research, no survey gathered primary data concerning all 14 Canadian governments with such a degree of exhaustivity. The study by Kennedy and Robbins (2004) was the closest to the one presented in this article. The articles by Ter-Minassian (2006) and by Alderete (2007) also deserve mention due to the scarcity of studies on budgeting from a sub-national point of view.
4. The four most-populated provinces of Canada (Ontario, Québec, British Columbia and Alberta) are comparable in size to some “small” countries of the OECD. In 2012, the most populated province of Canada – Ontario – had 13.5 million inhabitants. Table 1 gives details on the distribution of the Canadian population between provinces.
5. OECD/Korea Institute of Public Finance (2012) stated that more than half of the total government debt in Canada was under provincial responsibilities. Charland (2011) pointed out that, although the *Program Review* had a clear positive impact on the federal public finances, its impact on provincial public finances nourished controversies related to fiscal imbalance between the federal and provincial levels of government.
6. In Canada, co-ordination between federal, provincial, and territorial governments is partly assumed by numerous intergovernmental conferences (Simmons, 2004) gathering ministers or civil servants. One of those sectoral conferences deals with fiscal policies and budget management: the annual Intergovernmental Budget Conference (IBC) that brings together once a year senior civil servants from the Treasury Boards and Ministries of Finance of the 14 Canadian governments.
7. Visit the “Canadian Governments Compared” website at: <http://etatscanadiens-canadiangovernments.enap.ca/en/nav.aspx?sortcode=2.0.4.1>.
8. Based on Blöndal (2003), we retained questions about the prudence that characterises (or not) economic assumptions for budgeting. We also integrated “top-down budgeting techniques” and “relaxing central input controls” features in a unique feature called “top-down techniques and budget flexibility”. Based on the statement of Blöndal (2003:10) that institutional features “do in fact build on each other and must be seen as a package”, we considered that a trade-off has to be

made between budget flexibility and top-down budgeting with the purpose of allowing managers to be empowered while defining government-wide fiscal targets. We finally did not retain the “modern financial management practices” feature because of foreseen strong similarities between governments in Canada that would add no value for comparing.

9. See Annex 1 dedicated to methodological considerations.
10. The retained OECD questions are the following: 77, 78, 80, 82, 83, 84 and 87. Questions 71, 72, 73, 79, 81, 85 and 86 were not included in the questionnaire that was distributed to the IBC delegates in 2010.
11. The OECD average is not based on official OECD statistics, but is calculated by the authors for the purpose of this article.
12. A notable exception is Nova Scotia. Without this province, the link between the overall index and the size of the provinces is stronger ($r = 0.87$).
13. For further details, see www.fin.gov.on.ca/en/budget/ontariobudgets/2012/ch2e.html.
14. According to the Treasury Board of Canada Secretariat: “The strategic review process is an effective tool to help control the growth of spending. It is a mechanism that allows the government to reallocate funding from low-priority, low-performing programs to higher priorities for Canadians based on a comprehensive review of all programs.” For further details, see www.tbs-sct.gc.ca/sr-es/index-eng.asp.

References

- Alderete, J.C. (2007), *Budget Practices and State Expenditures: Lessons for California*, Public Policy Institute of California, San Francisco, United States, www.ppic.org/content/pubs/report/R_307JCR.pdf.
- Andrews, M. (2010), “Good Government Means Different Things in Different Countries”, *Governance*, 23(1):7-35.
- Bennett, C. (1991), “What is Policy Convergence and what Causes it?”, *British Journal of Political Science*, 21(2):215-233.
- Bevir, M. and R.A.W. Rhodes (2003), *Interpreting British Governance*, Routledge, London.
- Blöndal, J.R. (2001), “Budgeting in Canada”, *OECD Journal on Budgeting*, 1(2):39-82, <http://dx.doi.org/10.1787/budget-v1-art10-en>.
- Blöndal, J.R. (2003), “Budget Reform in OECD Member Countries: Common Trends”, *OECD Journal on Budgeting*, 2(4):7-25, <http://dx.doi.org/10.1787/budget-v2-art20-en>.
- CABRI (Collaborative Africa Budget Reform Initiative) (2008), *Budget Practices and Procedures in Africa*, Pretoria, www.cabri-sbo.org/en/programmes/budget-practices-and-procedures/48-publicationsanddocuments.
- Charland, G. (2011), *Cycles partisans, transferts fédéraux et autonomie des provinces au Canada (1983-2008)*, thèse en science politique, Université Laval, Québec, Canada.
- Cliche, P. (2009), *Gestion budgétaire et dépenses publiques : description comparée des processus, évolutions et enjeux budgétaires du Québec*, Presses de l’Université du Québec, Sainte-Foy, Québec, Canada.
- Economic Policy Committee and European Commission (2007), “Public Finances in EMU”, *European Economy*, Special Report No. 3, Commission of the European Communities, Luxembourg, http://ec.europa.eu/economy_finance/publications/publication338_en.pdf.
- Good, D. (2007), *The Politics of Public Money: Spenders, Guardians, Priority Setters, and Financial Watchdogs inside the Canadian Government*, University of Toronto Press, Toronto, Ontario, Canada.
- Imbeau, L., R. Landry, H. Milner, F. Pétry, J. Crête, P.G. Forest and V. Lemieux (2000), “Comparative Provincial Policy Analysis: A Research Agenda”, *Canadian Journal of Political Science/Revue canadienne de science politique*, 33(4):779-804.
- Institut de la statistique du Québec et Secrétariat aux affaires intergouvernementales du Québec (2012), *Tableau statistique canadien*, Vol. 10, No. 2, www.stat.gouv.qc.ca/publications/comparaisons_econo/tsc.htm.
- Joyce, M. (2011), “Performance Information and Innovation in the Canadian Government”, in A. Graham (ed.), *Innovations in Public Expenditure Management: Country Cases from the Commonwealth*, Institut d’administration publique du Canada, Commonwealth Secretariat, Toronto, Ontario, Canada, pp. 13-28.
- Kennedy, S. and J. Robbins (2004), “The Role of Fiscal Rules in Determining Fiscal Performance: The Canadian Case”, *International Journal of Public Budget*, www.asip.org.ar/en/revistas/56/dpfc/dpfc_04.php.

- Kim, J.M. and C.K. Park (2006), "Top-Down Budgeting as a Tool for Central Resource Management", *OECD Journal on Budgeting*, 6(1):87-125, <http://dx.doi.org/10.1787/budget-v6-art4-en>.
- King, G., R.O. Keohane and S. Verba (1994), *Designing Social Inquiry: Scientific Inference in Qualitative Research*, Princeton University Press, Princeton, New Jersey, United States.
- Mahon, R. and S. McBride (2008), *The OECD and Transnational Governance*, UBC Press, Vancouver, British Columbia, Canada.
- OECD (2004), "Case Studies of Selected OECD Countries: Canada", *OECD Journal on Budgeting*, 4(3) (Special Issue, "The Legal Framework for Budget Systems: An International Comparison"), pp. 157-183, <http://dx.doi.org/10.1787/budget-v4-art17-en>.
- OECD (2007), "Performance Information in the Budget Process: An Overview of OECD Country Experiences", Part I in *Performance Budgeting in OECD Countries*, OECD Publishing, Paris, pp. 17-85, <http://dx.doi.org/10.1787/9789264034051-3-en>.
- OECD (2009), *Government at a Glance 2009*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264075061-en>.
- OECD (2010), "Restoring Fiscal Sustainability: Lessons for the Public Sector", OECD, Paris, www.oecd.org/governance/budgeting/44473800.pdf.
- OECD/Korea Institute of Public Finance (2012), "Institutional and Financial Relations Across Levels of Government", *OECD Fiscal Federalism Studies*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264167001-en>.
- Przeworski, A. and H. Teune (1970), *The Logic of Comparative Social Inquiry*, Wiley – Interscience, New York, United States.
- Sartori, G. (1991), "Comparing and Miscomparing", *Journal of Theoretical Politics*, 3(3):243-257.
- Simmons, J.M. (2004), "Securing the Threads of Co-Operation in the Tapestry of Intergovernmental Relations: Does the Institutionalization of Ministerial Conferences Matter?", in J.P. Meekison et al. (eds.), *Reconsidering the Institutions of Canadian Federalism. Canada: The State of the Federation 2002*, Institute of Intergovernmental Relations, Queen's University, Kingston, Ontario, Canada.
- Tellier, G. (2011), "L'étude comparée des politiques publiques provinciales : un laboratoire à explorer", *Politique et sociétés*, 30(1):95-115.
- Ter-Minassian, T. (2006), "Fiscal Rules for Sub-National Governments: Can They Promote Fiscal Discipline?", *OECD Journal on Budgeting*, 6(3):111-121, <http://dx.doi.org/10.1787/budget-v6-art17-en>.
- Wiseman, N. (2007), *In Search of Canadian Political Culture*, UBC Press, Vancouver, British Columbia, Canada.

ANNEX 1

Retained questions and scoring details

General considerations

According to the approach used by the Economic Policy Committee and the European Commission (2007) for comparing budgetary procedures within the European Union (see page 131 of the chapter “Strengthening budgetary procedures”), a minimum of four questions were selected for each of the five features analysed. In order to have a numerical representation, a score between 0 (lowest) and 1 (highest) was given to answers from the delegates to the annual Intergovernmental Budget Conference (IBC) in Canada. For each feature, a numerical index was constructed as a weighted average. In the absence of an empirical or strong theoretical basis to assign a particular weighting, all questions received equal weight. When several answers could be given, the highest score was retained.

Prudent economic assumptions

Q.5 and 6: Existence of independent reviews of economic assumptions:

- no independent review or consultation: 0;
- assumptions formulated by the government but after holding consultations with experts from non-governmental organisations: 0.5;
- assumptions formulated or reviewed by an independent panel: 1.

Q.8: Fiscal sensitivity analysis of the economic assumptions in the budget documentation:

- no analysis: 0;
- yes, but only for selected activities: 0.5;
- yes, comprehensive analysis: 1.

Q.61: Central reserve funds to meet unforeseen expenditures:

- no reserve: 0;
- yes, to meet general unforeseen expenditures or finance new policy initiatives: 0.5;
- yes, to meet major forecasting errors in macroeconomic and other assumptions underlying the budget: 1.

Table A.1. **Prudent economic assumptions**

2007 OECD questions	5 and 6	8	61	Total
2010 ENAP questions	5 and 6	8	61	
<i>Weighting</i> ¹	<i>1/3</i>	<i>1/3</i>	<i>1/3</i>	<i>1</i>
Newfoundland and Labrador	0.50	0.00	0.00	0.17
Prince Edward Island	0.00	0.00	0.50	0.17
Nova Scotia	1.00	0.00	0.00	0.33
New Brunswick	0.00	0.00	0.50	0.17
Québec	0.50	0.50	0.50	0.50
Ontario	1.00	1.00	0.50	0.83
Manitoba	0.00	0.00	0.00	0.00
Saskatchewan	0.00	0.00	0.00	0.00
Alberta	0.00	0.50	0.00	0.17
British Columbia	0.00	1.00	1.00	0.67
Federal government	0.50	0.50	0.50	0.50
OECD average ²	0.48	0.30	0.42	0.40

1. Equal weighting following Economic Policy Committee and European Commission (2007), "Public Finances in EMU", *European Economy*, Special Report No. 3, Commission of the European Communities, Luxembourg.

2. The OECD average is not based on official OECD statistics, but is calculated by the authors for the purpose of this article.

Medium-term budget frameworks

Q.16: Multi-year expenditure estimates in the annual budget:

- no: 0;
- yes, at the aggregate level: 0.33;
- yes, at the ministry level: 0.66;
- yes, at the line-item level: 1.

Q.17: Number of years covered by the multi-year expenditure estimates:

- 2 years: 0;
- 3 years: 0.2;
- 4 years: 0.4;
- 5 years: 0.6;
- 6 years: 0.8;
- 7 years: 1.

Q.18: Frequency of estimates updates:

- no updates: 0;
- every 10 years: 0.2;
- every 4 years: 0.4;
- every 3 years: 0.6;
- every 2 years: 0.8;
- annually (and more frequently than annually): 1.

Q.19: Manner to extrapolate estimates: six choices, with a score of 0.167 for each item.

Q.20: Existence of multi-year targets or ceilings:

- no targets or ceilings: 0;
- yes, there are aggregate targets or ceilings: 0.33;

- yes, there are targets or ceilings for each ministry: 0.66;
- yes, there are aggregate targets or ceilings at the line-item level: 1.

Q.21: Coverage of multi-year targets or ceilings:

- no targets or ceilings: 0;
- between 2 and 5 years: 1.

Q.22: Frequency of revision of multi-year targets or ceilings:

- no targets or ceilings: 0;
- every year: 0.2;
- every 2 years: 0.4;
- every 3 years: 0.6;
- every 4 years: 0.8;
- every 10 years: 1.

Table A.2. Medium-term budget frameworks

2007 OECD questions	16	17	18	19	20	21	22	Total
2010 ENAP questions	16	17	18	19	20	21	22	
<i>Weighting¹</i>	<i>1/6</i>	<i>1/6</i>	<i>1/6</i>	<i>1/6</i>	<i>1/9</i>	<i>1/9</i>	<i>1/9</i>	<i>1</i>
Newfoundland and Labrador	0.33	0.20	1.00	0.50	0.00	0.00	0.00	0.34
Prince Edward Island	1.00	0.00	1.00	0.33	0.00	0.00	0.00	0.39
Nova Scotia	0.33	0.40	1.00	0.50	0.33	1.00	0.20	0.54
New Brunswick	0.33	0.60	1.00	0.33	0.33	1.00	0.20	0.55
Québec	0.33	0.60	1.00	0.66	0.00	0.00	0.00	0.43
Ontario	0.66	0.20	1.00	0.50	0.00	0.00	0.00	0.39
Manitoba	0.33	0.60	1.00	0.33	0.33	1.00	0.20	0.55
Saskatchewan	0.33	0.40	1.00	0.00	0.00	0.00	0.00	0.29
Alberta ²	0.66	0.20	1.00	0.00	0.66	1.00	0.20	0.60
British Columbia	0.66	0.20	1.00	0.83	0.00	0.00	0.00	0.45
Federal government	0.33	0.20	1.00	0.83	0.00	0.00	0.00	0.39
OECD average ³	0.62	0.31	0.96	0.46	0.32	0.60	0.25	0.52

1. Based on OECD (2009), *Government at a Glance 2009*, OECD Publishing, <http://dx.doi.org/10.1787/9789264075061-en> and its Annex C.
2. The data for Alberta come from the *Government Accountability Act* and the publication *Ministry Business Plans 2010* (available at www.finance.alberta.ca/publications/budget/budget2010/contacts.pdf). Answers to Question 19 were not found.
3. The OECD average is not based on official OECD statistics, but is calculated by the authors for the purpose of this article.

Top-down techniques and budget flexibility

Q.23: Imposition of ceilings for each ministry's initial spending request:

- no limits: 0;
- only indicative limits: 0.33;
- only for some types of expenditure: 0.66;
- for all types of expenditure: 1.

Q.24: Type of information contained in the annual budget circular: four choices, with a score of 0.25 for each item.

Q.26: Resolution of disputes between line ministries and the central budget authority:

- by the Minister of Finance or Treasury Board: 0.25;

- by the Prime Minister (or Premier): 0.5;
- by a ministerial committee: 0.75;
- by the Cabinet: 1.

Q.49: Extent to which lump-sum appropriations are used:

- no lump-sum appropriations: 0;
- yes, for operating expenditures with a sub-limit on wages (0.25) or without sub-limits (0.5);
- yes, for operating and capital expenditures with a sub-limit on wages (0.75) or without sub-limits (1).

Q.51: Reallocation between line items:

- no: 0;
- yes, with the approval of the legislature: 0.33;
- yes, with central budget authority approval case by case: 0.5;
- yes, with codified and clear restrictions: 0.66;
- yes, no central budget authority approval required: 1.

Q.53.1: Ministry/agency ability to carry over budget allocations for operating expenditures from one year to another:

- no: 0;
- yes, with the approval of the legislature: 0.33;
- yes, with central budget authority approval case by case: 0.5;
- yes, with codified and clear restrictions: 0.66;
- yes, without restriction: 1.

Table A.3. Top-down techniques and budget flexibility

2007 OECD questions	23	24	26	49	53	54	Total
2010 ENAP questions	23	24	26	49	51	53.1	
<i>Weighting¹</i>	<i>1/6</i>	<i>1/6</i>	<i>1/6</i>	<i>1/6</i>	<i>1/6</i>	<i>1/6</i>	<i>1</i>
Newfoundland and Labrador	0.66	0.25	0.50	0.00	0.50	0.00	0.32
Prince Edward Island	1.00	0.25	0.75	0.00	0.66	0.00	0.44
Nova Scotia	0.33	0.50	1.00	0.50	1.00	0.00	0.56
New Brunswick	1.00	0.50	1.00	1.00	0.66	0.00	0.69
Québec	0.66	0.50	0.50	0.00	0.66	1.00	0.56
Ontario	1.00	0.50	1.00	1.00	0.66	0.00	0.69
Manitoba	1.00	0.75	1.00	0.50	0.50	0.00	0.62
Saskatchewan	1.00	1.00	0.25	0.00	0.50	0.00	0.46
Alberta	0.00	1.00	1.00	1.00	0.66	0.00	0.61
British Columbia	0.33	0.75	0.25	0.00	1.00	0.00	0.39
Federal government	0.00	0.50	0.50	1.00	1.00	0.66	0.61
OECD average ²	0.47	0.53	0.57	0.42	0.49	0.49	0.50

1. This index is constructed from two sub-indexes of equal weight (top-down techniques: 50%; budget flexibility: 50%). See also OECD (2009), *Government at a Glance 2009*, OECD Publishing, <http://dx.doi.org/10.1787/9789264075061-en>, Annex C, pp. 19-21.

2. The OECD average is not based on official OECD statistics, but is calculated by the authors for the purpose of this article.

Focus on results

Q.71.1: Authority responsible for setting performance targets. Considering that some answers presented in the 2007 OECD questionnaire (president, parliament, international organisation) are not taken into account, the relative weight of the answers has been adjusted as follows:

- none: 0;
- deputy minister: 0.25;
- line minister: 0.50;
- central budget authority: 0.75;
- government, Prime Minister (or Premier): 1.

Q.71.2: Authority responsible for achieving performance targets:

- none: 0;
- deputy minister: 0.25;
- line minister: 0.50;
- central budget authority: 0.75;
- government, Prime Minister (or Premier): 1.

Q.76: Authority to which line ministers are required to report about performance information:

- internally within the relevant ministry: 0.166;
- central budget authority: 0.5;
- Cabinet: 0.66;
- Prime Minister's Office (or Premier's Office): 0.83;
- legislature and supreme audit institution: 1.

Q.77: Disclosure of performance against targets: multiple-choice question proposing six different ways of informing the public about performance against targets. Each way has a weighted score of 0.166 and the final score is the sum.

Q.78: Frequency of use of performance information. Multiple-choice question: for each of the possible choices of authority (Prime Minister or Premier; government; Minister of Finance; Treasury Board; line minister; budget committee in the legislature; sectoral committee in the legislature), the request was for the frequency (in %) of use of performance information in budgetary decision making (the index is a weighted average):

- 0-20%: 0.2;
- 21-40%: 0.4;
- 41-60%: 0.6;
- 61-80%: 0.8;
- 81-100%: 1.

Q.79.1: Frequency of use of "performance achieved against targets" by the central budget authority in order to determine budget allocations:

- 0-20%: 0.2;
- 21-40%: 0.4;
- 41-60%: 0.6;

- 61-80%: 0.8;
- 81-100%: 1.

Table A.4. **Focus on results**

2007 OECD questions	77	78	80	82	87	83	Total
2010 ENAP questions	71.1	71.2	76	77	78	79.1	
<i>Weighting¹</i>	<i>1/6</i>	<i>1/6</i>	<i>1/6</i>	<i>1/6</i>	<i>1/6</i>	<i>1/6</i>	<i>1</i>
Newfoundland and Labrador	0.50	0.50	1.00	0.17	0.43	0.20	0.47
Prince Edward Island	0.50	0.50	1.00	0.17	0.20	0.00	0.39
Nova Scotia	0.50	0.50	1.00	0.33	0.46	0.20	0.50
New Brunswick	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Québec	0.50	0.50	1.00	0.50	0.94	0.60	0.67
Ontario	0.50	1.00	0.50	0.17	0.37	0.20	0.46
Manitoba	0.50	0.50	1.00	0.50	0.51	0.00	0.50
Saskatchewan	0.50	0.50	1.00	0.50	0.26	0.20	0.49
Alberta	1.00	0.50	1.00	0.50	0.43	0.20	0.60
British Columbia	0.50	0.50	1.00	0.50	0.17	0.60	0.55
Federal government	0.50	0.50	1.00	0.50	0.43	0.20	0.52
OECD average ²	0.61	0.43	0.66	0.24	0.30	0.35	0.43

1. This index is based on the approach used in OECD (2009) even though the variables comprising the composites and their weights are not exactly similar. The index referred to six questions, each of them receiving an equal weight of 1/6. See OECD (2009), *Government at a Glance 2009*, OECD Publishing, <http://dx.doi.org/10.1787/9789264075061-en>, Annex C, pp. 15-19.
2. The OECD average is not based on official OECD statistics, but is calculated by the authors for the purpose of this article.

Budget transparency

Q.35: Budget presented to the legislature. Each of the 12 items receives an equally weighted score of 0.083:

- no information: 0;
- full information: 1.

Q.56: Frequency of in-year reporting:

- not at all, or on an *ad hoc* basis: 0;
- annually: 0.333;
- quarterly/every six months: 0.666;
- weekly/monthly: 1.

Q.68: Public availability of audit reports:

- never/rarely: 0;
- yes, in most cases but some exceptions: 0.5;
- yes, always: 1.

Q.69: Delay in publication of audit reports:

- not published: 0;
- more than 12 months: 0.5;
- between 1 and 12 months: 1.

Table A.5. **Budget transparency**

2007 OECD questions	35	56	69	70	Total
2010 ENAP questions	35	56	68	69	
<i>Weighting¹</i>	<i>1/3</i>	<i>1/3</i>	<i>1/6</i>	<i>1/6</i>	<i>1</i>
Newfoundland and Labrador	0.58	0.00	1.00	1.00	0.53
Prince Edward Island	0.50	0.00	1.00	1.00	0.50
Nova Scotia	0.75	0.66	1.00	1.00	0.81
New Brunswick	0.50	0.33	1.00	1.00	0.61
Québec	0.42	1.00	1.00	1.00	0.81
Ontario	0.83	0.66	1.00	1.00	0.83
Manitoba	0.75	0.66	1.00	1.00	0.81
Saskatchewan	0.50	0.66	1.00	1.00	0.72
Alberta	0.58	0.66	1.00	1.00	0.75
British Columbia	0.92	0.66	1.00	1.00	0.86
Federal government	0.50	1.00	1.00	1.00	0.83
OECD average ²	0.62	0.86	0.78	0.97	0.81

1. Equal weighting following CABRI (Collaborative Africa Budget Reform Initiative) (2008), *Budget Practices and Procedures in Africa*, Pretoria, www.cabri-sbo.org/en/programmes/budget-practices-and-procedures/48-publicationsanddocuments, p. 33.

2. The OECD average is not based on official OECD statistics, but is calculated by the authors for the purpose of this article.

The reconciliation of primary accounting data for government entities and balances according to statistical measures: The case of the European Excessive Deficit Procedure Table 2

by
Giovanna Dabbicco*

This article examines the scope and size of adjustments made by statisticians on source data from public accounting systems in EU member states to reach harmonised statistical measures. The article focuses on EDP Table 2 which shows the reconciliation from cash/cash modified or accrual public accounting to ESA 95, analyses the potential changes needed to EDP Table 2 if public accounting is on a full accrual/IPSAS basis, and proposes a possible way forward for better reconciling the relevant reporting balances. The analysis takes into account the study carried out by the European Commission report on the “Suitability of International Accounting Standards for the Public Sector (IPSAS) for the EU member states”, and the differences between statistical reporting and IPSAS highlighted by IPSASB in the consultation paper on “IPSASs and Government Finance Statistics”.

JEL classification: H83, H61, H62, E62, E63

Keywords: Fiscal policy, public accounting, statistics, reconciliation, EDP working balance, EDP tables, excessive deficit procedure, IPSAS, international public sector accounting standards, GFS, government finance statistics

* Giovanna Dabbicco is a researcher/statistician at the Italian Statistical Office (ISTAT), Directorate of National Accounts, Rome, Italy. She is a former temporary agent at the European Commission, DG Eurostat, Luxembourg, where she was a member of the team leading the project on “Suitability of IPSAS for EU Member States”. An earlier version of this article was presented at the 13th OECD accruals meeting held in Paris on 7 March 2013. The interpretations and opinions are solely those of the author. The opinions expressed and arguments employed in this article do not necessarily reflect the official views of ISTAT or Eurostat or the OECD or of the governments of OECD member countries.

Acronyms

EDP	Excessive Deficit Procedure
EFSS	European Financial Stability Facility
ESA 95	European System of Accounts 1995 (Eurostat)
EU	European Union
GDP	Gross domestic product
GFCF	Gross fixed capital formation
GFS	Government finance statistics (International Monetary Fund)
IFRS	International Financial Reporting Standards
INE	Spanish Statistical Office (<i>Instituto Nacional de Estadística</i>)
IPSAS	International Public Sector Accounting Standards
IPSASB	International Public Sector Accounting Standards Board
ISTAT	Italian Statistical Office (<i>Istituto nazionale di statistica</i>)
PPP	Public-private partnerships
R&D	Research and development
SNA 93	System of National Accounts 1993 (United Nations)

1. Background

Fiscal policy in the European Union (EU) – notably the Excessive Deficit Procedure (EDP) – relies on statistical measures to ensure comparable data between member states. The statistical measures for deficit and debt derive from the European System of Accounts (ESA), itself a European legal act. The ESA is almost fully consistent with the worldwide System of National Accounts. ESA 95 is an accruals-based system with balance sheets and flow accounts in a complete and consistent structure.

Since public accounting systems in EU member states are very heterogeneous – both between countries and within countries (at different levels of government or for different types of bodies) – statisticians must take source data from these accounting systems and make appropriate adjustments to reach harmonised statistical measures.

The scope and size of these adjustments are highly dependent on the underlying public accounting system, and notably if this system is based on accruals or cash-based principles (or something in between).

In order to provide a clear link between public accounting and statistical data, EU member states are required to transmit reconciliation tables to Eurostat twice per year, as part of a package of reported information which allows Eurostat to assess the quality of key aggregates such as deficit and debt. These reconciliation tables are known as “EDP Table 2” (divided by four sub-sectors of government), and they formally provide the link between

the so-called “working balances” (i.e. the public deficit as reported nationally to parliaments, and ideally audited) and the net lending/net borrowing in ESA 95 terms for each sub-sector.

While the tables were largely based on cash-based public accounts when they were first designed in the early 1990s, the growing adoption of public accruals accounting in the EU means that the nature of the required adjustments has been changing. This article analyses EDP Table 2 and examines what types of adjustments would be necessary if the starting point were to be a fully accrual-based system, for example IPSAS.

2. Moving the current reconciliation in EDP Table 2 from working balance to EDP deficit

The starting point of EDP Table 2 is the working balance, as described above. Countries are required to describe if the accounting basis is cash, accrual or mixed.

Proceeding from this, the table may contain a large number of entries or relatively few, depending on how close the working balance is to statistical definitions. Countries using cash accounting in their working balance sheets generally have a larger number of adjustments, and as the working balance becomes more sophisticated (accruals, mixed, etc.), the number of entries may be lower, concentrating on different blocks of the existing reconciliation scheme.

Two examples of EDP tables are given in Tables 1 and 2.

Table 1 shows Italy’s need to correct the working balance (which is cash-based) for financial transactions and time of recording which lead to adjustments on both interest and other accounts; there are also other adjustments for specific government transactions. Some statistical discrepancies nevertheless remain unexplained for the latest years not yet finalised.

A comparative example is the case of Spain, which introduced accruals-based accounting during the 1990s at central and state levels, and where state government accounting standards appear to be close to IPSAS. Table 2 shows that the EDP Table 2 for Spain does not include lines related to debt transactions but makes more use of lines related to non-financial transactions, coverage of extra-budgetary units, and other adjustments. Temporal adjustments for taxes are also made, though there are no other accruals adjustments.

The overall relationship between the working balance and the EDP deficit in EDP Table 2 is shown in Box 1.

Table 3 shows the impact in per cent of GDP, for the period 2008-11, of the sum of all the types of adjustments needed for the central government sector in EU countries.

It should be noted that, even in countries which use the accrual principle, the public accounting procedure required to acknowledge the rights or obligations for the point of accrual may not be the same as the procedure for statistics, and therefore differences in accrual implementation may arise. This may notably be the case for interest payments and taxes, and leads to specific entries in EDP Table 2 for such accruals adjustments.

It should be noted in passing that another option in designing EDP Table 2 would have been to start from pure cash movements in all member states (changes in bank accounts), thereby creating a kind of cash-flow reconciliation with a statistical balance. The existing table structure would be robust enough to accommodate cash information, but would likely have more entries than currently because it could involve adjustments for debt-related transactions that are normally excluded from most “cash-based” accounting systems.

Table 1. **Sample EDP Table 2A for Italy (central government sector)**
as part of its April notification for the year 2013

ESA 95 accounts

Table 2A. Provision of the data which explain the transition between the public accounts budget balance and the central government deficit/surplus					
Member state: Italy Data are in millions of euros Date: 12/04/2013	Year				
	2009	2010	2011	2012	2013
Working balance in central government accounts	-85 202	-67 491	-62 713	-48 727	-53 404
<i>Basis of the working balance¹</i>	<i>Cash</i>	<i>Cash</i>	<i>Cash</i>	<i>Cash</i>	<i>Planned</i>
Financial transactions included in the working balance	14 389	2 193	4 599	4 302	7 984
Loans, granted (+)	1 870	5 417	8 305	8 007	10 700
Loans, repayments (-)	-2 219	-2 402	-2 054	-1 771	-1 591
Equities, acquisition (+)	4 080	28	7	10	10
Equities, sales (-)	0	0	0	-1 794	-636
Other financial transactions (+/-)	10 658	-850	-1 659	-150	-499
Of which: Transactions in debt liabilities (+/-)	0	0	0	0	0
Detail 1					
Detail 2					
Non-financial transactions not included in the working balance	0	0	0	0	0
Detail 1					
Detail 2					
Difference between interest paid (+) and accrued (EDP D.41) (-)	-1 102	-2 303	-2 470	-6 360	1 038
Other accounts receivable (+)	598	-593	1 538	2 780	L
Detail 1					
Detail 2					
Other accounts payable (-)	-1 583	2 659	-632	3 864	L
Detail 1					
Detail 2					
Working balance (+/-) of entities not part of central government	M	M	M	M	M
Net borrowing (-) or net lending (+) of other central government bodies	M	M	M	M	M
Detail 1					
Detail 2					
Other adjustments (+/-) (please detail)	-737	-861	-612	-9 519	L
Detail 1	-47	0	0	0	Building securisations and other building sales (Real Estate Fund) classified in Table 2D
Detail 2	-70	-37	-173	-15	Cancellations of foreign debts
Detail 3	-108	-138	-394	-50	Additional cancellations Paris Club (re-routed via government)
Detail 4	-12	-23	-30	-57	Reclassification of revenues of uncompensated seizures
Detail 5	-598	-159	-175	-165	Reclassification of revenues classified in dormant accounts
Detail 6	0	0	0	-8 853	Transfer of local bodies' deposits from banks to their accounts in the Central Treasury System
Detail 7	-62	-61	-72	-34	Guarantees called

Table 1. **Sample EDP Table 2A for Italy (central government sector)**
as part of its April notification for the year 2013 (cont.)

ESA 95 accounts

Table 2A. Provision of the data which explain the transition between the public accounts budget balance and the central government deficit/surplus					
Member state: Italy Data are in millions of euros Date: 12/04/2013	Year				
	2009	2010	2011	2012	2013
Working balance in central government accounts	-85 202	-67 491	-62 713	-48 727	-53 404
<i>Basis of the working balance¹</i>	<i>Cash</i>	<i>Cash</i>	<i>Cash</i>	<i>Cash</i>	<i>Planned</i>
Detail 8	175	-452	-200	-75	
Detail 9				156	
Detail 10	-15	9	433	-426	
Detail 11					
Net borrowing (-)/lending (+) (EDP B.9) of central government (S.1311)	-73 637	-66 395	-60 290	-53 660	-38 226

Notes: Member states can adapt Tables 2A, B, C and D to their national specificity according to the established practice. L = not available. M = not applicable. MFI = monetary financial institution. OFI = other financial intermediary.

1. Please indicate accounting basis of the working balance: cash, accrual, mixed, other.

Source: ISTAT (2013), "EDP Tables – April 2013 Notification", Rome, http://epp.eurostat.ec.europa.eu/portal/page/portal/government_finance_statistics/excessive_deficit/edp_notification_tables.

Box 1. Relationship between the working balance and the EDP deficit in EDP Table 2*

Working balance:

- exclusion of financial transactions included in the working balance;
- inclusion of non-financial transactions not included in the working balance;
- adjustments for sector delimitation;
- time of recording (transition to ESA 95 based on accrual recording);
- other adjustments (e.g. imputations following ESA 95 methodology).

= EDP government net borrowing/net lending.

* A complete analysis of the relationship is included in the Eurostat guidelines for completing the general government deficit and debt notification under the excessive deficit procedure (European Commission – Eurostat, 2012).

Table 2. **Sample EDP Table 2A for Spain (central government sector)**
as part of its April notification for the year 2013

ESA 95 accounts

Table 2A. Provision of the data which explain the transition between the public accounts budget balance and the central government deficit/surplus						
Member state: Spain Data are in millions of euros Date: 27/03/2013	Year					Balance of non-financial budget operations of the "state"
	2009	2010	2011	2012	2013	
Working balance in central government accounts	-69 345	-39 180	-41 572	-21 822	-28 557	
<i>Basis of the working balance¹</i>	<i>Accrual</i>	<i>Accrual</i>	<i>Accrual</i>	<i>Accrual</i>	<i>Planned</i>	<i>Accrual for most operations</i>
Financial transactions included in the working balance	0	0	0	0	0	
Loans, granted (+)	M	M	M	M	M	
Loans, repayments (-)	M	M	M	M	M	
Equities, acquisition (+)	M	M	M	M	M	
Equities, sales (-)	M	M	M	M	M	
Other financial transactions (+/-)	0	0	0	0	0	
Of which: Transactions in debt liabilities (+/-)	0	0	0	0	0	
Detail 1	0	0	0	0	0	Capital gains of the Central Bank
Detail 2						
Non-financial transactions not included in the working balance	-6 498	-3 138	-3 196	326	1 189	
Detail 1	-1 503	-949	-302	-53	-10	FAD operations (<i>Fondo de Ayuda Oficial al Desarrollo</i>)
	-5 440	-1 203	-899	-169	0	Local Investment Fund
	372	-152	-179	-10	-20	Other funds which are not institutional units
Detail 2	73	-834	-1 816	558	1 219	Other non-financial operations not considered in the budget of the year
Difference between interest paid (+) and accrued (EDP D.41) (-)	-3 313	203	-638	-1 699	2 129	
Other accounts receivable (+)	57	180	-1 072	-788	0	
Detail 1	57	180	-1 072	-788		Temporal adjustment in taxes
Detail 2						
Other accounts payable (-)	M	M	M	-3 403	0	
Detail 1				-3 403		Tax reimbursements
Detail 2						
Working balance (+/-) of entities not part of central government	M	M	M	M	M	
Net borrowing (-) or net lending (+) of other central government bodies	1 139	-1 132	-4 948	-37 717	-514	
Detail 1	18 121	19 174	18 694	15 988		Revenue
	-18 134	-19 426	-18 753	-16 223		Expenditure
Detail 2	1 152	-880	-4 889	-37 482		Adjustments
Other adjustments (+/-) (please detail)	-19 971	-9 673	14 899	-16 347	-15 150	
Detail 1	-4 242	-2 051	-3 251	-1 062	-1 233	Capital injection into a public corporation and others
Detail 2	-8 124	-8 785	-8 278	-8 181	-8 200	Cancellation of taxes and others
Detail 3	182	187	219	100	100	Export insurance guaranteed by the state
Detail 4	-356	-549	-181	-238	-340	Re-routed items relating to SEPI (<i>Sociedad Estatal de Participaciones Industriales</i>)
Detail 5	-545	-1 259	-1 251	628	-1 400	Military equipment expenditure
Detail 6	-31	-50	-67	-12	-80	Expenditure for producing coins

Table 2. **Sample EDP Table 2A for Spain (central government sector)**
as part of its April notification for the year 2013 (cont.)

ESA 95 accounts

Table 2A. Provision of the data which explain the transition between the public accounts budget balance and the central government deficit/surplus						
Member state: Spain Data are in millions of euros Date: 27/03/2013	Year					Balance of non-financial budget operations of the "state"
	2009	2010	2011	2012	2013	
Working balance in central government accounts	-69 345	-39 180	-41 572	-21 822	-28 557	
<i>Basis of the working balance¹</i>	<i>Accrual</i>	<i>Accrual</i>	<i>Accrual</i>	<i>Accrual</i>	<i>Planned</i>	<i>Accrual for most operations</i>
Detail 7	-4 667	5 912	29 044	-3 989	-5 956	Advances to <i>Comunidades Autónomas</i> and <i>Corporaciones Locales</i>
Detail 8	-1 306	-1 189	-770	0	0	Reclassification of loans
Detail 9	-882	-1 889	-566	-3 593	1 959	Other adjustments
Net borrowing (-)/lending (+) (EDP B.9) of central government (S.1311)	-97 931	-52 740	-36 527	-81 450	-40 903	

Notes: Member states can adapt Tables 2A, B, C and D to their national specificity according to the established practice. M = not applicable.

1. Please indicate accounting basis of the working balance: cash, accrual, mixed, other.

Source: INE (2013), "EDP Tables – April 2013 Notification", Madrid, http://epp.eurostat.ec.europa.eu/portal/page/portal/government_finance_statistics/excessive_deficit/edp_notification_tables.

3. The reconciliation of the balances in final accounts under accrual IPSAS: A theoretical exercise

There is a growing tendency to adopt accruals-based accounting in Europe. Eurostat has undertaken a study on the suitability of IPSASs for EU member states.¹

The following analysis represents a purely theoretical exercise to show the issues in EDP Table 2 that should be resolved if full accrual standards (for example, IPSAS) were to be applied in an EU member state – notably how the structure of the table could be revised to show an ordered reconciliation of the transactions recorded under accruals accounting with the transactions under ESA principles. Such a structure would likely be more useful for users in this case, and also for Eurostat when it carries out its verification work.

The necessary reconciliations/adjustments might be grouped around the following major items:

- the corrections needed for completing the budgeting procedure under a full accrual basis;
- the corrections needed for reconciling accrual accounting with ESA principles.

Where the working balance (public accounting balance) is compiled under a cash basis (Italy, for example), the primary impact on EDP Table 2 from adopting accruals (for example, under IPSAS) would be to reconsider all the existing lines related to:

- Elimination of financial transactions.
- Corrections for time of recording.
- Other adjustments, including any off-budget treasury operations.
- Elimination of the working balance effect of institutional units mainly engaged in market activities (i.e. public corporations and quasi-corporations) which are not included in the National Accounts definition of government and therefore should not affect government net lending/borrowing, as defined by ESA (and which have not already been adjusted in other items of reconciliation of Table 2A). This elimination should be made carefully, since in fact many "extra-budgetary" units may already be using IFRS-

Table 3. **Total adjustments to reconcile the working balance and the EDP deficit/surplus in per cent of GDP¹**

Central government sector in EU 27, 2008-11

	2008	2009	2010	2011
Austria	-2.3	0.6	0.7	0.9
Belgium	-5.7	1.5	0.0	-1.1
Bulgaria	0.6	2.5	-0.3	-0.1
Cyprus ²	-4.1	-3.3	-3.2	4.5
Czech Republic	2.1	0.0	0.1	-1.2
Denmark	0.4	0.1	-2.7	0.0
Estonia	0.7	0.1	0.7	1.9
Finland	-0.2	-0.9	-0.6	-0.8
France	0.6	-0.9	-1.9	0.0
Germany	0.0	-0.7	1.2	0.6
Greece	3.7	2.0	3.1	-1.9
Hungary	0.2	0.9	0.4	-9.8
Ireland	-0.3	-2.9	18.4	-2.3
Italy	-0.8	-0.8	-0.1	-0.2
Latvia	1.9	-0.9	-1.8	-1.0
Lithuania	0.9	1.5	-0.2	0.7
Luxembourg	0.4	0.5	4.8	1.5
Malta	0.6	-1.2	-0.9	-0.6
Netherlands	-15.1	5.2	-0.4	-0.8
Poland	2.0	3.7	2.5	1.8
Portugal	0.8	0.2	0.0	-3.8
Romania	0.7	0.0	-0.9	0.2
Slovak Republic	1.4	2.4	0.0	0.6
Slovenia	1.4	0.2	0.1	2.1
Spain	0.8	2.7	1.3	-0.5
Sweden	2.9	-5.1	0.0	1.8
United Kingdom	0.0	0.1	0.0	-0.2

1. Data in bold indicate a total adjustment, in per cent of GDP, above or equal to 2.5 (positive or negative).

2. Note by Turkey: The information in this document with reference to "Cyprus" relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Turkey recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of the United Nations, Turkey shall preserve its position concerning the "Cyprus issue".

Note by all the European Union member states of the OECD and the European Union: The Republic of Cyprus is recognised by all members of the United Nations with the exception of Turkey. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.

Source: Eurostat – published EDP notification tables. Elaboration on Eurostat GFS database http://epp.eurostat.ec.europa.eu/portal/page/portal/government_finance_statistics/excessive_deficit/edp_notification_tables.

type accounting, and therefore the statisticians are already implicitly converting these to ESA concepts anyway, though the adjustments are not shown in the reconciliation table.

- The existing EDP Table 2 lines relating to general government units which are not included in the working balance would be expected to become redundant if public accounting adopts a full consolidation approach, as under IPSAS.

As a good starting point, the IPSASB consultation paper on GFS/IPSAS analyses the differences between IPSASs and GFS reporting guidelines, some of which derive from conceptual differences.²

Analysing the differences with the EDP Table 2, the main adjustment groups could be described as listed in Table 4.

Table 4. **Description of ESA/EDP adjustments on working balance under accruals/IPSAS**

Working balance	Description of adjustment
Coverage effects	Add IPSAS-basis (or other) data for bodies not in the working balance. Remove consolidation impacts not corresponding to the general government sector boundary. ¹
Revaluation effects	Remove all data concerning holding gain/loss.
Provisions and reserves	Remove movements in provisions and reserves. Add actual expenditure, or debt cancellation/assumption data, associated with these provisions and reserves.
Net accruals adjustment for taxes	Remove any accruals/cancellation impacts for taxes and add time-adjustment impact (if used).
Net pensions adjustment	Remove any accrued pension costs (actuarial impacts) and add pensions paid.
Accrued interest	Accrue interest if necessary, or adjust for specific instruments where the approach differs.
Investment expenditure	Remove depreciation and add accrued GFCF expenditure.
Military expenditure	Adjust the accounting data to the delivery approach.
Swaps	Implement the EDP treatment of swaps (may disappear with ESA 2010).
Inventories	Revalue inventories to the current price approach.
Other timing adjustments	Adjust any other timing differences between IPSAS and ESA.
Other adjustments (specific, etc.)	Make miscellaneous adjustments, including for example re-routed transactions and capital transfers for capital injections considered as non-financial transactions, etc.
Other accrual adjustments	Include transactions which may not be fully recorded on an accrual basis because of the information available or because of the lack of reliable information for such accrual treatment at the moment of the notification.

1. In fact, IPSAS 22 already provides a framework for the use of the general government boundary. However, it does not appear to be fully used by any jurisdiction, and is under review as part of the IPSAS Board's IPSAS/GFS project.

On the basis of this analysis, Table 5 presents a possible new template for EDP Table 2 for member states that might adopt accruals/IPSAS in their public accounting systems.

Table 5 assembles the ESA/EDP adjustments identified in the above analysis into the following line items:

- adjustments for bodies not included in (or not belonging to) the general government sector;
- adjustments for revaluation effects (holding gains and losses);
- adjustments for gross fixed capital formation and capital transfers;
- adjustments for specific transactions for ESA/EDP (on PPPs, financial leasing, debt assumption, debt cancellation, depreciation, net pension changes, etc.);
- adjustments for interest, where necessary;
- adjustments for taxes on accrual versus time-adjusted method used;
- adjustments for differences in accrual recording and other adjustments, such as timing adjustments related to the availability of information at the moment of reporting.

Close attention should to be paid to each of these elements to achieve a better reconciliation. Ideally no adjustments/corrections would be needed if the economic events and transactions were treated according to a common conceptual framework and common implementation process. On the other hand, it is generally accepted that those events might be regarded in a different perspective by accountants and statisticians, due to the different aims of the analyses and the following descriptions they provide: performance, citizen satisfaction and management of resources by the entities and macroeconomic measurement of uses and resources with production, income distribution and redistribution, and saving in all the sectors of the economy, fiscal sustainability and estimation of budgetary position under the excessive deficit procedure.

However, the different points of view do not exclude each other but rather appear to be closely complementary. Practical questions remain regarding the extent to which single entities may produce a unique set of data designed to serve both perspectives, and the costs of doing so.

Table 5. **A possible new template of EDP Table 2**

ESA 95 accounts

Table 2A. Provision of the data which explain the transition between the public accounts budget balance and the central government deficit/surplus						
Member state: XXX Data are in ... (millions of units of national currency) Date: XX/XX/20XX	Year					
	2007	2008	2009	2010	2011	
Working balance in central government accounts						
<i>Basis of the working balance¹</i>	<i>Accrual</i>	<i>Accrual</i>	<i>Accrual</i>	<i>Accrual</i>	<i>Accrual</i>	
Adjustments for entities not corresponding to the general government sector boundary						
<i>Of which: Revenue</i>						
<i>Of which: Expenditure</i>						
Holding gains/losses						
Detail 1						
Detail 2						
Non-financial transactions not included in the working balance						
Gross fixed capital formation (investments)						
Investment grants and capital transfers						
Adjustments to ESA 95/EDP (+/-)						
Military expenditure						
Provisions and reserves						
Debt cancellation/debt assumption						
Net accruals adjustment for taxes (accruals, cancellation of taxes)						
Net pensions adjustment						
Depreciation						
Imputed capital formation associated with financial leasing agreement						
Rents of financial leases included in the working balance						
Reclassification of loans						
Capital injections (financial transaction classified as capital transfers)						
Inventories revaluation						
PPP assets reclassification						
Swaps						
Guarantees called						
UMTS licences (Universal Mobile Telecommunications System)						
Securisation						
Super-dividend						
Other adjustments (specific, etc.)						
Accrued interest adjustments (where necessary) (EDP D.41)						
Detail 1						
Detail 2						
Adjustment for taxes resulting from time-adjusted method						
Detail 1						
Detail 2						
Adjustments for differences in accrual recording						
Detail 1						
Detail 2						
Other adjustments						
Detail 1						
Detail 2						
Net borrowing (-)/lending (+) (EDP B.9) of central government (S.1311)						

1. Please indicate accounting basis of the working balance: cash, accrual, mixed, other.

If one works from the perspective of reconciling a working balance to an EDP deficit, the next step would be to see if a common integrated chart of accounts could handle all the above financial flows, commitments and payments which are not accrued expenditure and revenue, i.e. arrears of appropriation, payments of loans, gross fixed capital formation not yet realised,

taxes not yet assessed, as well as flows that give rise to non-financial adjustments such as accruals and provisions for future expenditure or for predictable risks, gains and losses, etc.

The work can then be completed with the adoption of a taxonomy for all the items in the chart of accounts which allows the reclassification of the various items, expenditure and revenue, payments and receipts under international accounting standards according to the statistical reporting framework.³

Box 2 lists the issues currently under consideration by IPSASB and the statistical community with the aim of minimising the differences between IPSASs and statistical reporting.

Box 2. List of differences between IPSAS and GFS reporting guidelines for consideration by either the IPSASB or the statistical community*

1. Scope of consolidation (general government versus public sector).
2. Principle of accounting basis: cash; cash modified reporting versus accruals; single-entry versus double-entry book-keeping.
3. Percentage of coverage of variables in financial statements according to the IPSAS structure.
4. Principle of measurement notably for property and equipment, equity, liabilities (fair value versus historic cost) [according to ESA, sources used to compile financial transactions and debt provide information valued at nominal value].
5. Inventory measurement: IPSAS require measurement at “the lower of cost and net realisable value” whereas ESA requires market value.
6. Recording of borrowing cost/interest capitalisation.
7. Cash modified accounting practice in member states for taxes versus accrual basis of taxes.
8. Impairment of assets.
9. Amounts recognised as a provision.
10. Holding gains/losses; investments in unquoted shares; presentation of re-measurement of gains/losses.
11. Gross fixed capital formation and depreciation.
12. Treatment of debt cancellation/debt assumption (recognition and derecognition of financial instruments).
13. Non-performing loans.
14. Advance payments on goods, defense equipment and services recognised as expenses rather than transactions.
15. Defense equipment that satisfies the accounting criteria defined are not capitalised.
16. Premiums and discounts on treasury bonds netted and recorded as expenses or reductions in expenses (interest, premium, discount).
17. Prior period adjustments/backcasting – correction of errors under IPSAS versus National Accounts time series adjustments.
18. Transaction costs: costs of disposing of non-financial and financial assets (decommissioning/restoration costs in disposal of assets).
19. Distributions receivable from controlled entities (super-dividends treatment under ESA).
20. Contributions from owners, for commercial government operations (capital injections treatment under ESA).
21. Recording for public-private partnerships (PPPs).
22. Currency on issue/seigniorage.
23. Subscriptions in international organisations.
24. Treatment of contract leases and licenses for extractive industries exploration and evaluation; development and production.
25. Costs associated with R&D and other intangible assets.
26. Low-interest and interest-free loans.

Box 2. List of differences between IPSAS and GFS reporting guidelines for consideration by either the IPSASB or the statistical community* (cont.)

27. Recognition criteria (for example, for certain types of provisions, expenses related to non-performing loans).
28. Provisions arising from constructive obligations.
29. Biological assets (living animals and plants).
30. Net assets/equity.
31. Transactions between the central bank and government entities.
32. Transactions which may not be fully recorded on an accrual basis because of the information available or because of the lack of reliable information for such accrual treatment at the moment of the notification.

* A complete analysis of these differences is available in the consultation paper "IPSASs and Government Finance Statistics" (IPSASB, 2012).

Notes

1. The report was required by Article 16(3) of the Budgetary Frameworks Directive 2011/85/EU which set out the rules in member state budgetary frameworks necessary to ensure compliance with the Treaty obligation to avoid excessive government deficits. The report and the accompanying staff working document, which were forwarded by the European Commission to the Council and to the European Parliament and published in March 2013, are based on information received through consultations with Commission services, international organisations, member states' experts and other interested parties (such as governmental authorities also outside Europe). The report also incorporated the results of a study commissioned by Eurostat with Ernst & Young, which aimed to stocktake the accounting and auditing practices in all 27 EU member states. The study is available at http://epp.eurostat.ec.europa.eu/portal/page/portal/government_finance_statistics/government_accounting.
2. The consultation paper "IPSASs and Government Finance Statistics" (IPSASB, October 2012) lists the issue of differences between GFS reporting guidelines and IPSASs for consideration by either the IPSASB or the statistical community; see <https://www.ifac.org/publications-resources/ipsass-and-government-finance-statistics-reporting-guidelines>.
3. According to the IPSAS consultation paper: ... "in case of adoption of accrual IPSAS the chart of account could be designed in a way that the same accrual based harmonised information system that generates data for a government's financial statements can generate most of the data necessary for the government's statistical reports".

References

- European Commission – Eurostat (1995), *European system of accounts ESA*, Luxembourg.
- European Commission – Eurostat (2012), *Guidelines for completing the general government deficit and debt notification under the Excessive Deficit Procedure*, Luxembourg.
- European Commission – Eurostat (2013a), Report from the Commission to the Council and the European Parliament, "Towards Implementing Harmonised Public Sector Accounting Standards in Member States", *The Suitability of IPSAS for the Member States*, Luxembourg.
- European Commission – Eurostat (2013b), *Manual on Government Deficit and Debt, Implementation of ESA95*, Luxembourg.
- IMF (International Monetary Fund) (2001), *Government Finance Statistics Manual 2001 (GFSM 2001)*, Statistics Department, IMF, Washington, DC, www.imf.org/external/pubs/ft/gfs/manual.
- INE (Instituto Nacional de Estadística) (2009), "EDP Inventory and Notification Tables", Spanish Statistical Office, Madrid, http://epp.eurostat.ec.europa.eu/portal/page/portal/government_finance_statistics/excessive_deficit/edp_notification_tables.
- INE (2013), "EDP Tables – April 2013 Notification", Spanish Statistical Office, Madrid, http://epp.eurostat.ec.europa.eu/portal/page/portal/government_finance_statistics/excessive_deficit/edp_notification_tables.

IPSASB (2012), "IPSASs and Government Finance Statistics", consultation Paper, October, Toronto, Canada, <https://www.ifac.org/publications-resources/ipsass-and-government-finance-statistics-reporting-guidelines>.

ISTAT (Istituto nazionale di statistica) (2012), "EDP Inventory and Notification Tables", Italian Statistical Office, Rome, http://epp.eurostat.ec.europa.eu/portal/page/portal/government_finance_statistics/excessive_deficit/edp_notification_tables.

ISTAT (2013), "EDP Tables – April 2013 Notification", Italian Statistical Office, Rome, http://epp.eurostat.ec.europa.eu/portal/page/portal/government_finance_statistics/excessive_deficit/edp_notification_tables.

United Nations (2009), *System of National Accounts SNA 2008*, New York, United States.

