Revisiting the Efficiency of Performance Budgeting in OECD Countries: Lessons for Balkan Countries

MELDINA KOKOROVIĆ JUKAN & ELMAN NADŽAKOVIĆ

Abstract Performance budgeting (PB) is a new tool of modern public finance management reform and it is being introduced in the Balkan countries in last two decades with more or less success. Empirical research on PB practices in OCED countries shows that many of them still struggle to make effective use of performance information in budgetary decision making. To that end, this study revisits efficiency of PB in OECD countries in order to make recommendation for Balkan countries who are introducing performance budgeting. Paper investigate on efficiency of PB and its contribution to the quality of public practices in general, as well as potential challenges in implementation. OECD data on Performance budgeting survey from 2018 were used. It was concluded that PB improves efficiency of public finances but implementation process requires considerable amount of time, combination of factors, trained and educated staff, major investments in technology systems, acceptance of experimentation and failure.

Keywords: • performance budgeting • public finance • OECD countries

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1 Introduction

Performance budgeting is defined by the OECD as the systematic use of performance information to inform budget decisions, either as a direct input to budget allocation decisions or as contextual information to inform budget planning, and to install greater transparency and accountability throughout the budget process, by providing information to legislators and the public on the purposes of spending and the results achieved (OECD, 2019a). It was first introduced in the United States by the United States Secretary of Defense Robert S. McNamara in the Pentagon in the 1949. The main goal of its introduction was to improve the budgetary processes of the US government and initiative recommended that the concept of the federal budget be redesigned.

As a new tool of modern public finance management reform, performance budget aims to use performance information on public spending which are aligned with national strategies and implementing programs to inform budget decision in terms of more efficient, transparent and accountable use of public resources. In that sense, performance budgeting refers public sector funding mechanisms which use performance information to link funding to results – outputs and/or outcomes – with the aim of improving performance (Robinson, 2007).

Program budgeting remains popular and different versions of budgetary reforms under various names such as management by objectives, zero-base budgeting, program budgeting or output budgeting have been applied in USA and around the world. Nowadays, the majority of the OECD member countries apply some form of performance budgeting, but reports different levels of success in terms of achieving efficiency, transparency and better accountability. Based on evidence on implementation, USA, Australia, Finland, the Netherlands, New Zealand, and the United Kingdom are the leaders of performance budgeting.

Moreover, there are some evidences showing that performance budgeting practices contribute to lower government debt and higher GDP growth rates (Kwon, I., 2018). Therefore, it can be expected that new countries will accept some form of program budgeting as their own key to reach higher standards in public finance.

Based on the observed practices across the OECD countries, there are four different models (approaches) of performance budgeting implementation, but in practice the following three are most commonly used: presentational, performance-informed and managerial performance budgeting. Presentational performance budgeting is a model where performance information is presented with budgeting documents or other government documents, but is included as background information for the purposes of accountability and dialogue with legislators and citizens on public policy issues and government direction. Performance information does not play a significant role in decision making on allocations nor is it intended to do so. Performance information is provided parallel with the annual
budget providing transparency, but without expectation that information provided will be used in budget allocation decisions. Performance-informed budgeting is a model where performance information plays an important, but not the key role in spending decisions; however, resources are related either to proposed future performance or to performance results in an indirect manner. There is no automatic linkage between performance and funding levels. The weight given to performance information depends on particular circumstances. Managerial performance budgeting, is a model which uses the system of performance information developed in the context of the budget process primarily as a tool of performance management and accountability at an organizational and management level, rather than primarily as a tool of resource allocation.

Empirical research on performance budgeting implementation shows that performance budgeting is increasingly prevalent in OCED counties, but many of them still struggle to make effective use of performance information in budgetary decision making (OECD, 2019b). Having that in mind, this study aims to investigate on efficiency of program budgeting use and addresses the following main research questions:

- Have performance budgeting practices contributed to the quality of public practices in OCED countries?
- What was the policy impact in terms of effectiveness of performance budgeting measured in terms of policy impact and by overall contribution of performance budgeting systems and processes to improved quality of public finances?
- What are the potential challenges/obstacles to effective implementation of performance budgeting?