Short- and long-term forecasting by the Netherlands Bureau for Economic Policy Analysis (CPB): Science, witchcraft, or practical tool for policy?

by

Frits Bos and Coen Teulings*

CPB forecasts for the next year and for the next period of government should be seen as well-motivated estimates based on all recent information, plausible assumptions and expected trends. These assumptions and trends are partly based on econometric estimation methods and insights from economic theory. However, the economy is a chaotic system in which small events can have major effects at short notice. Even when major uncertainties and risks are well understood, it remains impossible to indicate where and when a little spark will kindle a great fire or when the bubble in (e.g.) the housing or stock market will burst. The more distant the look into the future, the more uncertain are the forecasts. For such long-term analyses, the CPB employs scenarios, extended sensitivity analyses and identification of major political choices. Policy making is like sailing in fog. The regular set of CPB forecasts helps to look forward and to monitor whether a change of course is necessary. Despite fundamental uncertainty about the future, the CPB forecasts provide a good base for political discussions and decision making, like a coalition agreement, budget and wage rate negotiations and defining a long-term policy strategy. These forecasts inform Dutch society, reduce transaction costs in economic and political decision making, and foster consensus on economic and fiscal policy.

JEL classification: A11, C0, D80, E17, F17, F47, G17, H68

Keywords: Macroeconomic forecasting and government policy, accuracy of forecasts, uncertainty and public decision making, measurement in economics, CPB Netherlands Bureau for Economic Policy Analysis

* Frits Bos is a senior economist on public finance and regional economics at the CPB Netherlands Bureau for Economic Policy Analysis. Until May 2013, Coen Teulings was director of the CPB. A previous draft of this paper was published in Dutch in *Liberaal Reveil*, September 2011 (special topic "Looking Into the Future", pp. 132-138). The authors would like to thank Camilia Bruil, Edwin van de Haar and Wim Suyker for comments. The opinions expressed and arguments employed in this article do not necessarily reflect the official views of the OECD or of the governments of its member countries.

1. Introduction

The CPB Netherlands Bureau for Economic Policy Analysis (CPB) regularly publishes forecasts about the macroeconomic development next year, in the next period of government, or for the long term. These forecasts play a central role in official decision making in the Netherlands.¹ But it is evident that the CPB and other economic institutes like the IMF and the OECD were not very successful in forecasting the financial crisis. This raises some important questions. How are such forecasts constructed? To what extent are they based on facts and scientific insights? Why were these forecasts not more accurate? What is the value of such forecasts when they are often inaccurate, in particular in times when they would have been most useful?

This paper discusses five different types of forecasts by the CPB: forecasts for next year, forecasts for the next period of government, analyses of the sustainability of public finance, long-term scenarios, and long-term effects of election platforms.

2. Forecasts for next year²

Each quarter, the CPB publishes a forecast on the Dutch economy and the world economy for the current year and next year. Twice a year, extended analyses are published: in April, the so-called “Central Economic Plan” (CEP); and in September, on the same day as the release of the new annual national budget publication, the “Macro Economic Outlook” (MEV). In June and December, updates of these forecasts are published. In the extended analyses in April and September, a lot of attention is paid to the uncertainty of the forecasts. This could be in quantitative terms, e.g. by estimating the impact of a higher oil price or a lower growth of world trade on Dutch economic growth, inflation, public finance and real income of various groups of households. But the uncertainty of the forecasts could also be addressed in more qualitative terms, e.g. by referring in the text to major unbalances in the terms of balance of payments between China and the United States or the risks on the American housing market.

CPB short-term forecasts serve many different purposes. The general purpose is to provide an up-to-date assessment and forecast of the Dutch economy and government budget, including the impact of the most recent policy measures. This serves Dutch politics and society, but also other stakeholders, e.g. the European Union and foreign investors. The short-term forecasts are also used for many specific purposes. These include their use as input for negotiations between employers, trade unions and the government about wage rates, pensions and social security arrangements. The macroeconomic part also serves as input for forecasting government revenue and expenditure by the ministries. As a consequence, the same macroeconomic input is used by all ministries, and this input is not subject to interference by politicians or civil servants. Another specific use is indexing of public and private contracts, e.g. updating the budgets and contracts for infrastructure projects for price changes.

According to common perception in the Netherlands, the macro-econometric model plays the most dominant role in the short-term forecasting of the CPB. However, the macro-econometric model mainly serves as a bookkeeping system in which the insights from monitoring, specific economic analyses and other economic models are combined and made consistent. During the forecasting process, many specific equations in the macro-econometric model are even ignored and are replaced by the estimates of other models. This applies, for example, to the estimates on government finance: these are mainly based on three specific models (a model for social security and income tax based on detailed micro data, a model with estimates for all kinds of specific types of taxes, and a bookkeeping model for government finance as a whole) in combination with the estimates of some macroeconomic key variables (e.g. GDP growth, changes in wage rates, inflation and interest rates) and all kind of exogenous information (e.g. about new policy plans). The forecasting process is interactive: in several rounds, the estimates of macroeconomic key variables are updated on the basis of the most recent data (e.g. about wage agreements, new statistics on national accounts and the labour market, administrative information on public finance) and updated specific estimates (e.g. about tax revenue, unemployment and imports and exports); the latter will often be partly based on the macroeconomic estimates of the previous round. This interactive process stops when no new information becomes available, and the macroeconomic estimates hardly change any more in successive rounds of estimation. Exchange of views with experts from Statistics Netherlands, the Dutch Central Bank and the major socio-economic ministries is also a regular part of the forecasting process. This provides feedback on the data used, the interpretation of policy measures, and the expected development of the Dutch economy.

The Netherlands is a small and very open economy, to a great extent intertwined with Germany, the European economy and the rest of the world. Forecasts for economic growth in major trading partners are therefore crucial to forecasting the Dutch economy. CPB forecasts about foreign economic growth are based on statistics, forecasts and analyses of international economic institutions, like the IMF, the OECD, the European Commission and the European Central Bank, and of national economic institutions like the CPB or the Central Bank. There is also regular consultation and exchange of views in the various international forums for macroeconomic forecasters. The most recent development of world trade is published in the CPB world trade monitor. This monitor is based on statistics on the imports and exports of 85 countries and other data from national statistical offices and central banks. International and national economic institutions all over the world use the CPB world trade monitor. The oil price and exchange rates are not really forecasted, but are fixed on the average of the previous month. This turns out to be a more accurate forecast than forecasts based on econometric models and analyses. As a first step, the forecast of domestic developments mainly amounts to quantifying the impact of new government policy and forecasting the result of new wage negotiations and changes in the structural labour supply.

Regularly, the CPB publishes analyses of the accuracy of its forecasts. In the period 1971-2008, the average forecasting error of economic growth was 0%, i.e. an unbiased estimate. However, this average reflects major under- and over-estimates. The average absolute forecasting error for the next year was more than 1 percentage point. After some time, when more information becomes available, the error becomes smaller, but even in September of the current year the average absolute forecast error was still 0.7 percentage points. In times of economic downturn, economic growth is often

overestimated, while in years with a booming economy underestimation is quite common. The CPB was not successful with its forecasts of the financial crisis of 2008. In September 2008, the CPB forecasted an economic growth rate of 1.25% in 2009, while national accounting statistics showed two years later that the Dutch economy had contracted by 3.5%.

Improving the accuracy of these forecasts is very difficult to achieve. Modifying the macroeconomic model will hardly yield better results, as this model only has a very limited impact on the forecasts for the current and next year. Three-quarters of the forecasting error are caused by an error in forecasting exogenous developments, like world trade.

Our material welfare is based on an extreme amount of worldwide co-operation and specialisation. The famous economist Milton Friedman used the example of a pencil to illustrate this.³ A pencil is made of wood, paint and graphite, materials that come from all over the world, but it only costs a dime in the shop next door. The downside of this extreme amount of worldwide specialisation and the strong interrelations of worldwide financial markets is that specific events in one part of the world can have major impact elsewhere. Examples from the recent past are the bankruptcy of the American investment bank Lehman Brothers, earthquakes in Japan, the terrorist attacks on 11 September 2001 and the unsustainable public finance in Greece. Such specific events are often already very hard to foretell, but it is even much more difficult to foretell their consequences. This involves not only the consequences in a pure technical sense, but also forecasting the effect on trust and under- and over-reaction by investors, governments, producers and consumers. The economy also reacts to forecasts made by economic institutes like the CPB and the IMF. This may invalidate the accuracy of such forecasts.⁴ For example, if a financial crisis is forecasted, then governments and investors can take measures to prevent such a financial crisis or to mitigate its effects substantially.

The Dutch economy is very likely to be influenced by unlikely events. From a Dutch perspective since the Second World War, the financial crisis in 2008 looked like a very rare black swan (see Taleb, 2007). However, based on a worldwide and historical overview of financial crises, Reinhart and Rogoff (2009) demonstrate that such financial crises are much more likely than commonly thought. For forecasters like the CPB it is very difficult to foretell when such a black swan will arrive, how it will look and what its consequences will be.⁵ But the CPB can indicate what are the most likely and major risks for the Dutch economy and suggest how Dutch policy makers should best deal with such risks. The most important lesson for the CPB from the financial crisis in 2008 is that much more attention should be paid to the risks on the financial markets.

3. Forecasts for the next period of government⁶

Before the start of a new period of government, the CPB publishes a macroeconomic forecast for the next four or five years assuming no changes in government policy. Together with the CPB analysis of the sustainability of public finance, this forecast is the major input for the official Advisory Group on Fiscal Policy, the evaluation of election platforms, and the coalition agreement. After the start of a new government, an updated forecast is published including the effects of the new coalition agreement. This forecast is also used for fixing the expenditure ceilings for the new period of government and the multi-annual budgets for each ministry.

Like in the forecasts for next year, the assumptions about international developments such as world trade, the oil price, the interest rate and the exchange rate are of major importance for the forecasts for the next period of government. However, the impact of the macro-econometric model is much larger, and the estimate of potential economic growth plays a central role in this.

The macro-econometric model (see CPB, 2010b) is not based on strict adherence to one school of economics. Most of the economic relationships employed are the result of empirical studies. Major assumptions in economic theory, like rationality and a perfect market mechanism, are of minor importance in the model. In the short term, expenditures like private consumption and exports are the major drivers of economic growth. In the long run, the supply side is the most important. This is investigated by looking at the structural development of labour supply, the equilibrium rate of unemployment, and labour productivity. The financial crisis has adverse effects on structural economic growth. The increased risk premiums imply that the desired return on financial investments also increased. Higher risk premium means higher costs of capital, which pushes investments down and reduces capital intensity. This lowers labour productivity and increases the equilibrium rate of unemployment.

The macro-econometric model is not used mechanically: CPB economists should always check the plausibility of the results. Common sense and a critical attitude towards the model – which by definition can never be more than a very simple imitation of the many complex relationships in economic reality – are indispensable. Furthermore, when necessary and relevant, the insights from more specific models and analyses are also used, e.g. for the labour market.

For the forecasts for the next period of government, the operationalisation of the assumption of no changes in policy is also important. For the government revenues, unchanged policy is interpreted as stable rates for taxes and social security contributions and application of current official indexing formulas to thresholds and maximum tax deductions. For health-care expenditure, it is much less straightforward to define unchanged policy for the next period of government. Extrapolation of the trend growth in real health-care expenditure of 4.25% per year in the period 2001-08 is not appropriate, because in that period health-care expenditure was growing much faster than economic growth. This cannot last long without restrictions. For the next period of government, therefore, different growth rates are assumed for the public and private health-care expenditure. For each age cohort, the assumption is made that public health-care expenditure will increase in line with economic growth, i.e. by 1.75% per year. Due to an ageing population, this results in a real growth rate of publicly financed health care of 3%. The growth of total health-care expenditure is expected to be 1% higher per year. It is assumed that, in this scenario of no policy change, this extra growth in health-care expenditure is paid by the individual consumers themselves. This implies that the growth of health-care expenditure will be financed up to 30% by private contributions. In their election platforms, all political parties have allocated extra resources for public health care, in order to reduce the strong increase in private health-care contributions.

4. Sustainable public finance⁷

In order to judge the health of public finance, the current deficit, debt and assets of the government are not the only things that are relevant. This information should be combined with estimates about future revenue and expenditure. Since 1997, the CPB makes such

analyses of the sustainability of Dutch public finance. These analyses show that the ageing of the Dutch population, the increase in their life expectancy and the exhaustion of natural gas resources are a major threat to the sustainability of Dutch public finance. These calculations are based on demographic projections and assumptions about economic growth, the interest rate and the discounting rate. Public finance is defined in general terms to be sustainable when our children and grandchildren can in the future benefit from the same social security and other public arrangements without any need for increasing taxes and social security contributions. Translating this general definition into an operational concept is not straightforward and requires major choices. How is this definition of constant arrangements put into practice by the CPB?

For government expenditure, constant arrangements imply that social benefits increase in line with wage rates. Future generations can then receive old-age benefits and unemployment benefits indexed by the increase in wage rates. The same applies to the current public arrangements for education and health care. Also, these types of expenditure are linked per recipient (children or the elderly, respectively) to the increase in wage rates, which enables providing the same quality of education and health care in the future. Put differently: in the future, for each pupil the same number of teachers are available, and for each of the elderly the number of nurses is the same as at present, while the salaries of these teachers and nurses increase in line with the general increase in wage rates. Some government expenditure is more difficult to attribute to individual recipients, like defence, police and public administration. This is resolved by assuming that in the future the expenditure remains fixed as a percentage of GDP.

For taxes and social security contributions, a similar approach is taken. Constant arrangements then imply a constant average tax rate in comparison to income (income tax) and consumption (VAT). For a long-term analysis, the assumption of constant arrangements is more meaningful than an alternative benchmark defined by strictly following current laws and regulations. An example can illustrate this. According to the law, the tax bracket for the income tax does not increase in line with wage rates but in line with inflation. Strictly adhering to this legal principle would imply that all Dutch citizens, including those with very low incomes, would have to pay in the future the highest tax rate of 52%. This would resolve the problem of the sustainability of Dutch public finance, but it does not present a plausible and politically neutral picture of the future.

The analysis of the sustainability of Dutch public finance is not a forecast of the most likely scenario. To meet that end, expected future changes in government policy should also be taken into account. The analysis should be regarded as a way to check whether the financial position of the government is sufficient to continue current public arrangements. If the current financial position does not suffice for this, sooner or later a change of policy will be required to restore sustainability.

Sustainability of public finance could be regarded as a problem with regard to the distribution of income over generations. Without timely adjustments, future generations may suddenly have to accept a drastic deterioration of public arrangements. By timely adjustments, the net benefit from the government will be spread more evenly over the different generations. CPB studies on ageing and sustainability also show the impact of specific policy measures on sustainability and the distribution over different generations.

The analysis of sustainability is a financial check on government policy. However, it does not provide a criterion for discerning which policy measures are preferable from a

Table 1. Dutch government expenditure and revenue, 2011-60 (% GDP)
Assuming no policy changes; figures excluding the new coalition agreement by the Rutte government¹

	2011	2015	2020	2040	2060
Expenditure					
Social security	12.6	12.3	12.75	15.25	14.75
AOW (old-age pensions)	4.9	5.4	6.0	8.5	8.0
Disability benefits	1.8	1.6	1.5	1.5	1.5
Unemployment benefits	1.4	1.0	1.0	1.0	1.0
Other	4.4	4.4	4.25	4.25	4.5
Care (collectively financed)	9.8	10.3	10.75	14.25	14.25
Education	5.5	5.3	5.25	5.5	5.25
Other expenditure (excluding interest)	19.9	18.4	18.25	18.0	18.0
Interest payments	2.6	3.1	3.0	4.5	7.5
Total	50.3	49.4	50.0	57.75	60.0
Revenue					
Income tax and social security contributions	22.3	23.0	23.25	24.75	24.75
Of which: Linked to pension income	1.9	1.9	2.0	2.75	2.75
Taxes on production and imports	13.2	13.3	13.75	15.5	15.25
Of which: Linked to consumption by 65+	2.1	2.3	2.75	4.25	4.0
Corporation tax (excluding natural gas part)	2.7	3.1	3.5	3.25	3.5
Revenues from natural gas	1.7	1.6	1.5	0	0
Other revenue	5.7	5.4	5.25	5.0	5.0
Total	45.6	46.4	47.25	48.5	48.25
EMU government balance	-4.7	-3.1	-2.75	-9.0	-11.25
Robust government balance	-5.0	-2.75	-2.5	-5.75	-4.75
EMU government debt	69.0	73.8	75.0	132.0	217.0

1. See Horst et al. (2010), "Vergrijzing verdeeld; toekomst van de Nederlandse overheidsfinanciën", CPB Special Publication No. 86, www.cpb.nl/en/publication/distribution-benefits-between-generations-future-dutch-public-finance.

welfare point of view. Innovations in medical technology can raise life expectancy and therefore have a high social rate of return. But in terms of sustainability, public investments in medical research score badly, as they not only increase public expenditure but also increase life expectancy and therefore old-age public pensions. All public expenditure, irrespective of its importance for society, should be financed. This applies also to expenditure on infrastructure, education or future environmental quality.

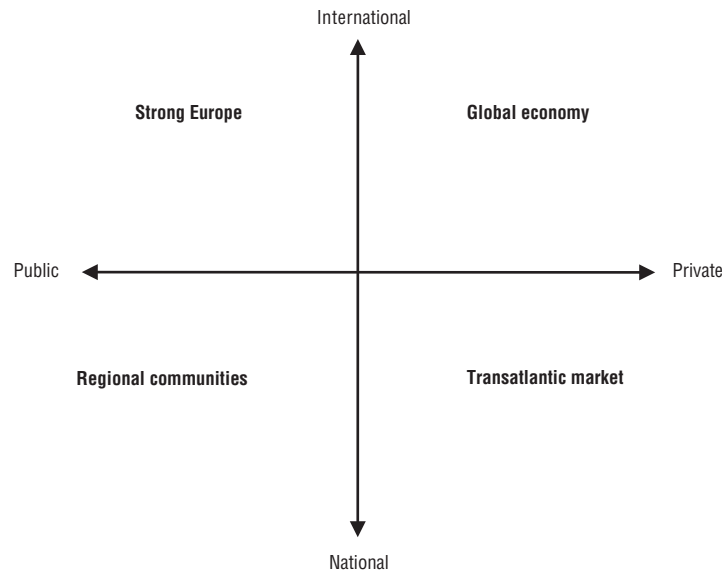
5. Long-term scenarios

Since 1955, the CPB has established long-term scenarios. The purpose of these studies is to support policy makers in making strategic choices. Current decision making is based on current knowledge and a rough assessment of future developments. For policy decisions with a long time horizon or requiring huge investments, policy makers should balance the advantages of waiting and postponement (with the possibility that new knowledge becomes available or that economic and political circumstances unexpectedly change) and the costs and risks of postponement.

Scenarios provide policy makers with different perspectives on the future that can be used to evaluate and compare policy alternatives and their long-term consequences. Scenarios can be smart combinations of historic developments, current facts and possible future trends. They force policy makers to look and reconsider how effective and robust their policy proposals are in view of different long-term perspectives. The purpose of scenario analysis is not to forecast the future. The purpose is to help policy makers prepare for the future and make robust, effective and promising plans.

In the CPB study “Four Futures of Europe” (Mooij and Tang, 2003), four scenarios are presented for the development of the European economy up to 2040. Different scenarios are defined in terms of two key uncertainties (see Figure 1). The first is the role of national institutions: to what extent will the division of tasks between public and private change? The second key uncertainty is about international co-operation: to what extent will countries be prepared and able to co-operate in Europe and worldwide? In subsequent CPB studies, these scenarios have been elaborated for the Dutch economy, its major regions, the spatial development and the environment (see Huizinga and Smid, 2004, and Janssen et al., 2006).

Figure 1. **Two key uncertainties and four scenarios**



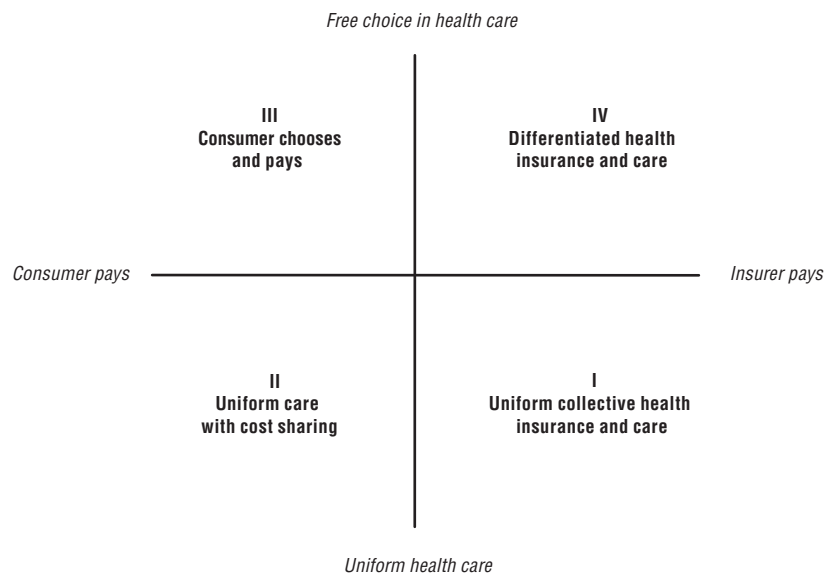
Source: Mooij, R. (de) and P. Tang (2003), “Four Futures of Europe”, CPB Special Publication No. 49, www.cpb.nl/en/publication/four-futures-europe.

In 2010, a new scenario analysis was published (“The Netherlands of 2040”) which focused on the role of human capital, technology and cities for economic growth (Weel et al., 2010). The first key uncertainty was the worldwide distribution of work among people: will there be more specialisation or will flexible generalists win the day? The second key uncertainty relates to cities. In all scenarios, cities become more important. However, the question is whether there will be relatively small and scattered cities or whether economic growth will concentrate in some very big cities.

In 2013, the major policy options for health-care reform in the Netherlands were investigated through four scenarios (see Ewijk et al., 2013). For this purpose, two fundamental dimensions of alternative health-care systems were distinguished: care solidarity and risk solidarity (see Figure 2).

Recently, the practice of half a century of scenario analysis by the CPB was evaluated (Gelauff, 2012). Major conclusions were:

- Quantification was of limited importance in international studies, like “Four Futures of Europe” and “The Netherlands of 2040”. In contrast, scenarios that focused on the Dutch economy were much more quantified; this applies in particular to studies about the impact for spatial development and regions. In a quite ad hoc way, over time many cost-

Figure 2. **Four different worlds of future health care in the Netherlands**

Source: Ewijk et al. (2013), "The Future of Health Care", CPB Policy Brief 2013/03, www.cpb.nl/sites/default/files/publicaties/download/cpb-policy-brief-2013-03-future-health-care.pdf.

benefit analyses on investments for infrastructure and the environment were also based on key figures of the scenarios, e.g. economic growth, demography and mobility.

- Economic outcomes were sometimes outside all the scenarios, e.g. average annual economic growth was 5% in the period 1950-70, while the three scenarios indicated a range between 2.2 and 2.9%. Similarly, according to one of the scenarios in the 1980s, unemployment would be over 23% in 2010. However, other scenarios were much more successful in capturing a realistic range – e.g. scenarios for the period 1985-2010 indicated a range of economic growth between 1.75% and 4%, and 2.5% was the actual outcome. Similarly, according to 1992 scenarios, the number of passengers at a major Dutch airport (Schiphol) in 2015 would be between 34 and 49 million, which well encompasses the current number of 45 million.
- Stories and visionary perspectives were particularly important for international studies. Scenario analysis served to introduce new developments and challenge the mental maps of policy makers, e.g. about the role of human capital, the city, globalisation, demographic shrink in the countryside and the choices to be made in Dutch health care.

6. Long-term effects of election platforms⁸

For 25 years, the CPB has evaluated the economic effects of election platforms. Only the election platforms of political parties that make a request are evaluated by the CPB. In 2006, eight political parties made such a request; of the political parties represented in the Dutch parliament, only the Party for Animal Rights was not interested in such an evaluation. Each evaluation provides a transparent and comparable overview of the policy measures proposed by the various political parties, and their effects. The booklet with the evaluations is therefore labelled "Charting Choices" (CPB, 2006). Each evaluation is not a report mark or approval, and certainly not advice on how to vote. All political platforms are good, but they reflect different political priorities and choices.

Political parties are often suspected of promoting their policy with unwarranted claims and false promises. By subjecting their election platform to an independent analysis, they can increase the credibility of their policy plans. It also forces them to specify their plans and can help in negotiations about coalition agreements. On the basis of a first quick scan or a more thorough provisional evaluation, political parties may also decide to adjust their plans, e.g. to ensure that their targets in terms of public finance or real income of specific groups of households will be met.

The first evaluation in 1986 was restricted to analysing the consequences for economic growth, employment, public finance and real income of various groups of households during the next period of government. However, the most fundamental political choices only become visible when looking at the long-term effects. For example, does a party prefer reducing income inequality or increasing long-term economic growth? Does the political party favour education for the younger generation or more care for the elderly? Is a party willing to pay for a cleaner environment in terms of smaller long-term economic growth? The reaction to such fundamental choices clarifies a party's political priorities. In subsequent evaluations, the analysis was therefore extended to all kinds of long-term effects. This not only covered the budget of the government or of households, the profits of corporations, or economic growth, but also a broad concept of welfare – i.e. in principle everything that citizens think is important and valuable. The last evaluation therefore included, *inter alia*, the reduction of greenhouse effects, changes in traveling time and noise, education, health care, efficiency of the housing market, and the change in housing prices and net rentals.

Unavoidably, the evaluation remains restricted to major effects and to effects for which sufficient high-quality data and scientific analyses are available. For example, an extended international economic literature exists regarding the effectiveness of many different types of education policies, like class size and performance pay for (good) teachers (see Elk et al., 2011). As a result, the education policy proposals of political parties could be classified as promising, not promising, neutral, or effect unknown. An effort was even made to quantify the effects of education policy proposals on long-term economic growth. For major proposals to reform Dutch health care, such an analysis was not possible – not even in very modest qualitative terms. As a consequence, the evaluation of the health-care proposals was limited to describing the type of policy measures, e.g. in favour of more or less free market processes, and the proposed adjustment of the private contributions.

7. Conclusions

This overview of the various short and long-term forecasts by the CPB shows that they have different purposes and different features. For all forecasts, it is crucial that they are updated when new information and insights become available, that they are relatively accurate in comparison to forecasts by other institutes, and that they are not subject to political interference or systematic biases. All forecasts are a mix of facts, assumptions and science.

Point estimates – i.e. estimates without reliability intervals or optimistic and pessimistic scenarios – are best suited as macroeconomic input for government budget estimates, for indexing public and private contracts, for comparing election platforms, and for making policy agreements for the next year or the next period of government. In the analysis of the sustainability of public finance, the evaluation of election platforms and the

long-term scenarios, the focus is on identifying and clarifying the major uncertainties, the political choices and their consequences.

Users of forecasts should be well aware of the uncertainties involved and should take them into account when formulating policies. To a great extent, policy should be robust in order to avoid a situation where the permanent adjustments in forecasts necessitate continuous adjustment of policy. The Dutch trend-based fiscal policy is a good example of how to deal with such uncertainty. The CPB tries to shed light on the uncertainty of the future by explicitly addressing major risks and by sketching their consequences and the various policy options to best deal with them.

The role of the CPB as a forecaster is therefore comparable to a seismologist warning for a new earthquake. Although it is impossible to forecast exactly the timing and strength of an earthquake, the warnings by the seismologist can help to make houses more shockproof.

However, a major task of the CPB is also to provide construction advice – i.e. how can the Dutch and European economies and public finances be made more healthy and shockproof. What are the institutions, fiscal rules and public arrangements best suited for this? According to Coats (1989:118), the most valuable contribution of economists is “damage minimisation by modifying, refining, or even blocking the ill-considered policy proposals by laymen – for example, by emphasising the opportunity costs of a given action or more broadly, the system-wide implications of a specific policy”. In line with this view, the CPB construction advice should also include criticising policy proposals that would not help to make the Dutch and European economies more shockproof and healthy.

Notes

1. The role of the CPB in Dutch policy is discussed by Bos (2008), and by Bos and Teulings (2010, 2012 and 2013).
2. For a more detailed discussion, see Jong et al. (2010).
3. See the famous television series “Free to Choose” (1979-80) and the book by Friedman (1980). Friedman borrowed this example from Read (1958).
4. The major role of trust and the interaction of the economy with forecasts and policy advice are reasons why forecasting in economics is fundamentally different from forecasting in natural science.
5. However, it is clearly not impossible. This is evidenced by the contribution of the IMF chief economist Rajan to the 2005 Jackson Hole Conference in which he well foretold the financial crisis (see Rajan, 2005 and 2010).
6. See CPB (2010a) and CPB (2012).
7. See Horst et al. (2010).
8. See CPB and Planbureau voor de Leefomgeving (2010 and 2012) and Bos and Teulings (2012).

References

- Bos, F. (2008), “The Dutch Fiscal Framework: History, Current Practice and Role of the Central Planning Bureau”, *OECD Journal on Budgeting*, 2008(1):7-48, <http://dx.doi.org/10.1787/budget-v8-art1-en>.
- Bos, F. and C. Teulings (2010), “CPB and Dutch Fiscal Policy in View of the Financial Crisis and Ageing”, CPB Document 218, www.cpb.nl/sites/default/files/publicaties/download/doc218.pdf.
- Bos, F. and C. Teulings (2012), “Evaluating Election Platforms: A Task for Fiscal Councils? Scope and Rules of the Game in View of 25 Years of Dutch Practice”, in *Rules and Institutions for Sound Fiscal Policy after the Crisis*, Banca d’Italia, pp. 417-442 (also downloadable as MPRA paper No. 31536, http://mpa.ub.uni-muenchen.de/31536/1/MPRA_paper_31536.pdf).

- Bos, F. and C. Teulings (2013), "Netherlands: Fostering Consensus on Fiscal Policy", Chapter 7 in G. Kopits (ed.), *Restoring Public Debt Sustainability: The Role of Independent Fiscal Institutions*, Oxford University Press; an earlier draft was published in 2012 as "The World's Oldest Fiscal Watchdog: CPB's Analyses Foster Consensus on Economic Policy", *CPB Discussion Paper 2007*, www.cpb.nl/sites/default/files/publicaties/download/dp207the-worlds-oldest-fiscal-watchdog_0.pdf.
- Coats, A.W. (1989), "Economic Ideas and Economists in Government", in D. Colander and A.W. Coats (eds.), *The Spread of Economic Ideas*, Cambridge University Press, Cambridge, United Kingdom.
- CPB (2006), "Charting choices 2008-2011: Economic Effects of Eight Election Platforms", *CPB Document 139*, www.cpb.nl/en/publication/charting-choices-2008-2011-economic-effects-eight-election-platforms.
- CPB (2010a), "Economische verkenning 2011-2015", *CPB Document 203*, www.cpb.nl/en/publication/economic-outlook-2011-2015.
- CPB (2010b), "Saffier II, 1 model voor de Nederlandse economie, in 2 hoedanigheden, voor 3 toepassingen", *CPB Document 217*, www.cpb.nl/en/publication/saffier-ii-1-model-dutch-economy-2-qualities-3-uses.
- CPB (2012), "Juniraming 2012: De Nederlandse economie tot en met 2017, inclusief Begrotingsakkoord 2013", *CPB Policy Brief 2012/01*, www.cpb.nl/en/publication/juniraming-2012-de-nederlandse-economie-tot-en-met-2017-inclusief-begrotingsakkoord-2013.
- CPB and Planbureau voor de Leefomgeving (2010), "Keuzes in kaart 2011-2015; effecten van negen verkiezingsprogramma's op economie en milieu", *CPB Special Publication No. 85*, www.cpb.nl/en/publication/charted-choices-2011-2015-effects-nine-election-platforms-economy-and-environment.
- CPB and Planbureau voor de Leefomgeving (2012), "Keuzes in kaart 2013-2017; een analyse van tien verkiezingsprogramma's", www.cpb.nl/en/publication/charted-choices-2013-2017.
- Elk, R. (van), D. Lanser and S. van Veldhuizen (2011), "Onderwijsbeleid in Nederland; de kwantificering van effecten", *CPB Background Document*, www.cpb.nl/en/publication/onderwijsbeleid-nederland.
- Ewijk, C. (van), A. van der Horst and P. Besseling (2013), "The Future of Health Care", *CPB Policy Brief 2013/03*, www.cpb.nl/sites/default/files/publicaties/download/cpb-policy-brief-2013-03-future-health-care.pdf.
- Friedman, M.R. (1980), *Free to Choose: A Personal Statement*, Harcourt, New York, United States.
- Gelauff, G. (2012), "CPB Scenario's door de tijden heen", presentatie bij symposium ter gelegenheid van benoeming van Henri de Groot tot hoogleraar aan de Vrije Universiteit van Amsterdam.
- Horst, A. (van der), L. Bettendorf, N. Draper, C. van Ewijk, R. de Mooij and H. ter Rele (2010), "Vergrijzing verdeeld; toekomst van de Nederlandse overheidsfinanciën", *CPB Special Publication No. 86*, www.cpb.nl/en/publication/distribution-benefits-between-generations-future-dutch-public-finance.
- Huizinga, F. and B. Smid (2004), "Vier vergezichten op Nederland; productie, arbeid en sectorstructuur in vier scenario's tot 2040", *CPB Special Publication No. 55*, www.cpb.nl/en/publication/four-views-netherlands-production-labour-and-sectoral-structure-four-scenarios-until-2040.
- Janssen, L.H.J.M., V.R. Okker and J. Schuur (ed.) (2006), *Welvaart en leefomgeving; een scenariostudie voor Nederland in 2040*, joint publication by CPB, MNP and RPB.
- Jong, J. (de), M. Roscam Abbing and J. Verbruggen (2010), "Voorspellen in crisistijd: de CPB-ramingen tijdens de Grote Recessie", *CPB Document 207*, www.cpb.nl/en/publication/forecasting-times-crisis-cpb-forecasts-during-great-recession.
- Mooij, R. (de) and P. Tang (2003), "Four Futures of Europe", *CPB Special Publication No. 49*, www.cpb.nl/en/publication/four-futures-europe.
- Rajan, R.G. (2005), "Has Financial Development Made the World Riskier?", *NBER Working Paper*, No. 11728, National Bureau of Economic Research, Cambridge, Massachusetts, United States, www.nber.org/papers/w11728.
- Rajan, R.G. (2010), *Fault Lines: How Hidden Fractures Still Threaten the World Economy*, Princeton University Press, Princeton, New Jersey, United States.
- Read, L. (1958), "I, Pencil: My Family Tree as told to Leonard E. Read", *The Freeman*, 8(12):32-37.
- Reinhart, C.M. and K. Rogoff (2009), *This Time is Different: Eight Centuries of Financial Folly*, Princeton University Press, Princeton, New Jersey, United States.
- Taleb, N.N. (2007), *The Black Swan: The Impact of the Highly Improbable*, Random House, New York, United States.
- Weel, B. (ter), A. van der Horst and G. Gelauff (2010), "The Netherlands of 2040; Strengthen Cities to Prepare the Netherlands for the Future", *CPB Special Publication*, No. 88, www.cpb.nl/sites/default/files/publicaties/download/netherlands-2040.pdf.

Capital budgeting and procurement practices

by

Philippe Burger and Ian Hawkesworth*

Capital investment is a key function of government. However, for a number of reasons it has proven difficult for governments to ensure that capital investment represents value for money, is affordable, and is budgeted and accounted for in a prudent and transparent manner. This article discusses these challenges facing governments. Using the findings of a survey conducted among OECD countries and enhanced engagement countries in 2012, this article provides an overview of what governments are doing with respect to planning and prioritisation, procurement, construction, operation and management, monitoring and evaluation, and budgeting and accounting for capital projects. The article concludes with a number of recommendations for capital budgeting and procurement.

JEL classification: H400, H540, H570

Keywords: Capital investment, capital budgeting, capital projects, value for money, budgeting systems, accounting systems, transparency, procurement, public-private partnerships, PPPs, TIP, traditional infrastructure procurement

* Ian Hawkesworth is Head of PPPs and Capital Budgeting in the Public Governance and Territorial Development Directorate, OECD. Philippe Burger is Professor of Economics and Head of Department at the University of the Free State, South Africa. This article was originally presented at the annual meeting of the OECD Network of Senior Public-Private Partnership Officials, 15-16 April 2013 (www.oecd.org/gov/budget/ppp). The opinions expressed and arguments employed in this article do not necessarily reflect the official views of the OECD or of the governments of its member countries.

1. Introduction

Capital investment is a key function of government. However, for a number of reasons it has proven difficult for governments to ensure that capital investment represents value for money, is affordable, and is budgeted and accounted for in a prudent and transparent manner. This article discusses these challenges facing governments. Ideally, the way in which a government budgets and accounts should be neutral and should not have an impact on its capital procurement decisions. However, this is not always the case. Using the findings of a survey conducted among OECD countries and enhanced engagement countries in 2012, this article provides an overview of what governments are doing with respect to planning and prioritisation, procurement, construction, operation and management, monitoring and evaluation, and budgeting and accounting for capital projects. The article concludes with a number of recommendations for capital budgeting and procurement.

Several reasons exist for a renewed focus on capital procurement. In recent years, a rather large infrastructure gap developed in many countries, and in rapidly developing economies infrastructure gaps are often restraining growth. Due to the effects of the international financial crisis, many government budgets are under significant pressure, causing some countries to curtail capital spending. With the combination of an increased infrastructure gap and increased budgetary pressure comes the need to be more discriminate in terms of which projects are selected. This calls for more robust capital budgeting and procurement processes that ensure value for money, affordability and sound budgetary treatment. In addition, some countries may face other fiscal pressures, such as an ageing society (Penner, 2008:10), that create incentives to move transactions off budget and off the public accounts by using public-private partnerships (PPPs) rather than traditional infrastructure procurement (TIP). Another way to move investments off budget is to procure via a state-owned enterprise (SOE) or government investment entity that is classified in the public sector but outside of general government. In such cases, the government very often also issues a guarantee on the debt issued by the SOE, which means that the government still carries the main risk of the project while having less control over it. Naturally, such actions do not solve long-term fiscal sustainability issues; they merely undermine budget transparency and the relevance of budget documentation. That governments succumb to such budgetary pressure is not new. Indeed, well before the financial crises and using a rather comprehensive sample of countries around the world, Hammami et al. (2006:4) show that governments with higher debt levels are more likely to engage in PPPs. Governments can use a multiplicity of accounting devices that affect where (i.e. on whose books) and when (in which fiscal year) transactions are recorded. A recent paper by Irwin (2012), aptly titled “Accounting devices and fiscal illusion”, sets out the dangers of how accounting devices can be used by governments to make government finances look better than they actually are. Many of these devices involve capital transactions. More often than not – since they involve the selection of procurement

methods – they really are more than mere accounting devices. They are in essence devices that affect value for money, affordability and budget transparency.

Capital budgeting and procurement processes must be robust, and any possible incentives that could undermine the pursuit of value for money should be minimised. Such perverse incentives can be created by the choice of accounting rules and the definition of the government headline budget balance. Strong oversight and review by institutions such as the central budget authority or supreme audit institution may mitigate perverse incentives and budget maximisation tendencies of line ministries. Furthermore, a weak integration of the project planning and *ex ante* value-for-money assessment with the budgeting process may cause projected and realised value for money to deviate.

Although value for money is a complex concept, one possible way it can be defined is what the government judges to be an optimal combination of quality, features and price, calculated over the whole of the project's lifetime (for more detail, see Burger and Hawkesworth, 2011: Appendix). Value for money entails economy, efficiency and effectiveness, but also a political role for government to define the needs and demands of citizens. Combining these in an assessment, the government must establish whether or not a project represents positive value for money. Of course, the government may also override a negative value-for-money finding and proceed with a project. However, by frequently overriding negative value-for-money indicators that show that a project should not proceed, there is also the possibility that the government can undermine the credibility of using value-for-money assessments. In addition, poorly executed value-for-money tests and very uncertain environments cause large deviations of realised value for money from what was projected. These deviations also undermine the credibility of value-for-money tests.

Various phases characterise the capital budgeting and procurement cycles. The procurement cycle entails planning and prioritisation of capital projects and the subsequent current expenditure and revenue flows that these projects generate. The procurement cycle also includes the preparation of tenders, the vetting of bidders, contract negotiations, awarding the contract, the construction phase, and the operational phase. In the case of traditional infrastructure procurement, the asset might have been transferred to the government following the completion of the construction phase, while in the case of a PPP a private operator might operate the project and be responsible for maintenance, management and service delivery. The government also needs to monitor and evaluate the performance of the project, be it a traditionally procured project or a PPP.

This article seeks to establish what kind of capital budgeting practices countries follow with respect to both PPPs and TIP projects. The former include projects where private parties are responsible for the construction and provision of an asset delivering a government service; the latter represent projects where the government itself carries most of the risks with respect to the establishment and operation of the asset delivering the government service (Burger and Hawkesworth, 2011). The article emphasises the importance of a robust procurement cycle. If the procurement cycle lacks robustness, it often causes the poor selection of projects, overruns of both costs and time, and poor service delivery, and therefore results in poor value for money in general.

Based on the overview of what countries do, and drawing on the literature, the article is organised in the following way. The volume of PPP investment and traditional investment will be briefly touched upon (Section 3). While PPP investment is the smaller

part of total investment it appears at present to be the one that carries the most risks. Therefore PPP investment volumes in particular merit attention. The performance of PPPs is also much discussed. While the construction phase of PPPs is usually more successful than that of TIP, there is still no clear general evidence with respect to whole-of-life cost.

A key issue for PPPs is the budgeting and accounting treatment (Section 4). Particular budgeting and accounting systems may result in PPPs being categorised as either on or off the public sector's balance sheet and hence whether they affect the government's headline budget balance. If a country uses cash budgeting, the initial charge for capital investment will mainly hit the budget over the construction phase rather than as depreciation under accrual-based budgeting. There is no perfect system, and accounting and budgeting systems have various strengths and weaknesses. The main lesson is that any illegitimate incentives to prefer one form of capital procurement to another due to budgeting and accounting treatments should be countered by complementary rules and procedures.

The procurement process of capital investment has various key phases. Section 5 gives an overview of these key phases and who does what in the survey countries. The chief executive or cabinet is the primary actor in the prioritisation of infrastructure and capital projects in 12 of the 23 countries. In eight countries, it is also involved in assessing needs, resolving conflicts and deciding whether the TIP or PPP mode of delivery is more adequate. The central budget authority (CBA) plays a role in most countries (15) with respect to planning and budgeting proposals. In a smaller number of countries, the CBA also plays a role in the prioritisation of infrastructure and capital projects (nine countries) and *ex ante* value-for-money assessments (eight countries). In a majority of countries, the CBA is required to approve if not all capital and infrastructure PPP and TIP projects, then all those above a certain threshold. A somewhat larger number than the number of countries requiring CBA approval for TIP projects require it for all PPP projects (six versus three countries). As can be expected, the ministry responsible for the project plays a significant role in almost all the activities. Executive agencies for infrastructure play a role in many of the countries with respect to project outputs (11 countries), *ex ante* value-for-money assessments (12 countries), planning and budgeting proposals (10 countries), monitoring project execution (13 countries), and *ex post* evaluation (11 countries). The supreme audit institution plays a primary role in *ex post* project evaluation in 12 countries. The key elements of a good institutional PPP framework are that the tasks of political prioritisation, value for money, affordability, execution, regulation, audit and accountability are conducted by institutions with clear mandates and sufficient capacity.

The next discussion (Section 6) concerns planning, prioritising, and ensuring value for money. A key element in prioritisation is cost-benefit analysis. Cost-benefit analysis is meant to provide an indicator of the total benefit a particular project will generate for society by applying a holistic and quantifiable view. In essence, it is meant to indicate whether the project represents absolute value for money for society. It should ideally provide the basis for comparing execution options for a particular project as well as comparing different projects to each other. However, cost-benefit analysis is not as straightforward as it may appear, and countries use it to varying degrees. Indeed, cost-benefit analysis is usually only one element when governments decide which projects should go ahead. Elected politicians, other stakeholders and experts also usually play an active role. Should the government decide to proceed toward procurement of a particular capital asset, TIP is still usually the default option. However, for particular projects a PPP procurement method may be the better option. One key element in determining whether

to use a PPP versus TIP is a relative value-for-money test. The test seeks to indicate the relative difference in value for money between a TIP public sector option and a PPP. Value-for-money tests, perhaps in the form of a public sector comparator (PSC), are only as good as their design, the input, and the realism of how they are interpreted.

Regardless of its procurement method, a capital asset must be affordable in the near and long term. A key task for government is thus to ensure that the payments necessary to service the specific project and/or the portfolio of projects can be afforded by the users and/or the public purse. A particular role is usually played by the finance ministry to ensure affordability, the transparency of spending, and the management of the contingent liabilities, as discussed in Section 7.

In addition to cost-benefit analysis, value-for-money tests, affordability and budgeting/accounting issues, there are a number of lessons that need to be taken into consideration when deciding whether to procure using a PPP or TIP. These are discussed in Section 8 and include:

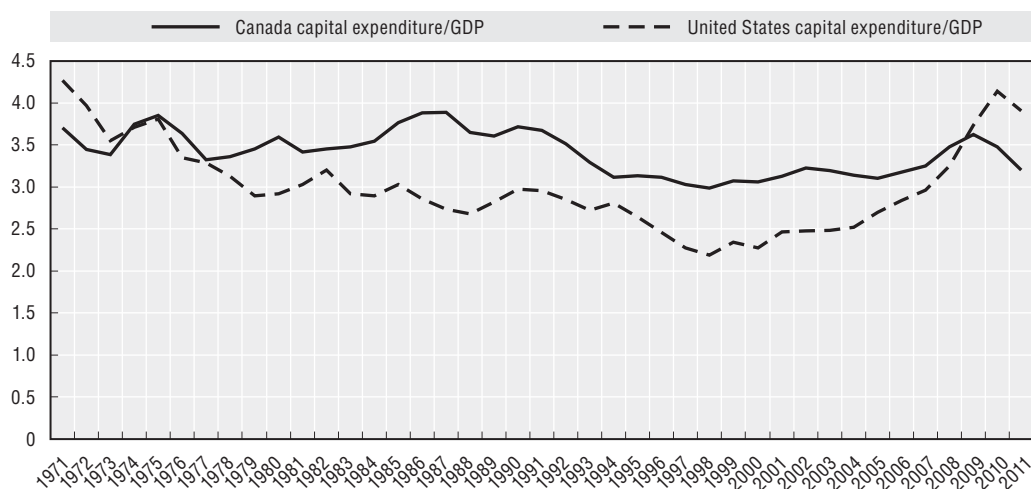
- value for money is endangered by detailed input specification;
- transaction costs are higher with PPPs;
- a lack of competition affects both PPP and TIP procurement;
- PPPs perform better than TIP in the construction phase, but the evidence is less clear with respect to whole-of-life costs;
- regardless of their accounting treatment, both PPPs and TIP create liabilities for the government;
- user fees can be levied by both a public and a private operator;
- the public sector comparator is only as good and credible as what is invested in it.

In conclusion, the article lists recommendations that will contribute to making the procurement cycle more robust and to reducing skewed incentives governments may face during the procurement cycle.

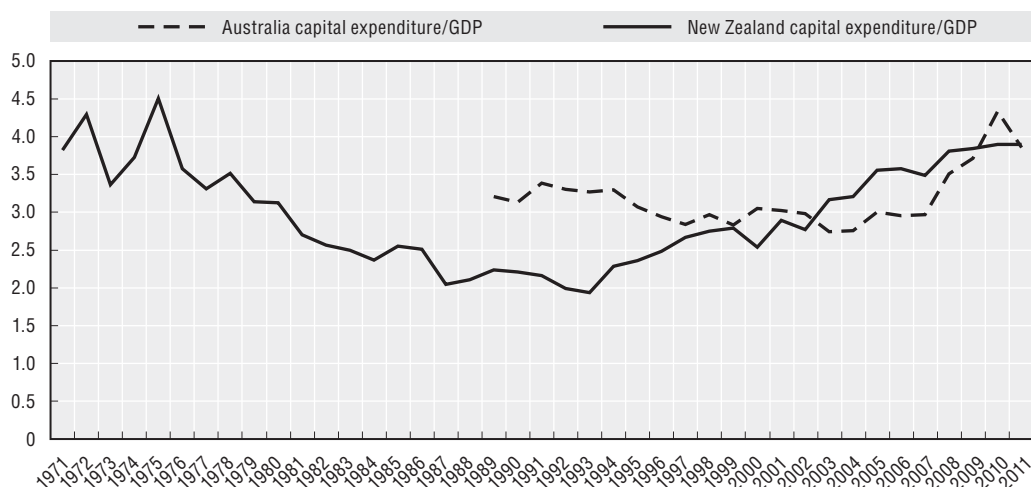
2. Government investment figures at a glance

In many OECD countries, investment by the government as a percentage of GDP decreased to significantly lower levels in the early 1980s and since then has not increased again.¹ These countries include Austria, Belgium, Canada, Denmark, Finland, Italy, the Netherlands, Norway, Sweden, Switzerland, and the United States. Some, like Canada and New Zealand, saw a decrease but together with Australia saw an increase again from the mid-2000s. Figures 1 and 2 demonstrate the situation for a few countries. Figure 3 shows other countries.

The point can be made that in many OECD countries basic infrastructure was in place by the 1980s and that subsequently governments needed to dedicate less to capital creation (note that the numbers cited refer to gross investment). Thus, one could have expected a decrease in the ratio of capital expenditure to GDP. In addition, economic growth rates by the 1980s slowed significantly in OECD countries relative to the 1960s. Therefore, to keep the overall stock of public capital in line with the size of GDP required less investment. Nevertheless, there are also indications that the decrease in capital expenditure in many countries went beyond these explanatory factors and that subsequently an infrastructure gap opened in many OECD countries. For instance, McKinsey Global Institute (2010:32) reports that 40% of the water pipes in London are older

Figure 1. **Capital expenditure/GDP ratios for Canada and the United States**

Source: OECD (2012), OECD Economic Outlook, Vol. 2012/1 (No. 91), OECD Publishing, http://dx.doi.org/10.1787/eco_outlook-v2012-1-en and authors' calculations.

Figure 2. **Capital expenditure/GDP ratios for Australia and New Zealand**

Source: OECD (2012), OECD Economic Outlook, Vol. 2012/1 (No. 91), OECD Publishing, http://dx.doi.org/10.1787/eco_outlook-v2012-1-en and authors' calculations.

than a century, while 12% are older than 150 years. Lin and Doemeland (2012:10), citing several studies, report that in the United States the median age of coal power stations is over 40 years. In addition, according to Lin and Doemeland (2012:10), the European Commission reported in 2011 that to remain competitive the EU needs over the decade following 2011 between USD 2.1 trillion to USD 2.8 trillion in infrastructure investments. Lin and Doemeland also report that the American Society of Civil Engineers in 2009 estimated that the United States would need USD 2.2 trillion of infrastructure spending in the five years following 2009. Of that amount, USD 1.18 trillion has still not been budgeted.

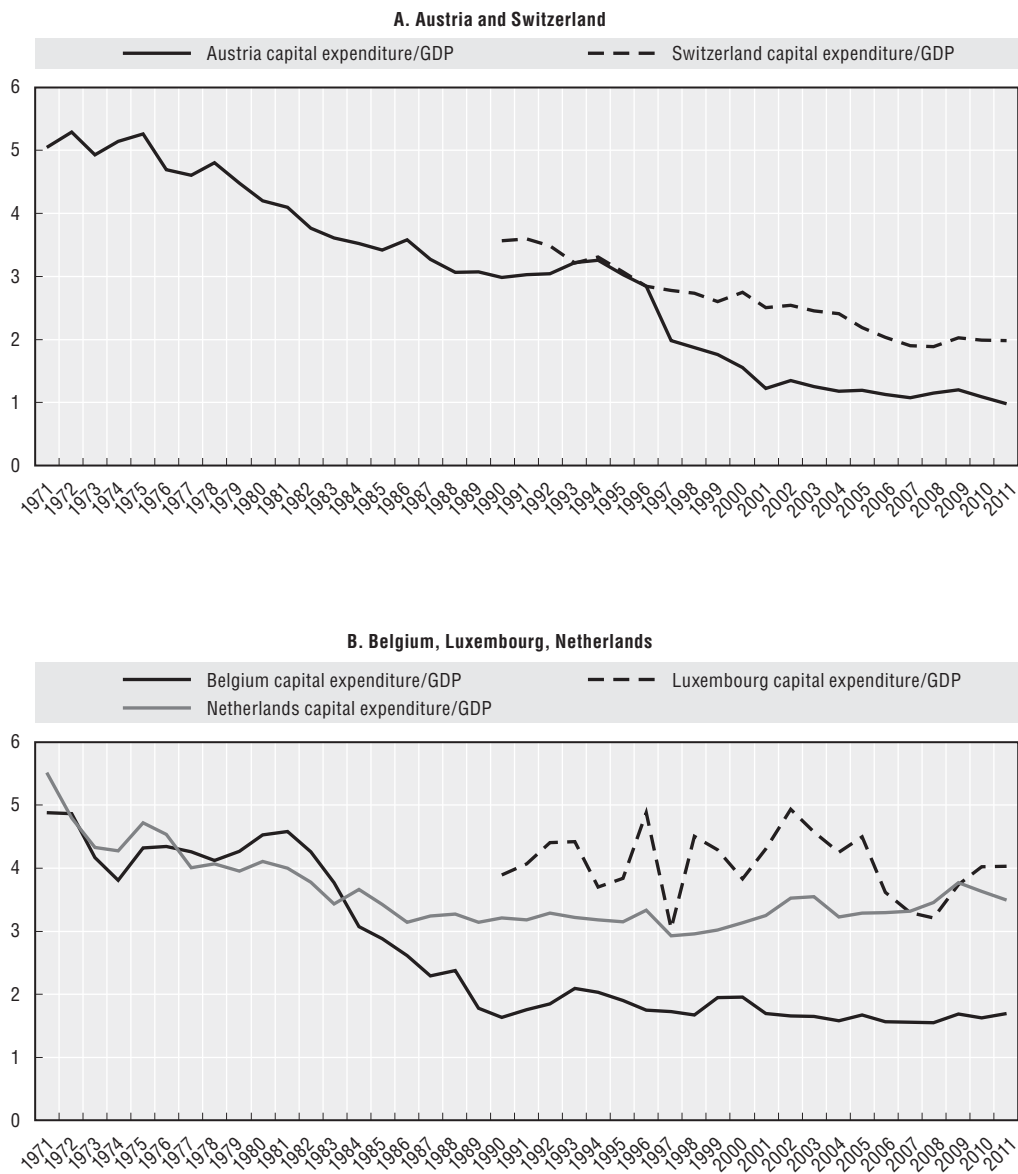
Figure 3. **Capital expenditure/GDP for selected countries**

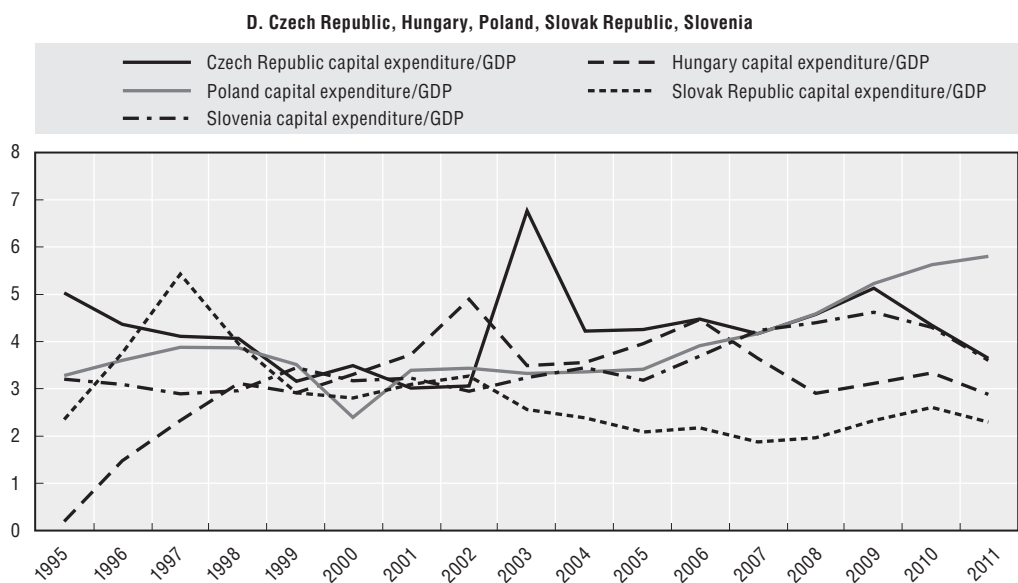
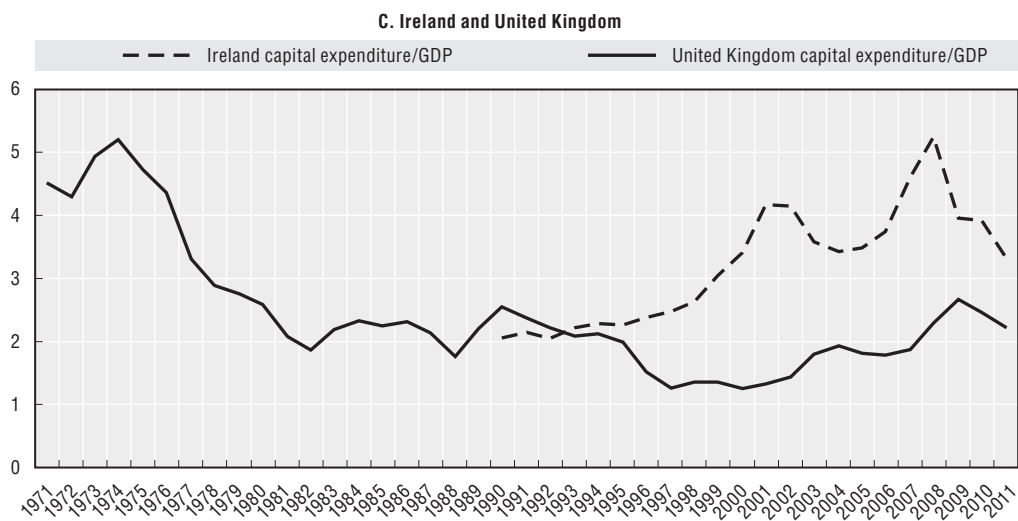
Figure 3. **Capital expenditure/GDP for selected countries (cont.)**

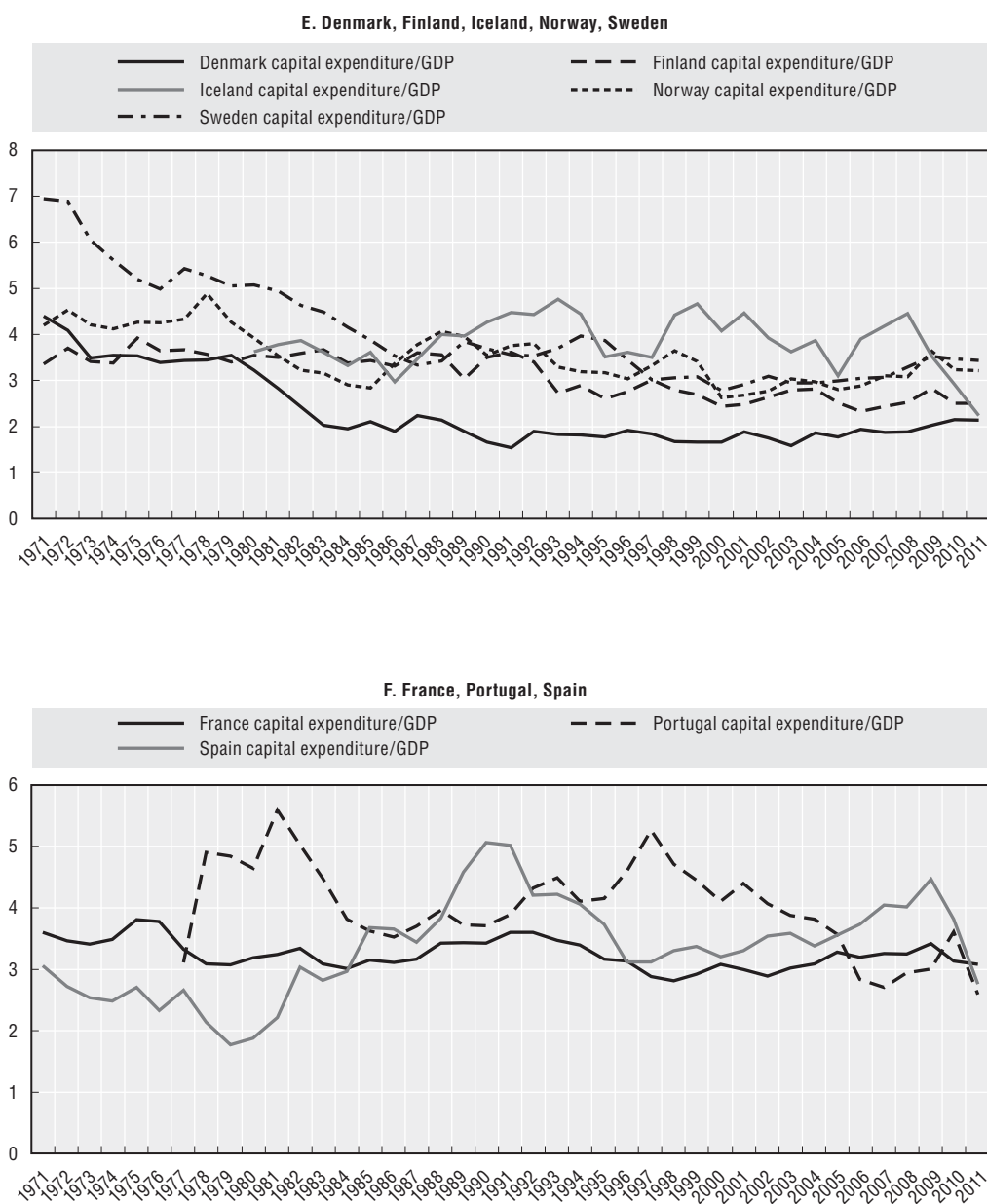
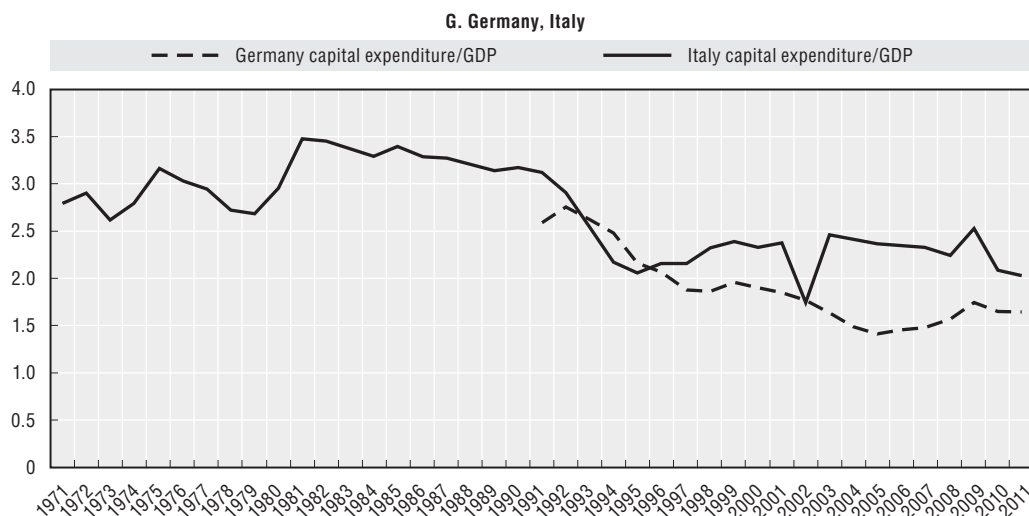
Figure 3. **Capital expenditure/GDP for selected countries (cont.)**

Figure 3. **Capital expenditure/GDP for selected countries (cont.)**

Source: OECD (2012), OECD Economic Outlook, Vol. 2012/1 (No. 91), OECD Publishing, http://dx.doi.org/10.1787/eco_outlook-v2012-1-en and authors' calculations.

3. Public-private partnership volumes and performance

PPPs account for a relatively small part of total public infrastructure investment flows. However, they represent sizeable investments and can be expected to increase further in light of fiscal pressures on many national treasuries.

Eighteen countries have enough information to state the percentage of public sector infrastructure investment that PPPs represent (total asset value, public plus private components included). Of these 18, five report that they do not have any PPPs. Of the remainder, eight report that PPPs constitute 5% or less of public sector infrastructure investment (see Table 1). Table 1 contains information with reference to specific countries. The United Kingdom tops the list, with the percentage of public sector infrastructure investment that takes place through PPPs exceeding 15%.

As shown in Table 2, there is a great variation in the number of PPPs in various countries. The United Kingdom tops the list with 648 PPPs, and Korea is a close second with 567 PPPs. Australia comes in at third place with 127 PPPs.

Much has been said and written about the extent to which one asset procurement method (PPP or TIP) outperforms the other. Responses show that a minimal number of PPPs failed (less than 18 of the cross-country stock) or had to be renegotiated to arrange an extension of the duration of the contract (less than ten). Bailouts are also limited in number (less than 12). According to Table 3, PPPs outperform TIP with regards to timeliness, construction cost, operating cost and quality of the finished project, although the number of countries in which PPPs outperform TIP is significantly fewer for operating cost compared to timeliness, construction cost and quality of the finished project. PPPs perform worse than TIP with regards to transaction costs. However, as discussed below, the picture is less positive for PPPs with regards to operating costs.

Table 1. For the 2011 fiscal year, what percentage of public sector infrastructure investment flow (total asset value, public and private components included) took place through PPPs?¹

Australia	> 10%-15%
Austria	No PPPs
Canada	> 1%-3%
Czech Republic	> 0%-1%
Estonia	No PPPs
Finland	> 10%-15%
Germany	> 3%-5%
Hungary	No PPPs
Italy	> 1%-3%
Korea	> 5%-10%
Luxembourg	> 5%-10%
Mexico	> 15%
New Zealand	> 1%-3%
Norway	> 3%-5%
South Africa	> 3%-5%
Spain	> 3%-5%
Sweden	No PPPs
Switzerland	No PPPs
United Kingdom	> 15%

1. The survey was conducted during the period June-August 2012. The questionnaire was sent to senior officials in the central budget authorities and related institutions. All 34 OECD countries were included, as well as two OECD enhanced engagement countries (Brazil and South Africa). Of the total 36 countries approached, 23 responded. The countries that responded are: Australia, Austria, Brazil, Canada, Czech Republic, Estonia, Finland, Germany, Hungary, Italy, Japan, Korea, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Slovak Republic, South Africa, Spain, Sweden, Switzerland, and United Kingdom.

Table 2. The number of PPP contracts, their value, and the extent of failure and renegotiation

	If possible, provide the total value of PPP contracts concluded for the 2011 fiscal year (in national currency)	How many PPPs were operating in your country during the 2011 fiscal year (i.e. the stock of PPPs)?
Australia		127
Canada	< CAD 8 billion	67
Czech Republic	CZK 1 billion	46
Finland	At the end of 2011, there were three central government PPP contracts in force with a total commitment value of EUR 1.6 billion. Expenditures so far amounted to about EUR 360 million, while future annual budget expenditures on these projects are foreseen to amount to some EUR 50-70 million during the next 15-20 years. This excludes any future new PPP projects.	3
Germany	EUR 1.6 billion	12
Japan		58
Korea	KRW 2.2 trillion	567
Luxembourg	EUR 115 million	0
Netherlands		18
Norway		3
Slovak Republic		1
South Africa	ZAR 90 million	20
United Kingdom	GBP 2.1 billion	648

Table 3. Based on the general experience of your government, how do PPPs perform relative to traditional infrastructure procurement with regard to the following dimensions?

	Better than TIP	The same as TIP	Worse than TIP	Not enough data
Timeliness, e.g. being completed on time/according to projected deadline	14	1	0	2
Construction cost, e.g. projects completed on or under expected budget	12	2	0	3
Operating cost, e.g. projects operate on or under expected budget	7	3	1	5
Quality of the finished project, e.g. projects comply with code, innovations, etc.	10	3	0	4
Transaction costs	4	1	7	4

The following questions attempt to elicit more detail regarding deviations of actual cost from projected cost and the extent to which delays occurred during the planning and construction phases of the PPP or TIP projects.

In the nine countries that could report results for PPPs in Table 4, construction costs did not exceed projected cost by more than 10% (see Table 4). Of the 12 countries reporting results for TIP projects, six reported that realised construction costs usually exceed projected constructions costs by more than 10%. Therefore, on the basis of construction costs PPPs seem to perform better than TIP projects. However, six countries report that they do not have sufficient data to make such an assessment for PPPs, while nine report insufficient data to make such an assessment for TIP (the latter constitute almost 40% of the countries that responded to the survey).

Table 4. In the experience of your government in most TIP and PPP projects in the period 2002-11, to what extent do ex ante, projected construction costs deviate from the realised construction costs of projects?

	PPPs	TIP
Realised cost is lower than projected cost by less than 10%.	2	0
Realised cost does not deviate from projected cost.	4	2
Realised cost is higher than projected cost by less than 10%.	2	4
Realised cost is between 10-29% more than the projected cost.	1	4
Realised cost is between 30-49% more than the projected cost.	0	2
Realised cost exceeds the projected cost by 50% or more.	0	0
Too little data to tell.	6	9

Although 12 countries reported that PPPs perform better than TIP projects with regard to construction costs, only seven countries could do so for operational costs. Only four countries in the case of TIP and five in the case of PPPs could assess the extent to which realised operational costs deviate from projected costs (see Table 5). Most countries report that they do not have enough data to make a judgment: 10 for PPPs (out of the 18 countries with PPPs responding to the survey) and 15 for TIP (out of the total of 23 countries responding to the survey). The large number of countries that are not able to respond with respect to PPPs is not necessarily that surprising. PPPs are relatively new to most (though certainly not all) of the countries that respond that they do not have sufficient data. However, what is surprising is the number of countries that are unable to respond to this question with respect to TIP projects. The large number of countries with insufficient data

also means that there is little information to assess empirically whether PPPs outperform TIP projects over the lifetime of the project. This contrasts strongly with the purported motivation of going the PPP route, namely the maximisation of whole-of-life value for money.

Table 5. Given the experience of your government in most TIP and PPP projects in the period 2002-11, to what extent do *ex ante*, projected operating costs deviate from the realised operating costs of projects?

	PPPs	TIP
Realised cost is lower than projected cost by less than 10%.	0	0
Realised cost does not deviate from projected cost.	3	1
Realised cost is higher than projected cost by less than 10%.	2	2
Realised cost is between 10-29% more than the projected cost.	0	0
Realised cost is between 30-49% more than the projected cost.	0	1
Realised cost exceeds the projected cost by 50% or more.	0	0
Too little data to tell.	10	15

Table 6 shows that, in terms of the delay between the moment a decision is taken to procure capital and the moment when the project starts operating, six countries report delays in some PPP projects (meaning between 10% and 49% of projects), with one reporting it in the vast majority of projects. Seven countries report delays in some TIP projects.

Table 6. During the period 2002-11, what proportion of TIP and PPP projects experienced delays between the moment a decision is taken to procure capital through TIP or PPP, and the moment when the project starts operating?

	PPPs	TIP
In all projects	0	0
In the vast majority of projects (i.e. in 75% or more)	1	0
In most projects (i.e. between 50% and 74%)	0	0
In some projects (i.e. between 10% and 49%)	6	7
In a few projects (i.e. in more than 0% but less than 10%)	3	4

With regard to the nature of the delays, Table 7 shows that in Australia and Canada delays in approval play a significant role in PPP projects. Construction periods that are longer than expected also play an important role in PPP projects in Australia, Hungary and Mexico, while changes in what the government wants from the project also serve as important causes of delay in Australia, Brazil, the Slovak Republic and Spain. Construction periods that last longer than expected are a common and relatively very important problem in the case of TIP projects in nine of the ten countries reporting problems with delays. The government changing its mind about what it wants from a TIP project also plays an important role in Australia, the Slovak Republic and Spain.

Table 7. **Were the delays mentioned in the previous question due to (when selecting, please indicate the level of importance of the cause of delay using a scale of five, with 1 being the least important and 5 being very important):**

	Australia	Brazil	Canada	Estonia	Germany	Hungary	Korea	Luxembourg	Mexico	Slovak Republic	Spain
PPPs											
Delays in approval ¹	5		5		1		2				
Differences due to stakeholder disputes ²		4			3	4	2			3	
Longer-than-expected contract negotiations	2	1	1		2		4			5	2
Construction takes longer than expected	5	3				4			4		2
Time delays due to financial pressure on construction company	5	2					1			1	4
Government changes its mind about what it wants from project; thus during the negotiation or construction it changes the desired outputs	5	4	1		3		1			5	4
Other									3	5	
TIP											
Delays in approval ¹	5			1	1		1	3			
Differences due to stakeholder disputes ²		1		3	3	4	2	3		3	
Longer-than-expected contract negotiations	2	2		4						5	2
Construction takes longer than expected	5	3		4	3	4	5	3	4	3	4
Time delays due to financial pressure on construction company	5	2		2	1					1	1
Government changes its mind about what it wants from project; thus during the negotiation or construction it changes the desired outputs	5	2		1	3		2	3		5	4
Other								2	3	5	

1. E.g. in parliament or oversight committees.

2. E.g. when a new high-speed rail line runs through a densely populated area with residents being unhappy about it, or unhappiness to pay by possible users.

4. The impact of budgeting and accounting systems on capital procurement

4.1. Defining capital

Public budgeting and accounting should allow the executive and legislative parts of the government to allocate resources to the legitimate and transparent execution of policy. Good budgeting practices allow the government to plan and record its efforts to maximise the welfare of its citizens. However, capital and the traditional techniques of public budgeting represent an awkward fit and may contain perverse incentives. The awkwardness covers issues such as the definition of capital, the headline deficit measure that the government selects, and the budgeting and accounting systems. The answers to these issues might create unintended incentives for procuring capital in a certain way.

Any analysis of capital budgeting needs to consider what constitutes capital. At least since the 1960s, proper budgeting for capital and capital budgeting required the application of a set of criteria, first to decide whether the expenditure qualifies as a capital expenditure and, second, whether or not the expenditure is justified. The latter usually entails a cost-benefit analysis or value-for-money assessment, as well as an assessment as to whether or not the expenditure can be afforded, either in a single-year or multi-year budgetary framework.

Traditionally, whether or not an expenditure is classified as a capital expenditure depends on three accounting criteria (Premchand, 2007:94):

1. Will the good be used in the production or supply of goods and services? (called the productivity criterion).
2. Does the life of the good extend beyond one year? (called the longevity criterion).
3. Is the good intended for resale? (called the use-by-government criterion).

Premchand (2007:94) further argues that economists usually add a further criterion: is the good either self-financing or self-liquidating? Self-financing means that the good can service its own interest payments, while self-liquidating means that the good can service its own interest and principle repayments.² To establish whether or not a project is self-liquidating requires that the government does a whole-of-life (net present value) valuation of its projects. If only self-liquidating projects are approved, a government effectively (though not necessarily formally) applies the three accounting criteria, as well as the economic criterion. Of course, such pure examples where governments only select self-liquidating projects as capital do not exist in reality. However, if the government does not in general use a whole-of-life (net present value) approach, it might select projects that do not represent positive value for money. It also means that the economic return on government capital might be lower compared with the case where it did apply a whole-of-life (net present value) approach.

If a government does apply a whole-of-life (net present value) approach and uses it as a determining factor when selecting most of its capital projects, it might just as well use the economic criterion formally when defining capital. The exception to this would be heritage goods or goods such as national parks, while it should be possible to apply the economic criterion to all capital that will be used in producing government services. Doing so will give a clearer picture about the government's net worth, particularly if that government also applies a golden rule according to which, over the business cycle, a government does not borrow more than it needs to finance net capital expenditure³ (with depreciation being met from revenue; also see Kahn and Mayes, 2009:4).

In most of the countries, what qualifies as a capital good depends mainly on two criteria (see Table 8). The most important is whether the good has a life that extends beyond one year (the longevity criteria) and, second, whether or not the good will be used in the production or supply of goods and services (the productivity criteria). Canada, Estonia, Italy, New Zealand, the Slovak Republic, South Africa and the United Kingdom use both these criteria. Finland, Korea and Sweden also apply the longevity criteria in their accounting but not in their budgeting. A few countries also consider whether or not the good is intended for resale (Canada, Estonia and the United Kingdom in both their accounting and budgeting, while the Slovak Republic and Sweden only use it in their accounting).

4.2. Capital accounting, budgeting for capital, and capital budgets

When identifying some transactions as capital in nature, a further distinction is drawn between:

- capital accounting;
- budgeting for capital (or capital budgeting);
- capital budgets.

**Table 8. In accounting and budgeting terms, which of the criteria below does your government use to define a good as capital?
(more than one option per country is possible)**

	In budgeting terms	In accounting terms
The good will be used in the production or supply of goods and services	10 countries: Brazil, Canada, Estonia, Finland, Italy, Mexico, New Zealand, Slovak Republic, South Africa, United Kingdom	10 countries: Brazil, Canada, Estonia, Finland, Italy, Mexico, New Zealand, Slovak Republic, South Africa, United Kingdom
The good has a life that extends beyond one year	14 countries: Australia, Canada, Czech Republic, Estonia, Hungary, Italy, Japan, Luxembourg, New Zealand, Slovak Republic, South Africa, Spain, Switzerland, United Kingdom	17 countries: Australia, Canada, Czech Republic, Estonia, Finland, Hungary, Italy, Japan, Korea, Luxembourg, New Zealand, Slovak Republic, South Africa, Spain, Sweden, Switzerland, United Kingdom
The good is not intended for resale	3 countries: Canada, Estonia, United Kingdom	5 countries: Canada, Estonia, Slovak Republic, Sweden, United Kingdom
The good is either self-financing or self-liquidating	No country	No country
Not applicable	5 countries: Germany, Korea, Netherlands, Norway, Sweden	3 countries: Germany, Netherlands, Norway

Capital accounting refers to the keeping of separate accounts for realised capital and current transactions in the government books. A distinction between these two types of transaction is possible within the context of both accrual-based and cash-based accounting systems. The same is true for capital budgeting – i.e. in planning prospective transactions, a government can distinguish between prospective capital and current transactions and it can do so either under an accrual-based or a cash-based budgeting system.

Distinguishing between capital and current transactions in the budget can occur in a unified budget or in two separate budgets. Therefore, capital budgeting can occur within a unified budget that encompasses both capital and current transactions, or it can occur in a separate capital budget.⁴ In some countries, these separate budgets are managed by separate government departments, and parliament even approves them separately. The underlying logic to the practice of having separate capital and current budgets is the same as the logic, and the discipline, underlying the so-called golden rule. Thus, the practice is usually that current transactions on the current budget are financed from tax revenues, while capital transactions can, but need not, be financed by loans. The rationale for separate capital and current budgets is the danger that a unified budget makes it easier for mandatory items such as entitlements to crowd out discretionary items such as capital (Posner et al., 2009:56).

However, with increased emphasis on the integration of capital and current expenditure, most countries introduced a single, unified budget (cf. Jacobs, 2009:7-8). Table 9 indicates that, in Korea, the Netherlands, Norway and Sweden, no distinction is made between capital and current transactions in the budget. By implication this also means that there are no separate budgets for the two types of transaction. Mexico and the United Kingdom use dual systems with two separate budgets for current and capital transactions. The other 17 countries distinguish between capital and current expenditure, but in doing so they use a unified budget that includes both.

The great majority of OECD countries run single, unified budgets. This is done with the recognition that the government operates under a single overall budget constraint and that

Table 9. There has been a long debate in many countries as to whether or not governments should have a budget for capital that is altogether separate from the budget for recurrent expenditure and revenue. Does your government:

a) Make no distinction between capital and current expenditure?	Total 4: Korea, Netherlands, Norway, Sweden
b) Distinguish between capital and current expenditure but, in doing so, use a unified budget (i.e. a budget that contains both capital and recurrent expenditure)?	Total 17: Australia, Austria, Brazil, Canada, Czech Republic, Estonia, Finland, Germany, Hungary, Italy, Japan, Luxembourg, New Zealand, Slovak Republic, South Africa, Spain, Switzerland
c) Use a dual system, i.e. where there are altogether separate budgets for capital and current items?	Total 2: Mexico, United Kingdom

different claims on the budget, be they capital or current, should compete with one another within the limitation of the overall budget constraint (Posner et al., 2009:57). A unified budget also makes it easier for the government to consider non-capital alternatives to capital projects. For instance, if a road experiences congestion, one possibility is a capital project to enlarge the road (i.e. add some lanes), but the non-capital alternative might be to impose a congestion charge that will choke off demand and alleviate the congestion. Of course, although the introduction of a unified budget might be predicated on the better integration of capital and current expenditure, it does not guarantee better integration.

Unfortunately, with many governments switching to unified budgets and the use of an overall cash-based budget balance in the 1970s, the discipline inherent in having separate budgets for capital and current expenditure (i.e. that only capital expenditure can be loan financed) was lost. With an overall cash-based budget balance that includes both current and capital expenditure, it becomes less clear whether government borrowing finances only capital expenditure or both capital and current expenditure.

In an effort to ensure budgetary discipline, governments such as those of Germany and the United Kingdom introduced the golden rule (Jacobs, 2008:7). In Germany, it was written into the Constitution, while the United Kingdom government accepted it as policy in 1997 and put it into law in 1998 in the Finance Act 1998 and the *Code for Fiscal Stability*. In 2009, Germany tightened its policy stance on debt beyond the specifications of the golden rule by amending Articles 109, 115 and 143 of its Constitution and thereby introducing the debt brake whereby the federal government will not be allowed to run deficits from 2016 and the German states not from 2020 (exceptions though are allowed). With the onset of the 2008/09 financial and economic crisis, the United Kingdom went in the opposite direction and, in 2009, abandoned the golden rule. Although the golden rule is not general practice, by using it governments can justify incurring deficits to finance capital. Thus, given the fiscal stress that many countries experience, one might expect renewed interest in the golden rule.

More popular than the golden rule are fiscal rules that put limits on debt and deficits. Those imposed by the EU are an example. As the ongoing fiscal crisis testifies, many countries exceeded the limits set by these rules even though their contents have been made stricter through time (e.g. the EU Fiscal Compact⁵ accepted in 2012 for implementation in 2013 is stricter than the conditions of the Stability and Growth Pact or the Maastricht Criteria).⁶ Therefore, strengthening discipline with a fiscal rule in a system with unified budgets does not necessarily guarantee discipline – only political will can guarantee it.⁷

Not only does the introduction of a unified budget make it less clear what type of expenditure is financed by government borrowing, but in a unified budget capital

expenditure draws less attention and subsequently might be lower compared to a case with separate current and capital budgets. This is indeed what Poterba found in his seminal study for the United States (Poterba, 1995). Using data for the 1960s in a study that compared US states, Poterba found that states with separate current and capital budgets spent more on capital (note, though, that more is not necessarily better). However, the presence or absence of a separate capital budget did not affect non-capital spending.

Whether a government should run separate capital and current budgets or run a unified budget (that nevertheless distinguishes between capital and current expenditure) is, as discussed above, not unambiguously clear. While separate budgets imply stronger discipline but weaker integration of capital and current expenditure decisions, the opposite is true for unified budgets. Thus, whichever option a government selects, it needs to also address the weak points of that option. If it selects the use of separate capital and current budgets, it will need to strengthen the selection mechanisms of capital projects to ensure that line ministries better integrate their capital and current expenditure decisions. If it selects a unified budget, it should ensure that the unified budget is also accompanied by guidelines or fiscal rules as well as the political will to limit government borrowing that finances current expenditure.⁸

4.3. The incentive structure of accrual-based and cash-based systems for accounting and budgeting

In addition to the acceptance of the golden rule or other fiscal rules, some countries also replaced their cash-based budgeting and accounting with accrual-based budgeting and accounting. Cash-based budgeting and accounting systems recognise transactions and events when cash is received or paid, whereas accrual-based budgeting and accounting is a system in which revenues are recognised when they are earned and expenses are recognised as they are incurred. Accrual-based means that the headline deficit measure, called a net operating balance, excludes capital acquisition cost but includes the depreciation of capital (the consumption of capital).⁹ The move to introduce accrual accounting coincides with the release by the IMF in 2001 of new guidelines for Government Finance Statistics (GFS). The 2001 GFS system differs from the 1986 GFS system in being accrual-based compared to the cash-based nature of the 1986 version (also see Kahn and Mayes, 2009:1).¹⁰

Blöndal (2004:105-107), Schick (2007:130-137), Robinson (2009:78-79) and Kahn and Mayes (2009:3-6) discuss the arguments for and against accrual-based budgeting. With respect to capital, these arguments include the following:

1. With accrual-based budgeting, decision makers have more information about full cost. For instance, cash-based systems do not record depreciation, while accruals do. This will improve budgetary discipline as well as the effectiveness and efficiency of expenditure. Specifically, better choices are made with respect to priorities and the inputs to use, as well as the choice between outsourcing and internal production. However, opponents argue that improved discipline can be created without accrual-based budgeting. For a detailed discussion on this, see Schick (2007:131-137).
2. The introduction of accrual-based budgeting focuses attention on the improvement of the management of capital stock, including the acquisition, disposal and maintenance of capital. Again, opponents argue that such improvement can be done without accrual-based budgeting.

3. In a cash-based system, the lump sum spent on capital investment is all recorded in the year that the government pays for the investment. An accrual-based system will allocate the capital expenditure over the life of the capital, thus eliminating the perceived anti-capital bias of the cash-based system. However, some opponents of accrual-based budgeting argue in favour of the “matching principle” according to which the lump-sum expenditure on capital acquisition is all recorded in the year in which the government pays for the capital so as to “match” it to the year in which the political decision was taken to buy the asset. If not matched but allocated over the life of the capital, the expenditure of future governments will reflect the decisions of previous governments. Robinson (2009:78) also mentions that some countries, such as France and the United States, use a commitment-based system, which differs from a cash-based or accrual-based system. In a commitment-based system, the government reports in the budget the total capital expenditure in the year that the contract is signed, even if the payment for capital takes place in a later year.
4. Some argue that an accrual-based system allows for less manipulation aimed at making the government’s financial position look better. For instance, in a cash-based system an asset can be sold, thereby reducing the deficit, while an accrual-based system would not record it as a reduction in the net operating deficit. However, Schick (2007:134) argues that accrual-based systems contain various other ways in which the government’s financial position can be manipulated to make it look better (e.g. assumptions regarding tax arrears or discount rates) and that often these manipulations are more difficult to detect than the manipulations in cash-based systems.

The choice of system – i.e. whether a government selects a cash-based or an accrual-based system, or something that is a hybrid of the two – affects the comparability of costs and ultimately may affect the choice between public-private partnerships (PPPs), delivery through an SOE¹¹ and traditional infrastructure procurement (TIP).

Accrual-based budgeting is still less popular than accrual-based accounting: by 2004, seven OECD countries had introduced accrual accounting, while only three had introduced accrual-based budgeting (Blöndal, 2004:117). By 2009, Posner et al. (2009:78) added Denmark to the list. The responses to this survey show that there are a number of variations in how the two principles are applied.

Table 10 shows that most countries use either a cash-based or accrual-based system for their accounting and budgeting, with some using a combination of methods. For instance, with respect to accounting, Italy uses a combination of a cash-based and a commitment-based system, while Switzerland uses a combination of an accrual-based and a commitment-based system. For its budgeting, Finland uses a combination of cash-based, accrual-based and commitment-based systems. However, most countries use only one system. For instance, eight of the nine countries that use a cash-based system for their accounting, use only a cash-based system. Eight of the ten countries that use an accrual-based system only use an accrual-based system.

For budgeting, the picture is more mixed. Five of the twelve countries that use a cash-based system for budgeting use only that system, while for accrual-based budgeting the number is three out of the eight countries. Table 11 shows that, in non-accrual-based budgeting systems, the appropriations for the capital project are appropriated annually according to the project plan. While this may result in delays and indeed higher costs due to the risk of a project being discontinued, it is often a direct result of the one-year basis of

Table 10. **What is the basis for your government's accounting (of realised transactions) and its budgeting (of prospective transactions)? (more than one option is possible)**

	Accounting	Budgeting
Cash-based	9 countries: Czech Republic, Finland, Germany, Hungary, Italy, Japan, Netherlands, New Zealand, Norway	12 countries: Austria, Brazil, Czech Republic, Estonia, Finland, Germany, Italy, Japan, Korea, Netherlands, New Zealand, Norway
Accrual-based	10 countries: Australia, Austria, Canada, Estonia, Korea, New Zealand, Slovak Republic, Sweden, Switzerland, United Kingdom	8 countries: Australia, Austria, Canada, Czech Republic, Finland, New Zealand, Switzerland, United Kingdom
Modified cash-based	3 countries: Luxembourg, Mexico, South Africa	5 countries: Luxembourg, Mexico, Slovak Republic, South Africa, Sweden
Modified accrual-based	2 countries: Brazil, Spain	Spain
Commitment-based	2 countries: Italy, Switzerland	4 countries: Brazil, Finland, Italy, Switzerland

the budget process in OECD countries. The legislature's "power of the purse" as a general rule involves appropriating for only one year and does indeed never extend beyond a legislature's term.

Table 11. **If your government uses a cash-based, modified cash-based or commitment-based system to appropriate funding in the annual budget, does it allocate construction costs in the following manner?**

a) Total cost is appropriated in the first year and subsequently carried over until the project is completed.	Total 1: Finland
b) The cost is appropriated annually according to the project plan.	Total 15: Brazil, Canada, Czech Republic, Estonia, Germany, Hungary, Korea, Luxembourg, Mexico, Netherlands, Norway, Slovak Republic, Spain, Sweden, Switzerland
c) Not applicable, since your government only uses an accruals-based system.	Total 3: Australia, New Zealand, United Kingdom

Good planning suggests that the construction cost estimates of the value-for-money analysis, discussed in the next section, should serve as inputs into the budget and the medium-term expenditure estimates of the government. This is indeed the case for TIP and PPP projects in respectively 13 and 18 countries (see Table 12).

4.3.1. The choice of system, and comparability of the costs of PPPs and TIP

Irrespective of whether the government uses a cash-based or accrual-based system, with a PPP the capital expenditure is not recorded on the budget or in the accounts of the government. It will appear on the budget and in the accounts of the private partner. Instead, the government records the annual payments to the private partner. These payments should allow the private partner to service its debt (repayment of loan, as well as paying interest), pay for the maintenance and management of the capital, and generate some profit.

Irrespective of whose debt it is or who owns the asset, if the debt repayment of a project is aligned with the lifetime of the asset, the amount of debt repaid and the amount of the depreciation that the asset entails might be very similar (whether that asset is owned by the private partner, as in the case of a PPP, or is owned by the government, as is the case with a TIP). Therefore, in an accrual-based system, if the government selects a PPP, that part of the amount that the government pays to the private partner to allow it to repay its debt might look very similar to the amount that would be recorded for depreciation if

Table 12. Do the construction cost estimates of the value-for-money analysis for projects serve as inputs into the budget and the medium-term expenditure estimates of the government?

	PPPs	TIP
Australia	Yes	Yes
Austria	-	-
Brazil	No	Yes
Canada	Yes	Yes
Czech Republic	Yes	Yes
Estonia	No PPP	Yes
Finland	Yes	Yes
Germany	Yes	Yes
Hungary	Yes	Yes
Italy	-	-
Japan	-	-
Korea	Yes	Yes
Luxembourg	Yes	Yes
Mexico	Yes	Yes
Netherlands	Yes	Yes
New Zealand	Yes	Yes
Norway	-	Yes
Slovak Republic	Yes	Yes
South Africa	-	-
Spain	Yes	Yes
Sweden	No PPP	Yes
Switzerland	No PPP	Yes
United Kingdom	No	No
Total “yes”	13	18
Total “no”	2	1

the government selected a TIP project instead of a PPP. Thus, in an accrual-based system the current expenditure of PPPs and TIP projects might look very similar and are comparable. In contrast, because the cash-based system excludes depreciation on TIP projects while a payment to a private partner in a PPP will still include the component to allow it to repay its debt, the current expenditure of government on PPPs and equivalent TIP projects is not completely comparable. Therefore, because the accrual-based system accounts for depreciation of TIP projects, the current expenditure in an accrual-based system will look larger than in a cash-based system. However, this difference in cost size is an illusion, as it merely rests on the inclusion or exclusion of depreciation.

Thus, equivalent treatment of the PPP and TIP options suggests the use of an accrual-based system. Alternatively, if a government uses a cash-based system, an equivalent treatment of the PPP and TIP options requires a full recognition of depreciation costs.

4.3.2. The choice of system, and the choice between TIP, PPP and delivery through an SOE

The preference for the delivery through TIP, a PPP or an SOE might be influenced by the government's choice of headline deficit indicator, which in turn depends on the budgeting and accounting systems that the government uses. Conceptually, the cash-based total balance indicator and the accrual-based net lending/borrowing indicator are similar. Both concepts include current expenditure and net capital acquisition (although the cash-based definition does not account for depreciation). The focus of both these indicators is also on

changes in the government's total (gross or net) debt position. However, the inclusion of capital expenditure in both indicators means that when there is pressure to reduce the deficit and debt, there are the following incentives:

- An incentive to prefer PPPs and SOE delivery to TIP, because with a PPP and SOE delivery the capital expenditure and the accompanying debt are off-budget and off the accounts of the government. Mintz and Smart (2006) note that governments at times create agencies outside of general government and then re-route investment through these agencies. In addition, these agencies issue bonds to finance the investment projects, while the government guarantees the debt. In this manner, the investment decision is off-budget with respect to the general government. Thus, the government will find it easier to comply with a debt and deficit rule defined in terms of the cash-based total balance or accrual-based net lending applied to general government.¹² However, there exist also very legitimate reasons why a government might decide to let an agency conduct the investment instead of a government department. If the type of project is complex and a specific agency specialises in projects of that type and complexity, the agency might be in a position to deliver better value for money. The choice between delivery through an agency and delivery through a traditional government department is therefore very similar to the choice between using a PPP and TIP. This similarity extends to the balance-sheet treatment of assets. If an agency buys the asset with funds it raised in the capital market, the bulky investment does not appear on the balance sheet of the government.
- An incentive to reduce capital expenditure in the form of TIP relative to current expenditure. Reducing capital expenditure might be easier than reducing entitlement expenditure or other expenditure that flows directly to voters (e.g. salaries of civil servants), and doing so may succeed in reducing the deficit (be it a cash-based total balance or an accrual-based net lending/borrowing indicator). However, reducing the deficit through a reduction in capital expenditure will not improve the net worth of the government. Only a reduction in current expenditure to reduce the deficit will improve the net worth of the government.
- Of the 23 responding countries, 12 use cash-based total balances as the headline measure of the budget balance (see Table 13). Another six countries use an accrual-based net lending/borrowing measure, while five use a combination of systems. The differences in headline measures are largely a reflection of the type of accounting and budgeting systems that the countries use.

Table 13. **Which budget balance measure constitutes your headline measure?**

Cash-based total balance	Total 12: Australia, Czech Republic, Finland, Germany, Japan, Korea, Luxembourg, Mexico, Netherlands, Norway, Sweden, Switzerland
Accrual-based net lending/borrowing	Total 6: Austria, Canada, Estonia, Slovak Republic, Spain, United Kingdom
Other ¹	Total 5: Brazil, Hungary, Italy, New Zealand, South Africa

1. Details about "Other":

Brazil: Public revenues measurement is cash-based, while expenditure is commitment-based.

Hungary: Mixed-based total balance.

Italy: Revenues include also revenues from the sale of financial and non-financial assets, while expenditure includes loans granted.

New Zealand: The government uses two key measures, namely accrual-based net debt and OBEGAL, which is a net operating balance measure. These are defined in published financial statements of the New Zealand government (see www.treasury.govt.nz/budget/forecasts/befu2012).

South Africa: Modified cash-based total balance.

These incentives would not exist if the headline measure were the accrual-based net operating balance. Preference for its use is predicated on it measuring a change in the government's net worth, instead of assessing the change in total (gross or net) debt.¹³ By adopting an indicator such as the net operating balance, the government focuses on its net worth instead of its debt. It thereby eliminates the incentive to reduce capital expenditure instead of current expenditure or to shift the capital expenditure off the budget or off the accounts of the government in times of budgetary pressure.

Despite this benefit of the net operating balance, fear could exist that the government might lose control over borrowing if it does not also approve the total amount of borrowing that finances investment (Martí, 2006:63-64). However, controlling the net operating balance does not preclude the government from controlling the total level of borrowing (Robinson, 2009:79). This can be done by augmenting the targeting of the net operating balance with an additional borrowing limit on capital expenditure. The alternative is for the government to target the net lending/borrowing instead of the two individual balances (i.e. the net operating balance and the borrowing for capital expenditure). However, Robinson (2009:79-81) points out that a budgetary limit on capital is not even a necessity, as there are also indirect ways to control capital spending, as in Australia and Denmark. In Australia, the Parliament approves a pool of funds from which spending ministries at any time can use funds to procure capital, while in Denmark spending ministries can take out internal state loans on which there is a limit per department. In addition, in both countries central approval is required for capital projects.

Nevertheless, if a government explicitly budgets for capital expenditure, it probably uses a cash-based total balance indicator, an accrual-based net lending/borrowing indicator or an accrual-based system together with targets for both the capital budget balance and the current budget balance. To ensure that, under these configurations of the system, there is no incentive to prefer PPP projects to TIP projects, the government should – irrespective of whether a project is a TIP or a PPP project – budget the full capital cost up front (Funke et al., forthcoming). In the case of a TIP project, the full capital cost is the direct capital cost, while in the case of a PPP it is the capital component of all future costs. This is in principle the practice in France and the United Kingdom (HM Treasury, 2007, paragraphs 14-17; Posner et al., 2009:67).¹⁴ Where the government carries a contingent liability, the same should be done for all investment projects of SOEs. The presumption that the capital cost of all these SOE and PPP investments will be fully budgeted up front would largely eliminate the incentive to prefer PPPs and SOE delivery to TIP delivery merely because the investments of PPPs or SOEs are recorded off-budget and off the books of the government. An additional but related matter concerns the measurement of the impact of PPPs, SOEs and TIP on fiscal sustainability. Being part of government's everyday activity means that the effect of TIP projects on fiscal sustainability is fully reflected in public debt and future primary balance numbers. The same is not true for PPPs and projects undertaken by SOEs whose debt the government guarantees. This again creates an incentive to get projects off the books of the government. According to Hemming (2006:51-52), two ways are available to the government to prevent this asymmetry between PPPs and TIP projects:

- Add the present value of future PPP commitments to public debt to establish a more realistic reflection of the government's total commitments. Sustainability would then be judged in terms of public debt plus PPP commitment. Should fiscal policy seem unsustainable, the question will be with how much does the primary balance need to be adjusted to ensure fiscal sustainability.

- Do not add the PPP debt to public debt, but include the non-debt-servicing component of the future expenditure that PPPs imply for the government as part of the primary expenditure of the government. Should public debt seem unsustainable with the inclusion of the PPP costs into the primary balance, the government will have to indicate how it plans to ensure fiscal sustainability by cutting expenditure and/or raising more revenue.

With respect to SOE investments where the government guarantees the debt that the SOE issues, the implied contingent liability of the government should be added to public debt to assess the sustainability of fiscal policy.

In the interest of transparency and good fiscal planning and management, budget documentation or other published material should contain an assessment of contingent liabilities. Ideally they should be listed and priced, but merely listing them would help to flag potential problems. However, as indicated in Table 14, the government documentation in only four countries for PPPs – and in only three countries for SOEs, agencies and private incorporated businesses – lists and prices contingent liabilities (the four are the Czech Republic, Estonia, Finland and the Slovak Republic, while the three are Brazil, Estonia and Luxembourg). In three countries, the government documentation lists contingent liabilities related to PPPs (Canada, Italy and South Africa). The same number of countries lists them for SOEs, agencies and private incorporated businesses (Canada, Italy and New Zealand).

Table 14. Does the budget documentation or other published material contain an assessment with respect to contingent liabilities derived from:

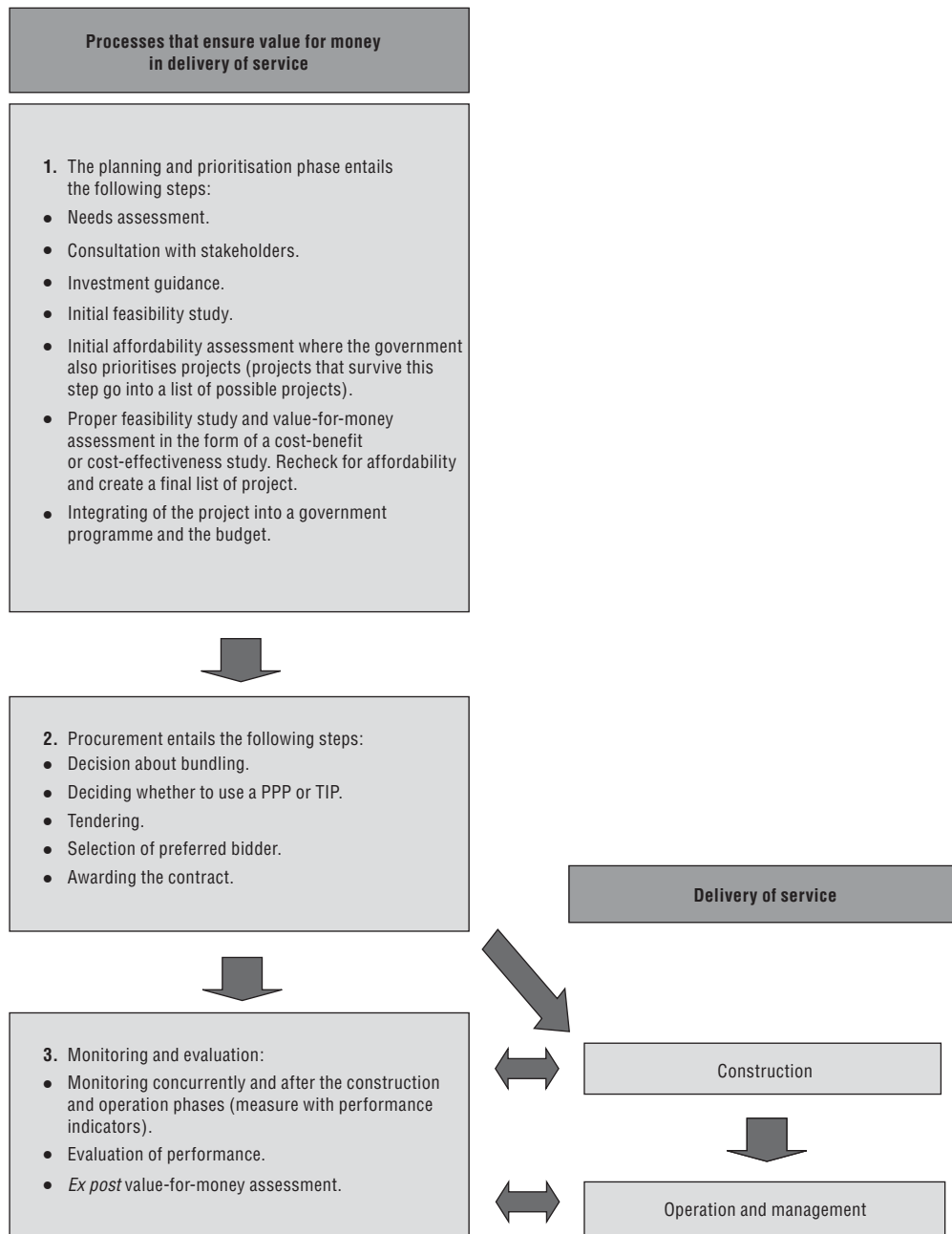
	PPPs	SOEs, agencies and private incorporated businesses
a) Yes, they are listed but not priced	3	3
b) Yes, they are listed and priced	4	3
c) No	11	11

5. Overview of the procurement cycle and institutional roles

As noted in the introduction, there are several phases to the capital procurement cycle (see Figure 4; also see Rajaram et al., 2010, and Dorotinsky, 2008a and 2008b). Broadly, the phases can be divided into those that are aimed at ensuring that the delivery of the service yields maximum value for money (planning and prioritisation, procurement, monitoring and evaluation) and the actual implementation of the project (construction, operation and management). The focus of this article is on institutional roles, systems and activities that are necessary for ensuring value for money and affordability. The issues of the implementation phase are not discussed in this article.

Planning and prioritisation as well as procurement should be done with the intention of selecting those projects that will maximise value for money once constructed and operating. Monitoring and evaluation focus on whether value for money has been attained. The focus on value for money contrasts with a procedures-based procurement system, where the latter focuses primarily on compliance with stated rules and procedures (Veiga Malta et al., 2011:12). Therefore, the rules involved with a value-for-money approach focus on steering public sector managers towards maximising value for money.

As illustrated in Figure 4, the capital procurement process can be broken down into several activities, with different institutions primarily being responsible for each of these activities. These activities are listed as the column headings in Table 15a and 15b. The chief

Figure 4. **Phases of the procurement cycle**

executive or elected government body is a primary actor in the prioritisation of infrastructure and capital projects in 12 of the 23 countries. In eight countries, it is also involved in assessing needs, resolving conflict, and deciding whether the TIP or PPP mode of delivery is more adequate. The central budget authority plays a role in most countries (15) with respect to planning and budgeting proposals. In a smaller number of countries, it also plays a role in the prioritisation of infrastructure and capital projects (nine countries) and *ex ante* value-for-money assessments (eight countries). As can be expected, the

Table 15. Please indicate who are the primary actors responsible for each of the activities listed below

(Select a maximum of two or three actors per row, including them only if they play prominent roles in each activity. Not all of the activities take place in every country; if an activity does not take place, please select the choice “n.a.”)

	a) Chief executive or elected governing body	b) Legislature or legislative body	c) Central budget authority	d) Ministry responsible for capital projects	e) Executive agency for infrastructure answering to a ministry	f) Private consultants	g) Civil society organisations	h) Supreme audit institutions	i) “n.a.” (e.g. activity does not take place)
Prioritisation of all infrastructure/ capital projects	12	8	9	18	7	0	2	1	1
Needs assessment	8	2	6	21	8	2	1	2	0
Consultation about project outputs	4	1	6	18	11	6	4	2	0
<i>Ex ante</i> value-for-money analysis	1	1	8	15	12	9	2	1	1
Planning and budgeting proposal	3	1	15	21	10	1	2	1	0
Dispute resolution	8	1	6	11	6	1	1	1	3
Monitoring project execution	4	1	7	18	13	4	1	6	0
<i>Ex post</i> evaluation	2	0	4	17	11	4	1	12	0
Deciding whether PPPs or TIP are more adequate	8	2	12	17	5	3	0	1	2
Determining rules for PPPs	5	4	11	9	3	1	0	2	3
Procurement for PPPs	2	1	4	11	4	5	2	0	6

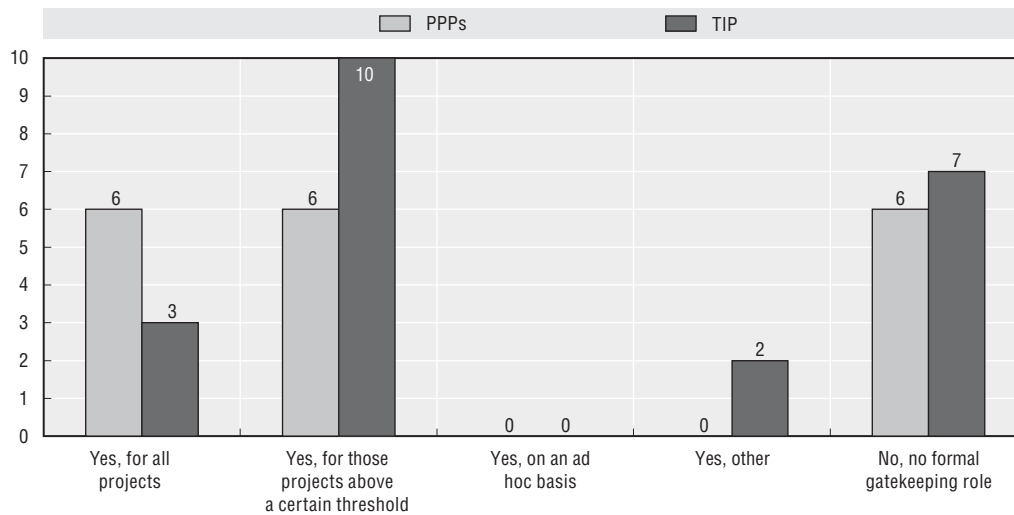
ministry responsible for the project plays a significant role in almost all the activities. Executive agencies for infrastructure play a role in many of the countries with respect to project outputs (11 countries), *ex ante* value-for-money assessments (12 countries), planning and budgeting proposals (10 countries), monitoring project execution (13 countries), and *ex post* evaluation (11 countries). The supreme audit institution plays a primary role in *ex post* project evaluation in the case of 12 countries.

Value for money should be the golden thread that runs through all these phases. In principle, the government should undertake no project unless it represents value for money. Value for money is a concept that includes both qualitative and quantitative aspects and typically involves an element of judgment on the part of the government. The value-for-money point is often made in terms of allocative efficiency, where the latter is defined in terms of benefits and costs (Jacobs, 2009:8). However, it goes beyond allocative efficiency to encompass planning and prioritisation and the actual procurement, as well as the monitoring and evaluation phases of the procurement cycle.

In a majority of countries, the central budget authority (CBA) is required to approve if not all capital and infrastructure PPP and TIP projects, then all those above a certain threshold (Figure 5). A somewhat larger number than the number of countries requiring CBA approval for TIP projects require it for all PPP projects (six versus three countries).

In 12 countries, the supreme audit institution is responsible for *ex post* value-for-money assessment. It assesses *ex post* value for money relative to the *ex ante* value for money in Australia, Brazil, Finland, Germany, Hungary, Luxembourg, Mexico and the Netherlands, while in Estonia, Norway, the Slovak Republic and South Africa, it does not.

Figure 5. **Is the central budget authority required to approve capital/infrastructure projects of line ministries (even when these projects fall within the existing approved budget envelope of the responsible line ministry/agency)?**



6. Planning, prioritisation, and ensuring value for money

The planning and prioritisation phase starts with the conceptualisation of the project and ends when the project is ready to proceed to tender. At the outset, a line ministry and/or other relevant authorities must conduct a needs analysis. This will often be linked to the political programme and mandate of the elected government, and the project may on a general level be part of a long-term infrastructure development plan. Such a plan might exist at either the national level or a policy area level.

If a project is complex or out of the ordinary for a line ministry, it might also need project guidance. External consultants may fulfil such a role. From the outset, the government should consult external stakeholders of the project. These could include the direct beneficiaries of the service but also those affected by the delivery of the service, labour unions, lobby groups or those dealing with public interest issues such as environmental interest groups. While it may make the process more complex, involving these stakeholders at a relatively early stage should ensure legitimacy and buy-in as well as reduce delays caused by disputes with external stakeholders. For instance, agreeing on who should undertake an independent environmental impact study for a project might reduce delays. If a contract has significant implications for labour, involving labour unions from the outset reduces labour conflict and therefore reduces cost, thereby improving the value for money of the project. Obviously, specific projects may impact certain groups negatively, at least at the outset. It is the role of the government to weigh the interests of various groups against each other in order to maximise total public welfare.

A needs analysis should then be expanded into an initial feasibility study. Usually no government wants to subject all project proposals to full *ex ante* value-for-money analysis, for the simple reason that such an analysis is costly and time consuming. Hence a preliminary screening after the initial needs assessment, as well as a screening after an initial feasibility study, might eliminate those project ideas for which the need is not as urgent or that are clearly not feasible.

After the initial feasibility study, the government should add projects to the list of possible projects that it will scrutinise and sort in order of priority. Adding projects to a list of possible projects is of course an ongoing process that depends on when the initial feasibility studies are completed. However, to ensure systematic prioritisation, the timing of doing the prioritisation should be synchronised with the budget cycle. This calls for concrete procedures to integrate prioritisation within the budget cycle (Jacobs, 2011:417). Synchronisation also means that prioritisation should be done with a preliminary consideration of affordability and the government's budget constraint in mind – it makes no sense to consider projects any further if the government does not have the resources to finance them. Not only should projects fit into the current year's budget envelope but – given that capital projects are typically long-term in nature – thought should also be given to the long-term implications and commitments that a project implies.

6.1. The concepts of value for money and the public sector comparator

Those projects that survive the needs analysis and preliminary feasibility study as well as the initial prioritisation and affordability tests should then be subjected to a proper feasibility study and *ex ante* value-for-money assessment. This includes the full development of the project idea. In countries where *ex ante* value-for-money assessments are done, they often constitute the key component of the planning and prioritisation phase of the procurement cycle. Once the *ex ante* value-for-money assessment is done, the government should also revisit its initial prioritisation of projects to ensure that the results of the proper feasibility study and *ex ante* value-for-money assessment coincide with those of the preliminary feasibility study. If there are deviations affecting the value for money of the project, they may also affect the initial prioritisation of the projects.

Prioritisation is needed because every project has an opportunity cost – i.e. selecting any particular project implies that another project cannot be realised. Value for money is maximised by ensuring that the value for money yielded by a selected project exceeds the value for money forgone by not realising another project. Not only should a single line department prioritise its own projects, but the government as a whole should do so in terms of broad capital expenditure categories. Where projects are relatively large compared to the total budget, it might also be advisable that the chief executive (office of the president, prime minister, cabinet, or central budget authority) prioritise projects centrally. As mentioned above, if a government uses an accrual budgeting and accounting system that targets the net operating balance, it might also require that all capital projects be approved centrally. This will ensure that opportunity costs are considered on an overall government level. It will also ensure that total borrowing does not exceed what the government considers feasible and prudent.

With regard to traditionally procured projects, the most formal and extensive form of *ex ante* value-for-money assessment is the cost-benefit analysis. Related to cost-benefit analysis is cost-effectiveness analysis.¹⁵ Governments use both of these quite extensively (see Table 16).

As is well known, cost-benefit analyses include social costs and benefits relating to a project. Therefore, the question that cost-benefit analyses address is not a narrow one of costs and benefits to the government, but rather costs and benefits to society. A cost-benefit analysis may also be done for a PPP, but in many countries the government conducts cost-benefit analysis only for traditionally procured projects.

Table 16. Briefly identify the types of value-for-money analysis that your government uses (e.g. cost-benefit or cost-effectiveness analysis). If your government uses cost-benefit or cost-effectiveness analysis for TIP, does it also use cost-benefit or cost-effectiveness analysis for PPPs?

	TIP	PPP
Australia	C/BA	C/BA
Austria		
Brazil	C/BA and CEA	C/BA and VfM assessment elaborated by private partner
Canada	C/BA	C/BA and PSC
Czech Republic	C/BA	
Estonia	CEA	
Finland	Mostly C/BA	Mostly C/BA
Germany	C/BA and CEA	C/BA, CEA and PSC
Hungary	C/BA	C/BA and PSC
Italy		
Japan		
Korea	C/BA and policy analysis	C/BA, policy analysis, and PSC
Luxembourg		CEA
Mexico	C/BA, CEA, and economic justification	PSC
Netherlands	C/BA	C/BA and PPC
New Zealand	C/BA	C/BA and PSC
Norway	C/BA	C/BA
Slovak Republic	C/BA	PSC
South Africa		
Spain	C/BA	C/BA
Sweden	C/BA, CEA and multi-criteria	
Switzerland	C/BA	
United Kingdom	C/BA	C/BA

C/BA: cost-benefit analysis; CEA: cost-effectiveness analysis; PSC: public sector comparator; PPC: public-private comparator; VfM: value-for-money assessment.

Cost-benefit analyses typically also include an assessment of alternative project options (e.g. when a road is planned, the assessment may also consider alternative options such as rail¹⁶). Thus, cost-benefit analyses are used to establish both absolute and relative value for money. Absolute value for money concerns the question of whether the benefits of the project exceed the costs, while relative value for money concerns the question of whether the option selected (e.g. a road) compares favourably in terms of value for money to the alternative (e.g. a rail line). Thus, in the case of a cost-benefit analysis the relative value-for-money question refers to a comparison of different outputs (e.g. a stretch of road versus a stretch of rail) that might deliver the same outcomes. However, primarily the focus of the cost-benefit analysis is the absolute value-for-money assessment.

What a cost-benefit analysis typically does not do is an assessment of the relative value for money that involves a comparison of the different modes to deliver the outputs. It typically does not compare delivery through a PPP to delivery through TIP. To consider whether or not to use a PPP instead of delivery through TIP, the government may use a public sector comparator (PSC).¹⁷ The PSC compares the bids made by private bidders on a hypothetical reference project undertaken in the traditional manner by the public sector. The purpose is to establish whether or not delivery through a PPP compares favourably with traditional public sector delivery. Figure 6 presents the relationship between the value-for-money tests such as the cost-benefit analysis and the PSC. Note that a PSC does not include the broader costs and benefits to society. It has a narrower focus, including

only the direct costs and revenues involved in the project. Including broader societal costs and benefits should not be necessary if a cost-benefit analysis already indicated that the project represents both absolute value for money and relative value for money with respect to alternative output options. However, in many countries projects that are selected as PPP candidates do not go through a cost-benefit analysis prior to being selected as potential PPP projects. It therefore follows that if a PPP project is only subjected to a PSC and not to a cost-benefit analysis, the government will only be testing value for money on one of the two axes of Figure 6.

Figure 6. **Absolute and relative value-for-money assessment**

Cost-benefit analysis (considers absolute value for money and compares the value for money of alternative options for projects relative to each other)				
Road	Rail	Higher toll on existing road/rail	etc.	
Road project delivered through TIP	Rail project delivered through TIP	Government charges a higher toll		Public sector comparator (considers the value for money of procurement options relative to each other)
Road project delivered through a PPP	Rail project delivered through a PPP	A private operator charges a higher toll		

Proposing an expansion of the use of value-for-money assessment methods such as cost-benefit analyses and the PSC is not uncontroversial. Critics of these techniques argue that the level of uncertainty involved in making cost and revenue projections that often span 20 to 30 years is of such a high degree that it renders these types of assessments rather weak and decisions based on them implicitly arbitrary. These critics argue that, in some cases, the creation of a project radically changes the environment in which it is constructed. As a result, the behaviour of and opportunities open to economic agents may change to such an extent that an accurate forecast of future costs and revenues becomes impossible, turning any forecasts that are made into mere “guestimates”. In some cost-benefit or value-for-money assessments, governments attempt to capture this risk by developing different possible scenarios for the project or by risk-weighting expenditure and revenue streams. However, detractors of these techniques argue that these refinements may still not properly capture the uncertainty. It might also be too rough an approach to use in decisions regarding project viability.

The difficulty in estimating future costs is further aggravated by “optimism bias” – namely the tendency of capital budgets to underestimate significantly the construction costs and time of most capital projects (Flyvbjerg et al., 2002). Flyvbjerg et al. argue that this tendency does not seem to decrease through learning over the years. Indeed, it remains deeply entrenched.¹⁸

6.2. The assessment of value for money in surveyed countries

Burger and Hawkesworth (2011) reported that, in general, PPPs in many countries are subjected to more stringent value-for-money criteria compared to TIP. The survey conducted for this article confirms this finding (see Table 17). In eight countries, all PPP

projects are subjected to absolute value-for-money assessments such as cost-benefit analysis, while only five countries make assessments for all TIP projects (the five overlap with the eight: Finland, Germany, Hungary, Mexico and the United Kingdom). In seven countries, all TIP projects above a threshold are subjected to value-for-money assessments, while in a further nine countries the TIP projects that are to be subjected to absolute value-for-money assessments are selected only on an ad hoc basis. Furthermore, in 12 of the countries all PPP projects are subjected to relative value-for-money assessments such as public sector comparators, with a further three countries requiring it for all projects above a threshold. In assessing all the numbers for PPPs, note that four of the 23 countries reported that they have no PPPs.

Table 17. In general, does your government apply an absolute value-for-money analysis (such as a cost-benefit analysis or a cost-effectiveness analysis) and/or relative value-for-money analysis (such as public sector comparators) that takes a whole-of-life (net present value) approach to prospective capital projects? (select the most relevant option)

A. Absolute value-for-money assessments (e.g. cost-benefit analysis)

	PPPs	TIP
Yes, for all projects	8 countries: Canada, Finland, Germany, Hungary, Mexico, New Zealand, Slovak Republic, United Kingdom	5 countries: * Finland, Germany, Hungary, Mexico, United Kingdom
Yes, for all those above a threshold	2 countries: Korea, Netherlands	7 countries: * Brazil, Finland, Korea, Netherlands, New Zealand, Norway, Sweden
Yes, on an ad hoc basis	4 countries: Australia, Brazil, Czech Republic, Spain	9 countries: Australia, Canada, Czech Republic, Estonia, Japan, Luxembourg, Slovak Republic, Spain, Switzerland
No	2 countries: Japan, South Africa	No country
Other	3 countries: Italy, Luxembourg, Norway	4 countries: Austria, Finland, Italy, South Africa

* Both these numbers include Finland, as some types of investment projects all need to be subjected to an absolute value-for-money assessment, while for other types (e.g. IT), only projects above a threshold need to be subjected to an absolute value-for-money assessment.

B. Relative value-for-money assessments for PPPs (e.g. public sector comparator)

Yes, for all projects	12 countries: Australia, Canada, Finland, Germany, Hungary, Japan, Luxembourg, Mexico, New Zealand, Slovak Republic, South Africa, United Kingdom
Yes, for all those above a threshold	3 countries: Czech Republic, Korea, Netherlands
Yes, on an ad hoc basis	Brazil
No	Italy
Other	2 countries: Finland, Norway
No PPPs	4 countries: Austria, Estonia, Sweden, Switzerland

Table 18 lists the number of countries and the various methods that they report using in order to assess value for money. In their assessment of value-for-money, governments use a variety of tools. The most popular are net present value and the internal rate of return on projects (see Table 18). For TIP projects, six countries also assess the capacity and willingness of users to pay (Brazil, Estonia, Germany, Norway, Slovak Republic, and Sweden); eight countries in the case of PPPs (Australia, Brazil, Czech Republic, Germany, New Zealand, Norway, Slovak Republic, and Spain). In nine countries for TIP and ten for PPP projects, the government uses qualitative expert opinion (the nine do not overlap fully – only Brazil, the Czech Republic, Germany, Korea, Mexico and the Slovak Republic apply it to both TIP and PPPs).

Table 18. **Which of the following tools are used in the value-for-money analysis? (more than one is possible)**

	PPP	TIP
Net present value	13 countries: Australia, Brazil, Canada, Czech Republic, Germany, Hungary, Korea, Mexico, New Zealand, Norway, Slovak Republic, Switzerland, United Kingdom	15 countries: Australia, Brazil, Canada, Estonia, Germany, Hungary, Korea, Mexico, Netherlands, New Zealand, Norway, Spain, Sweden, Switzerland, United Kingdom
Internal rate of return	10 countries: Australia, Brazil, Canada, Czech Republic, Finland, Hungary, Korea, Mexico, Slovak Republic, Spain	8 countries: Australia, Brazil, Estonia, Finland, Hungary, Korea, Mexico, Netherlands
Residual income	2 countries: Germany, Spain	5 countries: Brazil, Czech Republic, Estonia, Germany, Spain
Payback period	5 countries: Australia, Brazil, Czech Republic, Finland, Slovak Republic	6 countries: Australia, Brazil, Canada, Finland, Slovak Republic, Switzerland
Qualitative expert opinion	10 countries: Australia, Brazil, Canada, Czech Republic, Germany, Korea, Mexico, Netherlands, New Zealand, Slovak Republic	9 countries: Brazil, Czech Republic, Estonia, Germany, Korea, Mexico, Slovak Republic, Sweden, Switzerland
Analysis of the capacity/willingness of users to pay	8 countries: Australia, Brazil, Czech Republic, Germany, New Zealand, Norway, Slovak Republic, Spain	6 countries: Brazil, Estonia, Germany, Norway, Slovak Republic, Sweden
No PPP	3 countries: Estonia, Sweden, Switzerland	-

Value-for-money assessments help governments attain value for money if they play a decisive role in project selection. It helps little if a government goes through value-for-money assessments but then, when the assessments indicate negative value for money, nonetheless decides to proceed with a project on the basis of other, non-value-for-money criteria. For both PPP and TIP project countries, nine countries indicated that value-for-money analysis plays a decisive role in all or a vast majority of cases. However, for PPPs seven of the nine countries use value-for-money assessments for all their PPP projects. For TIP the corresponding number is two countries.

Enquiring as to what other factors play a role if value for money does not play a decisive role, survey evidence indicates that for both TIP and PPP projects political will/interest plays an important role. Another relatively important factor for both TIP and PPP projects is if the project constitutes part of a long-term infrastructure development plan. However, notwithstanding the above, Table 19 shows that only in a few countries would projects proceed if the value-for-money analysis indicates that a project is not financially viable (as measured in, for example, net present value terms).

Table 19. **In which of the following cases does the following statement hold true: “Absolute value-for-money analyses (as well as relative value-for-money analyses in the case of PPPs) play a decisive role in whether or not projects proceed to the procurement stage” (“decisive” meaning the project does not proceed unless the value-for-money analysis indicates it is a viable project)?**

	PPPs	TIP
In all projects	7	2
In the vast majority of projects (i.e. in 75% or more)	2	7
In most projects (i.e. between 50% and 74%)	2	3
In some projects (i.e. between 10% and 49%)	1	2
In a few projects (i.e. in more than 0% but less than 10%)	0	4
In no project	2	1

As discussed above, Flyvbjerg (2002) showed that many investment projects are prone to underestimate their construction costs. To ensure more credible estimates of expected costs, some governments include an estimate of optimism bias in their value-for-money tests. Typically this means that, after the cost of the project has been estimated, the cost is further inflated with an estimated optimism bias to hopefully get the projected cost closer to what the realised cost will turn out to be. Table 20 indicates that, for TIP projects, 10 countries out of the 15 that responded to the question report that they include an estimate of optimism bias in their value-for-money test. For PPPs, 8 of the 13 countries that responded include such an estimate in the value-for-money testing. The eight countries that include it in their value-for-money test for PPP projects are Australia, the Czech Republic, Finland, Germany, Korea, New Zealand, Spain, and the United Kingdom. With the exception of the Czech Republic, these eight countries together with Estonia, Luxembourg and Switzerland also include the estimate of optimism bias in their value-for-money test for TIP projects.

Table 20. In the value-for-money test that your government uses for TIP and PPP projects, does it explicitly include an estimate for optimism bias (optimism bias means the tendency for *ex ante* assessments to underestimate the cost and time it will take to complete a project)?

	PPPs	TIP
Australia	Yes	Yes
Austria	-	-
Brazil	No	No
Canada	-	-
Czech Republic	Yes	No
Estonia	No PPP	Yes
Finland	Yes	Yes
Germany	Yes	Yes
Hungary	No	No
Italy	-	-
Japan	-	-
Korea	Yes	Yes
Luxembourg	No	Yes
Mexico	-	-
Netherlands	No	No
New Zealand	Yes	Yes
Norway	-	No
Slovak Republic	No	-
South Africa	-	-
Spain	Yes	Yes
Sweden	No PPP	No
Switzerland	No PPP	Yes
United Kingdom	Yes	Yes
Total "yes"	8	10
Total "no"	5	6

Table 21 indicates that 16 of the 23 governments think absolute value-for-money assessments such as cost-benefit analysis really contribute to better decision making in the case of TIP (these are Australia, Brazil, Canada, the Czech Republic, Estonia, Germany, Hungary, Korea, Mexico, the Netherlands, New Zealand, Norway, the Slovak Republic, Sweden, Switzerland, and the United Kingdom). Twelve hold the same opinion with regard

to the use of cost-benefit analysis in the case of PPPs (these are Australia, Brazil, Canada, Finland, Germany, Hungary, Korea, Mexico, the Netherlands, New Zealand, the Slovak Republic, and the United Kingdom). (Twelve countries constitute the majority of the countries with PPPs: in five of the 23 countries there are no PPPs, so this is 12 out of 18 countries. In addition, there are two countries that do not use absolute value-for-money assessments, meaning that this is 12 out of 16 countries.) In 14 countries, relative value-for-money assessments for PPPs (such as public sector comparators) really contribute to better decision making.

Table 21. Which one of the following two options best describes the experience of your government with value-for-money analysis for projects?

A. Absolute value-for-money assessments (e.g. cost-benefit analysis)

		PPPs	TIP
They really contribute towards better decision making	Yes	12 countries: Australia, Brazil, Canada, Finland, Germany, Hungary, Korea, Mexico, Netherlands, New Zealand, Slovak Republic, United Kingdom	16 countries: Australia, Brazil, Canada, Czech Republic, Estonia, Germany, Hungary, Korea, Mexico, Netherlands, New Zealand, Norway, Slovak Republic, Sweden, Switzerland, United Kingdom
	No	Spain	Spain
In general, they create a false impression of precision and management rigour	Yes	Spain	No country
	No	5 countries: Brazil, Canada, Mexico, Spain, United Kingdom	7 countries: Brazil, Canada, Estonia, Mexico, Sweden, Switzerland, United Kingdom
No PPPs		3 countries: Estonia, Sweden, Switzerland	-
No response		7 countries: Austria, Czech Republic, Italy, Japan, Luxembourg, Norway, South Africa	6 countries: Austria, Finland, Italy, Japan, Luxembourg, South Africa

B. Relative value-for-money assessments for PPPs (e.g. public sector comparator)

They really contribute towards better decision making	Yes	14 countries: Australia, Brazil, Canada, Czech Republic, Finland, Germany, Hungary, Korea, Mexico, Netherlands, New Zealand, Slovak Republic, Spain, United Kingdom
	No	Switzerland
In general, they create a false impression of precision and management rigour	Yes	No country
	No	6 countries: Brazil, Canada, Korea, Mexico, Switzerland, United Kingdom
No response		8 countries: Austria, Estonia, Italy, Japan, Luxembourg, Norway, South Africa, Sweden

There is also the link between political decision making and its fit with the results of value-for-money assessments such as cost-benefit analyses. The point is sometimes made that a project was selected on the basis of politics, although it did not represent value for money. Traditionally, value-for-money assessments focus on the economy, efficiency and effectiveness of a project (Diamond, 2005):

- Economy in the use of resources: maximise inputs per dollar, euro, pound, yen, etc.
- Efficiency: maximise outputs per input.
- Effectiveness: maximise outcomes per output.

However, as is clear from the above, economy, efficiency and effectiveness focus on the supply side of delivering the good or service and do not consider whether or not there is a demand for it. In principle, if a user fee is to be charged, the government can test the market to assess possible demand. However, as is well known, if the good in question is a public good or a good with a relatively large externality, demand will not be fully revealed

– a free-rider problem will exist. This is where the politician comes in. The role of the elected politician is to express the demand for publicly delivered goods. The problem exists when there is a demand for the good but the value-for-money assessments (such as a cost-benefit analysis) indicate that the cost of delivery exceeds the benefits/revenues.¹⁹

The presence of such cases where value-for-money assessments indicate that costs exceed benefits/revenues calls for politically sanctioned guidelines. These guidelines should focus on seeking a clear and transparent procedure for processing negative value-for-money assessments while allowing for the political function of revealing public demand and public interest.

7. Ensuring the affordability of the project and the government portfolio

A project should only go ahead if it represents *ex ante* value for money and is affordable. Once the *ex ante* value-for-money assessment of a capital project is done and it is clear that a project will represent value for money, the government needs to decide whether or not it wants to continue with the procurement process towards implementation. Affordability of the project is again the deciding factor, which means that the initial prioritisation of the project needs to be revisited in light of the *ex ante* value-for-money assessment. A project, or a project portfolio, can be said to be affordable if government expenditure associated with a project – be it a PPP or other mode of delivery – can be accommodated within the intertemporal budget constraint of the government. As was the case with the initial affordability test, establishing whether or not a project is affordable also means that the decision whether or not to go ahead with the project must be synchronised with the budget cycle of the government, thus calling for explicit procedures to do so. Specifically, affordability means more than just fitting into the upcoming year's budget, as the project should at least fit into the medium-term budget envelope of the government department (cf. Jacobs, 2009:8-9). Obviously, a project that is expected to be fully dependent on user charging, rather than government revenue, needs to be assessed in terms of users' ability and willingness to pay for the use of the asset.

The project approval should take into account that the project represents a multi-year commitment to both capital and current expenditure. It is advisable that both construction and operational cost estimates of the value-for-money tests serve as inputs into the budget and medium-term expenditure frameworks, not just for the year in which the project is approved but for as long as the project is operational. This requires a thorough integration of the project into a government department's programme and budget (and thus also in the overall national/federal budget). As Table 22 indicates, in the majority of countries surveyed, government departments should demonstrate that new infrastructure projects fall within their existing budgetary envelopes and expected medium-term resource allocation before they can proceed with the projects. In 13 of the countries, it is always necessary for PPP projects, while in 16 countries it is always necessary for TIP projects (see Table 22).

As part of the feasibility study, and where relevant, the government should also explore the possibility of introducing user fees. Physical infrastructure projects (such as roads) or social infrastructure projects (such as hospital facilities) may create the opportunity to introduce user fees. These should of course also be reflected in the budget, as they may affect affordability. Value for money is closely linked to affordability and sustainability. A focus on affordability and sustainability, and thus whether or not a project

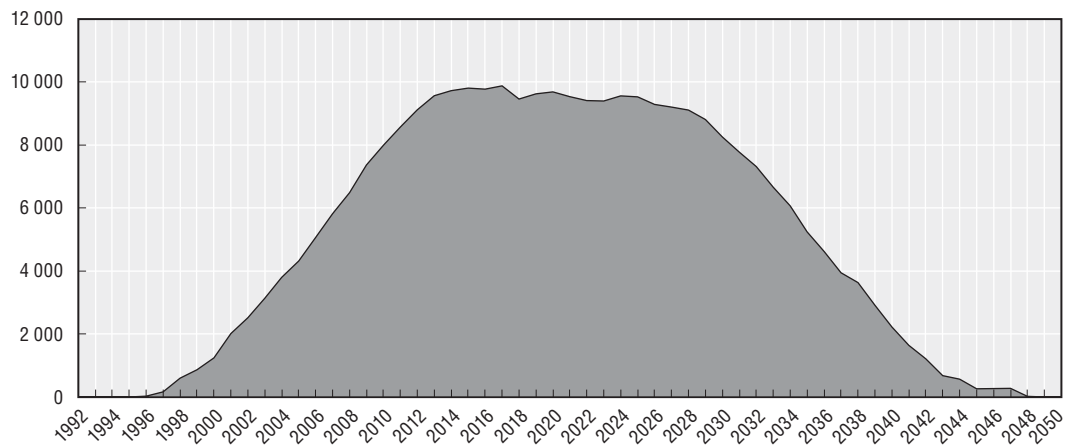
Table 22. Should a government department demonstrate that a new infrastructure project falls within its existing budgetary envelope and expected medium-term resource allocation before it can proceed?

	PPPs	TIP
Yes, always (100% of the time)	13 countries: Brazil, Canada, Czech Republic, Finland, Germany, Italy, Japan, Luxembourg, Mexico, Netherlands, Norway, Spain, United Kingdom	16 countries: Brazil, Canada, Czech Republic, Estonia, Finland, Germany, Italy, Japan, Luxembourg, Mexico, Netherlands, Norway, Slovak Republic, Spain, Sweden, United Kingdom
Yes, very often (> 75% but < 100% of the time)	2 countries: Hungary, South Africa	4 countries: Hungary, Korea, South Africa, Switzerland
Yes, often (> 50-75% of the time)	No country	No country
Yes, sometimes (> 25-50% of the time)	Korea	No country
Yes, rarely (> 0 but < 25% of the time)	No country	No country
No, not required	2 countries: Australia, Slovak Republic	2 countries: Australia, Estonia
No PPPs	3 countries: Estonia, Sweden, Switzerland	-
Other, please specify	2 countries: Austria, New Zealand	New Zealand

falls within the budget envelope in the foreseeable future, encourages the use of multi-year budgets (or a medium-term expenditure framework) as well as a whole-of-life approach to capital budgeting (Jacobs, 2009:9). Multi-year budgeting and a whole-of-life approach highlight that, by procuring capital, the government implicitly also commits to the running expenditure that the project will yield in future. However, as Posner et al. (2009:64, 72) argue, there is still in general a need for proper affordability tests on the level of sophistication of value-for-money tests. This is a challenge for the future, but the manner in which the United Kingdom Treasury reports future commitments with respect to PFI deals (private finance initiatives) might represent an initial suggestion as to how affordability tests can be refined.

In the United Kingdom, the Treasury reports long-term payment projections of annual unitary charges of PFI projects (see Figure 7). It is therefore possible to see the payments that the government will probably need to make on its existing set of PFI projects as far into the future as 2050. All countries could do something similar for TIP projects. Cost-benefit analyses and feasibility studies make projections for future operating, maintenance and interest costs generated by TIP projects. These projections go well into the future. As part of its affordability assessment, and in the interest of transparency, a government could – just as with PPPs – report the commitments implied by TIP projects in future years. Thus, even though medium-term budgeting typically covers only the next three to five years, augmenting it with a report on all the future commitments that projects imply might very quickly provide an indication of when projects will become unaffordable. For instance, with respect to PFI projects, Posner et al. (2009:63) note that – according to HM Treasury – annual PFI charges have grown to encumber 25% of operating budgets.

Figure 7. **Total unitary charges of United Kingdom private finance initiative projects of all projects signed as of November 2011 (GBP millions)**



Source: HM Treasury, "PFI Signed Projects List", www.hm-treasury.gov.uk/ppp_pfi_stats.htm (accessed November 2011).

8. Procurement: Choosing the option delivery method

Once the government establishes *ex ante* that a project represents value for money and is affordable, the project is ready for the procurement phase. A first step in this phase would be a decision on the degree of bundling. According to Estache and Iimi (2011), there is a trade-off between the size of the project and the degree of competition involved in the bidding process. Larger projects with a high level of bundling might allow for economies of scale and scope, which reduces cost. However, larger bundled projects usually attract fewer bidders, which increases cost. Not only are large projects technically more demanding, but if a contract includes different types of services – for instance, Estache and Iimi (2011) consider the combination of a water treatment plant and distribution networks – competitors who do not possess the technical proficiency in all of the types of services included are unlikely to bid. However, Ossowski (2007) notes that bundling may create incentives to reduce life-cycle costs. Hence, by unbundling the government can enhance competition, but it might also increase life-cycle costs and reduce the possibilities for economies of scale and scope. Thus, in complex projects that involve bundling, the government needs to consider carefully what level of bundling will yield the highest value for money.

A second step in the procurement phase is a decision regarding the mode of procurement – i.e. whether the government wants to use TIP or a PPP to deliver the project.²⁰

In principle, the decision to procure an asset should be separated from the decision on how to procure an asset. Of course, the result of value-for-money and affordability tests will feed into such a decision. In 11 countries, the government must always first decide on the procurement of an asset (which would include an assessment of its affordability) before it considers the choice between PPP procurement and TIP (Table 23).

Not all projects need to undergo a formal and extensive assessment to establish which procurement mode will deliver the most value for money. First, to subject all projects to an extensive consideration will be too costly and time-consuming. Second, governments might want to limit the extent to which they use PPPs simply because PPPs introduce a level of inflexibility to the budget. In a TIP project, engaging in the project implies an implicit long-term commitment to incur in future the current expenditure necessary to

Table 23. Does the government first decide on the procurement of an asset (which would include an assessment of its affordability) before it considers the choice between PPP procurement and traditional infrastructure public procurement?

	PPPs	TIP
Yes, always (100% of the time)	11 countries: Australia, Canada, Czech Republic, Finland, Germany, Luxembourg, Mexico, Netherlands, New Zealand, Spain, United Kingdom	11 countries: Australia, Canada, Czech Republic, Finland, Germany, Korea, Luxembourg, Mexico, Netherlands, Spain, United Kingdom
Yes, very often (> 75% but < 100% of the time)	3 countries: Brazil, Hungary, Italy	5 countries: Estonia, Hungary, Italy, Korea, New Zealand
Yes, often (> 50-75% of the time)	Korea	No country
Yes, sometimes (> 25-50% of the time)	No country	No country
Yes, rarely (> 0 but < 25% of the time)	No country	No country
No, not required	Japan	2 countries: Brazil, Japan
No PPPs	4 countries: Austria, Estonia, Sweden, Switzerland	-
Other, please specify	3 countries: Norway, Slovak Republic, South Africa	3 countries: Norway, Slovak Republic, South Africa

operate and maintain the project. However, this commitment is not contractual to the same extent as a PPP contract. The operational and maintenance costs of a TIP project usually involve employment contracts for civil servants and supply contracts for material needed to operate and maintain the project. However, if the government needs to cut maintenance and operating expenditure on an operating TIP project, it might be able to transfer the civil servants or ultimately – if expenditure cuts demand it – lay them off. Contracts with suppliers are also more flexible and usually of a shorter term than a PPP contract. Operating and maintenance costs in the case of a PPP are usually incurred by the private partner and paid with the fee it receives from the government. This fee is set by the PPP contract, and the government cannot reduce it unless it breaks or renegotiates the contract – both options are rather expensive as they may involve the government remunerating the private partner for lost income covering the remainder of the contract. Thus, it is easier for the government to reduce its expenditure in the case of a TIP project than a PPP contract. The higher degree of flexibility of TIP projects therefore explains why most governments want to limit the extent to which they use PPPs. Because of the inflexibility of PPP contracts, the government may wish to impose a limit on the extent to which it engages in PPP contracts. For instance, a government might limit its engagement in PPP contracts to 1% or 2% of the annual total budget.

In most countries, there is no structured way to establish whether or not a project should be considered for PPP status (cf. Burger and Hawkesworth, 2011), and the selection of projects to be considered for PPP status occurs on a rather ad hoc basis. Hence, according to Recommendation 5 of the “Recommendation of the Council on Principles for Public Governance of Public-Private Partnerships” (OECD, 2012b), governments should use a procurement option pre-test. A procurement option pre-test considers a set of conditions that are pre-requisites for a successful PPP (Burger and Hawkesworth, 2011:39-43). These include *inter alia* sufficient competition in and for the market, the possibility to quantify and define the amount and quality of the outputs, and the possibility to transfer a sufficient amount of risk to the private partner. Should these conditions not hold, it becomes unlikely that a PPP will deliver more value for money than TIP, and it thus becomes unnecessary to consider the PPP mode any longer as an option for delivery.

Once a project has been selected as a possible PPP candidate, the government needs to apply a relative *ex ante* value-for-money test to establish whether or not the PPP option can be expected to outperform the TIP option. In most countries that apply such a relative *ex ante* value-for-money test, it takes the form of a public sector comparator (PSC) as mentioned above. Once the project is placed out on tender and the bids of the respective private bidders are received, the government will compare these bids to the PSC to establish whether or not the PPP option outperforms the public sector option, i.e. TIP. In comparing the PPP option to the TIP option, the following should be kept in mind:

- **Regardless of their accounting treatment, both PPPs and TIP create liabilities for government.** Some governments still undertake PPPs to get the project off the books of the government. However, what moves off the government books are the asset and its associated debt, not the life-time cost. In the case of traditional infrastructure procurement, the government incurs the initial debt to finance the asset; thereafter it pays the operational expenditure and services the debt. Thus, the government will need to raise tax revenue to do so. With a PPP, the government incurs no debt to finance the asset. The private partner finances the asset by raising capital in the form of loans and equity. The private partner also needs to service this debt and pay operational expenditure in future. However, to do so it needs to earn enough income in future, usually by charging the government annual fees or user charges. Again, the government will need to raise tax revenue to be able to pay the annual fees or user charges. The payment of these fees is of course contingent on the private partner complying with the contract in terms of the quantity and quality of what it delivers. In principle, if it does not comply, the payment is not made. Nevertheless, the payments due under a PPP contract, though not certain, are still expected to realise. They are therefore not like contingent liabilities that are not expected to realise. Thus, although a PPP does not create a liability on the books that is as certain as the debt liability in the case of TIP, it nevertheless creates an expected liability that equals the present value of all the service fees and user charges that the government is expected to pay to the private operator of the PPP.²¹ Therefore, with both traditional infrastructure procurement and a PPP, the government faces a liability. In both cases, the government will need to allocate revenue in future to service the liability.
- **Too much input specification can undermine the rationale for PPPs.** PPPs rely on the private sector creatively responding to the bundling of an asset and the delivery of a service, thereby building, maintaining and operating the asset more efficiently than would be possible through a public sector traditional delivery method. However, experience has shown that if the government does not accept giving the private sector significant leeway on inputs and processes, the benefits of private sector participation will diminish. It is therefore important that this is borne in mind if the PPP option is to be explored.
- **Transaction costs are higher with PPPs.** As documented in Table 3, transaction costs with PPPs are usually significantly higher than with TIP. Posner et al. (2009:69) report that bidding costs sometimes represent up to 3% of the total project cost, while advisory services often exceed 5% of the total contract cost. Bidding for a PPP contract is therefore expensive and may be considered prohibitive by companies that would otherwise have wished to submit a bid. This may limit the amount of bidders, which in turn limits the competition for the contract. This argues for PPPs being most relevant in larger projects where transaction costs historically make up a smaller percentage.

- **PPPs perform better than TIP in the construction phase, but there is no clear evidence with respect to whole-of-life costs.** Studies have found that PPPs outperform TIP projects (cf. Allen Consulting Group, 2007; Arthur Andersen and Enterprise LSE, 2000; Fitzgerald, 2004; Haskins, Gale and Kelly, 2002; Mott MacDonald, 2002; National Audit Office, 2003; and University of Melbourne, 2008). However, most of these studies focus on the cost and time overruns during the construction phase of the project and do not focus on the operational phase of the project. The same pattern was discussed in Section 2 of this article. The reason why PPPs might outperform TIP projects during the construction phase may simply be because the more quickly and cheaply the project is completed, the quicker the private partner can start operating the project and start earning revenue to service its debts and maximise its return.
- **User fees can be levied on both public and private operators.** The possibility of charging a user fee on final beneficiaries should not be confused with the choice between procurement options, as the government can also charge a user fee on final beneficiaries in the case of TIP. The project need not be a PPP in order for final beneficiaries to pay for the service that they receive. Thus, the correct comparison is between a TIP project where the debt servicing and operational costs are paid for by user fees that are levied on final users, and a PPP (concession) where the debt servicing and operational costs are also paid for by user fees that are levied on final users. The alternative is to compare the PPP and TIP options with the government paying either directly or indirectly for the service in both cases.
- **The public sector comparator is only as good and credible as what is invested in it.** In a few countries, some types of projects have for a long time only been undertaken by using PPPs. This means that for many years there were few, if any, TIP projects that delivered a particular service. As a result, there is currently little reliable information based on actual TIP projects to inform a PSC or an equivalent value-for-money instrument. It is then argued that using a PSC to establish whether or not a PPP represents relative value for money is not credible, and that the government should consider not using a PSC or equivalent when deciding whether or not to proceed with a PPP. However, the complete predominance of one procurement type, even after the government conducted PSCs or their equivalents, rather suggests that in reality PPPs became the default option in a system geared completely towards using only PPPs. In such a system, using relative value-for-money assessments such as PSC and their equivalents seems to be rather ritualistic, as the system does not really allow alternatives anyway. Such a government should rather re-establish the true choice between the TIP and PPP options and, by using PSCs, the government should over time again build up sufficient and reliable information for use in later PSCs. Of course, initially the information on which the PSC will be based will not be actual TIP projects but, as the portfolio of actual TIP projects increase, the PSCs will become increasingly more reliable.

Once the government decides on which procurement mode to use, it needs to set out a tender, select the preferred bidder, and negotiate and award the contract. If the project is a PPP, the selection of the preferred bidder will involve the use of the PSC. In all these activities, the government will need to ensure that the tender, bids and final contracts achieve the initial needs identified and do not drift from the initial objectives. These are important topics that are beyond the scope of this article.

9. Monitoring and evaluation

In the case of both TIP and PPP projects, once a contract is awarded and the construction phase commences, there is a need to monitor and evaluate performance. Monitoring and evaluation need to occur concurrently to the construction and operational and management phases of the project. The type of project will dictate which performance indicators will be identified and what benchmarks these indicators should attain. In addition to regular monitoring and evaluation, there is also a need for the government to evaluate *ex post* whether or not the project delivered value for money. Ideally, the *ex post* value-for-money assessment needs to be conducted with reference to the initial *ex ante* value-for-money assessment. This will allow the government to identify deviations. A larger database of project performance focusing on the identified deviations will allow the government to also identify whether or not the realised optimism bias is different from the bias included in its *ex ante* value-for-money assessments and – should there be a difference and should it be quantifiable – what its scale is. Once quantified, the new estimates of optimism bias can be used to calculate optimism bias benchmarks for future *ex ante* value-for-money assessments. In addition, the monitoring and evaluation phase should establish whether or not the TIP and PPP projects operated within their allotted budgetary envelopes. If a project costs the government more than it budgeted for, the government should require the ministry responsible for the project to cover the cost overrun by reallocating resources from within its budget. To the same extent, ministries should also be allowed to keep cost savings (Jacobs, 2011:418).

In addition, an *ex post* value-for-money assessment should occur after completion of the project's construction phase, while further *ex post* value-for-money assessments should be conducted at regular intervals over the life time of the project to assess whether or not actual operating and maintenance costs align with *ex ante* estimated operating and maintenance costs. Thus, the government should not wait for the 25 years of a 25-year project to have run its course before it conducts an *ex post* value-for-money assessment of the operational phase of the project. Regular *ex post* value-for-money assessments conducted during the life time of the project should be possible, given that these entail a comparison between the projected results coming from the *ex ante* value-for-money assessment and the realised results coming from the operation of the project.

If the government conducts individual *ex post* value-for-money assessments for both TIP and PPP projects, it may also be in a position to do *ex post* value-for-money assessments that compare TIP and PPP performance. As mentioned above, *ex post* value-for-money assessments that compare TIP and PPP performance have been done for a number of countries, but these studies focus mainly on the construction phase and conclude that PPPs in general outperform TIP projects in terms of cost and time overruns. Given the relative newness of PPP programmes at the time these studies were conducted (the United Kingdom has only implemented PPPs since 1992), these studies did not compare the performance of PPPs and TIP projects during the operational and management phases.

Many governments focus their planning of activities mainly on a programme-by-programme basis, rather than a project-by-project basis. Thus, monitoring and evaluation as well as *ex post* value-for-money assessments are done on a programme-by-programme basis. However, since projects are mostly selected on a project-by-project basis, it is advisable for a government to augment its programme-by-programme evaluation with project-by-project assessments.

The government should also, on an overall level, track the number of PPP failures as well as the number of PPP contracts that were renegotiated. The implications of these failures and renegotiations for the attainment of value for money may be significant. If failure occurred, with the private partner losing its equity stake, the government or one of the other private partners (such as the main lenders) might have exercised their step-in rights. If the private partner has been replaced through another tender, value for money might have been largely preserved. However, if the government has to take over the service and deliver it itself, there is the danger of significant loss of value for money.

If contract renegotiations occurred at the request of the private partner, there is also a high probability that the government lost value for money compared to the original negotiated contract. It is therefore in the interest of the government to keep track of the overall performance of its PPP contracts, so as to ascertain *ex post* whether or not value for money was attained on target and, if not, the extent of the shortfall from the target. In some countries, capital projects form part of a longer-term infrastructure development plan, either of the government as a whole or of the specific line department in question. These plans usually state overall objectives to be achieved and outcomes to be realised. An *ex post* value-for-money assessment also needs to ensure that the outcomes achieved by the various TIP and PPP projects are aligned with the initial objectives and outcomes set out in the infrastructure development plan. This would be the ultimate sign of policy success.

Lastly, the government should ensure that the monitoring and evaluation are not only done by the line department responsible for the project, but also by the central budget authority (usually the finance ministry) and the supreme audit institution.

10. Conclusion and recommendations

To conclude, and based on the above analysis, this section sets out a list of recommendations to ensure that the capital procurement process will be more robust and therefore more successful in maximising value for money. With respect to accounting and budgeting systems and their impact on capital procurement, the recommendations are:

1. Budget the full cost of capital up front.
 - ❖ Irrespective of whether a project is TIP or a PPP, the government should budget the full capital cost up front. In the case of a TIP project, the full capital cost is the direct capital cost, while in the case of a PPP it is the present value of the capital component of all future user charges to be paid to the private partner. Budgeting the full cost up front removes the incentive to prefer a PPP to a TIP project on the basis that the PPP records the transaction off-budget and off the books of the government.
 - ❖ The government should budget the full capital cost up front for all investment projects of state-owned enterprises where the government carries a contingent liability. As with PPPs, budgeting the full cost up front removes the incentive to prefer re-routing transactions to SOEs merely because the SOE records the transaction off-budget and off the books of the government.
2. All debt of entities such as PPPs and SOEs that might impact government debt should be recognised explicitly and included in the assessment of fiscal sustainability.
 - ❖ When assessing the sustainability of government, either include PPP debt with public debt or alternatively, when not adding the PPP debt to public debt, include the non-

debt-servicing component of future expenditure that PPPs imply for the government as part of the primary expenditure of government.

- ❖ With respect to SOE investments where the government guarantees the debt of the issue, the contingent liability of the government should be added to public debt to assess the sustainability of fiscal policy.

With respect to the procurement cycle, the following recommendations are made:

3. All possible capital projects should be subjected to a needs analysis and an initial feasibility assessment, as well as an initial assessment of affordability. The initial assessment of affordability entails the prioritisation of projects. Only those projects that pass this phase should be put on a list of possible projects that will undergo a full feasibility study and *ex ante* value-for-money assessment.
4. The prioritisation of projects should be synchronised with the budget cycle. This will require specific procedures to ensure that the synchronisation occurs.
5. The *ex ante* value-for-money assessment should take a whole-of-life approach. Once it has been done, its results should be compared to the initial affordability assessment and be fed as inputs into the present and future budgets of the government.
 - ❖ The *ex ante* value-for-money assessment should take a whole-of-life (net present value) approach that integrates the capital and current costs over the project's life time. Usually a whole-of-life (net present value) approach takes the form of a cost-benefit analysis or cost-effectiveness analysis.
 - ❖ The initial affordability assessments of those projects that pass the *ex ante* value-for-money assessment should be revisited to establish whether they are still affordable and to reconsider the prioritisation of projects done in the initial affordability assessment. Again this process should be synchronised with the budget cycle.
 - ❖ The results of the *ex ante* value-for-money assessment should be fed as inputs into the present and future budgets of the government. This applies to both the capital and the current expenditure elements of the *ex ante* value-for-money assessment.
6. Some governments report the claims that the unitary charges of their PPPs put on future government expenditure, usually decades ahead. In the same manner, the government can also report the claims that TIP projects will put on future current expenditure, also for decades ahead. Reporting these claims does not require more data than was needed to calculate the unitary charges that a government needs to pay PPPs in future, and it will provide information on the affordability of the government's proposed and actual projects.
7. All projects, or at least all projects above a threshold, should include as part of their cost estimates an element that reflects the typical "optimism bias" experienced in projects.
 - ❖ Systematically biased deviations between *ex post* and *ex ante* value-for-money assessments should be recorded and should serve as a basis for the calculation of optimism bias in future contracts.
8. Before setting a project out for procurement, the government also needs to decide on the degree of bundling in the contract. Higher levels of bundling allow for economies of scale and scope and may reduce life-cycle cost, but higher levels of bundling may also mean less competition for the contract. Thus, the government needs to trade these aspects off to establish what level of bundling will lead to the highest value for money.

9. When using PPPs to deliver services, it is advisable that governments apply procurement option pre-tests as well as relative value-for-money assessments such as a PSC (or an equivalent instrument) to support the pursuit of maximum value for money.
 - ❖ The government needs to apply a procurement option pre-test to assess whether or not a project needs to be considered for delivery via a PPP. The procurement option pre-test considers whether or not there is sufficient competition for and in the market, the possibility to quantify and define the amount and quality of the outputs, and the possibility to transfer a sufficient amount of risk to the private partner. If a project cannot fulfil these requirements, it probably is not suitable for delivery through a PPP.
 - ❖ If a project might be suitable for delivery through a PPP, the government needs to conduct a relative value-for-money assessment using a PSC (or an equivalent instrument) to assess whether a PPP will deliver more value for money than TIP.
10. If the government considers the introduction of a user fee to be paid directly by the users of the service delivered by a PPP, the correct public sector comparison is with a TIP project that will also introduce user fees. What should not be compared is a PPP that charges user fees versus a TIP that charges no user fees and where the government pays for the service using taxes. Such a comparison will cause the TIP project to look more expensive than the PPP.
11. The government should conduct *ex post* value-for-money assessments. These value-for-money assessments should compare the realised outcomes with the *ex ante* value-for-money assessments to establish whether or not there have been deviations. In addition, an *ex post* value-for-money assessment should occur after completion of the project's construction, while further *ex post* value-for-money assessments should be conducted at regular intervals over the life time of the project to assess operational performance. Furthermore, the government should ensure that the monitoring and evaluation are not only done by the line department responsible for the project, but also by the central budget authority (usually the finance ministry) and the supreme audit institution.
12. If a project costs the government more than it budgeted for, the government should require the ministry responsible for the project to cover the cost overrun by reallocating resources from within its budget. To the same extent, ministries should also be allowed to keep cost savings.

Notes

1. All data in this section derive from OECD (2012a), *OECD Economic Outlook*, Vol. 2012/1 (No. 91), OECD Publishing, http://dx.doi.org/10.1787/eco_outlook-v2012-1-en. The data used for capital expenditure are government fixed capital formation, value, appropriation account, while the data for current expenditure derive from current disbursements, general government (% of GDP). The capital expenditure was divided by nominal GDP.
2. The ability of a good to service its interest and principle repayments might be either direct or indirect. If a government charges user fees on the beneficiaries of the service rendered with the good, the good might service its repayments directly. However, if by rendering the good it can be argued that households and firms earn more income, then the additional taxes collected on that higher income might be viewed as the ability of the good to service its interest and principle repayment.
3. The principle behind the golden rule is that of intergenerational equity (Posner et al., 2009:87). Thus, with taxpayers servicing debt in future, both the benefits received and the payment for the benefits received are allocated on an intertemporal basis – in principle each generation pays for the benefits it receives. Also see Bird (2008:2) who, referring to Musgrave (1997), states that "... so

the use of loan finance for public capital formation – along with procedures such as capital budgeting to make the linkage clear – has much to be said for it as a means of ensuring that the political process through which public goods are provided yields the desired time path of total (public plus private) consumption.” In addition to intergenerational equity, tax smoothing is also raised as a rationale for financing government investment with debt. Its case is contrasted with that of tax-financed investment. Thus if, to finance the investment, a government has to increase taxes, the tax burden will increase. If the taxes create a deadweight loss, the increase in the deadweight loss will increase proportionally by more than the increases in the tax rate. Thus the marginal cost of increasing the tax rate in terms of the deadweight loss is an increasing function of the tax rate. Hence, it is then better to borrow the funds needed for the investment and not to raise the tax rate. A prerequisite, though, is that the good must be self-liquidating – thus the investment needs to yield a return, directly or indirectly, that will allow the government to service the debt without increasing the tax rate in future (e.g. if private income increases due to the investment, the government might be able to collect more taxes without increasing the tax rate). In this manner, the tax rates are smoothed over time and tax distortions are minimised.

4. Up to the 1970s, many countries had altogether separate capital and current budgets (Jacobs, 2008:7-10). In many Commonwealth countries, it was the practice to have separate revenue and loan accounts. The revenue account recorded recurrent transactions, while the loan account recorded capital expenditure. Formally, a surplus on the revenue account would be carried over to the loan account, while it was seen as acceptable to borrow funds to finance capital.
5. According to the EU Fiscal Compact, governments will pursue a budgetary position that is balanced or in surplus, with a lower limit on the structural budget deficit of 0.5% (1% for countries with debt/GDP ratios significantly below 60%). In addition, if the public debt/GDP ratio exceeds 60%, the government will reduce it by 1/20th of the excess over 60% per year.
6. A government that runs a sustainable fiscal policy is a government whose debt/GDP ratio will not tend to explode in the medium to longer term. If in general a government just ensures that its debt/GDP ratio does not explode in the medium to longer term, it can be said to implicitly apply a golden rule as it can be shown that in the medium to longer term its deficits and debt are financing capital. If it ran a current deficit in the past, it will in future have to run primary current surpluses (i.e. current surplus that also excludes interest payments) to ensure that its debt/GDP ratio does not increase. Thus, if it wants to keep its debt/GDP ratio stable, all the borrowing in periods after the government ran the current deficit must finance capital.
7. Also see Mintz and Smart (2006) on public investment and the use of fiscal rules.
8. Bird (2008) also suggests that good governance means that governments should think through the link between expenditure and the sources (i.e. tax revenue or debt) used to finance a project. For instance, most taxes introduce distortions and deadweight losses that are not always included as costs in the projects that these taxes finance. The same is true of the opportunity costs of forgone private investment if government borrowing would absorb financing that would otherwise have been used for private investment. However, there are also dissenting views, such as Spackman (2004:482) who argues that public investment has little displacement impact on private investment.
9. Therefore, conceptually speaking the difference in monetary value between the net operating balance and the cash-based total balance should be net investment.
10. Note that an accrual-based system contains an accrual-based component as well as a cash-flow statement. Thus, strictly speaking the choice between an accrual-based and a cash-based system is not a choice between only accrual-based and only cash-based numbers. Rather it is a choice between accrual-based and cash-based numbers on the one hand and only cash-based numbers on the other hand. Also note that many countries have a permutation of both systems, with some transactions being recorded on a cash basis and others being recorded on an accrual basis.
11. Note that, for reasons of brevity, this article includes under the heading of SOEs not only pure SOEs, but also delivery through government-controlled infrastructure agencies (some are wholly or partly owned by the government) as well as delivery through private incorporated companies, where the government guarantees the debt that the SOE, agency or company issued to invest in the asset.
12. Mintz and Smart (2006:20) use the example of Infrastructure SpA (ISPA) in Italy. ISPA is a joint stock company that, at the time of writing their paper, was controlled by the Italian government. It uses private sector partners for investment projects in various infrastructure sectors and issues bonds to obtain finance for these projects. However, the Italian government guaranteed much of the debt. In 2005, this led Eurostat to rule that the bonds ISPA issued to finance a high-speed railway link

between Turin, Milan, Rome and Naples should be counted as part of government debt (Eurostat, 2005:2).

13. Conceptually, the accrual-based net operating balance is similar to the cash-based current balance. Both include current expenditure but exclude capital expenditure. However, although they are conceptually similar, the cash-based current balance suffers from one drawback compared to the accrual-based measure: it does not provide an indication of the change in the government's net worth. The problem with the cash-based current balance is that it does not include depreciation. When calculating the net worth of the government, depreciation is a rather key concept and cannot really be left out of the equation. An accrual-based net operating balance includes depreciation (as well as other non-debt liabilities; cf. Robinson, 2009). A focus on net worth implies treating a government as more akin to a company (though of course there are still significant measurement issues when it comes to assessing non-financial asset values for inclusion in the government balance sheet).
14. Of course this also implies that, in order to prevent double counting, only the operating part of the unitary charge paid annually by the government to the private party is expensed (see HM Treasury, 2007).
15. Both a cost-benefit and a cost-effectiveness analysis consider the costs and outcomes of different options. However, unlike a cost-benefit analysis, a cost-effectiveness analysis does not seek to quantify the benefits financially. As they are in principle seeking to perform the same task and are conceptually close to each other, for the purposes of this article cost-effectiveness analysis will be treated together with cost-benefit analysis under the heading of cost-benefit analysis.
16. A proper cost-benefit analysis would also consider non-capital options. Thus, the need for enlarged or extended roads and rail should also consider the use of, for instance, user fees that could choke off the demand. Of course, choking off demand might have larger societal and economic costs, such as dampened economic activity, that should also be considered in the analysis.
17. In the United Kingdom, a simplified value-for-money tool is used instead of a public sector comparator.
18. Indeed, optimism bias is not only limited to the construction phase of the project. Soares, Coutinho and Martins (2007) conducted a study based on applications during 1994-96 for investment incentives approved by the Portuguese institute IAPMEI (*Instituto de Apoio às Pequenas e Médias Empresas e à Inovação*) during the 2nd European Union Framework Programme. The incentives mostly supported Portuguese industry development. Soares et al. (2007:26-27, 36) found that, although estimates of future operating expenditure were mostly accurate, estimates of investment expenditure were very volatile (possibly due to delays in execution of the projects), while sales were systematically overestimated (by 9%).
19. The problem exists whether defined as a broader case where costs exceed broader social benefits or defined as a narrower financial case where direct costs to the government or a private provider exceed direct revenue flows.
20. There are also other options such as complete in-house production, alliancing, outsourcing, and delivery through an agency. While a private firm is usually responsible for the construction of an asset in the case of a TIP project (i.e. a simple design-build-transfer contract), complete in-house production uses no private participation at any stage of the project. Alliancing represents a case where the government and the private sector together undertake a project and share the risks. Outsourcing entails a private company performing a service on behalf of or for the government – the government nevertheless still carries the risks involved. Agency delivery involves a government agency, sometimes outside of general government, delivering the service. As described above, some agencies have the power to issue debt that may or may not be guaranteed by government. In terms of their balance sheet and budgetary treatment, these agencies can be treated in a manner similar to PPPs. This article limits itself to TIP and PPPs as these are widespread and, given the possibility for skewed incentives, represent some of the more controversial choices that a government needs to make.
21. If the PPP represents more value for money than the TIP option, the present value of this expected liability should be less than the debt plus the present value of the operational expenditure that the government would have incurred had it chosen traditional infrastructure procurement.

Bibliography

- Allen Consulting Group (2007), "Performance of PPPs and Traditional Procurement in Australia", report to Infrastructure Partnerships Australia, Melbourne, Australia.
- Arthur Andersen and Enterprise LSE (London School of Economics) (2000), "Value for Money Drivers in the Private Finance Initiative", report commissioned by the Treasury Taskforce, 17 January, London.
- Bird, R. (2008), "The marginal cost of funds and cost-benefit analysis", PREM Tax Policy Note, Version 4/26/2008, The World Bank, Washington, DC.
- Blöndal, J.R. (2004), "Issues in accrual budgeting", *OECD Journal on Budgeting*, 4(1):103-119, <http://dx.doi.org/10.1787/budget-v4-art5-en>.
- Burger, P. and I. Hawkesworth (2011), "How to Attain Value for Money: Comparing PPP and Traditional Infrastructure Public Procurement", *OECD Journal on Budgeting*, 2011/1:91-146, <http://dx.doi.org/10.1787/budget-11-5kg9zc0pvq6j>.
- Diamond, J. (2005), "Establishing a performance management framework for government", *Presupuesto y Gasto Público*, 40/2005:159-183.
- Dorotinsky, B. (2008a), "Capital Budgeting and Public Financial Management, Part I: A primer on systems and issues: Context and Definitions", *Public Financial Management Blog: Making Public Money Count*, International Monetary Fund, Washington, DC.
- Dorotinsky, B. (2008b), "Capital Budgeting and Public Financial Management, Part II: A primer on systems and issues: Capital Budgeting Process", *Public Financial Management Blog: Making Public Money Count*, International Monetary Fund, Washington, DC.
- Estache, A. and A. Iimi (2011), "(Un)bundling infrastructure procurement: Evidence from water supply and sewage projects", *Utilities Policy*, 19:104-114.
- European Union (2012), *Treaty on stability, co-ordination and governance in the Economic and Monetary Union*, signed 31 January.
- Eurostat (2005), "Decisions of Eurostat on deficit and debt: Three decisions on Italy: SCIP, ISPA and Concessionari d'imposta", *Euro-indicators News Release*, 65/2005, 23 May.
- Fitzgerald, P. (2004), *Review of Partnerships Victoria Provided Infrastructure: Final Report to the Treasurer*, Growth Solutions Group, Melbourne, Australia.
- Flyvbjerg, B., M.S. Holm and S. Buhl (2002), "Underestimating costs in public works projects: Error or lie?", *Journal of the American Planning Association*, 68(3):279-295.
- Funke, K., T. Irwin and I. Rial (forthcoming), *Budgeting and Fiscal Reporting for Public-Private Partnerships*, International Monetary Fund, Washington, DC.
- Hammami, M., J.F. Ruhashyankiko and E.B. Yehoue (2006), "Determinants of Public-Private Partnerships in Infrastructure", *IMF Working Paper*, WP/06/99, International Monetary Fund, Washington, DC.
- Haskins, S., D. Gale and L. Kelly (2002), "Creating and optimizing new forms of public-private partnerships in Seattle", *Water Science and Technology: Water Supply*, 2(4):211-218.
- Hemming, R. (2006), *Public-Private Partnerships, Government Guarantees, and Fiscal Risk*, International Monetary Fund, Washington, DC.
- HM Treasury (2007), *Accounting for PPP arrangements including PFI contracts*, Financial Reporting Advisory Board, FRAB(89)02.
- HM Treasury, "PFI Signed Projects List", www.hm-treasury.gov.uk/ppp_pfi_stats.htm (accessed November 2011).
- IMF (2001), *Government Finance Statistics Manual (GFSM 2001)*, International Monetary Fund, Washington, DC.
- Irwin, T.C. (2012), "Accounting devices and fiscal illusions", *IMF Staff Discussion Note*, SDN/12/02, International Monetary Fund, Washington, DC.
- Jacobs, D.F. (2008), "A review of capital budgeting practices", *IMF Working Paper*, WP/08/160, International Monetary Fund, Washington, DC.
- Jacobs, D.F. (2009), "Public expenditure and the budget", *Public Financial Management Technical Guidance Note*, No. 8, International Monetary Fund, Washington, DC.

- Jacobs, D.F. (2011), "Capital budgeting for government entities", Chapter 21 in H.K. Baker and P. English (eds.), *Capital Budgeting Valuation: Financial Analysis for Today's Investment Projects*, Wiley, Hoboken, New Jersey, United States.
- Kahn, A. and S. Mayes (2009), "Transition to Accrual Accounting", *IMF Technical Notes and Manuals*, No. 2009/02, International Monetary Fund, Washington, DC.
- Lin, J.Y. and D. Doemeland (2012), "Beyond Keynesianism: Global infrastructure investments in times of crisis", *Policy Research Working Paper* No. 5940, The World Bank, Washington, DC.
- Martí, C. (2006), "Accrual Budgeting: Accounting Treatment of Key Public Sector Items and Implications for Fiscal Policy", *Public Budgeting and Finance*, 26(2):45-65.
- McKinsey Global Institute (2010), *Farewell to cheap credit? The implications of long-term shifts in global investment and saving*, December.
- Mintz, J.M. and M. Smart (2006), "Incentives for Public Investment under Fiscal Rules", *Policy Research Working Paper* No. 3860, The World Bank, Washington, DC.
- Mott MacDonald (2002), *Review of large public procurement in the UK*, report for HM Treasury, Mott MacDonald, Croyden, United Kingdom.
- Musgrave, R.A. (1997), "Micro and Macro Aspects of Fiscal Policy" in M. Blejer and T. Ter-Minassian (eds.), *Macroeconomic Dimensions of Public Finance*, Routledge, London.
- National Audit Office (2003), *PFI: Construction Performance. Report by the Comptroller and Auditor General*, HC 371 Session 2002-2003, 5 February, The Stationery Office, London.
- OECD (2012a), *OECD Economic Outlook*, Vol. 2012/1, No. 91, OECD Publishing, http://dx.doi.org/10.1787/eco_outlook-v2012-1-en.
- OECD (2012b), "Recommendation of the Council on Principles for Public Governance of Public-Private Partnerships", OECD, Paris, www.oecd.org/gov/budget/ppp.
- Ossowski, R. (2007), "Budgeting for Public-Private Partnerships", Symposium on Evaluating Innovative Approaches to Public Service Delivery, OECD Working Party of Senior Budget Officials, 30-31 October, Madrid, www.oecd.org/gov/budgeting/39761706.pdf.
- Penner, R.G. (2008), "Budgeting for capital investment", statement before the United States House of Representatives Committee on Transportation and Infrastructure, 10 June, Washington, DC.
- Posner, P.L., S.K. Ryu and A. Tkachenko (2009), "Public-Private Partnerships: The relevance of budgeting", *OECD Journal on Budgeting*, 2009/1:49-74, <http://dx.doi.org/10.1787/budget-v9-art3-en>.
- Poterba, J. (1995), "Capital budgets, borrowing rules, and state capital spending", *Journal of Public Economics*, 56:165-187.
- Premchand, A. (2007), "Capital budgets: Theory and practice" in A. Shah (ed.), *Budgeting and Budgetary Institutions*, Public Sector Governance and Accountability Series, The World Bank, Washington, DC.
- Rajaram, A., T.M. Le, N. Biletska and J. Brumby (2010), "A diagnostic framework for assessing public investment management", *Policy Research Working Paper* No. 5397, The World Bank, Washington, DC.
- Robinson, M. (2009), "Accrual budgeting and fiscal policy", *OECD Journal on Budgeting*, 2009/1:75-103, <http://dx.doi.org/10.1787/budget-v9-art4-en>.
- Schick, A. (2007), "Performance Budgeting and Accrual Budgeting: Decision Rules or Analytic Tools?", *OECD Journal on Budgeting*, 7(2):109-138, <http://dx.doi.org/10.1787/budget-v7-art11-en>.
- Soares, J.O., M.C. Coutinho and C.V. Martins (2007), "Forecasting Errors in Capital Budgeting: A Multi-Firm Post-Audit Study", *The Engineering Economist*, 52:21-39.
- Spackman, M. (2004), "Time Discounting and of the Cost of Capital in Government", *Fiscal Studies*, 25(4):467-518.
- University of Melbourne (2008), *National PPP Forum – Benchmarking Study, Phase II: Report on the performance of PPP projects in Australia when compared with a representative sample of traditionally procured infrastructure projects*, University of Melbourne Report, Melbourne Engineering Research Institute, Melbourne, Australia.
- Veiga Malta, J.N., P. Schapper, O. Calvo-Gonzalez and D. Berroa (2011), *Old rules, new realities: Are existing public procurement systems addressing current and future needs?*, The World Bank/LAC, Washington, DC.

Budgeting levers, strategic agility and the use of performance budgeting in 2011/12

by

Ian Hawkesworth and Knut Klepsvik*

Governments need to be able to quickly and flexibly reallocate resources from one priority to another. This article addresses this dimension of strategic agility in terms of managing the reallocation of resources in the public sector through the use of various budgetary tools. The focus is on recent fiscal consolidation efforts, the use of performance information and spending reviews, and automatic productivity cuts. This article draws on the OECD survey on performance and results that was conducted in 2011/12; the data are accurate as of November 2012.

JEL classification: H610

Keywords: Performance budgeting, strategic planning, reallocation, fiscal space, public sector resources, performance information, spending reviews, automatic cuts of productivity dividends, top-down budgeting

* Ian Hawkesworth is Head of PPPs and Capital Budgeting in the Public Governance and Territorial Development Directorate of the OECD. At the time of writing, Knut Klepsvik was a senior policy analyst in the Budgeting and Public Expenditures Division of the same directorate. Helpful comments were received from Edwin Lau, and substantial data contributions were received from Natalia Nolan Flecha and Nora Keck. The opinions expressed and arguments employed in this article do not necessarily reflect the official views of the OECD or of the governments of its member countries.

1. Introduction

In order to put strategic agility into practice, governments need to be able to quickly and flexibly reallocate resources from one priority to another. This article will address this dimension of agility in terms of managing the reallocation of resources in the public sector through the use of various budgetary tools. It should be noted that a number of additional tools for finding or maintaining fiscal space – such as fiscal rules, medium-term expenditure frameworks, zero-based budgeting, public-private partnerships, etc. – are not addressed in this article (see Marcel, forthcoming). Rather, the focus here is on recent fiscal consolidation efforts, the use of performance information and spending reviews, and automatic productivity cuts. This article draws on the OECD survey on performance and results that was conducted in 2011/12 (OECD, 2011b). An overview of the results of this survey is to be found in the Annex.

The goal for reforms of budgeting policy levers has been to move away from the underlying incrementalism which can be inherent to a budget process and which is a barrier to strategic agility. While a number of tools and options can be implemented to facilitate greater flexibility, in many cases this still has a strong influence on how budgets are prepared. This article will highlight a number of practical options that countries have used to escape incrementalism and to facilitate budget flexibility.

Many governments have already increased budget flexibility in recent years by decentralising the budget process and by giving line ministries more freedom to manage their own resources. This practice provides line ministries with mechanisms to reallocate resources between programmes under their sectoral responsibility. This decentralisation of responsibility has helped to align the incentives of ministries to better manage their budgets and to innovate in order to make the best use of limited resources. Across government, however, it can actually reduce strategic agility, as it limits the programme knowledge of the central budget authority (CBA) and therefore its ability to make reallocation choices between sectors and ministries in line with changes in policy objectives or context.

The CBA, as the financial secretariat of the chief executive/cabinet, is responsible for ensuring budget or resource agility in support of strategic agility. For this, it requires the ability to ensure the necessary linkages between the budget processes and the mechanisms for priority setting, clarifying objectives, ensuring accountability for the use of resources, and collecting information on the extent to which programmes support intended objectives. The question therefore is: how can this be attained?

2. Budgeting procedures and tools to foster budget agility

Varying budgeting procedures and supportive budgeting mechanisms are being used to foster budget agility. It is important, especially in a crisis situation, to distinguish between the short-term and the medium-term challenges that need to be met. In the short term, a crisis needs to be met by immediate measures in order to adapt the level of spending to reduced revenue, shrink budget deficits and curb government debt. On the other hand, there are always medium-term and long-term challenges in budgeting to

sustainably create fiscal space for new policy initiatives, for strategic changes of policy, and for accommodating the increasing demands of society. The budgeting tools that a CBA may use to reallocate resources and to keep the budget agile are presented in Table 1.

Table 1. **Summary of budgeting mechanisms for strategic agility**

Budget mechanism	Perspective of budget agility		
	Short-term	Medium-term	Long-term
1. Top-down spending cuts	A very relevant measure for immediate budget cuts	A relevant measure for sizeable budget cuts in out-years	Less relevant for sustained spending cuts
2. Spending reviews	Strategic spending reviews may provide directions for cuts	Efficiency spending reviews provide useful guidance for cuts and reallocations	Both strategic and efficiency spending reviews are relevant
3. Performance budgeting	Performance data may guide the strategic orientation of spending cuts	Output and outcome data are useful for governance of agencies, but less used for resource allocation	Outcome data may guide long-term programme developments
4. Automatic cuts of productivity dividends	Not relevant for sizeable, immediate spending cuts	A relevant measure for limited annual reallocation	A very relevant measure for ongoing focus on reallocation

When using top-down spending cuts, the finance ministry – acting on a mandate from the chief executive/cabinet – allocates a reduced (compared to a baseline) budget allocation without the conventional participation of and negotiations with line ministries. This budgeting mechanism is ideally suited to overcome short to medium-term fiscal challenges. For example, experience from the financial crisis shows that, in dire situations with large fiscal deficits and rapidly mounting public debt, there may be a need for quick and decisive decisions in order to react to market pressures, changing macroeconomic conditions, public opinion and the general credibility of fiscal policy. Most OECD countries that have introduced substantial fiscal consolidation measures have prolonged the austerity policy to a medium-term perspective (OECD, 2012).

However, if traditional top-down budgeting and decentralisation (“each minister is his own finance minister”) is to survive, imposed top-down spending cuts may not be a viable mechanism for resource allocation in the long run. In order to take all relevant information into account before allocating resources, the conventional budget procedure and a larger degree of collaboration between the CBA and the line ministries are required.

Spending reviews are assessments of the strategic orientation of programmes and/or the efficiency of spending, and are broadly used to reduce and/or (re)allocate budgetary expenditures. An efficiency review seeks to identify how an existing government service or programme can be delivered with fewer resources. In a strategic review, both the objectives of policies and programmes being implemented as well as the efficiency of spending are under review. The ultimate objective of strategic reviews is to prioritise programmes on the basis of policy objectives and/or performance.

Spending reviews may be a viable budgeting mechanism in the short, medium and long term, but with different emphasis. Most governments that have introduced large fiscal consolidation have used a type of spending review and expert groups to guide the directions of the austerity measures. Some countries also conduct spending reviews in connection with elections in order to develop options for political changes of direction. For such decisions focusing on short-term and medium-term policy changes, a strategic review may provide important information for the directions of fiscal consolidation. The

short-term and medium-term challenges for the government will be to decide on measures that contribute to budget cuts, with minimal effects on economic growth and limited implications for employment and social equity. In this situation, it may be important to study the strategic orientation of programmes before any decision on cuts are made.

For budget cuts to be sustainable in the long run, the same kind of information is even more essential. While spending reviews look at the performance of government programmes, they differ from the ordinary operation of performance budgeting systems in that they are more likely to use in-depth evaluation results whereas performance budgeting tends to be more indicator-based. More information on programmes allows efficiency reviews to identify efficiency gains and areas for institutional development, ICT adoption, process re-engineering, etc., in order to achieve those gains. Such changes may take years to implement but could provide substantial fiscal space for reallocations down the road. Spending reviews are also tailored to a specific political need at a particular time and will usually have a limited time to reach recommendations that must be operational in their nature. While spending reviews may be a recurring feature, a review of a particular area will usually not be repeated for a number of years.

Performance budgeting is a term that focuses on how output and outcome information is used in budgeting for resource allocation. Performance budgeting is widely implemented in OECD countries, but there is currently no consensus on the optimal way of using performance budgeting. The OECD has identified three broad categories of performance budgeting (OECD, 2007):

- presentational performance budgeting;
- performance-informed budgeting;
- direct performance budgeting (formula-based budgeting).

Performance targets on output and outcome levels constitute important information about the strategic direction of programmes. The corresponding results on such targets indicate whether or to what degree the programmes are effective and efficient. The regular (annual) performance reports from programmes and government institutions as well as programme evaluations may provide important information to line ministries and the CBA when the centre of government discusses long-term policy changes to programmes. Performance information on the strategic direction of programmes may also be one of several inputs to spending reviews. However, country experiences so far indicate that performance information does add value to the management and service delivery tasks of line ministries and executive agencies but has proven difficult to use for resource allocation as per the needs of finance ministries. For programme managers, spending unit heads and line ministries, performance information is important both in the short run and in the long run. Performance information is also a vital part of an open government approach and may provide the legislature, the supreme audit institution and civil society with essential background information for assessing the accountability of the government.

Automatic productivity cuts or efficiency dividends are initiatives in which assumed productivity gains in the production of goods and services in kind are centrally deducted from line ministries' budget allocations. Normally, automatic productivity cuts or efficiency dividends apply to the operational expenditures of the central government. The size of these automatic cuts is usually chosen in the order of 1-2% per year. This provides a rather limited amount for annual reallocation – around 0.5% of the total central government budget of a typical OECD country. However, in the longer term the cumulative

total of such cuts amounts to substantial sums. In addition to the provision of medium-term and long-term continuous funds for reallocation, the main advantage of automatic productivity cuts is that the systematic, annual occurrence of these cuts makes the spending units focus on efficiency and strive for continuous and systematic strengthening of efficiency. The largest potential for budget agility in governments over the medium and long-term perspective stems from well-designed spending reviews drawing on performance information and supplemented by automatic productivity cuts. This in turn requires that other standard budgetary institutions be in place, such as top-down budgeting, medium-term expenditure frameworks, a strong central budget authority, etc.

The lessons learned from the use of the first three key tools – top-down spending cuts, spending reviews, performance budgeting – will now be addressed in the following sections.

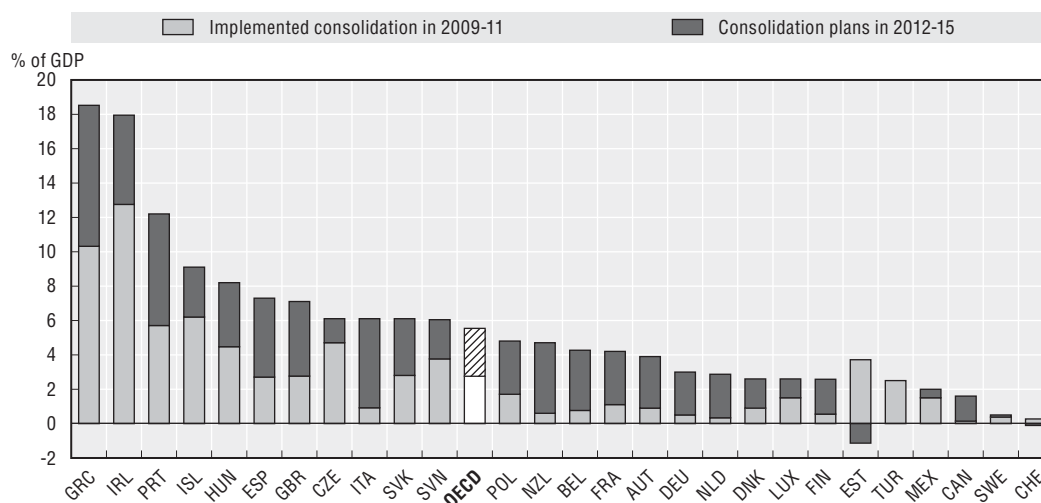
3. Top-down spending cuts and revenue enhancements: lessons learned from the financial crisis

In the aftermath of the global financial crisis and the fiscal stimulus efforts that followed, most OECD countries have adopted fiscal consolidation programmes that reduce and reallocate expenditures at both national and sub-national levels.

3.1. Central planning of fiscal consolidation

OECD countries have implemented fiscal consolidation by 2.8% of GDP in 2009-11 and are planning an equally large effort of fiscal consolidation in 2012-15. Two-thirds of the fiscal consolidation is expenditure reductions, and countries rely mostly on programme expenditure measures rather than operational ones in their efforts to reduce budget deficits and curb government debt. Welfare, health care, pensions and infrastructure are the four most frequently targeted programme areas for consolidation (OECD, 2012).

Figure 1. **Implemented (2009-11) and planned (2012-15) fiscal consolidation plans¹**



1. The data are the sum of annual incremental consolidation from 2009/10 until 2015 as reported by the national authorities. Only the following countries reported consolidation in 2009: Estonia, Hungary, Ireland, Poland and Slovenia. Austria reports consolidation until 2016. The following countries have not reported an announced concrete consolidation plan and are not included in the figure: Japan, Korea and the United States. Australia reports consolidation (especially in FY2013), but applies a broader definition of the term "consolidation" than this report. Norway does not apply a consolidation plan.

Source: OECD (2012), *Restoring Public Finances, 2012 Update*, OECD Publishing, <http://dx.doi.org/10.1787/9789264179455-en>.

The consolidation efforts that most OECD countries have planned and implemented since the financial crisis five years ago have been decided under extraordinary circumstances. Such large expenditure reductions and reallocations often require tough top-down decisions by the finance ministry, the council of ministers and the parliament. Estonia serves as an example. The Estonian government saw that the time frame of decisions and changes was very critical; therefore the Ministry of Finance prepared the consolidation plan, and the main debates/negotiations were held in the Cabinet. Special working groups of academics were temporarily created to provide advice to the Cabinet. The Cabinet discussed the 2009 supplementary budget focusing on fiscal consolidation in 37 meetings at the same time as the discussions on the 2010 budget and the four-year medium-term budget strategy were carried out. The parliament approved the consolidation measures in the regular process of approving annual and supplementary budgets (OECD, 2012).

In 2012, one-third of the governments of OECD countries reported that they used expert committees in one way or another in the process of planning fiscal consolidation measures (OECD, 2012). The expert committees may include academics (e.g. Estonia and Slovenia), experts from international organisations (e.g. Greece, Iceland and Portugal), civil servants (e.g. Hungary), an appointed commission (e.g. Italy), or an existing group that normally contributes to the budget formulation process (e.g. Belgium and Canada). The expert committees may be of a more ad hoc character and may differ from spending reviews (see next section) in purpose, in composition of members and in time frame. However, some countries used their ordinary spending review process as a background for developing the fiscal consolidation packages (e.g. Ireland and the United Kingdom).

Three governments reported that the consolidation plan was based on a political agreement, while one-fifth indicated that they had followed a normal budget procedure while developing the fiscal consolidation plan. Notwithstanding, the process of adopting and implementing fiscal consolidation plans has resulted in a change of government in about one-third of OECD countries (OECD, 2012).

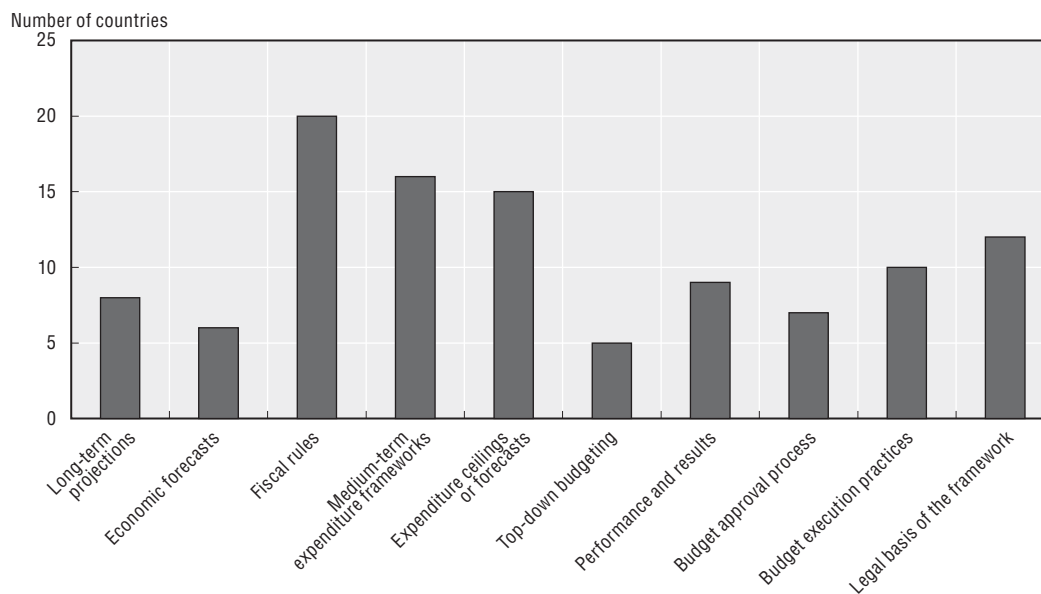
3.2. Countries take the opportunity to change the institutional budgetary framework

Most OECD countries have taken the opportunity of the financial crisis to introduce changes in their institutional framework for budgeting. During the last five crisis years (2008-12), 27 countries reported such changes in one or more areas of the institutional framework for budgeting, and 10 countries have changed their framework in five or more areas (out of ten options). While many of these changes are designed to improve fiscal sustainability through greater budget discipline (e.g. fiscal rules, expenditure ceilings), others could be interpreted as strengthening the central tools, information and processes that improve the ability of the central budget authority to support the strategic agility of the government.

Twenty countries have reported that they have changed fiscal rules since 2008, of which 14 countries belong to the EU and are influenced by the ongoing process of renewed fiscal governance in the EU. Sixteen countries have made changes in their medium-term expenditure framework (MTEF), and 15 have established expenditure ceilings. In addition, several countries are amending national laws – and constitutional laws – in order to regulate the new fiscal rules in national legislation. This is a specific feature of the ongoing reform of fiscal governance in the EU (the so-called Fiscal Compact), and there may be more changes in the budgetary frameworks in the next few years, partly because of the

ongoing process to strengthen the Stability and Growth Pact and to establish the Fiscal Compact in the EU, and partly because of a general exchange of experience during and after the financial crisis.

Figure 2. **Changed areas of budgetary institutional frameworks in OECD countries (2008-11)**



Source: Based on data in Chapter 2 of OECD (2012), *Restoring Public Finances, 2012 Update*, OECD Publishing, <http://dx.doi.org/10.1787/9789264179455-en>.

Allen Schick comments that, during the financial crisis, the most affected countries have bypassed conventional budget procedures and have relied on ad hoc procedures to draft and adopt fiscal consolidation packages. Budget information and decisions have been tightly controlled by policy makers at the centre of government or the finance ministry. The crisis has concentrated budget making in fewer hands and, in some countries, has given the finance ministry a disproportionate role in the process. He concludes that the concentration of information and power has reversed decades of progressive opening of the budget process through formal or informal consultations between government and stakeholders, with little or no opportunity for sub-national governments or civil society to influence outcomes of the budget process during the severe crisis time (Schick, 2013).

However, Schick does not expect that the profound fiscal stress, intense conflict, concentrated power and political instability of the financial crisis will be the template for budgeting's future. Although the financial crisis appears to have reversed the trend of incremental budgeting, the next generation fiscal rules will likely push more governments to adopt top-down budgeting processes that set fiscal aggregates and sub-aggregates before bids are prepared by spending units and line ministries. This shift has already occurred in many OECD countries, and an additional five countries have made changes to the top-down budgeting practice during these crisis years. Top-down constraints are part of the process of transforming central budget offices from control agencies that oversee the details of expenditure to managers of fiscal policy that guard the country's fiscal position and analyse the budget impact of policy options.

Schick summarises the lesson from disciplined countries that each country must summon the will to make and live by fiscal rules, to be fiscally prudent, to strive for results, and to pay attention to programme effectiveness in spending public money. Outsiders can guide, but the most important quality is that government leaders, programme managers and citizens yearn to do the right thing.

While top-down budgeting is likely to improve budget discipline, it can also reinforce budget stovepipes, and so other budget mechanisms are needed to balance incentives for efficient budget management with the ability to prioritise and reallocate spending across government. The remainder of this article will discuss general mechanisms that governments are using in order to organise fiscal space for reallocations and consolidations under normal economic cycles and downturns.

4. Spending reviews may indicate areas to be cut and provide space for reallocation

4.1. Introduction to spending reviews

Spending reviews are another major tool for fiscal reform. Typically, spending reviews are used to create fiscal space by reducing and/or (re)allocating budgetary expenditures due to, for example, a change of political priorities, a change in the demand for a service, or efficiency enhancement measures. Spending reviews became part of the mainstream budget reform tool box in the 1990s, but have been used for longer. Examples include the United Kingdom Public Expenditure Survey in the 1960s and the Australian Portfolio Management and Budgeting reform initiatives in the 1980s. According to the 2011 OECD survey on performance budgeting (OECD, 2011b), 17 countries out of 33 responses use spending review in various forms.

There are many definitions of spending review, and the roles played by the institutional actors also vary across countries and over time. A sign of a well-functioning spending review process is perhaps that it is continuously tailored to provide an answer to current challenges. In the United Kingdom, the aims of spending reviews are to support the biennial revision of the expenditure framework and ministerial ceilings. The United Kingdom Treasury decides on terms of reference, methodology and scope. Multi-institutional working groups draft the reviews, supported by line ministries. The review is approved by the Prime Minister and by the Chancellor of the Exchequer.

International organisations also use spending review in various forms. Both the IMF (Robinson and Last, 2009) and the OECD refer to spending reviews as a sub-component of performance-based budgeting. Spending review is meant to keep under review the appropriateness and effectiveness of existing programmes and use performance information to help identify programmes that can be cut, thus creating fiscal space. The World Bank¹ conducts public expenditure reviews of its borrower countries. These reviews are meant to establish effective and transparent mechanisms for countries to allocate and use available public resources in a way that promotes economic growth and helps reduce poverty.

The OECD has emphasised three characteristics that differentiate spending reviews from other types of evaluation (OECD, 2011a):

- Spending reviews not only look at programme effectiveness and efficiency under current funding levels, but also examine the consequences for outputs and outcomes of alternative funding levels.

- The review procedure is under the responsibility of either the finance ministry or the Prime Minister's Office.
- The follow-up of spending reviews is primarily decided as part of the budget process.

Spending reviews can further be sub-divided by their assessment criteria. An efficiency review can be defined as a review of inputs and processes to identify how an existing government service or programme can be delivered with fewer resources. Efficiency reviews can be applied to individual or multiple programmes or to an organisation or set of organisations to make operations more efficient and/or eliminate duplication of operations. This review is meant to improve efficiency without calling into question the justification for the programme or organisation. For example, Finland introduced the "Productivity Programme" in 2004 to maintain pressure to achieve public sector efficiencies. It included measures for improving government administrative structures, exploiting ICT and enhancing central government processes, as well as permanently reducing the number of government staff.

Strategic reviews, on the other hand, review both the objectives of policies and programmes being implemented as well as the efficiency of resource use in these programmes or organisations. The objective of such an exercise is to prioritise programmes on the basis of policy objectives and performance. This will necessarily entail the involvement of the political level of government – either throughout the review process or at key decision points. An example of a strategic review is the Canadian "Program Review" from 1994 to 1999, in which each department of the Canadian government was required to review its programmes and activities and identify the role of the government and the effectiveness and affordability of the programmes. These proposals were then reviewed by a steering committee of deputy ministers, a special Cabinet committee of ministers, and finally by the full Cabinet as decision-making body (see Bourgon, 2009, and Blöndal, 2001).

Table 2. A typology of spending reviews and performance evaluation

Primary objective	
Analysis: Analyse management, structures and/or policy to improve efficiency and effectiveness	Create fiscal space: Reallocate and/or reduce government expenditure for programmes or organisations
Performance evaluation (programme, policy or organisational evaluation)	Spending reviews
	Efficiency reviews Primary criterion: efficiency, i.e. identify how the existing policies can be conducted with less resources. Examples: ● Finland "Productivity Programme" (2005-15) ● Korea "Self-Assessment of the Budgetary Programme" (launched in 2005) Strategic review Primary criteria: efficiency and prioritisation, i.e. identify what the government should or should not do Examples: ● Australia "Comprehensive expenditure reviews", "Strategic review" (2007) ● Canada "Program Review" (1994), "Strategic Review" (2009) ● Denmark "Spending review" (ongoing) ● Netherlands "Interdepartmental Policy review" (1982, and relaunched in 2009) ● United Kingdom "Spending Review" (launched in 1998)

While both efficiency and strategic reviews look at programme efficiency, only strategic reviews compare the objectives of programmes (and the effectiveness in meeting them) against the changing priorities of the government, including in the context of a changing fiscal environment. Where the savings to be achieved through only efficiencies

are insufficient, strategic reviews may instead make proposals regarding service levels, programme terminations or restructuring in order to reach fiscal goals and establish budget agility.

4.2. Preconditions for effective spending review²

4.2.1. Political will is necessary to set the mandate and make the decision

Creating an effective spending review process requires a clear political mandate at the level of the chief executive. Spending reviews must be seen as a solution to a political problem rather than a technical, bureaucratic exercise. The mandate should be to identify options for reductions to baseline spending, to reallocate spending and, if relevant, to enhance revenue in order to create fiscal space for new priority spending. With regards to revenue measures, it should be noted that, in general, spending reviews should not veer into tax policy. There may be cases, however, where non-tax revenue plays an important role in financing the effort or creating incentives for particular behaviour from citizens or institutions. In these cases, it can be relevant to include revenue measures in the spending review.

The options proposed should be generated on the basis of sound research but ultimately decided by the chief executive/cabinet or another politically delegated entity (e.g. a ministerial committee) during the budget process.

Efficiency reviews should include reviews of issues that cut across policy areas, such as the organisation of support services, the use of ICT, and procurement practices. The efficiency reviews should actively benchmark agencies and public institutions against each other and against relevant private sector entities and similar institutions in other countries. A note of caution should be voiced with regards to relying too greatly on generating fiscal space by efficiency measures. In order to secure results on the ground, the government should avoid the illusion that efficiency improvements alone will be enough to create substantial fiscal space in the short term. If significant fiscal space is to be created, it is essential also to be willing to reduce or reallocate programme expenditure.

There is always the political danger that spending review will be attacked as a “small government” exercise. Spending review is, of course, an essential tool for any government that wishes to reduce the size of the public sector. However, assuming that this is not the government’s goal, it should be stressed publicly that the objective is to reallocate rather than reduce aggregate government expenditure.

4.2.2. The review team must contain the necessary political and technical capacity to produce the necessary recommendations

Spending reviews involve the creation of a spending review team with the explicit responsibility of assembling and putting forward options for cuts to baseline expenditure for consideration by the political leadership during the preparation of the annual budget. Experience from countries such as Australia and the United Kingdom seems to indicate that it is best to create spending reviews as a function within (not outside) the civil service. Ad hoc external reviews (e.g. conducted by notable businessmen) have often not been successful.

The spending review team usually draws on raw data, ordinary performance reports, evaluations, and efficiency reviews (as well as the views of budget analysts in the finance ministry). In some cases, the review team will be large enough to conduct analysis on its

own; in other cases it will rely on analysis that is already generated, or it will commission data collection and analysis from the finance ministry, the line ministries, management consulting firms, think tanks, etc.

Options for identifying fiscal space usually come in four forms: savings from measures to improve efficiency; the elimination of programmes (or elements of programmes) which are ineffective and cannot readily be reformed to make them effective; the elimination of programmes which are politically low priority; and revenue-enhancement measures (usually non-tax revenue).

The need for the spending review team to focus on priorities as well as efficiency and effectiveness makes it important that it should not only be technically competent, but also sensitive to the priorities of the government of the day. It may therefore be useful for the team to include specialists in public policy as well as persons with the ability to gauge political reactions. Recognising that spending review is not a purely technical function, it should be under the direction of politically appointed officials who are sensitive to the priorities of the chief executive/cabinet.

Government organisations must be obliged to provide the information requested by the spending review team. Some government organisations may resist such disclosure, as it lays bare the inner workings of the organisation and undermines the information asymmetry on which it depends. Spending reviews are whole-of-government exercises, but bundling issues may give better results. While it may be tempting to select programmes for review that look like potential candidates for budget cuts, this has to be balanced against the fact that such reviews may meet with strong resistance by the ministry concerned. Thus, selection should be balanced and perhaps also include programmes where there is some expectation that more funds will be allocated or that at least a review will protect a programme from additional cuts. This may make the ministry concerned more interested in participating.

4.2.3. The performance budgeting system should support spending review to the extent possible

The success of spending review in identifying options for cuts depends critically on ensuring that the officials who have responsibility for conducting spending review have access to the performance information that is generated, including performance evaluations and performance indicators and reports.

Programme evaluations – which are part of the usual work of line ministries and focus on improving outcomes rather than reducing cost – should provide some information that hints at whether the programme may be relevant for spending review. In order to more clearly identify programmes or elements of programmes which can be reduced or reallocated, the standard terms of reference of programme evaluations should be required to include the cost of improving programmes that, as currently designed, are ineffective. This includes an assessment of the probable cost of fixing the programme. Value-for-money audits carried out by the supreme audit institution may also be of use.

Performance indicators and reports are often part of the annual performance management framework. Experience shows that they are usually the most useful to the implementing agencies in their work and in their reporting. However, it remains a problem in many OECD countries to generate key indicators that can be used to compare the efficiency and effectiveness of the operation and delivery of government services. There is

no easy solution to this conundrum. Performance information should first be useful to those that generate it or else it risks becoming an empty paper exercise where the data generated are neither accurate nor useful. The finance ministry may be able to design a performance management system capable of providing some initial information on areas where efficiency and effectiveness are lacking.

4.2.4. Spending reviews have the most impact when change is necessary, but effects may take a few years to show themselves; links to the medium-term framework are important

Because cuts to existing programmes usually create some political resistance, the best time to carry out spending review with substantial impact may be when there is a change in leadership, which is often related to an election (but not necessarily). In times of crisis, the purely political prioritisation strategic review is the most relevant, as it basically becomes an exercise to reduce government expenditure. Reviews that concentrate on creating efficiency savings or changes in user behaviour leading to savings may not show their impact until they have been in place for a few years. It thus becomes crucial that the effects of spending review are built into the annual ceilings for each line ministry as per the medium-term framework. Without such a framework, the effects of the spending review may have to be renegotiated as part of every budget process, and their impact may consequently be limited.

Consideration should be given to the appropriate frequency of spending review and in particular to whether, in addition to the above, it should be an annual process. One possible approach would be to have periodic in-depth spending reviews and then a lighter spending review on an annual basis in the interim.

Spending reviews are part of the toolbox that enhances budget agility, as discussed at the beginning of this article. The preconditions discussed above thus form part of the foundation for budget agility.

5. Performance budgeting is a vital but imperfect tool

The public sector has traditionally been held to account for compliance with rules and procedures. However, in the last 20 years OECD countries have increasingly sought to develop a focus on the results achieved with the appropriations allocated, through performance budgeting. This is a “work in progress” in all OECD countries, and there is currently no consensus on the optimal way of using performance budgeting.

One of the challenges for performance budgeting is that many demands are made on the concept. The demands include:

- Provide high-level outcome data that enables the executive leadership of government to pursue its strategic goals.
- Provide data on activity/process, outputs and – most importantly – outcomes to the parliament, the supreme audit institution and civil society that enables these actors to hold the government to account.
- Provide output and outcome data that can be linked with input data in a way that provides transparency as to the efficiency and effectiveness of spending so that the finance ministry can monitor and steer the limited budgetary resources to where they matter most in a given political context.

- Provide input, process, output and outcome data to the line ministers and their secretariats so that they can hold the executive agencies to account and have the ability to adjust policies in light of goals and actual developments.
- Provide input, process and output data that enables the programme managers to adjust their operations so that services and programmes are delivered efficiently and effectively.

If the performance management system could be consistently able to service the needs of the many actors and deliver the specific information, the system should assure strategic agility, efficient and effective resource allocation, and transparency and accountability. However, this is more easily said than done. In consequence, most countries have focused on gearing their performance management system towards selected actors' needs.

5.1. Defining performance budgeting

The OECD identifies three broad categories of performance budgeting (OECD, 2007):

- Presentational performance budgeting requires the publishing of performance information in budgets and other government documents (e.g. annual reports). The information can refer to targets, the results against them, or both. While it serves to disseminate information for greater transparency and accountability of government operations, performance information is not intended to play an explicit role in decision making.
- Performance-informed budgeting takes presentational performance budgeting a step further and requires that either past or proposed future performance is used to inform the process of allocation of resources during budget formulation. Performance information is used along with other information in the decision-making process.
- Direct (or formula) performance budgeting requires the allocation of resources based solely on past or proposed future performance. This form of performance budgeting is used only in specific sectors, such as education and health. For example, the number of students who graduate with a Master's degree in the current year, in the past, or in a combination of the two will determine the following year's funding for the university running the programme.

Table 3. **Performance budgeting categories**

Type of performance budgeting	Link between performance information 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 performance budgeting	Tight/direct link	Performance results	Resource allocation and accountability

Source: OECD (2007), *Performance Budgeting in OECD Countries*, OECD Publishing, <http://dx.doi.org/10.1787/9789264034051-en>.

These three categories are not intended to be exhaustive. Variations exist within government and within programmes. In general there is widespread use of performance

information in the budgeting process, but the overwhelming majority of countries use performance information simply to inform budget negotiations (OECD, 2011b).

Performance budgeting reflects a number of innovations with respect to budget and management institutions in various countries. These include:

- **Changing the budget classification from inputs to programmes.** Under traditional (input) budgeting, the parliament appropriates the specified funding essentially by inputs (e.g. “salaries for a particular institution”). Performance budgeting entails government-allocated funding to a political priority (e.g. “enhancing road safety”) which typically entails fewer line items.
- **Reporting on non-financial performance information and lump-sum budgets.** Traditionally, government accounts and audits focus on whether the appropriation was used lawfully. Performance budgeting reporting is meant to focus on outputs (e.g. the number of “drive safely” campaigns conducted) and outcomes (e.g. reduction in road fatalities). This enables an increased awareness of the cost of certain activities and the benefits that they accrue. With more emphasis on what is delivered, a loosening of input control in favour of lump-sum budgeting is often used, and the control of lawfulness rests with internal control procedures. By “lump-sum” is meant an appropriation of funds from the parliament that is allocated to a particular agency or programme with few restrictions. This gives the head of the agency or programme flexibility in deciding the input mix – on what to spend the appropriation – which should increase efficiency.
- **Using non-financial performance data as part of the management and/or budget process.** This might take the form of performance-informed budgeting or formula budgeting (see above). It might also take place in negotiations between the finance ministry and the line ministries and/or between the line ministry and its executive units and agencies. In OECD countries, there is great variation but, most commonly, performance information is used by line ministries to manage executive unit activities, possibly in the form of performance contracts. Usually these contracts involve giving greater flexibility to these agencies in order for them to decide the appropriate mix of inputs that will achieve the desired outputs and outcomes. One measure of flexibility is lump-sum appropriations. As can be seen in Table 4, approximately two-thirds of OECD countries (17 countries) use lump-sum appropriations, but not with the same coverage of capital and operating expenditures.
- **Tight monitoring of formula performance budgeting in order to maintain fiscal discipline.** Performance budgeting does not imply that the centre of government abandons fiscal discipline. Even if additional flexibility is allowed and/or formula budgeting is used in certain sectors (e.g. health, education) overall spending ceilings – either at ministerial, programme or agency level – will be maintained by the finance ministry.
- **Use of medium/long-term strategic plans and budgetary frameworks.** As most policy outcomes can only be detected over a number of years, performance budgeting requires a medium-term perspective. For programming to be relevant, this also typically requires clear links between the government’s electoral-cycle programming (for the parliamentary period or the life of the government, etc.) and its overall long-term strategic goals.

Table 4. **Do ministries/agencies receive lump-sum appropriations?**

	Number	Countries
Yes, for both operating and capital expenditures, without any sub-limits	3	Finland, Ireland, Switzerland ¹
Yes, for both operating and capital expenditures, with sub-limit on wages	7	Czech Republic, Hungary, Italy, ² Netherlands, ³ Portugal, ⁴ Slovak Republic, United Kingdom
Yes, but only for operating expenditures, without any sub-limits	4	Australia, Iceland, Norway, Sweden ⁵
Yes, but only for operating expenditures, with sub-limit on wages	3	Canada, Denmark, Poland ⁶
No, detailed appropriations are set	13	Austria, Belgium, France, ⁷ Germany, Greece, Japan, Korea, Luxembourg, ⁸ Mexico, New Zealand, Spain ⁹ , Turkey, United States ¹⁰

1. Switzerland: Global budgets exist only for executive agencies, typically comprising two lump-sum appropriations (own operating and capital expenses).
 2. Italy: Some receive the amount as a percentage of tax revenues (e.g. revenue agency).
 3. Netherlands: Some agencies receive lump-sum appropriations covering operating expenditures; a large number of agencies are financed on the basis of their output (i.e. formula budgets; price*quantity).
 4. Portugal: Typically receive lump-sum appropriations with two sub-limits for operating and capital expenditures.
 5. Sweden: For smaller investment items (e.g. computers and office equipment) and larger items (e.g. software). Others with heavy investments (e.g. national road agency) receive one appropriation for the agency operations and one for investments.
 6. Poland: Each agency receives a lump-sum appropriation covering expenditures linked to targets imposed by the central government.
 7. France: Appropriations unrelated to the nature of expenditure.
 8. Luxembourg: Appropriations are fixed on the basis of a detailed proposal provided by the agency.
 9. Spain: Depends on the agency/organisation and its expenditures.
 10. United States: Some small agencies receive lump-sum appropriations; Cabinet and major agencies do not.
- Source: Based on OECD Budgeting Practices and Procedures Database, Q.49: "Do your agencies/executive organisations receive lump-sum appropriations?", and OECD analysis.

A number of challenges need to be addressed when designing and using performance budgeting:

- What gets measured gets managed. This means that objectives and indicators have to be comprehensive, reliable and measureable – easier said than done.
- Reforms need to be implemented at the agency/ministry level, which requires political buy-in and a willingness to change.
- Not all performance indicators are useful in the budget cycle. Legislators, ministers, policy analysts, service delivery professionals and concerned citizens are not necessarily interested in the same information at the same time; yet all must be able to derive value from the system.
- Given the cross-government nature of some policy outcomes (e.g. child obesity), successful performance budgeting implies substantial, sustained cross-ministerial co-operation.

While there is great variation in the performance targets used by governments, many limit their number to prevent information overload. For instance, the United States has 3 700 performance targets, followed by the Slovak Republic (1 641) and Korea (1 033). France, Japan and New Zealand have between 500 and 600 targets each, and Sweden only has 48.³

Performance budgeting practices are widely implemented but varied. While countries might face similar challenges and share a common need to focus on demonstrating the

extent to which spending achieves policy outcomes, they need to tailor their performance budgeting system to fit their particular circumstances.

No country directly links public expenditures to performance information. Except for a few areas (education and health, for instance), performance information is used to inform the budget, not determine it. Fiscal discipline is consequently not threatened by the introduction of performance budgeting.

Performance information is more commonly used for management and accountability purposes than for the allocation of resources. Consequently, performance budgeting is generally decentralised within the central government (to line ministries and agencies), with the exception of spending reviews. There is generally no clear answer, however, regarding how the government should react to bad performance.

While there is little doubt that performance budgeting information provides important input to all levels of government, it is difficult to apply it to a number of key steering tasks, particularly at the aggregate level. The second-best solution is to ensure that the generators of the most basic performance information – the executive agencies – gain value from the performance framework. This ensures that it will remain relevant, truthful and a part of the ongoing business of implementation. A special and more tailored effort must then be made to satisfy the legitimate performance information needs of the remaining actors, be it in the form of spending reviews, special evaluations or other focused gathering and analysis efforts. The existence of relevant and high-quality performance information will provide an important source for such tailored efforts of spending reviews and centrally governed top-down budgeting, and thereby also provide a basis for creating budget agility and fiscal space.

6. Productivity cuts may provide some fiscal space for reallocation drawn on productivity gains

6.1. Definition of automatic cuts of productivity dividends (ACPD)⁴

When accompanied by budget flexibility at the organisational level, automatic cuts of productivity dividends (ACPD) can create pressure for ministries and agencies to work more innovatively and to reallocate resources within their administrative area in search of greater productivity and effectiveness. ACPD procedures have the following characteristics:

- They are “automatic” in the sense that they are part of the regular budget process and no special decision is needed from year to year as to their application.
- The cuts are based on assumed productivity gains in the public production of goods and services in kind.
- In view of their rationale, the cuts are only applied to the operational expenditures of the central government.

Productivity is generally defined as a measure of the amount of output generated per unit of input. Productivity growth can be achieved by a better combination of inputs (the allocative efficiency of production), a better quality of inputs, or better operational efficiency (changes in the production process). The main obstacle to output measurement in the public sector is the lack of market prices, but measurement is also affected by the difficulty of accounting for changes in the quality of services.

6.2. Which countries use automatic productivity cuts? What is their rationale and how have they been implemented?

ACPD procedures are applied in several OECD countries. Their rationale – and the reason for acceptance in the national discussion about fiscal institutions – is that there is productivity growth in the public sector and that, without these automatic cuts, productivity growth would lead to backdoor increases in service levels without explicit budgetary decisions. Examples of automatic cuts of productivity dividends in five countries are presented in Table 5.

In principle, automatic cuts of productivity dividends are designed to be applicable to all operational costs of government. Operational costs include compensation of employment, and intermediate consumption and investment.⁵ However, the appropriateness of such a broad coverage has been questioned.