The main objective of the paper is to revisit the importance of performance budgeting practices and potential obstacles to its implementation since and to provide more insight for decision makers and practitioners in Western Balkan countries where performance budgeting practices are still in the early phases of introduction, especially at the lower government levels. (eg. municipalities). In a sense, the paper contributes and re-opens the questions regarding performance budgeting efficiency since there are no significant number of most recent research on this topic.

The rest of the paper is organized as follows. Sections 2 includes literature review of previous research on efficiency of performance budgeting in selected countries. Section 3 presents the sample, variables and method used. In the fourth section the analysis and discussion of results is presented. Final part includes main conclusions and recommendations.
2 Literature overview

The most comprehensive research on performance budgeting practices is systematically conducted by OECD. OECD tracks progress of performance budgeting practices through Performance budgeting survey that was conducted in 2006, 2011, 2016 and 2018.

In OECDs early research from 2007, it was found that implementing performance budgeting reforms have provided number of advantages and benefits (OECD, 2007):

1. Improving the setting of objectives, performance budgeting reforms provide a mechanism that enables politicians, if they choose to use it, to clarify objectives,
2. Improving the monitoring of performance: performance information as a signaling device, key actors have tools to monitor agencies, performance and progress, with details concerning what is working and what is not working,
3. Greater emphasis on planning, the introduction of performance information has resulted in a greater emphasis on planning in management and budgeting, and a move towards outcome focus in policy design and delivery.
4. Improving management, if properly used, performance information helps managers to implement policies and better manage programs to achieve results.
5. Improving transparency, performance budgeting reforms have improved transparency by increasing the amount of information provided to the legislature and the public on the performance and results of the public sector.
6. Informing citizens’ choices, some countries provide performance information as league table that evaluates and benchmarks the provision of local services such as schools and hospitals. This provides detailed information, not just raw numbers, which can help citizens about choices (citizen can choose from among local schools and hospitals). While this information is not perfect, it can at least provide some guidance with regard to the level of performance and service provision.

In contrast to the above mentioned comprehensive surveys, there are some evidence of good practices in selected (mostly OECD) countries on performance budgeting implementation., ie. in USA (Shea, 2008), Bulgaria (Hawkesworth et al., 2009), Germany (Kelleners, 2012), European Union (Downes, 2017), Indonesia (Marsus, 2022) etc.

Evidences from United States provided mixed results on the efficiency of performance budgeting practices. United States over 45 years invest efforts to reform federal government looking for ways that would establish clearer links between outcomes and funding. Especially, over past 25 years government tried different approaches of performance systems. Although it is the cradle of performance budgeting, it still struggles with basic problems like other any other country. It is notable that still exist general reluctance of the legislature to pay attention to performance information when making budget decisions. Decentralized federal system, as constitution system also adds complexity layer to performance budgeting effort. It is very important to know that almost all-American States have tried some form of performance-based budgeting. For instance, California

Generally, implementation did not outlive the government administrations that proposed reform. Failure demonstrated that to succeed, there must be shared commitment between budget reform and executive branch, and between the executive and legislative branches. In addition, it is difficult to implement major budget changes in a short period of time. Nevertheless, most experts agree that “While federal budget reforms have helped bring more systematic analysis into the budget process, their emphasis on performance information has had little direct impact on budget allocations.” (Office of the Legislative Auditor, State of Minnesota, 1994).

Progress of law implementation has shown numerous weaknesses. Insufficiently results-oriented measure of many agencies and programs led decision makers to help and improve program performance. Next step was Performance Improvement Initiative (PII), which aims to ensure production of maximum results. The PII gauges its success according to two measures: improved program performance and greater investment in successful programs. Shea (2008) reports that the PI Initiative is succeeding in focusing agencies’ attention on program performance. For example:

- 89% of programs established or clarified their long-term and annual performance goals to focus on the outcomes that are important to the American people.
- 82% of programs are achieving their performance goals.
- 73% of programs are measuring their efficiency, a relatively new activity for government programs.
- 70% of programs are improving efficiency annually, producing more value per dollar spent.
- 55% of programs that were initially unable to demonstrate results have improved their overall performance rating.

Yun-jie Lee and Wang (2009) claimed that United States results do not provide evidence that performance based budgeting has a significant impact on the spending growth rate. They concluded, “If performance based budgeting is designed to influence spending behaviors, efforts should be made to solicit legislative support; to involve top executives in the entire performance based budgeting process of design, implementation, and evaluation; to establish clear funding performance objectives; and to develop a culture of performance improvement.”
Compared to other international models, Downes et al. (2017) find that EU model is characterized by:

- Budget is primarily an investment-focused; emphasis is on allocation of resources of specific EU goals, avoiding duplication with national budget allocations;
- Investment programs are considered from a multi-annual perspective, and budget has a strong multi-annual character;
- Budget system is prevailing with performance information and reporting structures;
- It is legally required to abide by the principle of “sound financial management”; which means to respect the principles of economy, effectiveness and efficiency, and encompasses the need to set “SMART”2 objectives.
- Performance and results are concern of different EU institutions: European Commission, European Parliament and the European Court of Audit (ECA).

Australia’s major lessons from performance budgeting reform are that it takes a considerable amount of time, it requires a combination of factors, there is a need to train and educate staff, there is a need for major investment in technology systems, there needs to be acceptance of experimentation and failure, devolved responsibility to agencies requires very good information from agencies and maybe most important is that Reform is an ongoing process. As Hawke (2016) concluded “Australia is likely to keep trying to refine its performance information arrangements rather than abandoning them.”

### 3 Research Methodology: Research Data and Methods used

For data analysis, we use descriptive inference statistics, while from conclusions regarding the efficiency and types of program budgeting model employed, we use correlations and hi-square test. Due to the fact that the total population of OECD countries is 34, we use obtained data to make general conclusions, even though the hi-squared test did not show any statistical correlations

For the purposes of this study, we use OECD International Database on Performance Budgeting from 2018. Table 1 provides information on variable used for data analysis.

<table>
<thead>
<tr>
<th>Variables and measurements</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variables measuring existence of performance budgeting practices</td>
<td><strong>OECD questionnaire, 2018 Q 5</strong></td>
</tr>
<tr>
<td>1. Performance budgeting practices</td>
<td></td>
</tr>
<tr>
<td>Existence performance budgeting framework in place (i.e. linking budgetary allocations with information about performance, objectives and / or results)? (R27) (NO=1; Yes, and it is compulsory for line ministries and agencies=2; Yes, but it is compulsory only for line ministries=3; Yes, but it is optional for both line ministries and agencies=4)</td>
<td><strong>OECD questionnaire, 2018 Q 5</strong></td>
</tr>
</tbody>
</table>
2. Performance budgeting models
Which of the OECD performance budgeting system definitions most accurately describes the system in your country? (R28)
(Managerial Performance Approach =1
Performance-Informed Approach =2
Presentational Approach =3)

Variable measuring effectiveness of performance budgeting

1. Policy impact - Relative effectiveness of the performance budgeting system in advancing the considerations to the following:
Promoting transparency in policy aims and impacts
Promoting accountability for the effective use of resources by public bodies
Informing the allocation and prioritisation of resources by the executive
Improving parliament’s ability to understand and engage in discussion and debate on budget issues.
Promoting a culture of performance within in the public sector
Facilitating evaluation and oversight of spending effectiveness and impact
Promoting budget integration and coordination to support the achievement of cross-cutting goals
(not applicable=0, low=1, medium=2, high=3)