Table 5. **Country use of automatic productivity cuts**

	Terminology	Size	Coverage
Australia	Efficiency dividend	Applied at the rate of 1.25% per annum (varying over time 1.0%-1.5%). An additional one-off efficiency dividend of 2.5% was applied in 2012-13 to departmental appropriations.	Applied to the operational expenses of all agencies in the general government, unless they are specifically exempted, and to the total net departmental appropriations, excluding some specific receipts. It does not apply to administered expenses, such as grants, subsidies and benefit payments.
Denmark	Re-prioritisation contribution	A uniform 2% cut is applied to the budget baseline; the actual outcome of the budget process may be different.	Applied to the operating expenditure of central government. Institutions and programmes subject to special political agreements are exempted from the cut (approximately one-third of central government operating expenditure).
Finland	"Programme for Effectiveness and Productivity"	From 2011, an increased focus is put on the effectiveness of government functions, the availability and quality of services, and human resource management. No current absolute target, but the financial impact is to be achieved in line with the previous staff-cutting target of 8 414 by the year 2011 and further 5 034 in 2012-15. In 2007-11, only half of the saved personnel costs were cut from the appropriations of administrative branches. In 2012-15, 25% of the savings will be cut.	Quantitative top-down targets were decided for ministries and agencies, based on ministerial productivity plans. Measures to achieve this were proposed by ministries and negotiated between the Ministry of Finance and the line ministries, approved by the Cabinet.
New Zealand	Fixed nominal baselines and additional efficiency savings as of July 2012	New Zealand uses fixed nominal current operational expenditures as a baseline in the annual budget cycle. This means that inflation has to be absorbed. Given that the inflation rate has been around 2.5% for the last few years, ministries had to achieve at least a similar productivity gain in order to maintain their existing level of output. In addition, the efficiency savings will be added to the savings caused by the fixed nominal baselines. The size of the required savings is 3% for small agencies and 6% for larger agencies.	Fixed nominal baselines for operational expenditures are applied on the entire central government budget, without exception. The efficiency savings introduced in July 2012 apply to the core government administration as defined by the FTE cap (full-time equivalent).
Sweden	Deduction in productivity growth (DPG)	It is assumed that agencies can produce a constant output with decreased wage resources because of the corresponding increase in the productivity of labour. It is also assumed that the public and private sectors achieve the same productivity gains. The DPG is calculated as the average productivity growth in the public sector during the last ten years. Since its introduction, the DPG has kept within the range of 1%-2% and is applied to the wage index part of the PWA index (price and wage adjustment index).	The PWA index applies to ca. 28% of the total state budget (FY 2012). The DPG applies to ca. 16% of the total budget (which is the base amount subject to the DPG, not the actual deduction resulting from application of the DPG). Cuts are applied to the multi-annual estimates of agencies' operational costs, as an integral part of the budget process. These estimates are established in real terms, but annually converted into nominal terms by an aggregated wage and price index.

6.3. Country experience with automatic cuts of productivity dividends

Empirical data suggest that the long-run public sector productivity growth is usually estimated to be below that of the private sector, somewhere around 0.5% or 2% per year. This interval is consistent with the ACPD arrangements that countries like Australia (1.25%), New Zealand (0.8%) or Sweden (2%) have built into their budget procedures on a permanent basis.

There is consensus that there is productivity growth in the public sector, and there are approximate insights in the order of average growth in the government sector as a whole. That is enough to establish an effective ACPD arrangement. However, policy makers should avoid too direct a connection between the outcomes of productivity research and the parameters (cut percentages) of an ACPD arrangement. A direct connection may lead to a permanent policy debate about the appropriate cut percentages in the various sectors of public service provision and a politicisation of productivity research.

It appears from the literature surveyed by the OECD that small agencies and relatively labour-intensive government divisions and agencies may have more difficulty in realising uniform ACPD targets than large and less labour-intensive agencies. Without differentiation of ACPD targets, this problem can largely be solved by allowing reallocation of savings targets within ministries or between ministries.

The size of the ACPD cuts is usually chosen below the measured average productivity growth in the private sector, which contributes to political acceptability. Some countries have increased the percentage ad hoc and “one off”, in an attempt to solve budgetary problems in upcoming budget years. This may lead to politicisation of the mechanism and may undermine the long-term sustainability of the ACPD mechanism.

A uniform cut percentage is less costly to implement than a differentiated one, leads to less discussion, and avoids the politicisation of productivity research.

Sometimes it is argued that, in view of lacking market incentives (competition, profit), at least a part of the savings should be used to reward the agencies where the productivity gains are made. The literature studied by the OECD mentions advantages and disadvantages of ACPD arrangements that allow ministerial divisions and agencies to use part of the savings for investments that can lead to further savings or to further improvement of service levels.

Taking into account that the cuts of productivity dividends provide a limited amount for annual reallocation due to the low percentage and the restricted coverage of cuts (normally only on the operational expenditures of the central government), the automatic productivity cuts have a minor impact on budget agility in the short run. However, in the longer term the cumulative impact may create substantial fiscal space for the government. It should indeed also foster a culture of continuous innovation and change in pursuit of savings.

7. Conclusion: Achieving resource agility by balancing budget discipline with information, incentives and flexibility

This article has studied governments’ capacity for resource agility, or the ability to flexibly reallocate resources to changing priorities and strategic changes of direction. Four mechanisms have been described: top-down spending cuts, spending reviews, performance budgeting, and automatic cuts of productivity dividends. Although experience from governments’ responses to the financial crisis has shown that OECD

countries have gained from top-down spending cuts and revenue enhancements in the short and medium term, the largest potential for budget agility in governments over the medium and long-term perspective would be well-designed spending reviews drawing on performance information and supplemented by automatic productivity cuts.

Many countries have established top-down budgeting as an integrated element of the institutional framework of budgeting. This practice provides line ministries with an ability to adjust budget allocations within their responsibility, but may leave the central budget authority with a need for other mechanisms for long-term budget agility. During the financial crisis, some governments have used top-down spending cuts and revenue enhancement – often leap-frogging the conventional budgeting procedures. This may not be sustainable in the longer run.

In many countries, the consequence of top-down budgeting is a weakening of the finance ministry's ability to find fiscal space as part of the annual budget process. The basic reason is that line ministers have been able to use the regular budget process to forward new spending proposals and at the same time minimise the “threat” of adoption of new saving proposals touching their portfolios. Finance ministries are faced with a quandary: the move towards top-down budgeting has given them better control over overall expenditure and helped to align incentives at the line-ministry level to manage resources efficiently by acting as their own “ministry of finance”. At the same time, however, decentralised control over budget decision making exacerbates information asymmetries in the budget process. Not only do finance ministries generally know less now about individual programmes and organisational performance, but line ministries also have a diminished incentive to provide savings proposals that will reduce their budget allocation. In keeping with the nature of top-down budgeting, line ministries identify and reallocate efficiency gains within their own area of responsibility.

Performance budgeting has often been presented as a means of filling the “information gap” by providing a reporting mechanism between finance ministries and line ministries/agencies covering inputs in the form of budget resources, institutional information, outputs and outcomes. The results, however, have been mixed in terms of providing the clear, useable and timely information for finance ministries to make informed budget decisions, in particular with regard to prioritisation across spending areas. Finance ministries have often found themselves overwhelmed with copious amounts of performance information of limited use to the budget process. There is also increasing awareness that performance information needs are different for the management of service delivery in executive agencies compared to budget (re)allocation functions in the finance ministry. For instance, calculating impact and its cost is difficult, since attributing causal relations between societal outcomes and public sector outputs and processes is complex, difficult and prone to time lags. Information may be biased in favour of the agency generating the data, and indicators may simply be chosen because they are measureable rather than because they are meaningful. In addition, the political element of pursuing political programmes and the political impact of inputs play a significant role in the calculus by which resource allocation decisions are made. Tying resources to performance indicators (i.e. performance budgeting) is therefore difficult and rarely done in OECD countries.

A spending review procedure is part of the institutional response to the above conundrum when there is a need to identify fiscal space and prioritise expenditure. Ideally,

spending reviews will have a clear political mandate from the chief executive or cabinet, thus making the spending review a whole-of-government effort and all ministerial portfolios legitimate targets of inquiry. The issue of information asymmetry should also be mitigated by the fact that reviews are designed to collect data, analyse them and make recommendations for change. Spending reviews are becoming a more frequently used measure for budget agility in both the short and longer term. They may provide political options for cuts, reallocations and general fiscal space that would be sustainable over a medium or long-term perspective, focusing on efficiency and political strategic priorities (politically determined effectiveness).

Performance information still plays an important role in the budgeting process, however. It is widely implemented in OECD countries, and while its direct role for budget allocation seems to be in decline, performance information plays an important role as a source of information in spending reviews and in long-term developments of strategic directions for budget allocations (e.g. high-level statistical information). Performance information is a vital part of an open government approach and provides the legislature, the supreme audit institution and civil society with essential information for holding the government to account for its action.

Automatic cuts of productivity dividends provide a rather limited source of space for reallocation in the short run, due to the limited size of the total budget. Such automatic productivity cuts may nevertheless result in a culture of efficiency. This culture should be characterised by managers and agency heads who persistently focus on efficiency-enhancing measures, and may well be a generator of substantial fiscal space.

Notes

1. <http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/LACEXT/EXTLACREGTOPECOPOL/0,,contentMDK:20857505~pagePK:34004173~piPK:34003707~theSitePK:832499,00.html>.
2. See Hawkesworth, Robinson and Huerta Melchor, 2013.
3. OECD Budgeting Practices and Procedures Database (www.oecd.org/gov/budget/database), Q.75.
4. See Luinaud and Wilhelmsson, 2012.
5. Intermediate investment includes investment in support of government operations, but not investment in final capital goods such as infrastructure.

Bibliography

- Blöndal, J.R. (2001), "Budgeting in Canada", *OECD Journal on Budgeting*, 1(2):39-82, <http://dx.doi.org/10.1787/budget-v1-art10-en>.
- Bourgon, J. (2009), "Program Review: The Government of Canada's Experience Eliminating the Deficit, 1994-1999 – A Canadian Case Study", The Centre for International Governance Innovation, Waterloo, Ontario, Canada.
- Hawkesworth, I., M. Robinson and O. Huerta Melchor (2013), "Selected Budgeting Issues in Chile: Performance budgeting, medium-term budgeting, budget flexibility", *OECD Journal on Budgeting*, 2012/3:147-185, <http://dx.doi.org/10.1787/budget-12-5k44tpx5bl48>.
- Jinno, A. (2012), "Summary of OECD countries' experience of spending reviews", *OECD Working Paper*.
- Luinaud, M. and T. Wilhelmsson (2012), "Literature Review Automatic Cuts of Productivity Dividends", *OECD Working Paper*.
- Marcel, M. (forthcoming), "Budgeting for Fiscal Space and Government Performance beyond the Great Recession", *OECD Journal on Budgeting*.

- OECD (2007), *Performance Budgeting in OECD Countries*, OECD Publishing, <http://dx.doi.org/10.1787/9789264034051-en>.
- OECD (2011a), "Typology and implementation of spending reviews: Discussion paper", GOV/PGC/SBO(2011)9, OECD, Paris.
- OECD (2011b), "Budgeting features that strengthen fiscal policy in OECD countries: Results from the OECD Budget Practices and Procedures Database, Draft report", GOV/PGC/SBO(2011)11, OECD, Paris.
- OECD (2012), *Restoring Public Finances, 2012 Update*, OECD Publishing, <http://dx.doi.org/10.1787/9789264179455-en>.
- Robinson, M. and D. Last (2009), "A Basic Model of Performance-Based Budgeting", International Monetary Fund, Washington, DC.
- Schick, A. (2013), "Lessons from the Crisis", *OECD Journal on Budgeting*, 2012/3:9-37, <http://dx.doi.org/10.1787/budget-12-5k47tb29wn6h>.

ANNEX

Overview of results from the 2011/12 OECD survey on performance and results

Introduction

This section provides a quick overview of the results of the 2011 OECD Performance Budgeting Survey. The objective of the survey was to obtain updated data on the types of performance information and instruments employed throughout the budgeting process, and to ascertain how specifically this information is being used in budgetary decision making. The survey also introduced a section on the use of spending reviews, which have emerged as the main method for using performance information for budgetary decisions in a number of countries. In late 2011, the OECD sent a questionnaire to the central budget authorities in all member and partner countries. There was a high response rate: 32 out of 34 OECD member countries and the Russian Federation completed the questionnaire. All answers are self-reported. A preliminary version of the survey results was presented at the annual meeting of the OECD Working Party of Senior Budget Officials in June 2012. In the third quarter of 2012, the OECD Secretariat conducted follow-up and quality control of the responses, leading to adjustments in many of the responses.

The findings are presented below in aggregate form according to the structure of the survey: 1) the institutional context, and recent trends in performance budgeting; 2) types of performance information used in budgeting, and implementation of performance budgeting practices; 3) use of performance targets in budgeting; 4) performance evaluations and spending reviews; and 5) challenges and trends in performance budgeting. Figures and graphs show information for OECD countries only; however, tables include information on the Russian Federation.

Please note that, for brevity, a number of the findings have been aggregated.

Key findings

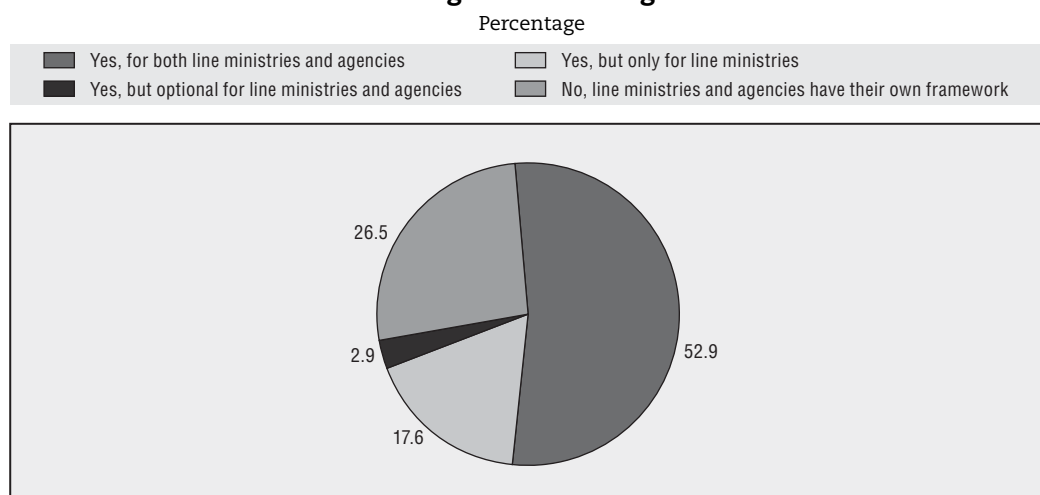
- Comparing responses in 2011 to the responses in 2007, it appears that, in negotiations between line ministries and central budget authorities, performance information is generally used less for strategic planning and – to a growing extent – not used at all.
- Compared to 2007, results in 2011 show a marked increase in the role of line ministries and agencies as the main institutions responsible for setting performance targets.
- Performance budgeting frameworks are abundant in OECD countries, but are generally flexible and not linked to allocation decisions.

- Performance budgeting is generally a decentralised practice within the central/federal government. The exceptions are spending reviews, where central budget authorities and chief executives play a more central role.
- Line ministries (e.g. different sectors) all generally use performance information in the same way, to increase spending and to reduce it or eliminate programmes to a lesser extent.

1.1. Standard performance budgeting framework

Performance budgeting frameworks are widely found in OECD countries and are generally flexible in nature. More than half of the countries have a standard performance budgeting framework in place that applies to all central government line ministries and agencies (Figure A1). About a quarter answered that there is no standard framework but that line ministries/agencies do have their own budgeting frameworks.

Figure A1. **Does the central budget authority have in place a standard performance budgeting framework which is applied uniformly across central government organisations?**



Source: Based on Q.11a: “Does the central budget authority have in place a standard performance budgeting framework which is applied uniformly across central government organisations?”

Table A1 shows the answers given by all countries participating in the 2011 OECD Performance Budgeting Survey.

Table A1. **Does the central budget authority have in place a standard performance budgeting framework which is applied uniformly across central government organisations?**

	Yes, for both line ministries and agencies	Yes, but only for line ministries	Yes, but optional for line ministries and agencies	No: Line ministries and agencies have their own framework
Australia				X
Austria	X			
Belgium				X
Canada	X			
Chile	X			
Czech Republic			X	

Table A1. Does the central budget authority have in place a standard performance budgeting framework which is applied uniformly across central government organisations? (cont.)

	Yes, for both line ministries and agencies	Yes, but only for line ministries	Yes, but optional for line ministries and agencies	No: Line ministries and agencies have their own framework
Denmark		X		
Estonia	X			
Finland	X			
France	X			
Germany				X
Greece				X
Hungary				X
Ireland		X		
Italy		X		
Japan	X			
Korea	X			
Luxembourg				X
Mexico	X			
Netherlands		X		
New Zealand	X			
Norway	X			
Poland	X			
Portugal				X
Russian Federation	X			
Slovak Republic	X			
Slovenia	X			
Spain	X			
Sweden		X		
Switzerland	X			
Turkey	X			
United Kingdom				X
United States ¹		X		
Total "yes"	18	6	1	8
Total "yes" without the Russian Federation	17	6	1	8

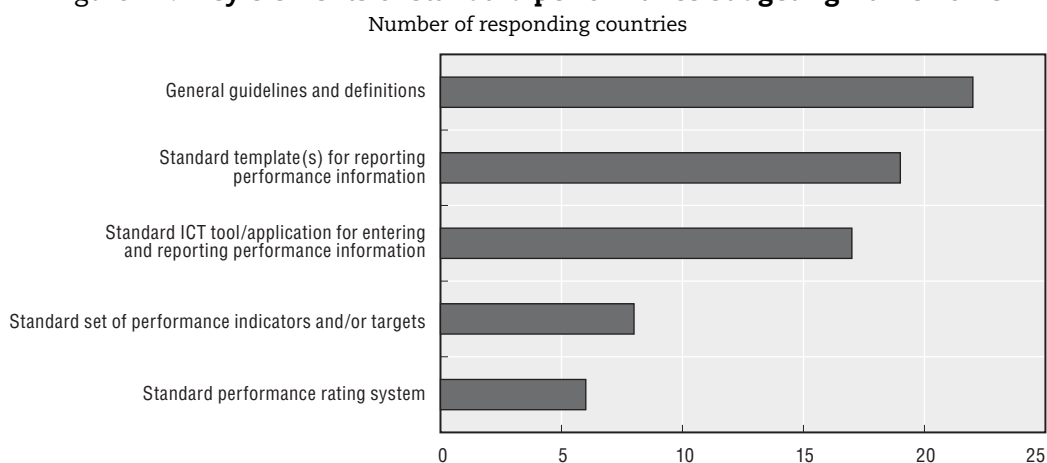
1. In the United States, agencies have variations on their own budgeting framework on top of the central guidance given to them by the by the Office of Management and Budget.

1.2. Key elements of the standard performance budgeting framework

General guidelines and definitions are the most common key elements of performance budgeting frameworks in OECD countries (21 countries), followed by standard reporting templates (18 countries) and standard ICT tools (17 countries) (Figure A2).

2.1. Institutions generating and using performance information

Generating performance information for use in the budgeting process is done by different institutions carrying out different functions (Table A3). Results show that the performance budgeting workflow in an average OECD country starts with the central budget authority (CBA) and the chief executive establishing the framework/guidelines. The CBA and internal audit institutions develop and maintain the ICT system. The tasks of setting performance targets, generating performance information and conducting evaluations are carried out by line ministries and agencies. The allocation and/or reallocation of funds based on performance information is done by the CBA in co-operation with the line ministries.

Figure A2. **Key elements of standard performance budgeting frameworks**

Source: Based on Q.11b: "What are the key elements of this standard framework?"

Table A2. **Key elements of standard performance budgeting frameworks**

	General guidelines and definitions	Standard template(s) for reporting performance information	Standard ICT tool/ application for entering and reporting performance information	Standard set of performance indicators and/or targets	Standard performance rating system
Australia	n.a.	n.a.	n.a.	n.a.	n.a.
Austria	X	X	X		
Belgium	n.a.	n.a.	n.a.	n.a.	n.a.
Canada	X	X			X
Chile	X	X	X	X	
Czech Republic	X	X	X	X	
Denmark	X		X		
Estonia	X	X		X	
Finland			X		
France	X		X		
Germany	n.a.	n.a.	n.a.	n.a.	n.a.
Greece	n.a.	n.a.	n.a.	n.a.	n.a.
Hungary	n.a.	n.a.	n.a.	n.a.	n.a.
Ireland	X	X			
Italy	X	X	X		
Japan	X	X			X
Korea	X	X	X	X	X
Luxembourg	n.a.	n.a.	n.a.	n.a.	n.a.
Mexico	X	X	X	X	X
Netherlands	X	X			
New Zealand	X	X	X		
Norway	X				
Poland	X	X	X		
Portugal	n.a.	n.a.	n.a.	n.a.	n.a.
Russian Federation	X	X		X	X
Slovak Republic	X	X	X		
Slovenia		X	X	X	
Spain		X	X		
Sweden	X		X		
Switzerland	X	X	X	X	X
Turkey	X	X	X		

Table A2. **Key elements of standard performance budgeting frameworks** (cont.)

	General guidelines and definitions	Standard template(s) for reporting performance information	Standard ICT tool/ application for entering and reporting performance information	Standard set of performance indicators and/or targets	Standard performance rating system
United Kingdom	n.a.	n.a.	n.a.	n.a.	n.a.
United States	X				
Total "yes"	22	19	17	8	6
Total "yes" without the Russian Federation	21	18	17	7	5

Table A3. **The performance budgeting workflow in an average OECD country**

Activities	Top two institutions responsible
Establishing a standard performance budgeting framework or drafting guidelines	Chief executive (e.g. office of the president/prime minister) and central budget authority
Developing and maintaining ICT system for managing or supporting data and process needs for performance budgeting	Central budget authority and internal audit institution(s)
Setting performance targets	Line ministries and agencies
Generating performance information	Line ministries and agencies
Conducting evaluations	Line ministries and agencies
Allocation and/or reallocation of funds based explicitly on performance information (excluding spending reviews)	Central budget authority and line ministries

Source: Based on Q.13: "Please indicate which institutions in your government play important roles in each of the following functions regarding the generation and use of performance information for use in the budgeting process."

Performance targets are most often set by the line ministries (Figure A3, Table A4). A comparison of the results for 2007 and 2011 shows that line ministries and agencies continue to be the main institutional actors with respect to performance management and have markedly increased their responsibility with respect to setting performance targets.

Figure A3. **Responsibility for setting performance targets**

Source: Based on Q.13a: "Please indicate which institutions in your government play important roles in each of the following functions regarding the generation and use of performance information for use in the budgeting process: a) setting performance targets."

Table A4. The performance budgeting workflow in an average OECD country

	Establishing a standard performance budgeting framework/guideline	Developing and maintaining ICT system for managing or supporting data and process needs for performance budgeting	Setting performance targets	Generating performance information	Conducting evaluations	Allocation and/or reallocation of funds based explicitly on performance information (excluding spending reviews)
Australia	k ⁴	c, d, e, f, g	f	b, c, d, e, f, g	b, c, d, e, f, g	a, e, f, g
Austria	e, j	e, f, g, h, j	a, b, f, g	c, d, f, g, i, j	c, d, f, h, i	k
Belgium	k	k	a	a, b, e, f	e	e
Canada	a, b, e	e, f, g, h, j	a, e, f, g	c, d, e, f, g	f, g	a, e, f, g
Chile	e	e	e, f, g	e, f, g	e, g	e
Czech Republic	e	h, j	f, g ²	e, f, g	k	e, f
Denmark	e, f	f, g	f, g	f, g	g, h, j ⁵	g
Estonia	e, f, g	e, f, g, j ⁶	a, e, f, g, i	a, e, f, g, j ⁶	a, c, e, f, g, h, i	e, f, g
Finland	a	g	a, f	f, g	f, g	k
France	e	e	f	f	c, e	k
Germany	k	k	f	f, g, i	f, g, i	b, f
Greece	e	k	j	k	c	e, f
Hungary	k	k	a, b, f	f, g	c, d, f, h, i	k
Ireland	e	k	e, f	e, f, g	e, f	k
Italy	e	e, f	f	f	k	k
Japan	a, b, e	k	f	f	e, f	e
Korea	e, j ⁷	e	e, f, g	f, g	e, j ⁷	e
Luxembourg	f	f, g	f	g	h	f
Mexico	b, e	e	a, e, f, g	d, e, f, g	d, e, f, g	k
Netherlands	a, b, c, e	e, f, g ⁸	a, e, f, g, i	f, g, i	f, h, i	a, b, e, f, g
New Zealand	c, e, f	e, f	a, f	f	f	f
Norway	a, e, f, g	e, f, g	a, b, e, f, g	c, d, e, f, g	c, d, e, f, g, h	k
Poland	e ³	e	a, f, g	f, g	k	k
Portugal	e	h, j ⁹	f, g	f, g	g, h, i	k
Russian Federation	a, e	e, f	f, g	c, e, f, g	e	e, f
Slovak Republic	e	e	e, f, g	c, e, f	f, g	e, f, g
Slovenia	e, j	e, j	f, g, j ¹	f, g, j	f, g, j	a, e, f, g, j
Spain	e	e	f, g	f, g	d, j ¹⁰	k
Sweden	e, g	e, g	b	f, g	c, g	a, e, f
Switzerland	a, e	e, f, g	a, e, f, g	c, d, e, f, g	b, c, d, g	g
Turkey	e	e	a, f, g	f, g	c, d, e, f, g, h, i	e
United Kingdom	k	k	a, e, f	f	a, c, e, f	f
United States	b, e, f	f, g, h	a, e, f, g	f, g	c, f, g, h, i	b, e, f, g h

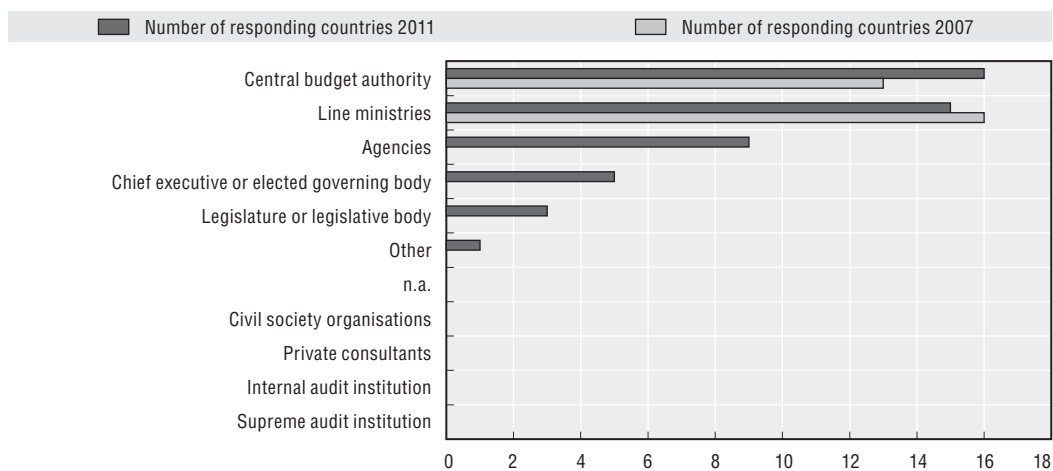
Key: a = chief executive or elected governing body (e.g. prime minister, president or cabinet), b = legislature or legislative body, c = supreme audit institution, d = internal audit institution, e = central budget authority, f = line ministries, g = agencies, h = private consultants, i = civil society organisations, j = other, k = n.a.

1. Slovenia: On the higher level of performance indicators (outcome and impact), targets are set in working groups and in co-operation with the Ministry of Finance (to follow link to the development strategy).
2. Czech Republic: The central budget authority can regulate or correct performance targets.
3. Poland: Specific guidelines concerning planning are presented in an annual circular of the Ministry of Finance.
4. Australia: No standard policy or practice.
5. Denmark: Public institutions for evaluation (EVA, KREVI, etc.)
6. Statistics Estonia.
7. Korea: Public Research Institute.
8. Netherlands: There is no single government-wide ICT system in place regarding performance information.
9. Portugal: IT Institute.
10. Spain: Specific agency for the evaluation of public policies.

Source: Based on Q.13: "Please indicate which institutions in your government play important roles in each of the following functions regarding the generation and use of performance information for use in the budgeting process."

In the relatively limited cases where allocation and reallocation take place on the basis of performance information, this happens under the responsibility of the central budget authority in co-operation with the respective ministry (Figure A4). Mirroring the trend above, line ministries appear to be taking a more active role in this respect in 2011 versus 2007, as the role of the CBA is slightly declining.

Figure A4. **Who is responsible for the allocation and/or reallocation of funds based explicitly on performance information?**

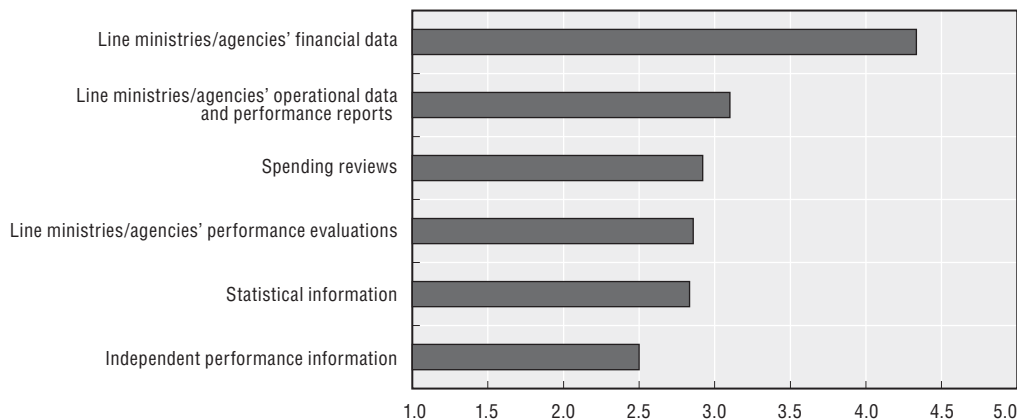


Source: Based on Q.13f: "Please indicate which institutions in your government play important roles in each of the following functions regarding the generation and use of performance information for use in the budgeting process: f) allocation and/or reallocation of funds based explicitly on performance information (excluding spending reviews)."

2.2. Performance information used by the central budget authority and the line ministries

Unsurprisingly, the results show that the CBA and line ministries nearly always use financial data in their budget negotiations (Figure A5). Non-financial performance information is used only occasionally or rarely, and independent performance information from non-government actors is used the least. Operational data, spending reviews and evaluations are used occasionally.

Figure A5. **How often do the central budget authority and line ministries utilise the following kinds of performance information in their budget negotiations?**

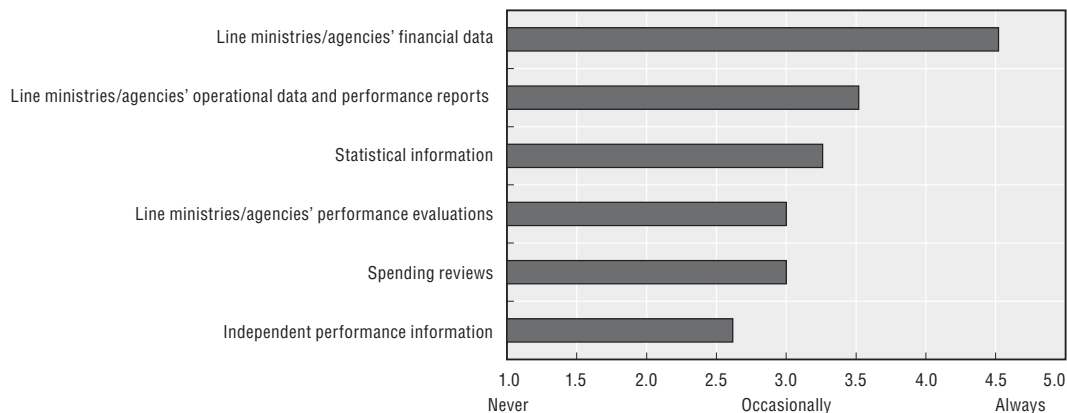


Source: Based on Q.14: "Generally speaking, how often do the central budget authority and line ministries utilise the following kinds of performance information in their budget negotiations?"

2.3. Performance information used by line ministries and agencies

Line ministries and agencies nearly always use financial data in their budget negotiations (Figure A6). Non-financial performance information is used occasionally or rarely. Statistical information is used occasionally, slightly more often than in budget negotiations with the central budget authority (Figure A5). Independent performance information is used the least.

Figure A6. **How often do line ministries and agencies utilise the following kinds of performance information in their budget negotiations?**

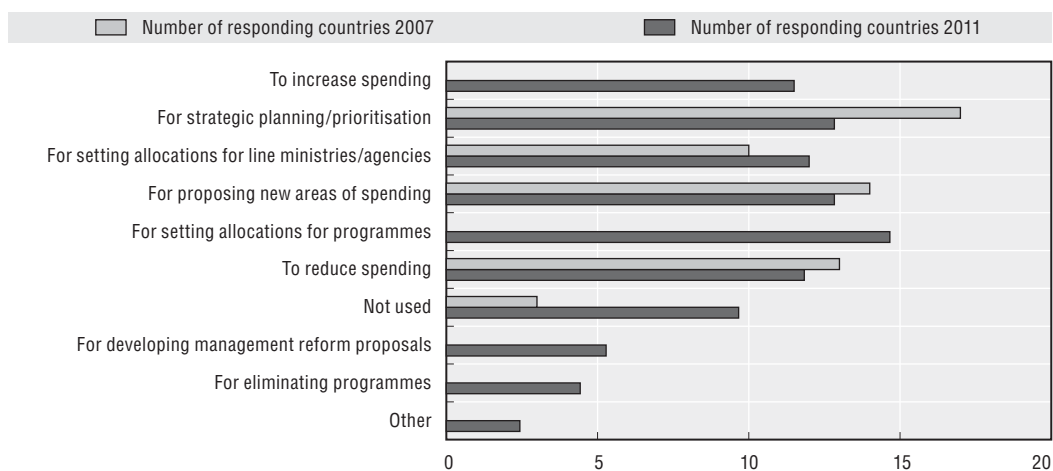


Source: Based on Q.16: "Generally speaking, how often do line ministries and agencies utilise the following kinds of performance information in their budget negotiations?"

2.4. Performance information in the different COFOG categories

Regarding the classification of functions of government (COFOG), aggregated results for 2011 show that the different policy sectors use performance information mainly for setting allocations for programmes, for strategic planning, for proposing new areas of spending, for setting allocations for line ministries and agencies, and to reduce spending (Figure A7). However, in about a third of the cases, performance information does play a

Figure A7. **How is performance information generally used by line ministries in their negotiations with the central budget authority?**



Source: Based on Q.19: "Please indicate how each of the following sectors of central government generally utilise performance information in their budget negotiations with the central budget authority."

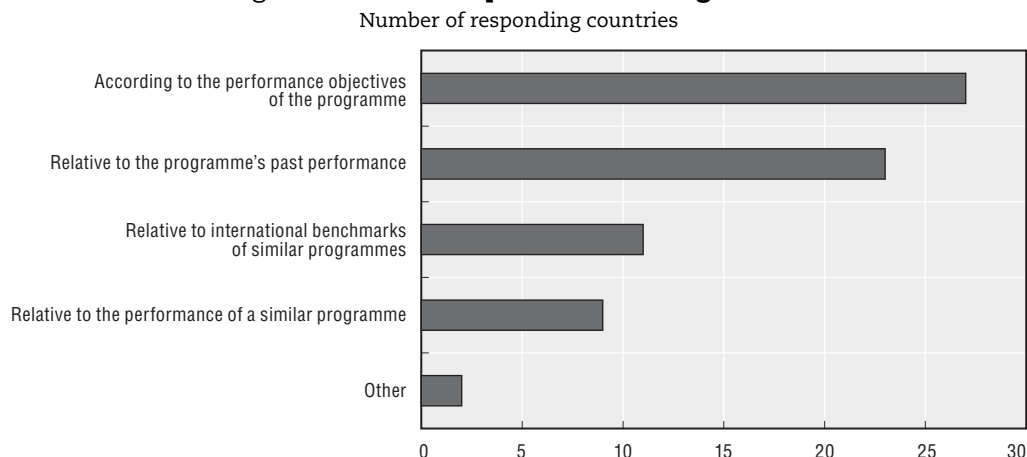
limited role in the budget negotiations with the central budget authority. In Figure A7, data from 2007 are also shown where available.

In general, it appears that line ministries in 2011 used performance information less than in 2007, with strategic planning and prioritisation representing the biggest decrease. There has also been an increase from three to ten in the number of countries reporting that performance information is not used in budget negotiations.

3.1. Benchmarks of performance targets

The survey examined the use of performance targets, a specific category of performance information by which a measurable performance objective is set *ex ante* for a specified period of time. According to the survey responses (Figure A8), these performance targets are mostly set according to the performance objectives of the programme and relative to the programme's past performance.

Figure A8. **How are performance targets set?**



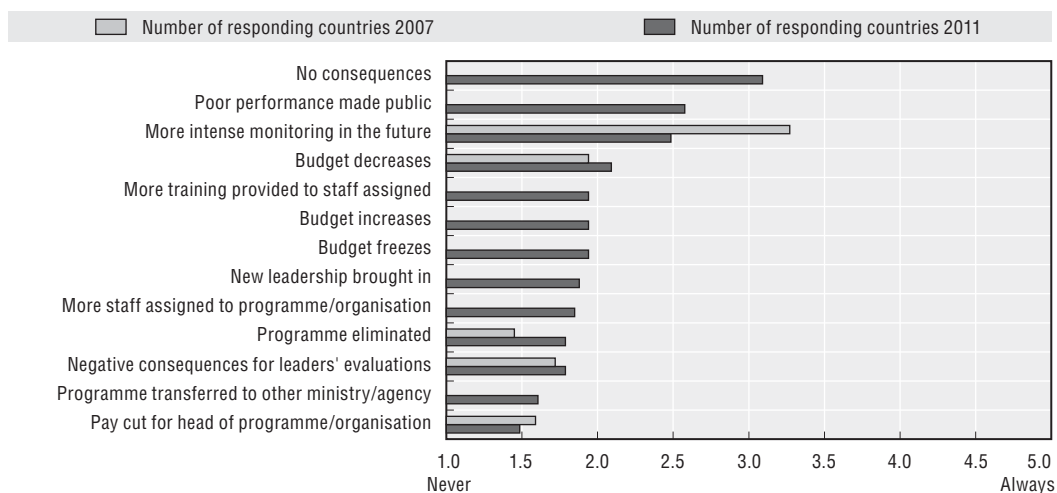
Source: Based on Q.22: "When setting performance targets, against what benchmark(s) are they generally set?"

3.2. Consequences when targets are met or not met

When performance targets are not met, often there are no consequences (Figure A9). This would seem to suggest that performance information is not easily transformed into actions. When comparing the results from 2007 with the results in 2011, more intense monitoring appears to have decreased as a consequence but the elimination of the programme appears to have increased slightly, even if it is still rarely the case. Interestingly, bad performance is made public occasionally in 2011; no data exist for this consequence for 2007.

4.1. Elements required for government evaluations

Performance evaluations are retrospective analyses of a policy, programme or organisation in order to assess how successful or otherwise it has been, what challenges may exist for improving performance, and what lessons can be learned for the future (Figure A10). The questionnaire referred to evaluations commissioned or conducted by government. Concerning the elements that are included in regulations and/or formal policy guidelines governing performance evaluations, 13 out of 32 OECD countries

Figure A9. **What happens when performance targets are not met?**

Source: Based on Q.24: "If performance targets are not met by line ministries/agencies, how likely is it that any of the following consequences are triggered?"

Figure A10. **What elements are required for government evaluations?**

Source: Based on Q.27a: "Please indicate which of the following elements are included in regulations and/or formal policy guidelines explicitly governing performance evaluations commissioned or conducted by your government."

answered that results must be made publicly available and that terms of reference must be published prior to the start of the evaluation.

4.2. Spending reviews

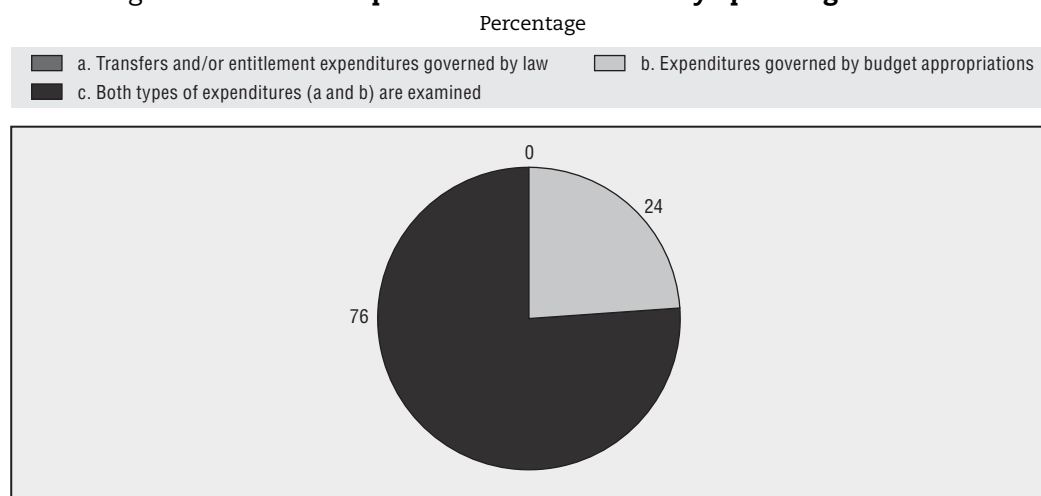
Spending reviews are a specific kind of evaluation conducted with the intent of enhancing efficiency and effectiveness, identifying savings, or identifying funds for reallocation. Spending reviews include specific proposals to achieve savings. The survey shows that spending reviews are used in just less than half of the OECD countries (17 countries conduct spending reviews whereas 16 countries do not).

4.3. Type of expenditure and level of government covered by spending reviews

Nearly three-quarters of spending reviews scrutinise expenditures appropriated in separate legislation (mandatory expenditures) as well as expenditures governed by yearly

budget appropriations (Figure A11). The remaining quarter covers only expenditures governed by budget appropriations.

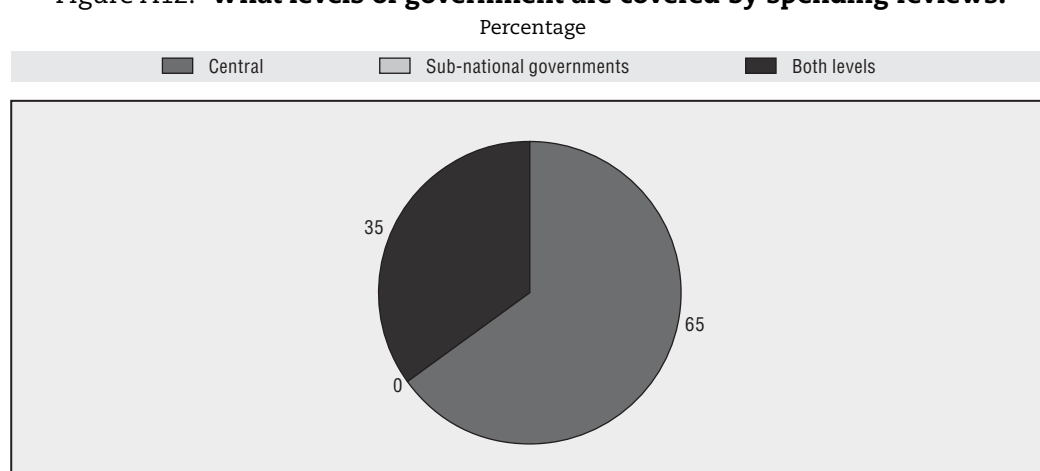
Figure A11. **What expenditures are covered by spending reviews?**



Source: Based on Q.31a: "Generally speaking, which kinds of government expenditures do spending reviews examine?"

Spending reviews rarely cover sub-national levels; two-thirds cover central government and only one-third covers both (Figure A12). Federal and decentralised unitary states will often not conduct spending reviews covering the specific sub-national budgets. However, fiscal transfers – which are part of the central budget and can constitute a substantial part of sub-national revenue – will often be included.

Figure A12. **What levels of government are covered by spending reviews?**



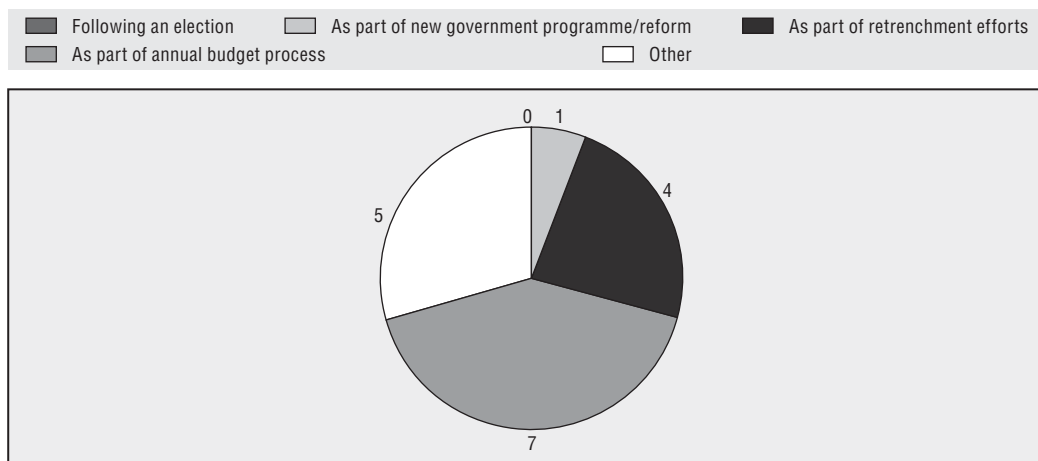
Source: Based on Q.31b: "Of these spending reviews, what levels of government are examined?"

4.4. Scope of spending reviews

Comprehensive spending reviews covering all programmes and expenditures are most often conducted as part of the annual budget process, followed by retrenchment efforts and other reasons (Figure A13).

Figure A13. **When are comprehensive spending reviews conducted (all programmes)?**

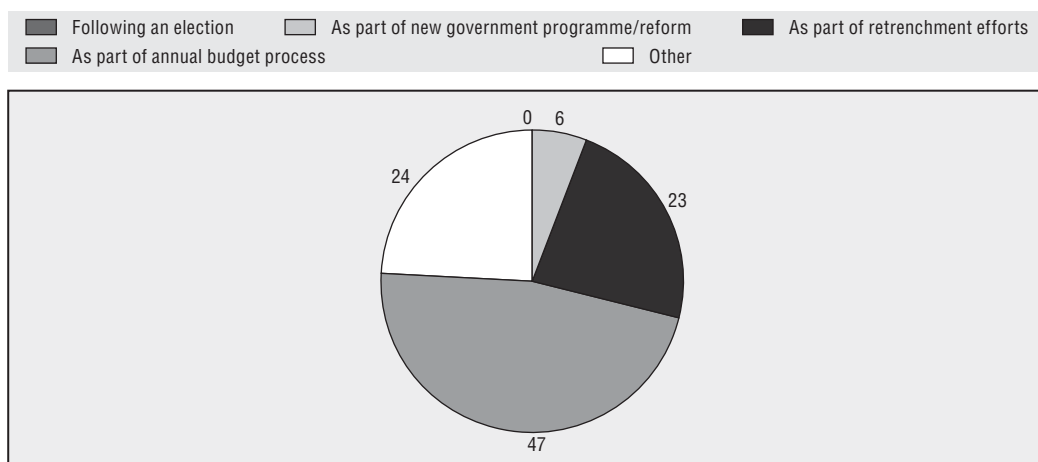
Out of a total of 17 countries



Source: Based on Q.31c: "Of these, what is the scope of reviews and when are they generally conducted?"

Figure A14. **When are less-comprehensive spending reviews conducted (some programmes)?**

Percentage of the total 17 countries



Source: Based on Q.31c: "Of these, what is the scope of reviews and when are they generally conducted?"

4.5. Spending review workflow

Spending review usually starts with determining the methodology, procedures and scope, followed by guidance and technical work which leads into the actual analytical work. The drafts are typically then reviewed for content, policy and quality before they are submitted for decision making and subsequent follow-up. In reality, these various stages may be iterative, and the terms of reference, methods and analysis may be adjusted in light of new knowledge and circumstances.

The countries in Table A5 are arranged (from the top) by the more centralised (with a strong participation from the president/prime minister/cabinet) to the more decentralised (in which line ministries play a more prominent role). Countries in the upper half of the list tend to use strategic reviews and focus on prioritisation (in addition to efficiency) of

Table A5. Roles and responsibilities in the phases of spending review

Out of a total of 17 countries

Countries, arranged by most centralised to most decentralised	1.Deter-mining the methodology and procedures for the review	2.Selection of review scope	3.Providing guidance, steering, technical assistance	4.Preparing reports and proposals	5.Super-vision and review of reports	6.Final decision making	7.Monitoring and follow-up
Finland	a	a	a	a	a	a	a, c, d
Switzerland	a	a, d	c	c, d	b	a	e ¹
Canada	c	a	c	d	a, c	a	c, d
Australia	a, c, d	a, c, d	c, d	c, d	a, c, d	a	a, c, d
Netherlands	c	a, c, d	c	b	c, d	a	c
Denmark	c	a, c	b, c, d	b, c, d	b, c, d	a	d
Ireland	c	c	c	c	b	a	c
Italy	b, c	b, c	b, c	b, c, d	b, c	a	c
United States	a, c, d	e	c, d	c, d	c, d	c	d
Spain	c	e	c	c	c	a	c
United Kingdom	c	c	c	d	c	e ²	c
Sweden	d	d	c, d	d	c	e ³	d
France	b, c	a, c	c	b	c, d	c, d	c, d
Russian Federation	c	c	c	c	c	c	c
Korea	c	c	c, e	d	c	c	c
Mexico	c	c	c, d	c, d	c, d	c, d	b, c, d
New Zealand	c, d	c, d	c, d	c, d	c, d	c, d	c, d

Key: a = president/prime minister/cabinet; b = commission/committee; c = central budget authority; d = line ministries; e = other.

1. Switzerland: Federal Department of Finance.

2. United Kingdom: Prime Minister and Chancellor of the Exchequer.

3. Sweden: Joint government decision.

expenditure. Countries in the lower half tend to be more interested in the efficiency review and a focus on technical efficiency.

Two important points need to be made: first, the most striking feature of the mapping is the uniform and dominating presence of the central budget authority. This shows that spending reviews in all countries are linked to the budget, as also documented in Table A6 where the key institution is the CBA. Second, the constitutional structure and tradition matter: of the six countries where the president/prime minister/cabinet appears not to play a role in the final decision making, three are large presidential countries. Consequently, even quite important funding decisions may be allocated to the finance ministry.

Table A6. Responsibility for spending review procedures

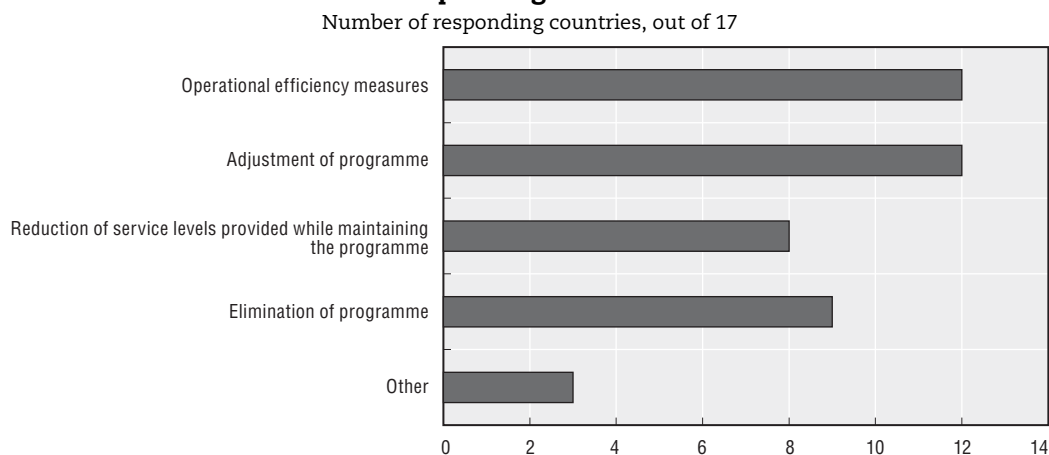
Activities	Top two institutions responsible
Determining the methodology and procedures for the review	Central budget authority and line ministries
Selection of review scope (in cases where all programmes are not reviewed)	Chief executive and central budget authority
Providing guidance, steering, technical assistance	Central budget authority and line ministries
Preparing reports and proposals	Central budget authority and line ministries
Supervision and review of reports	Central budget authority and line ministries
Final decision making	Chief executive and central budget authority
Monitoring and follow-up	Central budget authority and line ministries

Source: Based on Q.32: "Please indicate which government actors are primarily responsible for the following spending review procedures."

4.6. Savings measures adopted following spending reviews

With regards to the savings measures actually adopted by the countries using spending reviews (17), between 8 and 11 countries listed (in descending order) operational efficiency measures, adjustment of programmes and reduction of service levels (Figure A15).

Figure A15. **What were the savings measures adopted by the last round of spending reviews?**

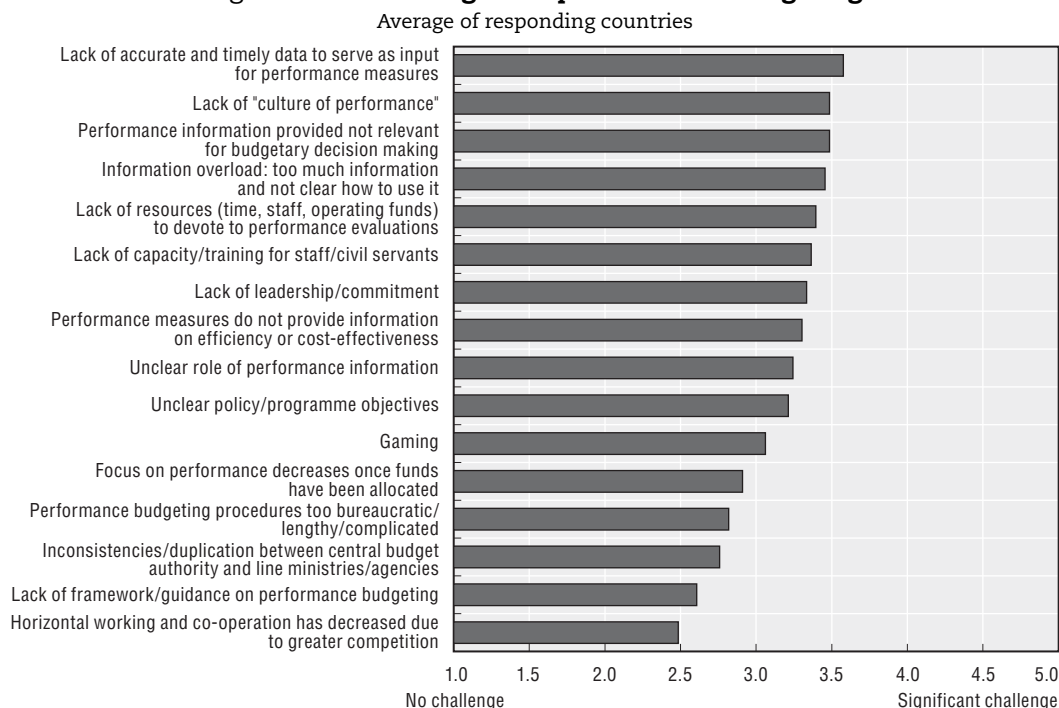


Source: Based on Q.36: "What were the savings measures adopted by the last round of spending reviews?"