2. Overall contribution of performance budgeting systems and processes to improved quality of public finances
Yes, quantifiable improvements
Yes, non-quantifiable improvements
No perceptible improvements to date
(Strongly disagree=1, Somewhat disagree=2 Neither agree nor disagree=3 Somewhat agree=4 Strongly agree=5)

Challenges for performance budgeting implementation

1. Potential challenges to effectively implementing performance budgeting
Lack of accurate and timely data to serve as input for performance measures
Poorly formulated indicators and targets that are not useful
Lack of leadership/commitment in promoting performance-based approach to budgeting
Gaming - whereby selection of performance targets chosen deliberately in ways that bias results
Unclear how performance affects budget allocation decisions
Focus on performance is not sustained once the budget has been allocated
Coordination problems where the achievement of targets requires horizontal working and cooperation across central government organisations
Lack of capacity/training for staff/civil servants with regards to performance measurement
Lack of resources (time, staff, operating funds) to devote to performance evaluations
Lack of culture of “performance”
Inadequate central guidance on performance-budgeting
Information overload—too much information is presented and not always clear which are most adequate for decision-making
Performance budgeting procedures too bureaucratic/lengthy/complicated
Lack of adequate ICT
(N/A=0, Low=1, Low-medium=2, Medium=3 Medium-high=4, High=5)
4 Results and Discussion

4.1 Overview of performance budgeting practices in OECD countries

Based on the 2018 OECD Performance Budgeting Survey data (OECD, 2018) most of the countries (88%) have some form of performance budgeting framework in place (see figure 1), where in most of the cases (67%) is compulsory for line ministries and agencies.

**Figure 1:** Existence of performance budgeting framework in OECD countries

[Insert pie chart showing percentages of countries with performance budgeting framework: 67% compulsory for line ministries, 12% compulsory only for line ministries, 9% yes, and it is compulsory for line ministries and agencies, 12% no, and 9% other.]

Source: (OCED, 2018), Question 5 (authors’ calculation).

Furthermore, there are three types performance budgeting models used in OECD countries, namely managerial performance budgeting model, performance-informed and presentation performance budgeting model/approach (see figure below)
Figure 2: Types of performance budgeting model/approach used in OECD countries

![Figure 2: Types of performance budgeting model/approach used in OECD countries](image)

Source: (OECD, 2018), Question 5.1 (authors’ calculation).

Data shows that there is no one preferred type of performance budgeting model/approached being used.

4.2 Effectiveness of performance budgeting in OECD countries

Table 2 provides descriptive statistics on effectiveness of performance budgeting in terms of policy impact. Based on the results, it can be observed that efficiency of performance budgeting has most impact on promoting transparency in policy aims and impacts (in 50% of reporting countries), promoting accountability for the effective use of resources (in 50% of reporting countries) and promoting a culture of performance within the public sector.

On the other hand, effectiveness was not achieved in terms of improvement of parliament’s ability to understand and engage in discussion and debate on budget issues. Only five countries (17.9%) reported high increase in that aspect of effectiveness. Facilitation of evaluation and overseeing on public spending, better allocation and prioritization as well as integration and coordination to support cross-cutting goals are partially achieved.

In order to examine the relation between domains of effectiveness and types of performance budgeting framework as well as between effectiveness and performance budgeting models/approaches we used correlation and Chi-squared test of independence. Both test did not show evidences of statistically significant correlation between domains of effectiveness and types of performance budgeting framework as well as between effectiveness and performance budgeting models/approaches.
**Table 2:** Effectiveness of performance budgeting (policy impact): descriptive statistics

<table>
<thead>
<tr>
<th>Domains of effectiveness:</th>
<th>Low</th>
<th>Medium</th>
<th>High</th>
<th>Average</th>
<th>Std. Dev.</th>
<th>Range</th>
<th>Min.</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promoting transparency in policy aims and impacts</td>
<td>3 (9.4%)</td>
<td>13 (40.6%)</td>
<td><strong>16 (50%)</strong></td>
<td>2.52</td>
<td>0.511</td>
<td>1-3</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Promoting accountability for the effective use of resources by public bodies</td>
<td>5 (16.7%)</td>
<td>13 (43.3%)</td>
<td><strong>12 (40%)</strong></td>
<td>2.35</td>
<td>0.647</td>
<td>1-3</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Promoting a culture of performance within in the public sector</td>
<td>8 (25.8%)</td>
<td>9 (29%)</td>
<td><strong>14 (45.2%)</strong></td>
<td>2.22</td>
<td>0.795</td>
<td>1-3</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Facilitating evaluation and oversight of spending effectiveness and impact</td>
<td>11 (35.5%)</td>
<td>12 (38.7%)</td>
<td>8 (25.8%)</td>
<td>2.00</td>
<td>0.739</td>
<td>1-3</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Informing the allocation and prioritisation of resources by the executive</td>
<td>8 (27.6%)</td>
<td>15 (51.7%)</td>
<td>6 (20.7%)</td>
<td>1.96</td>
<td>0.706</td>
<td>1-3</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Promoting budget integration and coordination to support the achievement of cross-cutting goals</td>
<td>13 (48.1%)</td>
<td>9 (33.3%)</td>
<td>6 (18.5%)</td>
<td>1.65</td>
<td>0.714</td>
<td>1-3</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Improving parliament’s ability to understand and engage in discussion and debate on budget issues</td>
<td>7 (25%)</td>
<td>16 (57.1%)</td>
<td>5 (17.9%)</td>
<td>1.62</td>
<td>0.668</td>
<td>1-3</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>

Source: (OECD, 2018), Question 16 (authors’ calculation).

### 4.3 Contribution of performance budgeting to the quality of public practices

Table 3 provided insights into the contribution of performance budgeting to the quality of public practices in OECD countries. The respondents were asked to assess the contributions in terms if there were quantifiable and non-quantifiable contributions or they did not experience any improvements at all.

Based on the survey results, it can be concluded that performance budgeting is improving public practices, but those improvements seems to be non-quantifiable. Less than 13% of respondent agrees that improvements can be quantified. In contrast, more than 60% of respondent reported non-quantifiable improvements observed.

Furthermore, in order to examine the relation between quality of public practices and types of performance budgeting framework as well as quality of public practices and performance budgeting models/approaches we used correlation and Chi-squared test of independence.
Chi-squared test of independence did not show any statistically significant correlation between quality of public practices and types of performance budgeting framework. Chi-squared test of independence showed statistically significant correlation quality of public practices and performance budgeting models/approaches (p=0.015). It is more likely that using managerial budgeting approach will yield in higher non-quantifiable improvements in the overall perception on the quality of public practices.

**Table 3:** Performance budgeting systems and processes contribution to improved quality of public finance

<table>
<thead>
<tr>
<th></th>
<th>Strongly disagree</th>
<th>Somewhat disagree</th>
<th>Neither agree or disagree</th>
<th>Somewhat agree</th>
<th>Strongly agree</th>
<th>Average</th>
<th>Std. Dev.</th>
<th>Range</th>
<th>Min.</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantifiable improvements</td>
<td>3 (9.7%)</td>
<td>1 (3.2%)</td>
<td>13 (41.9)</td>
<td>10 (32.3%)</td>
<td>4 (12.9%)</td>
<td>3.24</td>
<td>1.023</td>
<td>1-5</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Non-quantifiable improvements</td>
<td>-</td>
<td></td>
<td>12 (38.7%)</td>
<td>10 (32.3%)</td>
<td>9 (29%)</td>
<td>3.83</td>
<td>0.805</td>
<td>1-5</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>No perceptible improvements to date</td>
<td>10 (34.5%)</td>
<td>8 (27.6%)</td>
<td>7 (24.1%)</td>
<td>4 (13.8%)</td>
<td>-</td>
<td>2.17</td>
<td>1.017</td>
<td>1-5</td>
<td>1</td>
<td>5</td>
</tr>
</tbody>
</table>

Source: (OECD, 2018), Question 24 (authors’ calculation).