5.1. Challenges for performance budgeting

Several challenges have been reported as obstacles in implementing performance budgeting practices (Figure A16). The lack of accurate and timely data, the inexistence of a

Figure A16. **Challenges for performance budgeting**



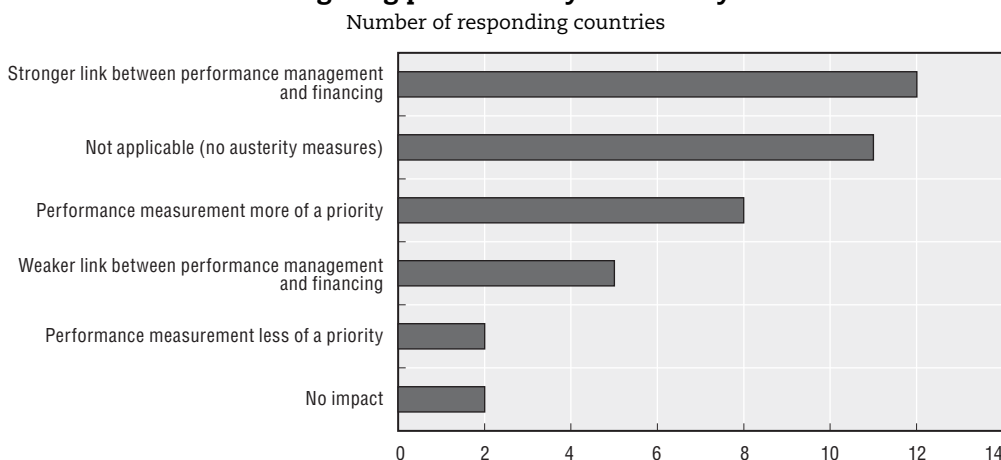
Source: Based on Q.40: "Rate each of the following potential challenges to performance budgeting on a scale of 1 to 5, with 5 being a significant challenge and 1 not being a challenge at all."

“culture of performance”, providing irrelevant performance information, or providing too much information are mentioned among the most important challenges. To assure the quality of performance data and to get and hold the interest of politicians remain important priorities. Overall, no particular challenge stands out.

5.2. Impact of austerity measures

The survey was conducted in 2011 in the aftermath of the global financial crisis. The results show that the crisis has resulted in a stronger link between performance management and financing in 12 countries (Figure A17). In ten countries, no austerity measures were used, and in five countries the austerity measures adopted showed a weaker link between performance information and financing. This would seem to indicate a stronger role for performance budgeting – at least in some countries – at this particular time, but evidence remains mixed as for previous answers.

Figure A17. **How have recent austerity measures impacted performance budgeting practices in your country?**



Source: Based on Q.41: “How have recent austerity measures impacted performance budgeting practices in your country?”

The politics of fiscal austerity: Democracies and hard choices

by

Paul L. Posner and Matthew Sommerfeld*

The sustainability of national economies will ultimately require a balance between near-term growth and longer-term fiscal consolidation. The question that is now being raised is whether such actions are politically sustainable. As the OECD area begins to emerge from the recession, another question is whether democratic countries can take pro-active leadership before a crisis forces their hand. This article examines the politics of fiscal consolidations in OECD countries in recent years, assessing whether and how leaders attempted to resolve the tensions between the fiscal and electoral imperatives.

JEL classification: H610, H620, H630, H680, P160

Keywords: Fiscal consolidation, sustainability of public finances, deficit, debt, Great Recession, financial crisis, political efficacy, democratic institutions, fiscal austerity, economic growth, role of political institutions, budget cuts, fiscal rules, political outcomes

* Paul L. Posner is professor of public administration and director of the MPA Program at George Mason University, Washington DC. Matthew Sommerfeld is a doctoral student at George Mason University. The opinions expressed and arguments employed in this article do not necessarily reflect the official views of the OECD or of the governments of its member countries.

Advanced countries face nearly unprecedented fiscal challenges, both for the medium and longer term. The Great Recession has added to fiscal pressures and public debt to countries that are already beginning to experience the fiscal fallout from ageing populations. Budgeting is clouded by nearly unprecedented fiscal ambiguity, as countries are conflicted between forces demanding fiscal consolidation and those advocating growth and stimulus to “jump start” stagnant economies.

Daunting challenges lie ahead in the next several decades for democratic countries and their leaders. With deficits and debt rising to near record levels in most countries, the recovery from the recession will still leave significant fiscal gaps that must be addressed. As countries cope with the resulting fiscal imbalances, they will also be dealing with longer-term fiscal pressures stemming from the ageing of populations and rising health-care costs. Unlike previous recessions, the return of strong growth will not end the fiscal gaps facing these countries, but will serve as the prelude for even more difficult and wrenching choices.

The sustainability of national economies will ultimately require a balance between near-term growth and longer-term fiscal consolidation. The question that is now being raised is whether such actions are politically sustainable. Many in fact would conclude that fiscal consolidation is an unnatural political act – dooming governments to certain defeat in subsequent elections. Recent elections seem to bear this out, as governments have lost power in nine OECD countries that have imposed fiscal austerity. Sceptical markets will rightly lose confidence in fiscal austerity regimes if significant questions cloud the political acceptability of countries’ fiscal downsizing.

In fact, many analysts and observers have concluded that democratic countries will tend to procrastinate and adopt needed spending and tax reforms only when a market-driven crisis arises to demand action. Yet, waiting for a crisis has significant downsides. Countries that wait for a crisis will face far larger fiscal adjustments. Moreover, the recent political unrest in European countries attests that implementing consolidation in the centre of a crisis requires precipitous changes to be instituted in short order, causing untold political and social dislocation and risks to millions of people.

As the OECD area begins to emerge from the recession, the central question will be whether democratic countries can take proactive leadership before a crisis forces their hand. The capacity of a democratic system to exercise fiscal self-restraint and foresight is among the central questions facing advanced systems today. This article addresses that question by examining the politics of fiscal consolidations in OECD countries in recent years, and assessing whether and how leaders attempted to resolve the tensions between the fiscal and electoral imperatives.

1. Deficit and debt position of OECD member countries

The legacy of the Great Recession for fiscal policy is staggering. Average national deficits in the OECD area spiked from 1.2% of GDP in 2007 to a level approaching 8% of GDP

in 2010 – after having more than doubled from 2008 and grown nearly six-fold since 2007. Accumulated public debt is projected at 97.9% of GDP for the OECD area as a whole for 2010 – after having grown by nearly 18.2 percentage points of GDP from 2008 and 24.6 percentage points of GDP since 2007.

For the major regions in the OECD area, the deficit situation is most critical in the United States, but the level of accumulated debt in the United States and the euro area is similar. The deficit figure for Japan lies between the United States and the euro area, albeit its level of accumulated debt is more than double that of the United States and the Euro area. Table 1 shows this in more detail.

Table 1. **Fiscal balances, OECD countries (2007-13)**

	2007	2008	2009	2010	2011	2012	2013
United States							
Actual balance	-2.9	-6.6	-11.6	-10.7	-10.0	-9.3	-8.3
Underlying balance	-3.8	-6.3	-8.9	-8.5	-7.9	-7.7	-6.8
Underlying primary balance	-1.8	-4.5	-7.4	-6.8	-6.0	-5.6	-4.5
Gross financial liabilities	62.1	71.4	85.0	94.2	97.6	103.6	108.5
Japan							
Actual balance	-2.4	-2.2	-8.7	-7.8	-8.9	-8.9	-9.5
Underlying balance	-4.4	-4.4	-8.3	-7.7	-8.0	-8.3	-8.6
Underlying primary balance	-3.7	-3.5	-7.2	-6.6	-6.7	-6.8	-6.7
Gross financial liabilities ¹	167.0	174.1	194.1	200.0	211.7	219.1	226.8
Euro area							
Actual balance	-0.7	-2.1	-6.4	-6.3	-4.0	-2.9	-1.9
Underlying balance	-1.8	-2.8	-4.7	-4.1	-2.8	-1.4	-0.4
Underlying primary balance	0.9	-0.1	-2.3	-1.7	-0.3	1.3	2.5
Gross financial liabilities	71.8	77.0	87.6	92.9	95.6	97.9	98.2
Total OECD							
Actual balance ²	-1.3	-3.4	-8.3	-7.7	-6.6	-5.9	-5.1
Underlying balance ³	-2.8	-4.3	-6.8	-6.4	-5.7	-5.0	-4.2
Underlying primary balance ⁴	-0.9	-2.5	-5.1	-4.6	-3.8	-2.9	-2.0
Gross financial liabilities ⁵	73.3	79.7	91.4	97.9	101.6	105.7	108.4

1. Japan gross financial liabilities include the debt of the Japan Railway Settlement Corporation and the National Forest Special Account from 1998 onwards.

2. Total OECD actual balance excludes Chile and Mexico.

3. Total OECD underlying balance excludes Chile, Mexico, Slovak Republic and Turkey.

4. Total OECD underlying primary balance excludes Chile, Mexico, Slovak Republic and Turkey.

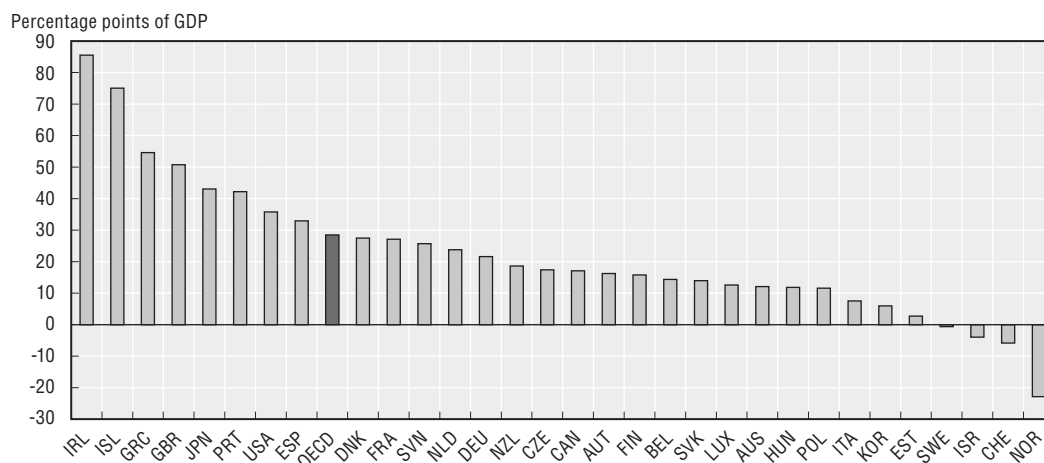
5. Total OECD gross financial liabilities exclude Chile, Mexico and Turkey.

Source: OECD (2011), *OECD Economic Outlook*, Vol. 2011/2 (No. 90), Annex Tables 27, 29, 30 and 32, OECD Publishing, http://dx.doi.org/10.1787/eco_outlook-v2011-2-en.

Figure 1 shows the evolution of government debt accumulation for individual OECD countries since 2007, i.e. how much debt has been added during the crisis. The figure is quite revealing, especially in putting the debt accumulation of specific countries in perspective.

While all OECD countries experienced fiscal stress from the Great Recession, there was considerable variability. One of the most important differences arises from the previous fiscal track record: those countries that had run persistent surpluses during the years prior to the recession had less dire fiscal deficits than those that experienced chronic deficits.

While the short-term fiscal deficits are difficult enough, many OECD countries face longer-term fiscal consolidation requirements to stabilise their debt/GDP ratios by 2025.

Figure 1. **Change in gross debt from 2007 to 2011**

Note: Gross debt is general government gross financial liabilities as a per cent of GDP (SNA basis).

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Sources: OECD (2012), *OECD Economic Outlook*, Vol. 2012/1 (No. 91), OECD Publishing, http://dx.doi.org/10.1787/eco_outlook-v2012-1-en, and OECD calculations.

According to these calculations, Japan has the highest fiscal consolidation requirements beyond 2011 followed by Ireland, the United States, and the United Kingdom. (Interestingly, Iceland has a relatively low future fiscal consolidation need due to the strong policy measures already implemented.)

Table 2 details these calculations for individual countries. (Note that references to “primary balance” refer to the balance before interest on debt outstanding.)

2. Can democracies take early action?

The foregoing suggests that leaders in OECD countries face a daunting array of short and long-term fiscal challenges. Fiscal gaps are daunting, perhaps more daunting than at any time in post-war history. According to recent IMF data, the world’s deficits will remain 3 percentage points larger in 2015 than in 2007 even though output gaps would have been closed. Beyond the short term, the United States and many European countries face the longer-term problems of dealing with the unsustainable costs posed by an ageing society and rising health-care costs.

Once the economies of OECD countries improve, the fiscal choices will once again become a central and appropriate issue for national leaders to address. As they face these choices, serious questions will need to be answered about whether advanced democracies have the political capacity to make the hard fiscal choices early enough to avoid a future featuring serious economic and fiscal shortfalls and precipitous and divisive political choices. Herbert Stein, chair of the Council of Economic Advisers under Presidents Richard Nixon and Gerald Ford, famously said: “If something cannot go on forever, it will stop.” But there is a corollary: how it stops matters.

Timely and early action can tame the magnitude of fiscal deficits by intercepting the growth of government interest costs before they crowd out public fiscal flexibility and private markets. In the United States, long-term budget models show that the failure to curb fiscal deficits over the next several decades will enable interest costs to become the

Table 2. **Consolidation requirement to stabilise the debt-to-GDP ratio over the long-term horizon**

As a per cent of potential GDP

	Underlying primary balance in 2010 (A)	Underlying primary balance required to stabilise debt ¹ (B)	Required change in underlying primary balance (C) = (B) – (A)	Change in underlying primary balance in 2011 (D)	Requirement beyond 2011 (C) – (D)
Australia	-1.8	0.1	1.9	1.0	0.9
Austria	-0.9	0.9	1.8	0.4	1.4
Belgium	2.0	0.7	-1.3	0.7	-2.0
Canada	-2.4	0.0	2.4	0.2	2.2
Czech Republic	-3.2	-0.3	2.9	0.9	2.0
Denmark	-0.5	0.1	0.6	0.3	0.3
Finland	-0.4	-0.3	0.1	-0.7	0.8
France	-3.3	1.7	5.0	0.7	4.4
Germany	-1.1	1.5	2.7	0.6	2.1
Greece	0.0	2.7	2.7	3.8	-1.1
Hungary	2.4	2.5	0.1	0.0	0.1
Iceland	-2.1	1.7	3.9	3.3	0.6
Ireland	-6.3	2.0	8.3	0.3	8.0
Italy	1.7	3.5	1.8	0.0	1.7
Japan	-5.0	3.9	5.9	-0.3	9.2
Korea	1.0	-4.5	-5.5	-0.3	-5.2
Luxembourg	-2.7	0.0	2.8	-1.2	3.9
Netherlands	-2.2	0.9	3.1	0.8	2.3
New Zealand	-3.6	0.1	3.7	0.1	3.6
Norway	-3.9	0.5	4.4	0.4	4.0
Poland	-4.8	2.1	6.9	0.3	6.6
Portugal	-4.1	2.2	6.3	1.6	4.6
Slovak Republic	-3.5	1.6	5.1	1.2	3.9
Spain	-5.6	0.8	6.3	1.2	5.1
Sweden	1.8	-0.2	-2.0	1.0	-3.0
Switzerland	0.3	0.0	-0.3	0.1	-0.5
United Kingdom	-5.7	3.1	8.8	0.9	7.9
United States	-7.0	2.4	9.4	1.4	8.0

1. Underlying primary balance required in 2005, based on gradual but steady consolidation paths, to stabilise debt-to-GDP ratios over the long-term horizon, embodied in the long-term baseline scenario presented in OECD Economic Outlook No. 87. Debt stabilisation may take place at undesirably high levels.

Source: OECD calculations.

largest “programme” in the budget, exceeding health care and social security. Politically, timely action on fiscal problems can yield significant dividends by providing the public time to make adjustments in their own retirement and savings plans and in their expectations about the role of government in their lives.

If countries wait until a market crisis forces their hand, a steep price will be paid by economies and the public alike. As we have seen recently in countries like Greece, countries can suddenly be forced by bond markets to make much-delayed reforms in major entitlements and tax policies during the trough of a painful recession. While promising eventual economic load shedding, ill-timed fiscal consolidations have the potential to be self-defeating, prompting a vicious cycle of continued economic decline and short-term fiscal erosion.

Other countries have had either outright defaults or serious flirtations with insolvency for which they have paid a long-term economic and political price. According to one

estimate, more than 90 countries have in fact defaulted on their debt over the past two centuries (Krueger, 2002). Many other countries at the financial brink managed to avoid default, but nonetheless experienced economic shocks and policy upheavals that caused rapid erosion of economic wealth and incomes.

The effects of such a shock are wide-ranging. Economically, currencies will experience rapid depreciation, ushering in spikes in inflation and interest rates. As the pressure to meet their fiscal commitments increases, some governments might resort to printing more money to lessen the debt burden, creating massive inflation. In either case, economic growth would collapse and the standard of living would decline (Burman et al., 2010).

Implementing the fiscal cure – spending cuts and tax increases – in the throes of a crisis would cause painful adjustments as well, at least in the near term. Much-delayed changes have to be implemented abruptly with little deliberation or debate. Major changes to entitlements and tax benefits that have become engrained have to occur almost overnight, as national leaders strain mightily to regain the confidence of credit markets and other investors throughout the world.

Eventually, such actions would probably restore economic growth, tame inflation and cut interest rates, but not after taking incomes and benefits below levels that most of us have come to expect. Early action on fiscal pressures could have mitigated extreme cuts and enabled adjustments to be phased in over many years, but an economic and financial crisis no longer allows this luxury.

Ultimately, countries undertaking major fiscal cures in the throes of an economic crisis can usher in political instability. Unless they inspire a “contractionary expansion”, such consolidations can exacerbate both deficits and downturns, giving rise to public resistance and political unrest. The legitimacy of deep cuts is particularly vulnerable to reversal when governments introduce cuts with little advance public education or when consolidation is perceived to be externally imposed.

Indeed, of the 14 crisis-hit countries in Europe that had elections from 2009 to 2012, nine of them deposed the sitting government. The foregoing shows that the governments’ defeat came during a time of high unemployment coupled with austerity measures.¹

- **Spain** (unemployment rate in 2012: 23%): Mariano Rajoy’s conservatives defeated the Socialist government in November 2011, marking their first electoral victory since 2000.
- **Greece** (unemployment rate in 2012: 20.6%): Socialist leader George Papandreu resigned in November 2011 and was replaced by Independent Lucas Papademos, who was charged with bringing various factions together in response to the crisis.
- **Ireland** (unemployment rate in 2012: 14.2%): Prime Minister Brian Cowen resigned just weeks prior to the February 2011 election, and his centre-right party, Fianna Fáil, was overtaken by Enda Kenny, leader of the centrist party Fine Gael.
- **Portugal** (unemployment rate in 2012: 12.6%): The centre-left Socialist government, led by Jose Socrates, was voted out of power in June 2011 and replaced by Aníbal Cavaco Silva from the Social Democratic Party.
- **France** (unemployment rate in 2012: 10%): Socialist François Hollande narrowly defeated conservative Nicolas Sarkozy in May 2012 to give the Socialists their first electoral victory since 1997.

- **Italy** (unemployment rate in 2012: 9.2%): In November 2011, Silvio Berlusconi of the centre-right coalition The People of Freedom resigned. In April 2013, Independent Giorgio Napolitano was elected with a comfortable margin of victory.
- **Finland** (unemployment rate in 2012: 7.9%): In April 2011, the Centre Party, which had previously won two consecutive elections, was defeated and replaced by the National Coalition Party.
- **United Kingdom** (unemployment rate in 2012: 7.8%): In May 2010, the Conservative Party leader David Cameron defeated Labour's Gordon Brown, marking the first electoral victory for the Conservatives since 1992.
- **Denmark** (unemployment rate in 2012: 7.6%): In September 2011, the centre-left coalition, led by Helle Thorning-Schmidt, narrowly defeated the centre-right coalition.

3. Erosion of faith in the political efficacy of democratic institutions

Notwithstanding the overwhelming advantages of early action on fiscal challenges, many observers have come to the conclusion that democratic systems and leaders are incapable of acting with foresight on fiscal problems. The conventional view of many of our most sophisticated commentators is that it will take a crisis before countries collectively come to grips with the hard choices that need to be made on the spending and tax sides of the budget. In this view, foresight is a politically unnatural act by elected officials who primarily focus on their next election far more than on the fiscal prospects facing the country 20 years from now. Drazen and Easterly conclude that the hypothesis that a crisis is necessary to induce significant reform has become the new orthodoxy (Drazen and Easterly, 2001).

In the United States, this dour outlook has been voiced by some of the leading fiscal observers. Leonard Burman, a leading public finance scholar and public official, has concluded:

The basic problem is that policy makers want to make people happy and win elections, which means higher spending and lower taxes. As long as interest rates stay low and the public does not express a strong aversion to deficits, there is little cost to political pandering. These principal-agent problems between politicians and the public are analogous to the incentive incompatibilities between corporate executives and their shareholders. Corporate CEOs are rewarded financially for boosting short-term profits, even if they harm the company over the long term. Political leaders perceive that their re-election depends on short-term results, even if the short-term expedients may be disastrous over the long term (Burman et al., 2010, p. 566).

The perceived conflict between the electoral imperative bearing down on public officials and the fiscal responsibility imperative is not only quite prevalent among policy leaders in the United States, but it also has deep academic roots. Public choice theorists have contributed their own theoretical justification. The behavioural assumption behind this view is that public officials are motivated by their self-interest to pursue private gain at the expense of the public interest. Buchanan attempts to demonstrate how bureaucrats and politicians alike will force government budgets to be higher than they should be to increase their own “political incomes” (Buchanan, 1977). Agents use their superior information as well as their superior political organisation and intensity over principals – i.e. the electorate – to push up spending and perpetuate a larger public sector. Government is a monopolist and not a neutral responder to demands from the public (Mitchell, 1995).

Buchanan and Tullock argue that politicians are incapable of fixing the deficit. Elections make them short-sighted and irresponsible, and only a major crisis or constitutional amendment will force fiscally responsible actions (Buchanan and Tullock, 1962).

Beyond public choice theory, other political scientists have long observed that the common pool problem creates asymmetry between those benefitting from narrow benefits and those paying the costs. As James Wilson has observed, “clienteles” politics promote the expansion of government benefits because those enjoying concentrated benefits have a greater incentive to mobilise than do the broad publics paying for these programmes. However, efforts to unwind these programmes are undermined by “entrepreneurial politics” where those bearing the concentrated costs of cutbacks have greater incentive to voice their concerns than do broad publics who stand to realise diffuse gains (Wilson, 1980). Many would conclude that this incentive structure would foster deficits and curb efforts to balance budgets because of the bias toward higher spending implied in this asymmetry. This asymmetry of interests is reflected in an asymmetry in mobilisation: the most intense interests with the greatest incentives to mobilise are the narrow groups benefitting from higher spending or lower revenues, not the broader publics who have to finance the costs in one way or another.

The bias against early action on deficits is reinforced by the steep discount rates that political leaders are said to adopt. Political leaders are short-sighted and have even less incentive to promote sacrifice among current taxpayers for the benefit of future taxpayers or public officials. The election cycles are often two to four years in most democracies, reinforcing the short-term bias of elected officials.

From these perspectives, a crisis appears to be the only way that the discounting problem and the asymmetries between narrow and broad interests can be addressed. First, a crisis overcomes the discounting problem by transforming the problem into one affecting current taxpayers. While current stakeholders may lose specific benefits from deficit reduction, they also realise immediate gains by the rescue of the broader economy that has become a compelling and immediate concern because of a crisis. A crisis rebalances the intensity between narrow beneficiaries and broader taxpayers by making the diffuse costs of current policies more salient and visible to broader publics. A crisis also makes the projected benefits from spending cuts and tax increases more compelling as well. Accordingly, a crisis succeeds in reversing the mobilisation bias from the narrow beneficiaries of government programmes to the broader publics.

It is important to define what we mean by a crisis. Given the absence of any commonly accepted threshold beyond which a problem merits categorisation as a crisis, it may be said – as “social constructionists” stress – that any crisis is to some extent “a creation of the language used to depict it”. The definition and response to a crisis involve a contest between competing frames regarding severity, causes, responsibility and implications (Nohrstedt and Weible, 2010).

Nonetheless, for the purposes of this article, we would define a crisis as an exogenous event or “shock” bearing down on all actors of the system that requires some kind of policy response. In its pure form, a fiscal crisis would consist of a market-induced shock where credit markets react by taking actions that cause immediate harm to the economy and to the prospects of financing government debt. This narrower definition helps us control for endogeneity where political leaders already committed to proactive fiscal policy contrive crises to mobilise support for their pre-existing positions. For instance, although the self-

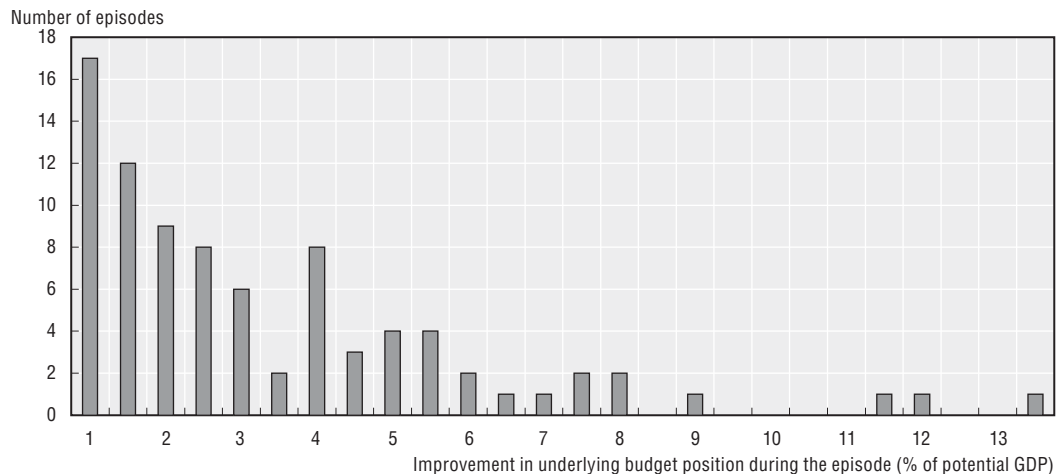
imposed “fiscal cliff” was momentarily avoided in January 2013 after President Obama and Speaker Boehner finally reached an agreement at the 12th hour, the threat of an economic crisis remains in the fourth quarter of 2013 if national leaders fail to pass necessary appropriation bills and extend the debt ceiling.

4. Achieving the politically improbable

Notwithstanding the reigning pessimism about democracies and deficits, many advanced countries have in fact undertaken significant fiscal consolidations in recent years. One OECD study found that, from 1978 through 2007, there were 85 fiscal consolidation episodes in 24 OECD countries that improved the cyclically adjusted fiscal balance. Most of these consolidation episodes were of short duration and led to only modest gains in fiscal balances. However, as shown in Figure 2, several episodes lasted over longer periods and achieved considerably greater fiscal consolidation (Guichard et al., 2007).

Figure 2. **Frequency and size of fiscal consolidations (1978-2007)**

Cyclically adjusted primary budget balance



Source: Guichard, S. et al. (2007), “What Promotes Fiscal Consolidation: OECD Country Experiences”, OECD Economics Department Working Papers, No. 553, OECD Publishing, <http://dx.doi.org/10.1787/180833424370>.

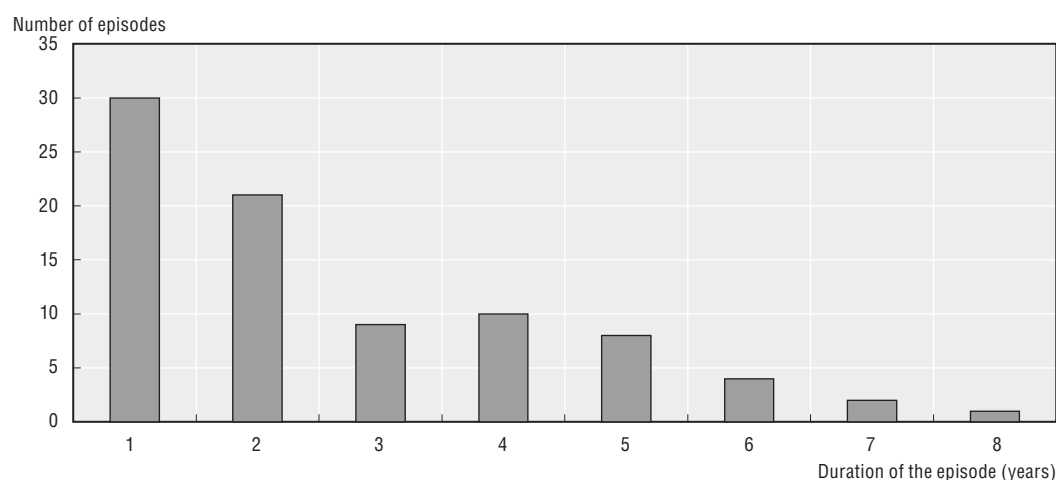
A separate OECD study examined the incidence and evolution of large fiscal consolidation episodes (Blöchliger et al., 2012). It found 13 cases of deficit reduction between 1980 and 2000 where deficits were reduced from 8% to 1% of GDP within five years.

Economist Henry Aaron has noted that many advanced countries have achieved even more significant swings in the primary balance in recent years. Table 3 illustrates that many countries, including the United States, have achieved significant and sustained reductions of deficits and debt (Aaron, 2010).

The question for OECD countries is whether there are lessons to be learned from these previous episodes that can help budget officials cope with the wrenching fiscal choices today. Were the countries from the past able to definitively face structural deficits and resolve them in ways that were both economically and politically sustainable? Were the economies of those countries made better off not only in the short term but for the longer term? And were the publics of those countries satisfied that fiscal consolidations were both

Figure 3. **Frequency and duration of fiscal consolidations (1978-2007)**

Cyclically adjusted primary budget balance



Source: Guichard, S. et al. (2007), "What Promotes Fiscal Consolidation: OECD Country Experiences", *OECD Economics Department Working Papers*, No. 553, OECD Publishing, <http://dx.doi.org/10.1787/180833424370>.

Table 3. **Fiscal swings for major consolidations**

	Period	Fiscal swing as a per cent of GDP
Australia	1992-2000	7.5
Canada	1992-2000	11.1
Finland	1992-2000	12.3
New Zealand	2000-2006	5.9
Sweden	1993-2000	14.9
United Kingdom	1993-2000	11.7
United States	1992-2000	7.4

Source: Aaron, H.J. (2010), "How to Think about the U.S. Budget Challenge", *Journal of Policy Analysis and Management*, 29(4):883-891.

equitable and economically efficient? As political leaders of today face seemingly no-win choices between austerity and growth, how did political officials fare with the voters when they implemented previous consolidations?

To answer these questions, we reviewed the research on fiscal consolidation, often based on quantitative analysis of the fiscal record of OECD countries. In addition, we reviewed the experiences of a set of countries that achieved significant consolidation and sustained surpluses for more than six years consecutively before the financial crisis, as shown in Table 4.

We examined in depth the experiences of four of these countries – Australia, Canada, New Zealand and Sweden – which had perhaps the deepest and among the most long-lasting consolidations in the OECD area. In addition, we added the United States since it sustained consolidation for ten years in the 1990s, ultimately running surpluses for four of those years. The United States illustrates the experience of a presidential system of separation of powers compared to the other parliamentary systems. For each of these five countries, we prepared a spreadsheet showing how the following issues affected the initiation, intensity and political sustainability of consolidations: trigger for consolidation, economic context, political competition among the parties, the timing of consolidation in

Table 4. **OECD countries in surplus, 2000-08**

	Years in surplus
Australia	9
Canada	6
Denmark	8
Finland	9
Korea	9
Luxembourg	8
New Zealand	9
Norway	9
Sweden	7

Source: OECD (2011), *OECD Economic Outlook*, Vol. 2011/2 (No. 90), OECD Publishing, http://dx.doi.org/10.1787/eco_outlook-v2011-2-en.

the electoral cycle, the composition of consolidation initiatives, the strategies pursued to achieve shared sacrifice, and the impact of consolidation on debt/GDP.

Table 5. **Australia (1994-98)**

Triggers			Nature of coalition	Timing	
<i>Market crisis</i>	<i>Economic pressures</i>	<i>Political impetus</i>	<i>Strong governing party/coalition</i>	<i>Political inception</i>	<i>Economic (counter-cyclical)</i>
The fiscal consolidation of 1986 was prompted by a credit and currency crisis. However, the 1994-98 consolidation was brought about primarily by political pressures and competition.	Short and severe recession in 1991. Inflation (3.22% in 1991) and unemployment (10.5% in 1993) were increasing; interest rates were also high at 7.23% in 1991.	Both political parties were responsible for the consolidation efforts from 1994 to 1998. They vied to become the party of fiscal responsibility.	The Labor Party initiated the 1994 round of consolidation, but was replaced by the Liberal-National coalition. The Howard-led Liberal coalition stayed in power from 1996 to 2007.	Consolidation was already under way when the Liberals took over in 1996. They continued various programmes from the previous administration while enacting some of their own (goods and services tax, GST).	Economic conditions had already showed signs of revival prior to consolidation. Starting in 1992, GDP grew at a rate of about 4% per year.
Strategies			Fiscal rules	Sustainability/outcomes	
<i>Composition</i>	<i>Cold shower/gradual</i>	<i>Shared sacrifice/compensatory actions</i>	<i>Budgetary targets</i>	<i>Number of years in surplus (2000-08)</i>	<i>Change in debt as a percentage of GDP</i>
The consolidation was initially revenue-based with the Labor Party in 1994. The Liberals took over in 1996, and initiated cuts in selected areas of expenditures, including social security and health care. However, as surpluses were achieved, the Liberals instituted major increases in spending in various social programmes. Spending grew by 7% annually during the last six years of the Howard administration.	Gradual: the Liberal coalition began making expenditure reductions in 1996 (they were elected in late 1995), achieving surpluses in 1997-98.	As a trade-off for lowering the marginal tax rate for high-income Australians, pensions and child allowances were means tested; some of the savings were transferred to benefits to the poor. Due to concerns that a GST would be regressive, the government also proposed to use budget surpluses to finance a reduction in personal income tax rates and an increased threshold for family benefits.	The Charter of Budget Honesty established a budgetary framework to achieve surpluses within three years. It was relatively general regarding the mechanisms. The Cabinet relies on the Expenditure Review Committee (ERC) to make decisions on resource allocation. Government budgets are passed intact by the parliament, while requests for capital and new programmes are subject to Senate amendments.	Nine years of surpluses.	National debt as a percentage of GDP decreased from 39.6% in 1994 to 14.2% in 2007. Per cent change: -25.4%.

Table 6. **Canada (1993-97)**

Triggers			Nature of coalition	Timing	
<i>Market crisis</i>	<i>Economic pressures</i>	<i>Political impetus</i>	<i>Strong governing party/ coalition</i>	<i>Political inception</i>	<i>Economic (counter-cyclical)</i>
The total net debt approached 100% of GDP in 1993. The <i>Wall Street Journal</i> editorial called Canada a banana republic. Moody's put Canada on a credit watch.	High interest rates (8.5% in 1990), high inflation (Mexican peso crisis), 11% unemployment in 1993.	The Liberal Party campaigned on reducing the deficits; the opposition parties were fragmented and their solutions were extreme and unpopular. Seventy per cent of the public supported spending cuts during the election campaign.	The Liberal Party dealt with the debt issue autonomously, producing savings from the comprehensive Program Review. The Liberals held on to power from 1993 to 2006.	The Liberal Party campaigned on fiscal consolidation and launched Program Review within six months of being in office.	The economy grew during consolidation following a period of economic stagnation. GDP growth rates hovered around 4% during the consolidation period.
Strategies			Fiscal rules	Sustainability/outcomes	
<i>Composition</i>	<i>Cold shower/gradual</i>	<i>Shared sacrifice/ compensatory actions</i>	<i>Budgetary targets</i>	<i>Number of years in surplus (2000-08)</i>	<i>Change in debt as a percentage of GDP</i>
The ratio of spending cuts to revenue increases was 87% spending cuts and 13% revenue increases.	"Cold shower" reduced primary spending by 3.7% of GDP within three years.	Eliminated tax deferral on business income, limited tax assistance for contributions to registered retirement savings plan by high-income earners, additional tax on investment income for corporations, increased large corporate tax rate, increased excise tax on tobacco and gas. Reforms to social programmes and pensions that actually provided less funds to recipients. Pre-funded the Canada Pension Plan by raising premiums; created an independent CPP investment board.	The Liberal Party election commitment was to reduce the overall federal government deficit to no more than 3% of GDP by 1996-97. The Liberals used two-year rolling targets, not making promises for the long term.	Six years of surpluses.	National debt as a percentage of GDP decreased from 96.3% in 1993 to 66.5% in 2007. Per cent change: -29.8%.

Table 7. **New Zealand (1984-93)**

Triggers			Nature of coalition	Timing	
<i>Market crisis</i>	<i>Economic pressures</i>	<i>Political impetus</i>	<i>Strong governing party/coalition</i>	<i>Political inception</i>	<i>Economic (counter-cyclical)</i>
In 1984, impending economic crisis marked by heavy capital outflows, which precipitated a large exchange rate devaluation, a credit downgrade, high inflation, and high debt.	In early 1980s, high taxes and a lack of growth led to debt, high unemployment, and high inflation. Chronic deficits reached nearly 7% of GDP by 1984.	The major political parties agreed to the need for fiscal consolidation and sustaining surpluses toward reaching identified debt targets. Conflicts between the parties focused on marginal disputes between spending increases and tax cuts. The Labour Party ruled from 1984 to 1990, the National Party from 1990 to 1999, Labour from 2000 to 2008, and the National Party from 2008 until current.	Prior to 1996 (when they changed to a programme review system), neither the Labour Party nor the National Party was able to control the budgetary process with considerable autonomy. In general, government budgets are passed without many changes. Following the switch to programme review, coalitions were forced to compromise on fiscal goals and priorities.	The Labour Party enacted deficit-reducing measures directly following the election in 1984, as did the National Party in 1990.	Economic conditions were improving in the mid-to-late 1980s as the Labour Party enacted deficit-reducing measures, although the economic growth experienced in New Zealand was considerably lower than the average in the OECD area during that time frame. Economic benefits did not materialise until the 1990s. In 1991, after seven years of reform, real GDP was only 2.8% higher than in 1984 compared to an average of 24% for OECD member countries in the same period.
Strategies			Fiscal rules	Sustainability/outcomes	
<i>Composition</i>	<i>Cold shower/gradual</i>	<i>Shared sacrifice/compensatory actions</i>	<i>Budgetary targets</i>	<i>Number of years in surplus (2000-08)</i>	<i>Change in debt as a percentage of GDP</i>
From 1984 through 1990, increases in revenue from about 32% of GDP to 40% in each fiscal year. After 1990, the National Party focused on lowering spending, reducing expenditures from 42% to 35% of GDP from 1991 to 1994.	Cold shower: each administration has dealt decisively with the deficit after taking office – first the Labour Party in 1984, then the National Party in 1990. Each party was able to reduce the deficit by more than 3.5% of GDP in its first three years in government.	1986: the broad-based 10% goods and services tax (GST) and significant cuts in the marginal personal income tax rates were offset somewhat by the elimination of tax loopholes and a general broadening of the tax base. Lack of compensatory actions: the government committed itself to running surpluses of at least 3% of GDP in an environment of strong economic growth (health and education spending saw increases while other social spending decreased).	Fiscal Responsibility Act (FRA) of 1994 laid out a set of guiding principles for fiscal decision making. The government promised to defer tax cuts until net debt was reduced to between 20% and 30% of GDP. Moreover, accrual-based budgeting was implemented to provide greater focus on the costs of budgetary commitments.	Nine years of surpluses.	National debt as a percentage of GDP decreased from 63.8% in 1987 to 25.7% in 2007. Per cent change: -38.1%.

Table 8. **Sweden: 1994-98**

Triggers			Nature of coalition	Timing	
<i>Market crisis</i>	<i>Economic pressures</i>	<i>Political impetus</i>	<i>Strong governing party/coalition</i>	<i>Political inception</i>	<i>Economic (counter-cyclical)</i>
The sharp economic crisis, with high unemployment, and the financial sector crisis prompt the deficit to spike at 12% of GDP, with the OECD projecting debt at 125% of GDP.	The economic crisis causes the worst recession since the Great Depression. Unemployment triples; interest rates explode to defend the fixed rate currency; banks in crisis.	With the country entering a crisis, all the political parties in the 1993 elections agree on the need for fiscal austerity, a marked convergence from the past.	The minority Social Democratic Party governs in coalition after 1993. Their support drops to 36% in the 1998 elections but they form an alliance with left-of-centre parties.	All the parties, including the winning Social Democrats, campaign on the need for fiscal consolidation and economic reforms.	Economic growth returns shortly before the start of consolidation and economic reforms. Inflation and interest rates normalise, unemployment drops, and GDP growth resumes. The central bank supports consolidation with lower interest rates.
Strategies			Fiscal rules	Sustainability/outcomes	
<i>Composition</i>	<i>Cold shower/gradual</i>	<i>Shared sacrifice/compensatory actions</i>	<i>Budgetary targets</i>	<i>Number of years in surplus (2000-08)</i>	<i>Change in debt as a percentage of GDP</i>
Ratio: 55% spending cuts to 45% tax increases, but spending accounts for 75% on a structural basis. Through comprehensive consolidation, most expenditures are cut.	Cold shower through three consolidations, with the new government imposing consolidation of 7.5% GDP in 1994. Cyclically adjusted primary balance improves by 9% of GDP in nine years. Major pension reform, privatisation and cuts in marginal tax rates from 90% to 70%.	Cuts in social security and pensions are offset by tax increases on high income. Income tax cuts and spending increases awarded as surpluses exceeded targets.	Major new fiscal rules including binding three-year spending caps, and two-step parliamentary approval of budget to lock in legislative support for spending ceilings. Running 2% surpluses became the new norm for fiscal policy. All open-ended entitlements were "closed ended" with fixed appropriations.	Seven years of surpluses.	National debt as a percentage of GDP decreased from 82.5% in 1994 to 49.3% in 2007. Per cent change: -33.2%.

Table 9. **United States: 1990-2001**

Triggers			Nature of coalition	Timing	
<i>Market crisis</i>	<i>Economic pressures</i>	<i>Political impetus</i>	<i>Strong governing party/coalition</i>	<i>Political inception</i>	<i>Economic (counter-cyclical)</i>
No market crisis. Higher interest rates prompted pressure from the central bank and the business community. An endogenous crisis prompted by threat of major cuts flowing from earlier balanced budget law.	Initial budget agreement in 1990 comes on the heels of interest rate pressures. The acceleration of growth facilitated final 1997 agreement that brought about surpluses for four years.	Fear of across-the-board budget cuts led to a search for a comprehensive alternative. Growing appeal of deficit reduction led to third-party candidate Ross Perot, prompting both the major political parties to pre-empt him.	Mix of bipartisan and partisan government. 1990 and 1997 actions reached across party lines during divided government. However, 1993 action achieved through strict party-line vote when Democrats controlled the presidency and the Congress.	President Bush in 1990 forced to come to terms with deficit and tax increases two years after campaigning against them. President Clinton achieves consolidation in the year following his election, even though he had to break campaign promises regarding tax cuts. The 1997 consolidation follows the "honeymoon" model after the election.	The initial 1990 agreement was reached as the economy declined and the costs of the banking crisis became apparent. A weak economy undermined deficit reduction and jobs alike, and ultimately Bush's re-election. The economic rebound and interest rate cuts stemming from the 1990 agreement benefited President Clinton, as the resulting economic boom produced surpluses ahead of projections.
Strategies			Fiscal rules	Sustainability/outcomes	
<i>Composition</i>	<i>Cold shower/gradual</i>	<i>Shared sacrifice/compensatory actions</i>	<i>Budgetary targets</i>	<i>Number of years in surplus (2000-08)</i>	<i>Change in debt as a percentage of GDP</i>
In the three reduction efforts of the 1990s, spending cuts constituted 60% on average.	Gradual, with the cyclically adjusted deficit dropping by 2% over the first four years. Over a ten-year period, the cyclically adjusted deficit changed by 4.7% of GDP.	In the 1997 consolidation, increases in taxes concentrated on high incomes, the expansion of the Earned Income Tax Credit, and low-income Medicaid eligibility and tax cuts.	The 1990 budget agreement was enforced by new rules: 1) discretionary spending caps, and 2) pay-as-you-go restrictions in increasing entitlements or tax cuts. The 1985 balanced budget rules were dropped due to unenforceability.	Two years of surpluses.	National debt as a percentage of GDP decreased from 63.1% in 1990 to 62.0% in 2007. Per cent change: -1.1%.

In the following sections, we discuss the findings on each of these variables based both on the literature and on the five case studies.

4.1. *Impetus*

Fiscal consolidation involves the allocation of sacrifice across contending groups and interests within each country. Accordingly, it is not surprising that many countries require a compelling trigger to bring about deficit reduction. As a general rule, fiscal consolidation is undertaken only when public finances are weak, as measured by rising deficits and debt levels (Molnar, 2012). In fact, some studies suggest that the gravity of the initial fiscal conditions influences countries to undertake deeper and more prolonged consolidations which have a greater chance of stabilising debt in the future (Larch and Turrini, 2008; Perotti, 1999). Some studies suggest that the more successful consolidations occur when initial fiscal conditions are at their worst. Consolidations are most likely to be persistent and successful if they start with high debt and deficit levels.

Large consolidations constitute a form of punctuated equilibrium where the existing policy frameworks undergo what amounts to a policy and political earthquake. Median improvement for large consolidations is an improvement of balance by 7% of GDP within five years (Blöchliger et al., 2012). Alesina and colleagues suggest that a crisis is needed to break a political deadlock or “war of attrition” between opposing parties and interests. A crisis can force action when it makes one group or party relatively weaker than the other (Alesina, Ardagna and Trebbi, 2006).

Among the five case studies, three of the five consolidations followed the crisis model where economic markets forced the hand of national policy makers, as shown in Table 10.

Table 10. **Fiscal consolidation triggers for case study countries**

1 = most important; 3 = least important

	Market crisis	Economic pressures	Political blame avoidance
Australia (1994-98)	3	2	1
Canada (1993-97)	3	1	2
New Zealand (1984-93)	3	2	1
Sweden (1994-97)	1	2	3
United States (1990-98)	3	2	1

Sweden faced economic pressures that triggered a recession and banking crisis in the early 1990s. Economic growth was negative from 1991 to 1993, and registered unemployment increased dramatically from about 2% in 1990 to over 8% in 1993. The economic slowdown and banking bailout had dramatic fiscal effects leading to a sharp increase in budget deficits, which peaked at over 12% of GDP in 1993.

During 1994 and early 1995, Canada’s fiscal outlook deteriorated quickly. The situation worsened due to a sharp rise in interest rates arising partly from concerns in the international investment community about Canada’s large debt burden. Following the economic crisis experienced by Mexico, investors shifted some of their assets out of Canada. This asset shift further pushed up Canadian interest rates, pushed down the Canadian dollar, and prompted Moody’s to put the country on a credit watch. With general government debt approaching 100% of GDP, foreign investors demanded higher interest rates.

Of course, deficits and debt do not cause a crisis by themselves – political actors add to the problem by using economic statistics to frame policy debates. Thus, in Canada, as the economy worsened, the crisis reached a boiling point when the country's pride was wounded by a *Wall Street Journal* editorial likening the country to a banana republic.

In some cases, however, even relatively modest fiscal imbalances can lead to national alarm and fiscal consolidation. The labelling of these imbalances as a “crisis” in some countries illustrated how that overworked term is often socially constructed.

For instance, Australia redoubled its efforts for consolidation after the recession of the early 1990s. By international standards, fiscal imbalances were relatively modest, with deficits peaking at 3.6% of GDP in 1992 and resumed growth in 1993. Thus a sharp trigger or crisis did not prompt renewed action in Australia. Rather, it was the broader economic concerns that the deficits symbolised which troubled elites. These concerns included the shadow cast by the original economic and fiscal crisis of the mid-1980s and the reliance of the Australian economy on foreign sources of capital to finance private investment. In the post-financial crisis era, the fiscal anxiety continues, as the Australian Labor government uses crisis metaphors to justify a return to surpluses. In countries like Australia, budget surpluses have come to serve as a symbolic metaphor for the competence of the government – the single most important “acid test” of a government's economic credentials (Hawke and Wanna, 2010).

In the United States, serious consolidation began in 1990 and lasted through 2001. High interest rates alarmed both the central bank and the business community, but there was certainly no market crisis bearing down on the country. Lacking a compelling market crisis, federal officials developed fiscal rules under the Gramm-Rudman-Hollings budget regime in the 1980s, which threatened to impose across-the-board budget cuts of USD 100 billion in 1990. Even without a crisis, the perceived political threat posed to President George H.W. Bush from the spectre of these cuts and a slowing economy was sufficient to prompt him to renege on his campaign pledge to avoid new taxes.

Progress toward fiscal consolidation is iterative and non-linear. Four of the five countries among the case studies had undertaken consolidations in the 1980s. Australia and New Zealand realised substantial fiscal reforms in this earlier period before deep recessions undermined their gains. Canada and Sweden also experienced consolidations in this earlier decade, but which were not as successful as their initiatives in the 1990s. This history suggests that fiscal consolidations are path-dependent and build on the previous experiences of countries, both good and bad.

Some countries, like Canada, learned lessons from the failure to sustain fiscal progress in the prior decade and applied these lessons to their more successful 1990s initiative. As the 1980s deficit reduction was eroded by overoptimistic assumptions, for instance, the new Liberal government in Canada in 1994 was determined to use deliberately cautious, “prudent” economic assumptions. Sweden learned that, to sustain its gains, it must adopt a three-year spending cap and a policy goal of sustaining surpluses when economic growth is expanding.

4.2. Austerity and economic growth

Considerable debate rages today about the alleged tension between fiscal austerity and growth. Certainly, macroeconomic theory tells us that economic downturns may be exacerbated and prolonged if major austerity is introduced at the low point of recessions.

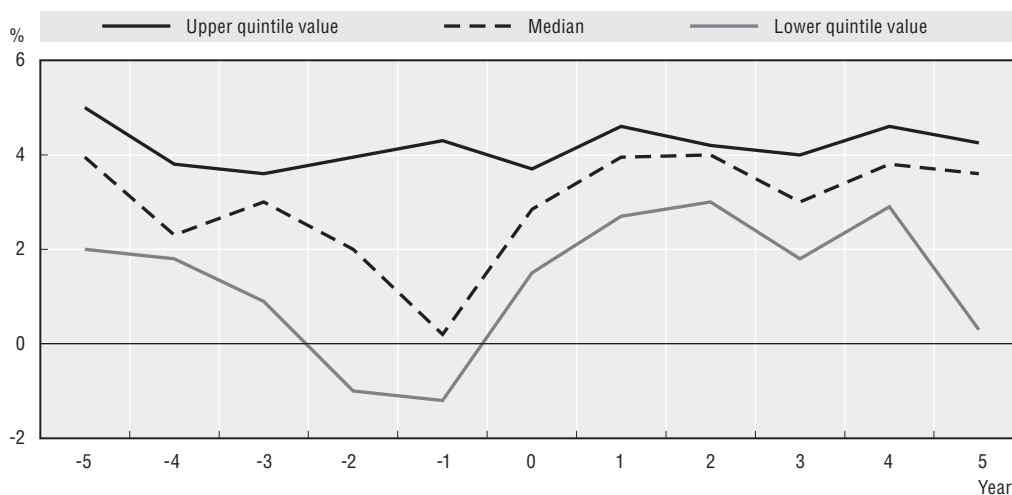
At first glance, if countries must wait for a spike in public deficits and debt to trigger consolidation, then they may very well need to initiate consolidations when the economy is weakest as well. Indeed, several studies find that consolidation is generally initiated when economic troubles descend. One study finds that the likelihood of fiscal consolidation increases with the rate of unemployment (Larch and Turrini, 2008). Another study finds that more successful consolidations begin with weak economic activity (Guichard et al, 2007).

Simply put, the politics and economics of fiscal austerity may indeed clash – with countries doomed to undertake pro-cyclical fiscal policy during both the peaks and the troughs of the business cycle. In the short term, it may very well be easier for leaders to gain support for consolidation when the economy appears to be flatlined and even in crisis. And it also is alluring for leaders to offer tax cuts and spending expansions when treasuries are brimming with surpluses, even though this often overheats the economy and can leave countries ill-prepared for future shocks.

Fortunately, the relationship between austerity and growth is not so simple. Even the most short-sighted leader might realise that undertaking austerity in the depths of recessions is not only the wrong economic medicine, but is also bad politics. As many European countries are finding today, cuts only deepen short-term economic woes and hasten the firing of national leaders in the process.²

Some studies are more sanguine about the economic timing of consolidation. One study finds that governments are more likely to undertake consolidations in good economic periods (Hagen and Strauch, 2001). Another study finds that the fallout from economic crises might hinder retrenchment (Barrios et al., 2010). A study of largest consolidation also finds that growth rates peaked before fiscal tightening began (Blöchliger et al., 2012), as shown in Figure 4 excerpted from that study.

Figure 4. **Economic growth rates and consolidation**



Source: Blöchliger, H. et al. (2012), "Fiscal Consolidation: Part 4. Case Studies of Large Fiscal Consolidation Episodes", OECD Economics Department Working Papers No. 935, OECD Publishing, Paris, <http://dx.doi.org/10.1787/5k9fd5xptlq-en>.

In contrast to the economic crisis hypothesis, in fact many countries undertake consolidation during times when economies are beginning to emerge from recessions.

Whether by forethought or fortuitous accident, leaders in some countries seem to have the uncanny ability to initiate austerity during what we will call a “Goldilocks economy” – i.e. an economy that is not too good, but not too bad. In these times, deficit reduction can boost growth, partly by convincing central banks and markets to lower interest rates (Hagen and Strauch, 2001).

Among the case study countries, Sweden undertook significant deficit reduction in 1994 just as its economy was beginning to restore growth from its recession lows. Well-timed fiscal consolidation can aid a healing economy by instilling confidence in global markets and central banks; indeed, the interest rates on a ten-year government bond dropped from 10% to 5% between 1994 and 1998 (Lilico et al., 2009). For the OECD area as a whole, half of the 85 consolidations from 1978 through 2007 were sustained long enough to stabilise the debt/GDP ratio for at least two years (Guichard et al., 2007).

Importantly, well-timed consolidations offer political bonuses as well. Governments undertaking painful cuts and tax increases can point to tangible progress in economic growth to justify the programmatic and fiscal sacrifices. President Bill Clinton was able to do this in the aftermath of passing the 1993 deficit reduction legislation, as a growing economy gained new momentum on the way to a growth boom that lifted all fiscal boats. His predecessor, President George H.W. Bush, was not so lucky: he was fated to begin the United States consolidation in 1990 during a worsening economy and was never really able to point to progress in the remaining two years of his term. In fact, notwithstanding substantial cuts and tax increases, deficits worsened in the first several years due to weaker-than-expected growth, depriving him of the ability to brag about the fiscal progress he helped institute. He lost the election of 1992 to Mr. Clinton, enabling the latter to claim credit for the progress that was kicked off during Bush’s tenure.

While waiting for economic growth to resume before undertaking consolidation may be appropriate for several reasons, in fact many countries may not have this luxury. Countries that must finance their debt may ultimately be priced out of the market if they fail to generate confidence in their economic and fiscal management. Countries pursuing stimulus strategies are particularly reliant on the forbearance of bond markets to finance additional government debt entailed by these strategies. Moreover, waiting too long may undercut the sense of urgency that is often critical to inspire support for fiscal sacrifice.

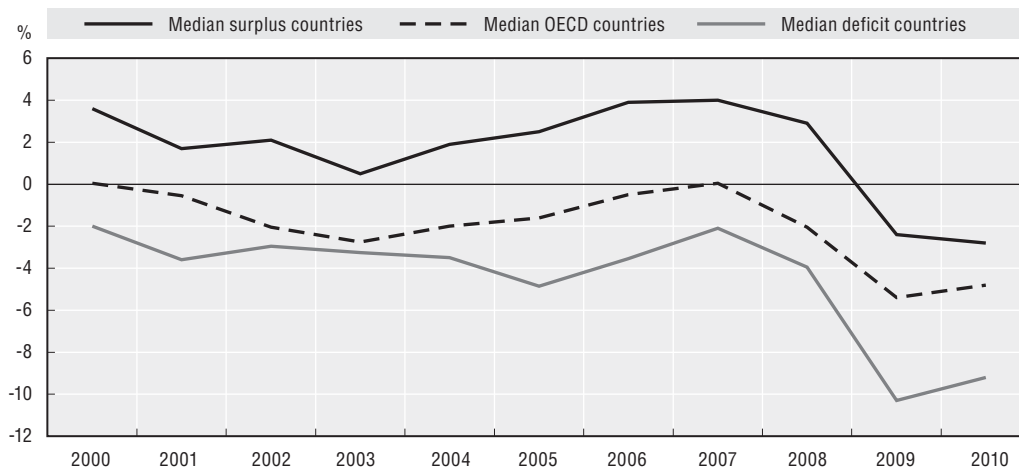
Indeed, Schick argues that, in a financial crisis, fiscal policy may need to follow a different compass than that prescribed by the textbooks. In normal recessions, a government should run a deficit by stimulating demand. However, in this Great Recession, it is critical for each government to promote confidence by markets. This means that bond and credit markets become more critical to sustainable financing for a government. And this means that austerity will have to take a front seat, not a back seat (Schick, 2012). Arguably, competitive capital markets may serve to place a limit on the ability of many countries to sustain expansionary fiscal policies during periods of recession.

Several of the five case study countries in fact felt compelled to attack deficits during the depths of recessions. In New Zealand in 1984, an impending economic crisis marked by heavy capital outflows precipitated large exchange rate devaluation, a credit downgrade, high inflation, and high debt. In response, the government implemented a series of sweeping economic reforms to reduce the role of government in the economy and win back the confidence of global markets. This included reducing a deficit of 6.5% of GDP by increasing taxes and cutting expenditures. Given the depth of the recession,

unemployment grew, and it took nearly seven years of reform just to raise GDP 2.8% higher than it was at the outset of the crisis (GAO, 1999).

Countries undertaking sustained consolidations reaped significant economic benefits over time. All five of the case study countries realised major improvements in interest rates, economic growth, and lower levels of public debt. Sustained surpluses enabled these countries to survive the Great Recession with far greater resilience, with less crippling deficits and debt than others. As shown in Figure 5, the surplus group of countries lapsed into deficits averaging 2.8% of GDP by 2010, compared with 4.8% for the OECD area as a whole and 9.2% for the countries with chronic deficits during the past ten years.

Figure 5. **Deficit/surplus as a percentage of GDP (2000-10)**



Source: OECD (2012), *OECD Economic Outlook*, Vol. 2012/1 (No. 91), OECD Publishing, Paris, http://dx.doi.org/10.1787/eco_outlook-v2012-1-en.

4.3. The pivotal role of political institutions

Political institutions are critical in determining whether and how fiscal consolidations will be shaped to respond to economic and fiscal triggers. Given the high stakes involved, a government must have sufficient political support to form an alliance with key groups and publics to push for needed reforms and retrenchment.

Among the political variables associated with consolidation, two stand out: the timing of consolidation and the relative strength of the ruling party. With regard to timing, there is strong evidence that governments are most successful when consolidations are introduced in the immediate aftermath of an election. In what has come to be known as the “honeymoon effect”, new governments have high standing with publics and are relatively untarnished by the slings and arrows of governing (Guichard et al., 2007).

This effect is amplified when the incoming government campaigned on fiscal consolidation issues. In this case, the party can claim a mandate to impose consolidation from the campaign itself. The point is that successful consolidations are not introduced by stealth but rather with broad publicity to capitalise on momentum drawn from the election. Fully transparent and compelling public rationales are the touchstone for the legitimacy of consolidations, and governments that fail to create these lose the political high ground of legitimacy that is so desperately prized in such a “high stakes” political contest.

Among the five case studies, the newly elected governments of Canada and Sweden had both campaigned on the need for consolidation, enabling them to claim a mandate for strong action. On the other hand, in the United States, President George H.W. Bush stressed tax cuts rather than consolidation in the 1988 election. This complicated and undermined his ability to promote his deficit reduction agreement with Congress that included tax increases, particularly within his own Republican Party which never forgave him for abandoning what was perceived as a central pledge that gave him the party's nomination.

The research is conflicted with regard to the impact of strong ruling parties on the prospects for fiscal consolidation. Some studies find that single-party governments are more effective in forging agreements than coalitions. Strong majorities are associated with more decisive actions and more dramatic “cold showers” (Larch and Turrini, 2008). Strong parliamentary majorities are more likely to fashion lasting fiscal consolidations and more fundamental reforms of major spending policies. Alesina et al. find that fiscal stabilisation is facilitated by presidential systems with unified political parties controlling the legislative branch (Alesina, Ardagna and Trebbi, 2006).

However, other research suggests that strong single-party governments do not have a statistically significant effect on consolidation performance (Wagschal and Wenzelburger, 2008; Sakamoto, 2001). Countries with minority governments or coalition governments do as well as single-party majorities. One leading scholar even suggests that single-party majorities in parliamentary systems may be less likely to take on difficult policy choices than coalition or minority governments because of the singular concentration of blame on that one party (Pierson, 1994). By contrast, divided governments facilitate hard choices by spreading blame to all parties and interests, assuming they can reach an agreement among themselves – a heroic proposition in some systems (Pierson, 1994).

Similar disagreements have broken out over the relative efficacy of presidential *versus* parliamentary governments in dealing with fiscal sacrifice and other hard choices. On the one hand, presidential systems may be at a disadvantage. Because the president and the legislature are institutionally and electorally independent, the president faces a more independent legislature, even under a unified government when the same party controls both institutions. Strong political parties can bridge the institutional differences, but at the same time they can make agreement under divided government doubly difficult.

However, presidential systems have several advantages. When coalitions govern, the coalition partners in parliament have greater potential leverage because they can credibly threaten to remove the government through a vote of no confidence – an option not available under a presidential system of separation of powers. Also, according to Cheibub, presidents are under greater pressure from publics to achieve deficit reduction than parliamentary leaders, owing to their greater visibility and responsibility for fiscal outcomes. In fact, Cheibub finds that presidential systems do a better job of fiscal management and budgetary control than parliamentary systems (Cheibub, 2006).

Interestingly, political orientation does not seem to matter. Molnar (2012) suggests that centrist parties were most likely to reduce debt, but Alesina and Perotti (1995) find that centrist governments are less likely to mount successful consolidations. In several of the case study countries, ruling parties were effective in pre-empting the positions of opposing parties. In countries like Australia and New Zealand, left-wing parties became credible reformers when they championed reforms to pensions and other programmes supported by their base in the name of economic growth. Whether pursued by left-wing or right-wing

parties, such a strategy can be very effective in disarming the opposition and capturing the broad centre of the political spectrum, albeit at some risk of alienating their base. This latter risk was illustrated by President George H.W. Bush whose support for tax increases in 1990 weakened the backing of conservatives in the Republican Party, which jeopardised passage in Congress and may have ultimately led to his defeat in the 1992 elections.

In the five case studies, patterns of political party control spread over the entire range of possible models for political support, as indicated in Table 11. Canada is the best pure example of a partisan model, with a single ruling party controlling government from 1993 through 2006.

Table 11. **Partisan models for fiscal consolidation**

	Partisan	Cross-partisan	Co-partisan
Australia	X	X	X
Canada	X		
New Zealand	X	X	X
Sweden		X	X
United States	X	X	

The other cases illustrated a cross-partisan coalition where several political parties joined in with a major party to govern. This was the case in Sweden in 1994: even while heading a coalition, the Social Democratic Party succeeded in gaining approval for major consolidation initiatives that not only rapidly improved the fiscal balance but also succeeded in reforming the country's pension system. The United States veered from the 1990 consolidation under a cross-partisan coalition to a purely partisan consolidation in 1993 and back to a cross-partisan coalition in the 1997 consolidation.

Table 11 also suggests that several countries exhibited co-partisanship, meaning that both parties essentially took turns implementing fiscal consolidation, albeit with some modest variations. In New Zealand, the different party coalitions all pledged fealty to the same fiscal goal of reducing debt to a set percentage of GDP, albeit with differing relative agendas and mixes of spending and revenues to achieve these targets.

There are times when national leaders succeed in gaining genuine bipartisan support for major reforms. This was particularly the case with pension reforms. Given the political resistance to change in programmes and structural policies, governments had incentives to reach out beyond their coalitions to form bipartisan or all-party commissions and task forces, as shown in Box 1.

4.4. The nature and composition of cuts

The economic success and political sustainability of fiscal consolidation are shaped by the kinds of consolidation strategies adopted. On the economic front, considerable research has long supported the conclusion that successful consolidations are mainly expenditure-based (Alesina and Perotti, 1995). One study found that expenditure cuts contribute 52% of successful consolidations compared to only 12% for unsuccessful ones (Hagen and Strauch, 2001). Spending consolidations are more likely to stabilise debt. Economists generally agree that spending cuts have less immediate impact on economic growth than tax increases. Moreover, spending cuts – particularly reforms to politically

Box 1. Multi-party vehicles in pension reform

- **Canada:** The reform of the Canada Pension Plan was adopted after two-thirds of the provinces adopted the arrangement.
- **Spain:** The 1996 Toledo Pact is an all-party agreement ratified by unions and the employer association to reform the Spanish old-age security system.
- **Sweden:** The 1998 reform of pensions was developed through an all-party agreement resulting in a new system providing incentives to prolong work and create notional private accounts.
- **Switzerland and New Zealand:** Both countries held referenda on major pension reforms in 1995 and 1997.
- **Austria:** The 1997 reform was a product of government bargaining with unions.
- **United States:** The 1983 reform was the product of a commission with participation by leaders of both major political parties which developed a consensual social security reform including extension of the retirement age and increased payroll taxes.

Source: Pierson, P. (2001), "Coping with Permanent Austerity" in P. Pierson (ed.), *The New Politics of the Welfare State*, Oxford Press, New York, United States.

entrenched programmes – may signal to bond markets and savers alike the government's resolve to reduce deficits and debt over the longer term.

These general conclusions all depend on the timing and nature of tax increases and spending cuts. Recent studies suggest that revenue-based consolidations can also be effective, particularly in countries with low taxes (Larch and Turrini, 2008). Spain had revenue consolidations that were helpful. While revenue increases may be particularly counterproductive in weak economies, their impacts on stronger economies may be more salutary. Revenue-based consolidations can also be effective if tax increases are concentrated in more indirect taxes like consumption and excise taxes which have less growth-dampening effects than increased taxes on income and investment (Tsibouris et al., 2006).

Regardless of the economic efficiency implications, political concerns prompted some countries to package tax increases with spending cuts. In a country like the United States, the failure to include both would have doomed any chance of cross-partisan collaboration.

The specific types of spending cuts will also affect the economic impact of consolidations. Transfers appear to be most associated with success. Wage cuts are also important. Structural reforms in unemployment and labour protections also appear to have lasting effects on consolidation.

Cuts in investment, on the other hand, may reduce growth and are often subject to reversal. For large consolidations, cuts in investment were more significant than wages. Investment halved during consolidation episodes (Blöchliger et al., 2012).

For all consolidations, revenue increases counted for a larger fraction of total reductions. Two-thirds of episodes had larger revenue increases than spending (Guichard et al., 2007). But for largest consolidations, revenues contributed only a third (Devries et al., 2011). One study suggested that recently the spending cut factor has weakened and a mix of revenue and spending has become more important. This might be because earlier consolidations already harvested the low-hanging fruit on spending. Further, the highest

spending countries may have converged to the median, removing their incentive to dig deeper for spending cuts (Larch and Turrini, 2008).

Beyond the mix, the size of consolidations has economic and political implications as well. “Cold shower” and large consolidations appear to be more successful than gradual and more modest initiatives. Table 12 shows that most countries undergoing consolidations undertake cold showers rather than gradual action. Needless to say, those countries engaging in “cold shower” consolidations are prompted by economic crisis and strong political majorities.

The strength of “cold shower” initiatives is their promise of greater economic and political returns more quickly. For one thing, they send a more definitive signal to markets about the seriousness of the proposed consolidation. Cold showers may also be more comprehensive, opening up opportunities to spread the pain across major programmes and constituencies – and possibly to engage in compensatory side payments, as will be discussed below. Large consolidations tend to use a broader mix of spending and tax increases to achieve their daunting fiscal targets (Molnar, 2012).

The disadvantages are that cold showers must generate savings immediately to achieve their bold fiscal goals. As a result, cold showers tend to disproportionately cut programmes like investments with more immediate consequences for deficit reduction, regardless of their longer-term consequences for the economy. Moreover, cold showers make it difficult to undertake reforms to sensitive pension programmes and even health-care programmes – reforms which ideally call for longer lead times and phase-ins to help clients adjust their life plans to new fiscal realities (Larch and Turrini, 2008).

Leaders have to be mindful about the political tensions that consolidation can bring when developing packages and priorities. While spending cuts may have greater effects on credit market credibility, they can also have disproportionate effects on inequality when compared to tax increases. Leaders must cover their political risks by pursuing strategies that spread the sacrifice and help obfuscate blame for imposing painful decisions.

The case study countries used a number of strategies to facilitate the imposition of losses that have been observed to be common in advanced political systems (Pierson, 1994):

- Sharing sacrifice through such strategies as across-the-board cuts and balancing spending and revenue actions. Such strategies help promote a perception of fairness. They also intercept “prisoners’ dilemmas” by ensuring groups that their sacrifices will not be exploited by political competitors who might dodge the deficit bullet. For instance, Sweden imposed an 11% across-the-board cut on nearly all programmes and agencies at the outset of its consolidation in 1994.
- Compensating losers with packages that cement coalitions by providing gains to offset a portion of the losses of major groups. One example is tax reform where, in several of the case study countries, reductions in tax expenditures from eliminating such breaks as mortgage interest deductions were partially offset by dramatic cuts in tax rates. In the United States, major consolidations in 1990 and 1993 were coupled with significant expansions of the Earned Income Tax Credit for low-income families and individuals and eligibility for Medicaid health coverage for low-income groups. In some countries, the desire to compensate consolidation’s losers can occur sequentially as countries wait for surpluses to provide tax cuts and new spending initiatives for publics suffering from “consolidation fatigue”. While such initiatives ultimately dissipated surpluses in the

Table 12. **Cold shower versus gradual consolidations**

	Cold shower	Number of years	Gradual	Number of years	Total number of years	Sample period
Austria	1984, 1996, 1997, 2001	4		-	4	1971-2006
Belgium	1977, 1982, 1984, 1993, 2006	5	1985, 1986, 1987, 1996, 1997, 1998	6	11	1971-2006
Bulgaria		-		-	0	2003-2006
Cyprus ¹	2000, 2004, 2005	3		-	3	1999-2006
Czech Republic	2004	1		-	1	1998-2006
Denmark	1983, 1984, 1986	3	2003, 2004, 2005	3	6	1971-2006
Estonia	2000, 2003	2		-	2	1996-2006
Finland	1976, 1981, 1984, 1988, 1996, 1998, 2000	7		-	7	1971-2006
France	1996	1	2004, 2005, 2006	3	4	1971-2006
Germany	1982, 1989, 2000	3	1983, 1984, 1985, 1992, 1993, 1994	6	9	1971-2006
Greece	1974, 1982, 1986, 1987, 1991, 1994, 1996, 2005, 2006	9		-	9	1971-2006
Hungary	1999, 2003	2		-	2	1998-2006
Ireland	1976, 1983, 1988, 2004	4	1991, 1992, 1993, 1994	4	8	1971-2006
Italy	1976, 1982, 1983, 1991, 1992, 1993, 1997	7		-	7	1971-2006
Latvia	1996, 2000	2	2003, 2004, 2005	3	5	1996-2006
Lithuania	1998, 1999	2		-	2	1996-2006
Luxembourg	1983, 1985, 1993, 1997	4	1994, 1995, 1996	3	7	1983-1987, 1991-2006
Malta	1999, 2004, 2005	3	2000, 2001, 2002	3	6	1999-2006
Netherlands	1985, 1991, 1993, 1996, 2005	5	1971, 1972, 1973, 1981, 1982, 1983, 1984	7	12	1971-2006
Poland	2005	1		-	1	1996-2006
Portugal	1977, 1982, 1983, 1984, 1986, 1992, 2002, 2006	8		-	8	1971-2006
Romania	1997, 1998, 1999	3		-	3	1996-2006
Slovak Republic	1998, 2001, 2003	3		-	3	1997-2006
Slovenia	2002	1		-	1	2001-2006
Spain	1986, 1992, 1996	3		-	3	1971-2006
Sweden	1971, 1976, 1983, 1987, 1995, 1996	6	1980, 1981, 1982, 1984, 1985, 1986, 2003, 2004, 2005	9	15	1971-2006
United Kingdom	1974, 1980, 1982, 1996, 1997, 1998, 2000	7		-	7	1971-2006
Total		99		47	146	

1. Note by Turkey: The information in this document with reference to "Cyprus" relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Turkey recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of the United Nations, Turkey shall preserve its position concerning the "Cyprus issue".

Note by all the European Union Member States of the OECD and the European Union: The Republic of Cyprus is recognised by all members of the United Nations with the exception of Turkey. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.

Source: Larch, M. and A. Turrini (2008), "Received Wisdom and Beyond: Lessons from Fiscal Consolidation in the EU", *European Economy, Economic Papers* No. 320, April, European Commission, Brussels, http://ec.europa.eu/economy_finance/publications.

United States, other case study countries like Australia, Canada and New Zealand were able to provide these benefits without losing their surpluses.

- Phasing in cuts by making wedge-shaped cuts that grow over time. The political impacts of spending cuts and tax increases can be substantially blunted if they are phased in over a number of years to provide ample time for transition and adaptation. For instance, pension reforms often phase in increases in the age for full benefits over several decades to provide time for those affected to adjust their career and savings pathways.
- Promoting larger, more sweeping changes that can yield more demonstrable fiscal progress. Ironically, sweeping changes have been found to be positively related to political success. Large packages not only improve chances for dramatic gains in economic outcomes, but also help promote perceptions of fairness by spreading the pain across more stakeholders. A former high Swedish finance official writes that a broader package of changes helps offset distributional effects, particularly if both spending cuts and tax increases are included (Henriksson, 2007). OECD research suggests that large multi-year adjustments can make reforms possible that would not have been able to find support on their own (OECD, 2010a).
- Taking the window of opportunity provided by consolidation to usher in long-term reforms in spending and tax programmes. While the near-term fiscal impact may be blunted due to long phase-in periods, ultimately such changes can strengthen the long-term fiscal underpinnings for countries facing fiscal gaps from ageing societies. Thus, pension reforms were phased in by both Canada and Sweden during this consolidation period. Major tax reforms featuring the first-time application of national consumption taxes were adopted by Australia and New Zealand during their consolidations.

Many of these strategies help democratic leaders protect themselves against the political risks associated with fiscal consolidation (Arnold, 1992). Arnold stresses the importance of designing policies to obfuscate or share blame. Hiding painful choices in larger omnibus legislation can buffer the traceability chain and enable legislators to avoid casting politically difficult votes. Delegating hard choices to independent bodies such as commissions or executive agencies is another time-honoured strategy to spread blame and avoid blame.

4.5. Fiscal rules

During times of fiscal austerity, as the stakes involved with budget decisions grow, formal rules and structures became more essential for budgeting. Fiscal rules can serve as a useful adjunct to the centrist coalitions, folkways and even moral consensus that used to form the parameters and glue that sustained a responsible centre for budgeting. A recent IMF study shows that 80 countries now have fiscal rules compared to only seven in 1990; most countries have a combination of rules (IMF, 2009).

Ideally, fiscal rules and institutions can provide additional fiscal discipline. The rationale is to force all players in the process to overcome the common pool problem by internalising the fiscal effects of their actions. Thus, if a fiscal rule succeeds in forcing advocates to “pay for” new spending or tax cuts, this in itself could prevent the unlimited grazing of the fiscal commons by interests that would otherwise enjoy concentrated benefits.

Fiscal rules can include a goal or target for deficits or debt over time, a set of processes for negotiating the budget including constraints on fiscal expansions, a set of institutional

roles for budgetary actors designed to empower guardians over claimants, and information promoting transparency and accountability for budgetary outcomes (Hagen, 2008). In many cases, fiscal rules and institutions have the goal of limiting the choices of democratic leaders, tying their hands to the proverbial mast to save them and their countries from their own hyper-responsive tendencies. Whether it be delegating choices to a commission or providing for automatic formulas that trigger fiscal actions on cue from certain indicators, the not-so-hidden agenda of many fiscal rules is to compensate for what is perceived to be the fiscal ambivalence of democratic leaders.

Research on fiscal consolidations is mixed, but most shows that the coverage and strength of fiscal rules help promote consolidation. One study suggests that balanced budget rules are more important than expenditure rules (Debrun et al., 2008). Another study suggests that budget balance requirements enable a more balanced focus on both revenues and spending (Larch and Turrini, 2008). Yet, other studies find that balanced budget requirements can produce pro-cyclical decisions and be evaded by classifying various activities as off-budget (Anderson and Minarik, 2005).

In the case study countries, fiscal rules were instrumental in enforcing political agreements for consolidation. Canada threatened agencies with a 10% across-the-board cut if the government's proposals for spending cuts from *Program Review* were thwarted. Spending ceilings in Sweden helped the parliament take ownership of fiscal consolidation and kept the entire framework on track. Surplus and debt targets in New Zealand and Sweden garnered sufficient agreement across all political parties to inspire continued retrenchment where necessary. In the United States, both spending caps and PAYGO requirements ("pay as you go") for new legislation enabled the national leaders of both political parties to sustain fiscal consolidation for nearly ten years.

However, it is important to place fiscal rules in perspective. Much as proponents of such rules desire them to be self-executing, in fact the effectiveness of rules ultimately depends on their alignment and support with political values and leaders. Wildavsky said it best: if the budget process is to be changed, then one must alter the underlying political system as well (Wildavsky, 1961). Rubin reminds us that budget reform can help carry out goals of politicians once they have made up their minds, but it cannot make up their minds (Rubin, 1990). As Meyers has said, budget rules are endogenous to the political system that created them – which constitutes both a strength and a weakness (Meyers, 2009).

Budget process reforms and fiscal rules in democratic systems have an independent effect more as a reinforcement to the substantive fiscal policy commitments made by political regimes rather than the catalyst forcing agreement on discipline and goals. Hallerberg's work shows that fiscal rules are most appropriate for coalitions where each party is bound to the overall political regime through contractual commitments. However, such rules become superfluous and often ignored in strong single-party regimes that can rely on a hegemonic direction by the government leaders (Hallerberg, 2004). Similarly, in the United States fiscal rules are useful to bind a coalition to a set of policy goals already agreed through political bargaining, but become irrelevant when the political regime changes. Thus, for instance, the PAYGO and spending caps agreed in 1990 were sustained for over eight years as a way to enforce the fiscal goals subscribed to in a negotiated agreement between both political parties. However, these same rules became superfluous and were disregarded when President George W. Bush was able to work exclusively with a

Republican-controlled Congress to unilaterally achieve his fiscal policy objectives without Democratic Party assistance (Posner, 2009).

The recent IMF study on fiscal rules worldwide reflected similar findings. In its conclusions, the IMF observes that fiscal progress is fundamentally influenced by political institutions, public opinion and leadership, with rules playing a supplemental and important role. In many countries, rules were adopted several years after fiscal consolidation began, to solidify and institutionalise political agreements (IMF, 2009).

5. The political outcomes of austerity

When countries in fact construct and implement credible plans to reduce spending and increase revenues, the conventional view would conclude that political leaders have arrived at these options only as a last resort. And most assuredly, having undertaken a politically unnatural act, those government leaders would surely not survive politically for very long after their courageous actions.

Conventional wisdom and academic theory to the contrary, intriguing studies suggest that not only have national leaders taken the initiative to pilot consolidation through the political straits, but they were rewarded electorally as well. Brender and Drazen used data on 164 elections from 23 OECD countries from 1960 through 2003. They found that governments achieving lower deficits through policy actions actually increased the probability of their re-election. Controlling for changes in the economy, a reduction of 1 percentage point in the deficit/GDP ratio increased the probability of reelection for existing regimes by 5.7 percentage points. The authors attribute this surprising finding to the fact that voters did not like deficits because they perceived that they would entail future tax increases or spending cuts in subsequent years (Brender and Drazen, 2006).

A 1998 study published by the Brookings Institution echoed similar findings. When examining whether governments following tight fiscal policies tend to lose popularity or are replaced in office, the researchers found the answer to be a “loud no” to both questions. If anything, the opposite proved to be the case: when deficits are reduced, governments that follow a “cold turkey” approach and focus on spending cuts may be rewarded at the ballot box. If anything, more radical fiscal adjustments were associated with a lower probability of a change in government. During sharp adjustments that rely primarily on spending cuts in general, and on the major components of government wages and transfers in particular, the probability of government survival increased (Alesina, Perotti and Tavares, 1998).

Similarly, the nine OECD countries running persistent surpluses in the period up to the Great Recession achieved surprising political success. As shown in Table 13, the governments in the nine countries were re-elected in 63% of the 24 elections in the eight years prior to the Great Recession. By contrast, countries with the highest deficits during this period were re-elected 40% of the time. More importantly, the governments in surplus countries had far greater success in elections following the Great Recession. Incumbent governments won in six of eight elections in the surplus group, but only won in one of the five elections in the deficit group. Importantly, these governments closed significant budget gaps while being returned to office, in some cases several times over. While fiscal austerity was difficult and politically challenging, astute and savvy leaders developed effective political strategies to build consensus and gain public support.

Table 13. **Electoral success of surplus versus deficit countries**

	Number of times surplus was achieved (2000-08)	Number of times the governing party changed (2000-08)		Election after the Great Financial Crisis (GFC)
		Elections	Change in government	
Surplus countries				
Australia	9	3	1	Incumbent won
Canada	6	4	1	Incumbent won
Denmark	8	2	0	Opposition won
Finland	9	2	2	Opposition won
Korea	9	5	3	No election held yet
Luxembourg	8	1	0	Incumbent won
New Zealand	9	3	1	Incumbent won
Norway	9	2	0	Incumbent won
Sweden	7	2	1	Incumbent won
Deficit countries				
Greece	0	2	1	Incumbent won/lost
Hungary	0	2	1	Opposition won
Italy	0	2	3	Opposition won
Portugal	0	2	0	Opposition won
Spain	3	2	1	Opposition won

Sources: *European Election Database*, www.nsd.uib.no/european_election_database; *ParlGov*, <http://parlgov.org/stable/index.html>.

This is not to say that fiscal austerity comes naturally to any system. Rather, the countries were acutely aware of the fragility of fiscal restraint and the political vulnerabilities of those pressing for continued restraint after years of deficit reduction. Building on this understanding, in fact, these governments engaged in sophisticated initiatives to build their case by tying this policy goal to broader national concerns and anxieties. Most importantly, deficit reduction and surplus retention were adroitly defined as a relevant, appropriate, and even necessary response to recent economic crises experienced by each of these countries (Posner and Blöndal, 2011).

It is important to understand what factors help influence governments to mount politically successful campaigns for fiscal retrenchment. Considerable thought has gone into explaining why fiscal choices are so politically unrewarding. It is time for policy analysts and political scientists to devote time to the qualitative and quantitative research understanding the other side of the political equation: how leaders can structure these choices so that they can survive and even thrive.

As noted earlier, conventional wisdom suggests that leaders have short-sighted time horizons, and the political rewards of consolidation are likely to be overshadowed by near-term political reaction. Research has shown that voters are capable of making intertemporal comparisons and of supporting policies that imply short-term deprivation. Leaders have proven adept at making the link between fiscal consolidation and economic outcomes that matter to voters, such as low inflation and higher growth (Przeworski, 1996).

Keech, among others, argues that political leaders have to exercise at least a modicum of economic foresight because voters judge them on the basis of retrospective voting – i.e. how well the economy has done under the leader's term. Leaders are penalised if rising debt and deficits lead to higher interest rates, inflation and currency crises. These factors account for the history of budget balance and fiscal consolidations that have occurred in many democratic regimes (Keech, 1995).

Indeed, savvy political leaders have proved adept at framing deficit reduction as an economic growth programme. They are able to lay economic problems such as high interest rates and inflation at the doorstep of high deficits. The sacrifices involved in fiscal consolidation must be justified by pointing to prospective economic gains in the near term, whether it be easing credit market pressures or staving off the potential for a full-scale exogenous debt crisis. Indeed, if the size and credibility of the package are impressive, the “announcement effect” creates a self-reinforcing virtuous cycle, prompting financial markets to lower interest rates at the outset when the consolidation package is established and enacted.

Of course, any democratically elected official has to be constantly aware of the public’s views on fiscal policy. In this regard, leaders can take advantage of what amounts to a profound ambivalence by the broader public about fiscal policy and consolidation. Typically, publics do not like deficits but also have strong support for continuing current taxes and spending programmes. These conflicting views change in relative salience over time, providing openings for leaders to mount campaigns.

How do leaders reshape the focus of debates? By reframing what the debate is about. This means changing the definition of the issue by highlighting the salience of one facet or dimension over others. Shifting the focus of debates need not entail convincing the other side that it is wrong in an absolute sense. Rather, it calls for the less-demanding task of shifting the relative priority of different values and priorities that most of us care about.

For fiscal policy debates, this means that leaders need not convince the public that its attachment to low taxes or social security benefits is misplaced in some absolute sense. Rather, policy change occurs when leaders succeed in showing the consequences of these policy attachments on other values that broader publics are equally attached to, namely fiscal and economic sustainability.

6. Conclusions

OECD countries and budget officials are condemned to navigate in churning fiscal waters, caught between the Scylla of economic recession and the Charybdis of fiscal austerity. The recent experience of countries undergoing sustained consolidations can inform how budget policy makers address some of the most vexing issues of our time.

The history of fiscal consolidation initiatives frames some critical questions that budget officials will have to face. The answers to these questions involve resolving tensions between conflicting goals that can only be handled within the context of each individual country.

● How can countries balance the risks of fiscal action and inaction in the face of the current economic downturn?

This headline question is preoccupying much of Europe today, and rightly so. On one hand, fiscal consolidation can – depending on how it is designed and phased in – further cripple struggling economies. On the other hand, waiting has risks as well. Some countries may simply not have the luxury of suspending consolidation, with bond markets bidding up interest rates to unsustainable levels. Other countries may face the risk of waiting too long, as returning growth may diminish the sense of urgency needed to tackle underlying fiscal problems.

The best results occur when countries have the skill and good fortune to begin consolidations during the “Goldilocks” moment when the economy is primed to move

forward. Discerning when that moment occurs is itself a difficult challenge, as incipient recoveries are often not recognised and reported until well after they start.

- **Can budget officials respond to the current crisis by avoiding the next one?**

Countries are under severe pressure to reduce deficits in the short term to achieve immediate savings and impress credit markets. However, some cuts can have longer-term consequences that can be fiscally self-defeating. Cuts in investments and aid to subnational governments are among those targets that promise large near-term savings but that have been shown to undermine growth and to be easily reversible over time.

Avoiding self-defeating cuts requires that budget officials take a long-term view, perhaps even one that exceeds the conventional medium-term framework baseline. Acting with foresight also requires that budget officials reach for reforms that bear fiscal fruit only in the long term. The countries that used a budget crisis to address pension and tax reform issues may have received little near-term savings, but nonetheless went a long way to lightening their load when the next crisis comes. Those countries that use periods of economic growth to strengthen their fiscal foundations will better weather the next downturn – another exercise of fiscal foresight in budgeting.

- **Has the current crisis provided an inflection point that will alter the future of budgeting?**

Fiscal history shows that a crisis has the silver lining of fortifying the resolve among policy makers and the public to avoid repeating such a devastating episode again. The economic and fiscal crises of the past several decades appear to have cast a long shadow over the choices made by leaders in countries like New Zealand and Sweden years after the crisis dissipated. It is conceivable that this crisis may be working to foster a similar shift in fiscal sensibilities and priorities in affected countries. Should this come to pass, it could have a transformative effect on national fiscal policy at precisely the right time, since the fiscal outlook of these countries will be battered by ageing populations and rising health-care costs.

- **How has the current economic crisis changed the kinds of cutback strategies that budget officials can use?**

Normally, the seriousness of fiscal consolidation is judged by the use of front-loaded, as opposed to back-loaded, fiscal reforms. Countries with serious deficits have little choice but to pursue front-loaded changes that deliver savings in the near term. However, the short-term economic crisis and longer-term demographic changes may make back-loaded changes more appealing. Back-loaded cuts enable countries to gain the benefit of the announcement effect signaling their fiscal resolve while avoiding immediate cuts to an economy in deep recession. Back-loaded cuts also enable countries to mitigate opposition to much-needed but sensitive reforms in pensions, health care and tax policies by phasing in these changes over a number of years. Since these kinds of public policies are, in effect, capitalised into the social and economic decisions of a country, reversals and reforms are a social project that must be viewed from a longer-term perspective.

- **Must budget officials wait for an economic crisis to generate support to resolve long-standing fiscal gaps?**

While the crisis hypothesis has become a truism, in fact this article has shown that democracies do not need a market shock to institute necessary reforms. While never

easy, leaders undertaking fiscal consolidations can be rewarded at the polls. Those who wait for a crisis, in fact, more often suffer electoral defeats owing to the greater dislocation and pain that crisis budgeting can cause.

Budget officials can pursue several strategies to head off a crisis. They can be more public about the future fiscal outlook, revealing in particular the long-term consequences of failing to take timely action on festering budgetary problems. While going public is always a political decision, disclosure of fiscal projections and underlying budgetary liabilities can enable leaders to use the power of shame to mobilise public support for properly framed fiscal reforms. Finally, budget officials may find it necessary to create a crisis internally to increase the sense of urgency about addressing longer-term fiscal challenges. Budget process reforms and fiscal rules can prompt policy makers to pause and be accountable for creating new commitments. Such reforms can also focus greater public debate on the need to reform existing tax and spending policies. Such self-imposed limits as spending ceilings and debt targets can be effective in mobilising fiscal reforms, but they ultimately require political support from elected officials who may be the most reluctant to tie their own hands to the proverbial fiscal mast.

Notes

1. *The Washington Post*, 7 May 2012.
2. Alesina has long noted that fiscal austerity is in fact compatible with economic restoration as long as it is done on the spending side. Expansionary consolidations can occur when cuts are perceived as permanent and citizens change their savings behaviour and their expectations of interest rates. For successful expansionary consolidations, 70% comes from spending cuts (Alesina and Ardagna, 1998).

Bibliography

- Aaron, H.J. (2010), "How to Think about the U.S. Budget Challenge", *Journal of Policy Analysis and Management*, 29(4):883-891.
- Ahrend, R., P. Catte and R.W. Price (2006), "Interactions between Monetary and Fiscal Policy: How Monetary Conditions Affect Fiscal Consolidation", *OECD Economics Department Working Papers* No. 521, OECD Publishing, <http://dx.doi.org/10.1787/414663503428>.
- Alesina, A. and S. Ardagna (1998), "Tales of Fiscal Adjustment", *Economic Policy*, 13(27):487-545.
- Alesina, A., S. Ardagna and F. Trebbi (2006), "Who Adjusts and When? On the Political Economy of Reforms", *NBER Working Paper* No. 12049, National Bureau of Economic Research, Cambridge, Massachusetts, United States, www.nber.org/papers/w12049.
- Alesina, A. and R. Perotti (1995), "Fiscal Expansions and Fiscal Adjustments in OECD Countries", *NBER Working Paper* No. 5214, National Bureau of Economic Research, Cambridge, Massachusetts, United States, www.nber.org/papers/w5214.
- Alesina, A., R. Perotti and J. Tavares (1998), "The Political Economy of Fiscal Adjustments", *Brookings Papers on Economic Activity*, 1:197-266.
- Anderson, B. and J.J. Minarik (2005), "Design choices for fiscal policy rules", *OECD Journal on Budgeting*, 5(4):159-208, <http://dx.doi.org/10.1787/budget-v5-art25-en>.
- Arnold, R.D. (1992), *The Logic of Congressional Action*, Yale University Press, New Haven, Connecticut, United States.
- Barrios, S., S. Langedijk and L. Pench (2010), "EU Fiscal Consolidation after the Financial Crisis: Lessons from Past Experiences", *European Economy, Economic Papers* No. 418, July, European Commission, Brussels, http://ec.europa.eu/economy_finance/publications.
- Baumgartner, F.R. and B.D. Jones (1993), *Agendas and Instability in American Politics*, University of Chicago Press, Chicago, Illinois, United States.

- Blöchliger, H., D.H. Song and D. Sutherland (2012), "Fiscal Consolidation: Part 4. Case Studies of Large Fiscal Consolidation Episodes", *OECD Economics Department Working Papers* No. 935, OECD Publishing, <http://dx.doi.org/10.1787/5k9fdf5xptlq-en>.
- Brender, A. and A. Drazen (2006), "Political Implications of Fiscal Performance in OECD Countries", *Fiscal Indicators*, Banca D'Italia, Rome.
- Buchanan, J.M. (1977), "Why Does Government Grow?" in T.E. Borcherding (ed.), *Budgets and Bureaucrats: The Sources of Government Growth*, Duke University Press, Durham, North Carolina, United States.
- Buchanan, J.M. and G. Tullock (1962), *The Calculus of Consent: Logical Foundations of Constitutional Democracy*, University of Michigan, Ann Arbor, Michigan, United States.
- Burman, L.E., J. Rohaly, J. Rosenberg and K.C. Lim (2010), "Catastrophic Budget Failure", *National Tax Journal*, 63(3):561-583, <http://ntj.tax.org>; originally presented at the TPC-USC conference "Train Wreck: A Conference on America's Looming Fiscal Crisis", Los Angeles, California, 15 January.
- Cheibub, J.A. (2006), "Presidentialism, Electoral Identifiability and Budget Balances in Democratic Systems", *American Political Science Review*, 100(3):353-368.
- Cogan, J.F., T.J. Muris and A. Schick (1994), *The Budget Puzzle: Understanding Federal Spending*, Stanford University Press, Stanford, California, United States.
- Committee for a Responsible Federal Budget (2009), *Deficit Reduction: Lessons From Around the World*, The Committee for a Responsible Federal Budget, Washington, DC, <http://crfb.org>.
- Conlan, T.J., M.T. Wrightson and D.R. Beam (1990), *Taxing Choices: The Politics of Tax Reform*, Congressional Quarterly Inc., Washington, DC.
- Cottarelli, C., L. Forni, J. Gottschalk and P. Mauro (2010), "Default in Today's Advanced Economies: Unnecessary, Undesirable, and Unlikely", *IMF Staff Position Note* No. SPN/10/12, September, International Monetary Fund, Washington, DC.
- Debrun, X., L. Moulin, A. Turrini, J. Ayuso-i-Casals and M.S. Kumar (2008), "Tied to the Mast? National Fiscal Rules in the European Union", *Economic Policy*, 23(54):297-362.
- Derthick, M. and P.J. Quirk (1985), *The Politics of Deregulation*, Brookings Institution, Washington, DC.
- Devries, P., J. Guajardo, D. Leigh and A. Pescatori (2011), "A New Action-based Dataset of Fiscal Consolidation", *IMF Working Paper* WP/11/128, International Monetary Fund, Washington, DC.
- Drazen, A. and W. Easterly (2001), "Do Crises Induce Reform? Simple Empirical Tests of Conventional Wisdom", *Economics and Politics*, 13(2):129-157.
- Fenno, R.F. (1966), *The Power of the Purse: Appropriations Politics in Congress*, Little, Brown and Company, Boston, Massachusetts, United States.
- GAO (General Accounting Office) (1994), *Deficit Reduction: Experiences of Other Nations*, GAO/AIMD-95-30, General Accounting Office, Washington, DC.
- GAO (1999), *Budget Surpluses: Experiences of Other Nations and Implications for the United States*, report to the Chairman and Ranking Minority Member of the Committee on the Budget, United States Senate, GAO/AIMD-00-23, General Accounting Office, Washington, DC.
- Garrett, G. and P. Lange (1991), "Political Responses to Interdependence: What's 'Left' for the Left?", *International Organization*, 45(4):539-564.
- Guichard, S., M. Kennedy, E. Wurzel and C. André (2007), "What Promotes Fiscal Consolidation: OECD Country Experiences", *OECD Economics Department Working Papers* No. 553, OECD Publishing, <http://dx.doi.org/10.1787/180833424370>.
- Hagen, J. (von) (2008), "European Experiences with Fiscal Rules and Institutions" in E. Garrett, E.A. Graddy and H.E. Jackson (eds.), *Fiscal Challenges: An Interdisciplinary Approach to Budget Policy*, Cambridge University Press, Cambridge, United Kingdom.
- Hagen, J. (von) and R.R. Strauch (2001), "Fiscal Consolidations: Quality, Economic Conditions, and Success", *Public Choice*, 109(3-4):327-346.
- Hallerberg, M. (2004), *Domestic Budgets in a United Europe: Fiscal Governance from the End of Bretton Woods to EMU*, Cornell University Press, Ithaca, New York, United States.
- Hawke, L. and J. Wanna (2010), "Australia after Budgetary Reform: A lapsed pioneer or decorative architect?" in J. Wanna, L. Jensen and J. de Vries (eds.), *The Reality of Budgetary Reform in OECD Nations: Trajectories and Consequences*, Edward Elgar, Cheltenham, United Kingdom.

- Hayes, M.T. (2001), *The Limits of Policy Change: Incrementalism, Worldview, and the Rule of Law*, Georgetown University Press, Washington, DC.
- Henriksson, J. (2007), "Ten Lessons about Budget Consolidation", *Bruegel Essay and Lecture Series*, Bruegel, Brussels, www.bruegel.org.
- IMF (2009), *Fiscal Rules: Anchoring Expectations for Sustainable Public Finances*, International Monetary Fund, Washington, DC.
- Jacobs, L.R. and R.Y. Shapiro (2000), *Politicians Don't Pander: Political Manipulation and the Loss of Democratic Responsiveness*, University of Chicago Press, Chicago, Illinois, United States.
- Keech, W.R. (1995), *Economic Politics: The Costs of Democracy*, Cambridge University Press, Cambridge, United Kingdom.
- Kitschelt, H. (2001), "Partisan Competition and Welfare State Retrenchment: When Do Politicians Choose Unpopular Policies?" in P. Pierson (ed.), *The New Politics of the Welfare State*, Oxford University Press Inc., New York, United States.
- Krueger, A. (2002), "Should Countries Like Argentina Be Able to Declare Themselves Bankrupt? A Commentary", *El Pais*, 18 January.
- Larch, M. and A. Turrini (2008), "Received Wisdom and Beyond: Lessons from Fiscal Consolidation in the EU", *European Economy, Economic Papers No. 320*, April, European Commission, Brussels, http://ec.europa.eu/economy_finance/publications.
- Levine, C. (1978), "Organizational Decline and Cutback Management", *Public Administration Review*, 38(4):316-325.
- Lilico, A., E. Holmes and H. Sammen (2009), *Controlling Spending and Government Deficits: Lessons from History and International Experience*, Policy Exchange, London, www.policyexchange.org.uk.
- Mayhew, D.R. (1978), *Congress: The Electoral Connection*, Yale University Press, New Haven, Connecticut, United States.
- Meyers, R.T. (2009), "The 'Ball of Confusion' in Federal Budgeting: A Shadow Agenda for Deliberative Reform of the Budget Process", *Public Administration Review*, 69(2):211-223.
- Mitchell, W.C. (1995), "Fiscal Behavior of the Modern Democratic State: Public Choice Perspectives and Contributions" in D. McCool (ed.), *Public Policy Theories, Models, and Concepts: An Anthology*, Prentice-Hall, Englewood Cliffs, New Jersey, United States.
- Molnar, M. (2012), "Fiscal Consolidation: Part 5. What Factors Determine the Success of Consolidation Efforts?", *OECD Economics Department Working Papers No. 936*, OECD Publishing, <http://dx.doi.org/10.1787/5k9h28mzp57h-en>.
- Nohrstedt, D. and C.M. Weible (2010), "The Logic of Policy Change after Crisis: Proximity and Subsystem Interaction", *Risk, Hazards and Crisis in Public Policy*, 1(2).
- OECD (2010a), "Restoring Fiscal Sustainability: Lessons for the Public Sector", OECD, Paris, www.oecd.org/dataoecd/1/60/44473800.pdf.
- OECD (2010b), *OECD Economic Outlook*, Vol. 2010/1 (No. 87), OECD Publishing, http://dx.doi.org/10.1787/eco_outlook-v2010-1-en.
- OECD (2011), *OECD Economic Outlook*, Vol. 2011/2 (No. 90), OECD Publishing, http://dx.doi.org/10.1787/eco_outlook-v2011-2-en.
- OECD (2012), *OECD Economic Outlook*, Vol. 2012/1 (No. 91), OECD Publishing, http://dx.doi.org/10.1787/eco_outlook-v2012-1-en.
- Perotti, R. (1999), "Fiscal Policy in Good Times and Bad", *The Quarterly Journal of Economics*, 114(4):1399-1436.
- Persson, T. and G.E. Tabellini (2003), *The Economic Effects of Constitutions*, The MIT Press, Massachusetts Institute of Technology, Cambridge, Massachusetts, United States.
- Pierson, P. (1994), *Dismantling the Welfare State? Reagan, Thatcher, and the Politics of Retrenchment*, Cambridge University Press, New York, United States.
- Pierson, P. (2001), "Coping with Permanent Austerity: Welfare State Restructuring in Affluent Democracies" in P. Pierson (ed.), *The New Politics of The Welfare State*, Oxford University Press Inc., New York, United States.

- Posner, P.L. (2009), "Budget Process Reform: Waiting for Godot", *Public Administration Review*, 69(2):233-244.
- Posner, P.L. and J. Blöndal (2011), "Democracies and Deficits: Prospects for Fiscal Responsibility in Democratic Nations", *Governance: An International Journal of Policy, Administration, and Institutions*, 25(1):11-34.
- Posner, P.L., T.J. Conlan and D.R. Beam (2004), "Another New Politics of Budgeting: The Pathways Framework", annual meeting of the Association for Budgeting and Financial Management.
- Posner, P.L. and B. Gordon (2001), "Can Democratic Governments Save? Experiences of Countries with Budget Surpluses", *Public Budgeting and Finance*, 21(2):1-28.
- Przeworski, A. (1996), "Public Support for Economic Reforms in Poland", *Comparative Political Studies*, 29(5):520-543.
- Roberts, A. (2010), *The Logic of Discipline: Global Capitalism and the Architecture of Government*, Oxford University Press, Oxford, United Kingdom.
- Rubin, I. (1990), "Budget Theory and Budget Practice: How Good the Fit?", *Public Administration Review*, 50(2):179-189.
- Sabatier, P.A. and H.C. Jenkins-Smith (1993), *Policy Change and Learning: An Advocacy Coalition Approach*, Westview Press, Boulder, Colorado, United States.
- Sakamoto, T. (2001), "Effects of Government Characteristics on Fiscal Deficits in 18 OECD Countries, 1961-1994", *Comparative Political Studies*, 34(5):527-554.
- Schick, A. (2012), "Lessons from the crisis", *OECD Journal on Budgeting*, 2012/3:9-37, <http://dx.doi.org/10.1787/budget-12-5k47tb29wn6h>.
- Sinclair, T.J. (1998), "Budget Deficits and Policy Change: The International Dimension", 94th annual meeting of the American Political Science Association.
- True, J.L., B.D. Jones and F.R. Baumgartner (2007), "Punctuated-Equilibrium Theory: Explaining Stability and Change in Public Policymaking" in P.A. Sabatier (ed.), *Theories of the Policy Process*, Westview Press, Boulder, Colorado, United States.
- Tsebelis, G. (2002), *Veto Players: How Political Institutions Work*, Princeton University Press, Princeton, New Jersey, United States.
- Tsibouris, G.C., M.A. Horton, M.J. Flanagan and W.S. Maliszewski (2006), "Experience with Large Fiscal Adjustments", *IMF Occasional Paper No. 246*, International Monetary Fund, Washington, DC.
- Wagschal, U. and G. Wenzelburger (2008), "Roads to Success: Budget Consolidations in OECD Countries", *Journal of Public Policy*, 28(3):309-339.
- Wildavsky, A.B. (1961), "Political Implications of Budgetary Reform", *Public Administration Review*, 21(4):183-190.
- Wildavsky, A.B. (1964), *The Politics of the Budgetary Process*, Little, Brown and Company, Boston, Massachusetts, United States.
- Wildavsky, A.B. and N. Caiden (2001), *The New Politics of the Budgetary Process*, Addison Wesley/Longman, New York, United States.
- Wilson, J.Q. (1980), *The Politics of Regulation*, Basic Books, New York, United States.

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

The OECD is a unique forum where governments work together to address the economic, social and environmental challenges of globalisation. The OECD is also at the forefront of efforts to understand and to help governments respond to new developments and concerns, such as corporate governance, the information economy and the challenges of an ageing population. The Organisation provides a setting where governments can compare policy experiences, seek answers to common problems, identify good practice and work to co-ordinate domestic and international policies.

The OECD member countries are: Australia, Austria, Belgium, Canada, Chile, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, the Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States. The European Union takes part in the work of the OECD.

OECD Publishing disseminates widely the results of the Organisation's statistics gathering and research on economic, social and environmental issues, as well as the conventions, guidelines and standards agreed by its members.

OECD Journal on Budgeting

Contents

Budget governance in Canada: Comparing practices within a federation
by *Benoît Rigaud* and *Paul-Émile Arseneault*

The reconciliation of primary accounting data for government entities and balances according to statistical measures: The case of the European excessive deficit procedure Table 2
by *Giovanna Dabbicco*

Short- and long-term forecasting by the Netherlands Bureau for Economic Policy Analysis (CPB): Science, witchcraft, or practical tool for policy?
by *Frits Bos* and *Coen Teulings*

Capital budgeting and procurement practices
by *Philippe Burger* and *Ian Hawkesworth*

Budgeting levers, strategic agility and the use of performance budgeting in 2011/12
by *Ian Hawkesworth* and *Knut Klepsvik*

The politics of fiscal austerity: Democracies and hard choices
by *Paul L. Posner* and *Matthew Sommerfeld*

Consult this publication on line at <http://dx.doi.org/10.1787/budget-v13-1-en>.

This work is published on the OECD iLibrary, which gathers all OECD books, periodicals and statistical databases. Visit www.oecd-ilibrary.org for more information.

Volume 2013/1

OECD publishing
www.oecd.org/publishing



ISSN 1608-7143
VOLUME 2012
(3 ISSUES)
42 2013 01 1 P



9 771608 714309