### 4.4 Challenges to effectively implementing of performance budgeting

Key challenges to effectively implementing of performance budgeting are reported in figure 3.

In terms of the main challenges to implement performance budgeting, the most pressing ones are related to the following:

- understanding of how performance budgeting practices contribute to better decisions on budget allocation;
- creating coordination to achieve target requirement among line ministries (horizontal coordination) and between government levels (vertical coordination) and
- lack of accurately and timely data to ensure adequate implementation of the performance budget in terms of measure using for corrective actions.

The similar conclusions are reported by Marsus, 2022 in case of Indonesia.
Figure 3: Potential challenges to effectively implementing performance budgeting in OECD countries

Source: (OCED, 2018), Question 22 (authors’ calculation).

5 Conclusions

Performance budgeting as the new tool for public spending is being introduced as a legal obligation across all Balkan countries. Most of the Balkan countries started with implementation of budgeting reform in the last two decades with more or less success. Being perceived as a tool for achieving “Value for Money”, accountability, transparency, efficiency and effectiveness of allocation of resources governments of all SEE countries accepted this method of budgeting. All countries, except Bosnia and Herzegovina, fully incorporated performance based budgeting into the budgeting legal system. Due to the complex political and legal structure, Bosnia and Herzegovina, only partly accepted performance budgeting system. Beside legislation, performance based budgeting reforms are still in the early development phase. Due to its importance and implication for fiscal policy and, consequently, on the lives of ordinary citizens, there was a need for understating what types of performance budgeting approaches are most commonly used, how it improves efficiency of public finance and what are the main obstacles that need to be addressed in order to establish functional performance budgeting model.

As most of the research show, it is not questionable that performance budgeting is the new standard for accountable, transparent and efficient way of public spending. This is confirmed through the OCED performance budgeting practices survey, which clearly shows
that introduction of any model/approach of performance budgeting will contribute to the quality of public practices.

Research confirms that introduction of performance budgeting improved budgeting process efficiency. It is showed that performance budgeting promotes (1) transparency of policies in terms of their aims and impact, (2) accountability of public bodies (ministries and government agencies where performance budgeting approach is implemented) and (3) informs decision makers on more effective budget spending. It also shows efficiency in terms of promotion of culture of performance within in the public sector in most of the OCED countries. Still, additional efforts need to be in terms of improving parliament’s ability to understand and engage in discussion and debate on budget issues and especially in respect to evaluation and oversight of spending effectiveness.

In terms of overall improvements of the quality of public practices, the research showed that more than half of the respondents stated that quantifiable improvements of the quality of public practices can be observed. But still, there are some obstacles of full implementation reported by the respondent. The most pressing issues in performance budgeting practices implementation are related to the following: coordination problems to achieve target requirements among different government levels, lack of clear leadership and commitment to promote performance budgeting, and lack of accurate data to improve performance.

Implementation process of performance based budgeting is process that requires considerable amount of time, combination of factors, trained and educated staff, major investments in technology systems, acceptance of experimentation and failure and it’s an ongoing process for all Balkan countries, where the evaluation of the implementation will be needed in the future.

The main limitation of this research is related to data source. We based our conclusion on the survey conducted by OCED, but we propose explaining analysis in the future research with focus on case studies and good practices of performance budgeting introduction in selected countries.

Notes:

1 There is more emphasis on long-term planning through the introduction of three-to five-year strategic plans.

2 Setting SMART objectives is the first step for budgeting. The SMART model is an acronym of Specific, Measurable, Attainable, Realistic and Timely that has been widely used to set objectives.
References:


