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THE BUDGET ACCOUNTING MODEL AND PERFORMANCE MEASUREMENT: PERCEPTIONS OF PUBLIC EMPLOYEES IN BOSNIA AND HERZEGOVINA

ABSTRACT

The aim of this paper is to analyze if the accounting system of Bosnia and Herzegovina (hereinafter B&H) budget is adequate and if it enables the measurement of public administration performance, as well as to give recommendations for future improvements. To achieve this, a survey was conducted among public employees working in the fields of finance, accounting and auditing at all levels of B&H government as well as among experts from the accounting and auditing field in B&H. The analysis of survey results revealed shortcomings in the accounting system in B&H budget evident in its inability to measure and report on the efficiency, effectiveness and economy of public spending, which reduces transparency and opens up an opportunity for misuse of public resources. According to the studies conducted thus far in this field, one of the most efficient ways to overcome this is to introduce specific cost and management accounting instruments into the accounting system of the budget, which would enable adequate measuring and reporting on the performance of public administration, thereby enhancing the transparency of public finances and accountability of public employees.

Keywords: Budget accounting, performance measurement, cost accounting, management accounting, transparency, accountability

1. Introduction

The traditional cash basis accounting systems are not able to document in detail the use of resources by a public sector entity, nor are they able to provide comprehensive information about its financial position. This complicates international comparisons based on financial and performance indicators.

Given the considerable effect of public sector on the functioning of the economy of any country, it

is necessary to work on the improvement of financial management in this sector in order to prevent possible financial crises in the future. B&H is faced with similar problems, where the lack of transparency is a consequence of an excessively complicated administrative organization regulated by multiple overlapping laws and by-laws.

According to the General Framework Agreement for Peace in B&H, the country is divided into two

entities, the Federation of Bosnia and Herzegovina (hereinafter FB&H) with 51% of the territory and the Republic of Srpska (hereinafter RS) with 49% of the territory. The Brcko area has been the subject of dispute and international arbitration and has been proclaimed a district, so that the state of B&H consists of two entities (FB&H and RS) and the Brcko District. The FB&H is an entity divided into 10 cantons (Una-Sana, Posavina, Tuzla, Zenica-Doboj, Bosnia-Podrinje, Central Bosnia, Herzegovina-Neretva, West Herzegovina, Canton Sarajevo, Livno), each with its own branches of government: legislative, executive and judicial. The cantons are divided into 74 municipalities and 5 cities, all representing local self-government units. The capital of the FB&H is Sarajevo. The RS is an entity that is divided into regions (Banja Luka, Doboj, Bijeljina, Pale and Trebinje), which are further divided into 55 municipalities and 2 cities. The de jure capital of the RS is East Sarajevo, and de facto capital, i.e. the administrative seat is Banja Luka.

As a result of the administrative structure of B&H and a very complex public administration a number of budget accounting subsystems have been developed. The differences between them are numerous and concern professional framework (degree of application of IPSAS, GFS, etc.), accounting bases used, forms and structures of financial statements (including budget execution reports), principles and scope of consolidation, modalities of organization of the treasury system and a number of other important assumptions.

The situation is further exasperated by the lack of a single system to inform the public about public administration performance. For the most part, budget reports include only financial information, without any details if there is compliance with all relevant regulations, if all necessary procedures were conducted etc., and this contributes to arbitrary spending of public resources and opens up opportunities for different types of misuse. Today, when most countries are financed through lending and development funds, mostly from the European Union, non-transparent financial reports and heterogeneous accounting systems are no longer acceptable.

Considering the above, the following hypothesis is proposed: *To be efficient, a budget accounting system should be compatible with the administrative organization of each individual country and modeled in such way as to ensure adequate and trans-*

parent measurement of public administration performance. To achieve the aims of this paper and to test the research hypothesis, a survey was conducted among public employees in the fields of finance, accounting and auditing at all levels of government as well as among experts from the accounting and auditing field in B&H.

The research results show that most of the surveyed individuals find that the model of budget accounting in B&H is not compatible with the administrative organization and particularities of B&H (in the sense of the current legislature and authority allocation between budget users, established accountability system and such). The respondents find that the current model of budget accounting in B&H does not enable the measurement of performance (efficiency, effectiveness and economy) of public administration, which opens up possibilities for misuse in public spending.

Correlation and regression analyses show that there is a strong relationship between efficiency, compatibility with administrative organization and adequate and transparent measurement of the performance of public administration in the case of B&H. Thus, we may conclude that the hypothesis of this paper is confirmed.

Establishment of an adequate system able to measure performance would have a critical role in providing support to all levels of government in B&H in decision-making and new policy implementation. It must be designed and implemented in such way as to optimize the relationship between strategic planning, public service delivery and the measurement of performance in terms of achieving comprehensive political goals from both financial and non-financial aspects. Such approach assists governments in achieving their strategic goals in regards to providing public services, thereby providing added value to the citizens.

2. Theoretical framework

Internationally, there are many papers that focus on identifying an optimal system for measuring the performance of public sector entities. One of the most frequently mentioned movements called "New Public Management – NPM" was created at the end of the last millennium. Some of the goals of this movement are to improve the performance of the public sector; stimulate accountability of government units to the users of their services, reduce

public expenditures and improve and strengthen accountability of public management (Barzelay, 2001). Some authors go even further and advocate the idea about a new movement called "New Public Service – NPS". This movement represents a group of ideas similar to NPM, which focus on citizens and their needs. The main role of public administration should be to satisfy citizens' needs in the best possible way (Denhardt, Denhardt, 2000). Finding the optimal system to measure public administration performance represents a challenge for researchers across the world. A great number of systems for measurement of public sector entity performance are created similarly to the 3E group of indicators (effectiveness, efficiency and economy). However, there are also multi-dimensional approaches to measuring performance, which emphasize the significance of interrelations between different stakeholders within the public sector. In their study, Brignall and Modell (2000) use a multi-dimension approach seek to identify adequate performance indicators, which budget organizations should disclose to satisfy information needs of three main groups of users, that is, the ones that provide the funds, professionals (companies) providing services and public service users. In their study, Smith and Street (2004) work on measuring the efficiency of budget organizations using two methods: Data Envelopment Analysis (DEA) and Stochastic Frontier Analysis (SFA). Using the DEA methodology in combination with other methods, Ray and Van de Sijpe (2007) measured the efficiency of public expenditure management in 52 developing countries. Their research results show that the efficiency of the public sector is primarily determined by a structural variable and management indicators, and that Asian countries have significantly greater efficiency in comparison to lower-income European countries. Performance measurement in the public sector is also possible using Balanced Scorecard (BSC), which is primarily developed for the private sector to measure results from the following perspectives: financial, customer, internal operational processes and learning and growth (Kaplan, Norton, 2001). The BSC is currently equally used in the public sector as in the private sector with certain modifications. The most significant difference, in comparison to the private sector, is that in the public sector, customer perspective is placed first, that is, customers must be clearly identified (donors, government, residents and such) so as to satisfy their needs, while the financial perspec-

tive is placed second (Kaplan, 2001). Detailed instructions about this are given by Niven, who transformed the concept of BSC into a tool, completely adapted to the public sector needs to improve the strategic and fiscal effectiveness and efficiency (Niven, 2008). Resource Accounting and Budgeting (RAB) is an approach to budget accounting founded on an accrual basis of accounting, which focuses on the results instead of inputs. The term *resource accounting* was devised by the IFAC¹ – Public Sector Committee in 2001 with an aim to emphasize that the changes recommended by the UK government imply more than the adoption of accrual accounting. The second key aspect is the connection between inputs, departmental goals and achieved results. Resource budgeting involves using accounting information about resources as the basis for planning and controlling public expenditures. Not all countries which have adopted accrual accounting, apply it in budgeting. The UK is one of those countries which find that it is better that government budgeting and accounting is determined on the same accounting basis. RAB translates the Government's policy and priorities into departmental strategies and budgets and then reports to Parliament on the efficiency and effectiveness of the provided services. The main goal is to improve the quality of public service delivery. Performance Management (PM) in public administration has a long history, and by all accounts, a long road ahead. However, its development was not without challenges. Practitioners, consultants and members of the academic community were searching for answers to the paradoxical and often problematic character of PM. Public administration reforms across the world have brought various approaches to performance management and measurement in the public sector. One of the newer trends is the correction of certain aspects of the NPM (Verbeeten, Speklé, 2015) and its expansion towards the New Public Governance (NPG). This is occurring at different rates in different European countries and public entities. Performance management is gradually becoming an integral part of all modern arrangements of governance. The part that was missing is a global, holistic approach that would integrate all aspects of the functioning of the public sector and guide them towards achieving excellence and the highest level of performance. Common Assessment Framework (CAF) represents such an approach. CAF is a Total Quality Management (TQM) tool specifically tailored for the public sector, which

is based on the self-assessment of organization performance. Since the launch of its first version in 2000, which was revised twice, in 2002 and 2006, approximately 3,000 organizations in many countries across and outside Europe have implemented it. The last version was published in 2013 and it presents a new standard. However, an ever newer version called CAF2020 is being developed. The question of measurement and improvement of public administration efficiency is a subject of continuing research of the academic communities in the neighboring countries as well. A great number of studies focus on the improvement of the budget accounting system as one of the key items within the public sector reform. Dražić Lutlisky and Vašiček (2007) emphasize the significance of external and internal financial reports in public sector governance and argue that the need for making public sector financial reporting in practice is very close and similar to that of the entrepreneurship sector. Public sector entities' financial reports are a source of data and information about public spending. They also provide information about events and business processes that occurred during the year and serve as a basis for decision-making since they enable the recognition of both strengths and weaknesses of the program that should be corrected. Using performance indicators, it is possible to compare budget users of the same size, considering the number of employees, number of people using their services, size of available funds, budget size, that is, income and expenditures. They increase transparency and enable a constructive dialogue with public administration (Crnković-Stumpf, 2008). By making public sector reporting similar to that of the private sector, trust in public administration grows, which creates possibilities for using modern methods of financing, such as the Public-Private Partnership model, which is increasingly used in European Union countries. Performance measurement and monitoring is necessary for government units in order for them to improve the decision-making and resource allocation processes. The introduction of program planning enables the integration of strategic and budget planning, which provides a possibility to measure the performance of individual programs, and thereby the total operations of government units (Vašiček, 2009). Performance measurement systems are, necessary, among other things, to prevent misuse of limited budget funds. There is no universal solution to setting up a budget accounting model. Therefore, it is necessary to take

into account that financial reporting depends mainly on the micro and macro environment, in particular the country-specific institutional environment (Mijoč et al., 2016).

In the following chapters, the authors examine if the B&H budget accounting system is compatible with the administrative organization of the country and determine if it enables performance measurement. Finally, we offer recommendations for improvements.

3. Methodology

To examine whether the B&H budget accounting system is compatible with its administrative organization and determine if it enables performance measurement, we have conducted a survey on a sample of two groups of respondents (a total of 208) from budget organizations in B&H: public employees in the finance, accounting and auditing positions in budget organizations across all levels of government (practitioners) and experts in the accounting and auditing profession from public universities in B&H (theorists), who belong to budget-funded organizations as well. The respondents from the first group are directly involved in the process of budget preparation, adoption and execution and are therefore in the best position to identify problems they face daily in their work. In the latter group, we have experts in the accounting and auditing profession, who are able to highlight the advantages and disadvantages of the current budgeting model from the academic and professional aspect and offer recommendations for improvement in accordance with international best practices. The survey was conducted at the end of 2017. The respondents were contacted via electronic mail and/or telephone and asked to participate in the survey for the purpose of research. Statistical processing of the data collected through questionnaires was conducted using the statistical program SPSS, version 16.0. Spearman's rank correlation coefficient was used due to the character of variables used to measure the respondents' opinions. The questions were formulated using the Likert scale. In addition, regression analysis was used, which is a justified approach in social studies.

3.1 Sampling and data

The survey was conducted by mailing the questionnaire to the practitioners from budget organiza-

tions at the local level (79 municipalities in FB&H, 57 municipalities in RS and Brcko District), at the cantonal level (10 cantonal ministries for finance), at the entity level (16 ministries in FB&H and 16 ministries in RS) and at state level (9 state ministries). The survey was sent also to the theorists in

the field of finance, accounting and auditing from 7 public universities in B&H (a total of 50). Out of a total of 237 questionnaires sent, 208 were returned, which means that the response rate was 87.8%. The demographic characteristics of the respondents are shown in Table 1.

Table 1 Demographic characteristics

Characteristic of the surveyed respondents	Number of respondents (n=208)	Structure in %	Cumulative %
Gender			
Male	74	35.58	35.58
Female	134	64.42	100.00
Age			
Up to 25 years of age	2	0.96	0.96
26-35 years of age	52	25	25.96
36-45 years of age	42	20.19	46.15
46-55 years of age	73	35.10	81.25
56 and over	38	18.27	99.52
Not answered	1	0.48	100.00
Level of education			
Secondary school	7	3.37	3.37
College (pre-Bologna two-year study)	5	2.40	5.77
Undergraduate (pre-Bologna four-year study and Bologna three-year study)	168	80.77	86.54
Masters/PhD	27	12.98	99.52
Not answered	1	0.48	100.00
Certificates relating to profession			
Certified accounting technician	4	1.9	1.9
Certified accountant	107	51.4	53.4
Certified external auditor	20	9.6	63.0
Internal auditor	6	2.9	65.9
Certified accountant, Internal auditor	6	2.9	68.8
Certified external auditor, Internal auditor	4	1.9	70.7
Other certificates	9	4.3	75.0
No certificates	52	25.0	100.0

Source: Authors' research, December, 2017

From the data presented in Table 1, we may conclude that almost two thirds of the respondents are female (64.4%); more than half of the respondents are aged 36 to 55 (55.3%); almost all respondents have an undergraduate, masters or a doctorate degree (94.2%). The Table shows

that most of the respondents (75.0%) have one or more certificates relating to their profession. The majority of respondents are certified accountants (51.4%), followed by certified external and internal auditors (12.5%), while some of them even have more than one certificate (4.8%) We may

conclude that the respondents' profile confirms the credibility of their opinions on the research topic, thus contributing to the relevance and reliability of the research results and the validity of

the proposed measures for improvement of the budgeting model.

The institutional characteristics of the respondents are shown in Table 2.

Table 2 Institutional characteristics

Organization characteristics	Number of respondents (n=208)	Structure in %	Cumulative%
Affiliation to adequate segment of the public sector			
Other	76	36.54	36.54
Government administration	132	63.46	100.00
Number of employees			
Up to 50 employees	70	33.65	33.65
From 51 to 250 employees	113	54.33	87.98
More than 250 employees	25	12.02	100.00
Administrative level within B&H			
Government level	22	10.58	10.58
Entity level	62	29.81	40.39
Cantonal level	45	21.63	62.02
Municipal level	78	37.50	99.52
Other	1	0.48	100.00

Source: Authors' research, December, 2017

As evident from Table 2, budget organizations from the sample are divided depending on whether they are affiliated with the government administration at any level of governance in B&H (63.5%), or to other budget-funded organizations (36.5%). According to the IMF methodology, public enterprises are an integral part of the public sector; however, they were not included in the sample because their accounting system is not based on the principles of budget accounting. More than half of organizations from the sample (54.3%) fall into the group of medium-sized legal entities with 51 to 250 employees. The sample includes organizations from all levels of governance in B&H. The Table shows total number of organizations per individual level of governance. Most of the respondents from the organizations that are affiliated with government administration at municipal level reported that their organization deals with public administration, government administration and general work of the public or local administration (78 respondents). Most of the respondents from organizations affiliated with government administration at cantonal, entity or government level

specified the functions of their ministries (54 respondents). They include the following: foreign affairs; internal affairs (security and defense); finance and treasury; justice; traffic and communications; culture and sports; education, science and technology; human rights and refugees; veterans-disability protection; energy, mining and industry; trade; entrepreneurship and crafts; agriculture, water management and forestry.

3.2 Statistical methods

To assess their opinions on the characteristics of the current budget accounting system in B&H and the administrative context of the country, the respondents were asked to indicate, on a scale of 1 to 5 (1 – strongly disagree, 5 – strongly agree), their agreement with the following statements:

- 1) Current budget accounting system in B&H is adequate for measuring and reporting on the results and performance of public administration;

- 2) Current budget accounting system in B&H enables the measurement of efficiency, that is, the productivity of resource use;
- 3) Current budget accounting system in B&H enables the measurement of effectiveness, that is, the extent to which programs, projects and activities achieve their goals and purpose;
- 4) Current budget accounting system in B&H enables the measurement of economy, that is, control over costs;
- 5) Current budget accounting model in B&H is fully compatible with the administrative organization and particularities of B&H.

The statements were formulated with the view to assessing, from the theoretical and practical aspects, if the budget accounting system in B&H is adequate and compatible with the administrative organization, and if it enables the measurement of public administration performance (efficiency, ef-

fectiveness and economy). These are also the areas on which EU places a special focus during the public finances management reform.

4. Results

The interpretation of the results will be conducted to test the hypothesis of the paper, which assumes that: *To be efficient, a budget accounting system should be compatible with the administrative organization of each individual country and modeled in such way as to ensure adequate and transparent measurement of public administration performance.*

4.1 Perception of the ability to measure the performance of the budget model in B&H and compatibility with the administrative organization and particularities of B&H

The table below shows the respondents' opinions on the characteristics of the current budget accounting model in B&H and its compatibility with the administrative organization and particularities of B&H.

Table 3 Descriptive statistics of the respondents' opinions on the characteristics of the current budget accounting system in B&H and administrative context of the country

	N	Min.	Max.	Average	St. Dev.
Current budget accounting system in B&H is adequate for measuring and reporting on the results and performance of public administration	208	1	5	2.600	1.050
Current budget accounting system in B&H enables measurement of efficiency, that is, the productivity of resource use	208	1	5	2.510	1.026
Current budget accounting system in B&H enables the measurement of effectiveness, that is, the extent to which programs, projects and activities achieve their goals and purpose	208	1	5	2.510	1.026
Current budget accounting system in B&H enables the measurement of economy, that is, control over costs	208	1	5	2.610	1.093
Current budget accounting model in B&H is fully compatible with the administrative organization and particularities of B&H	208	1	5	2.700	0.984

Source: Authors' research, December, 2017

The majority of respondents gave low ratings for all characteristics, which indicates that the current model of budget accounting in B&H is not adequate.

The main reason for this is the fact that it does not enable measuring and reporting on the results and performance of public administration. This also means that the current budget model in B&H does not enable the measurement of public adminis-

tration performance (efficiency, effectiveness and economy), which opens up opportunities for misuse of public funds.

As for the compatibility of the budget accounting model with the administrative organization and particularities of B&H, the respondents from the lowest levels of government reported having problems interpreting and complying with the relevant

legal regulations for years because they are often not sufficiently elaborated to meet the needs of local government organizations.

The situation is further complicated by a large number of laws and by-laws regulating the same area, which often overlap. Moreover, it takes long for practical guidelines on the implementation of new laws and by-laws to be implemented in practice.

One of the main reasons for this is the complexity of budget legislation in B&H. Public servants are burdened with a number of reports that they have to compile at very short intervals, so it is no wonder that they resist the introduction of new solutions imposed by public administration reform in the area of budget accounting, such as performance measurement.

4.2 Analysis of the relationship between the adequacy of the budget system in B&H and the perception of its efficiency

To assess the relationship between efficiency, compatibility with the administrative organi-

zation and adequacy for transparent measurement of public administration performance, we used the Spearman's rank correlation analysis. For the correlation analysis, we used variables to measure: (i) the respondents' perception of the compatibility of the current budget accounting model in B&H with the administrative organization and particularities of B&H (variable A3_2), (ii) the respondents' perception of whether the current budgeting system in B&H enables efficiency measurement (variable A2_1) and (iii) the respondents' perception of whether the current budgeting system in B&H is adequate for measuring and reporting on the results and performance of public administration (variable A1). Considering that we used all three variables from the Likert scale, we have chosen the Spearman's rank correlation analysis, which is adequate for the analysis of the mentioned variables.

Table 4 Results of the Spearman's rank correlation analysis of the selected variables with the goal to assess the relationship between measurement of efficiency, compatibility with the administrative organization and adequate and transparent measurement of public administration performance in B&H

		Compatibility with the administrative organization and particularities	Ability to measure efficiency	Adequacy for measuring and reporting on results and performance
Compatibility with the administrative organization and particularities (variable A3_1)	Correlation coefficient	1	0.579	0.394
	P-value		0.000***	0.000***
	Number of respondents		208	207
Ability to measure efficiency (variable A2_1)	Correlation coefficient		1	0.483
	P-value			0.000***
	Number of respondents			207
Adequacy for measuring and reporting on results and performance (variable A1)	Correlation coefficient			1
	P-value			
	Number of respondents			

Note: *** Significance at the 1% level

Source: Authors' research, December, 2017

Table 4 presents the results of the Spearman's rank correlation analysis using the selected variables to assess the relationship between efficiency measurement (variable A2_1), compatibility with the administrative organization (variable A1) and adequate and

transparent measurement of public administration performance (variable A3_1). The correlation analysis shows that there is a strong relationship between the selected variables. The relationship between the compatibility with the administrative organization

and particularities with efficiency measurement is high (the correlation coefficient is 0.579) and statistically significant with 1% probability. The relationship between the ability of the budget system to measure efficiency with the adequacy for measuring and reporting on results and performance is also very high (correlation coefficient is 0.483) and statistically significant at the 1% level.

The research results show that the current budget accounting system in B&H is used exclusively for recording of financial transactions and preparation of financial reports for external users. However, it does not satisfy the need for budget organizations to manage their finances efficiently.

Correlation analysis shows that the efficiency of the budget accounting model in B&H will increase as it becomes more compatible with the country's administrative organization. This means the higher the compatibility of the budget accounting model in B&H with the administrative organization of the country, the greater the ability to measure and report on the results and performance of public administration.

Therefore, the primary goal should be to improve the existing budget accounting model so as to en-

able the monitoring of arbitrary public spending and measurement of public sector performance in terms of satisfying public needs. One of the main preconditions for that is the application of the selected instrument of cost and management accounting in the public sector, which would enable the measurement of budget organizations' performance and improve, in particular, the control function of accounting.

In addition to the correlation analysis, the multiple regression method was used. As a dependent variable, we used the respondents' assessment of the compatibility of the current budgeting model in B&H with the administrative organization and particularities of B&H (variable A3_2). We used four independent variables. The first independent variable includes the respondents' opinions as to whether the current budgeting system in B&H is adequate for measuring and reporting on the results and performance of public administration (variable A1). The remaining three independent variables include opinions as to whether the current budget accounting system in B&H enables the measurement of efficiency (variable A2_1), effectiveness (variable A2_2) and economy (A2_3).

Table 5 Regression analysis: Dependent variable: Respondents' assessment of compatibility of the current budget accounting model in B&H with the administrative organization and particularities of B&H

	Regression coefficient estimates	Standard deviation	P-value
Constant	1.226	.179	.000
A1	.180	.070	.010*
A2_1	.244	.110	.027*
A2_2	.074	.116	.526
A2_3	.081	.081	.317
Determination coefficient			0.280
Corrected determination coefficient			0.266

Source: Authors' research, December, 2017

The regression analysis shows that the variations in responses about the adequacy of the model for measuring and reporting on budget organization results and performance, as well as responses about efficiency measurement indicate there is a 28.0% variation in responses about the compatibility of the current budgeting model in B&H with the administrative organization and particularities of

B&H. If we apply the corrected determination coefficient, which has been corrected for the number of independent variables, the percentage of interpreted variations is somewhat lower - at 26.6%. The relationship between the compatibility of the current budgeting model in B&H with the administrative organization and particularities of B&H and adequacy for measuring and reporting on performance

results is positive and statistically significant at a 1% significance level (p -value=0.010). The relationship between the compatibility of the current budget accounting model in B&H with the administrative organization and particularities of B&H and its ability to measure efficiency is also positive and statistically significant with 1% probability (p -value=0.027).

Correlation and regression analyses show that there is a strong relationship between efficiency, compatibility with administrative organization and adequate and transparent measurement of the performance of public administration in the example of B&H. Thus, we may conclude that the hypothesis of this paper is confirmed.

5. Discussion and conclusion

The requirements for joining the European Union include, among others, the need for candidate countries, such as B&H, to evaluate their public expenditure control mechanisms and to assess the extent to which they abide by the principles of good budgetary management, first and foremost: economy, efficiency and effectiveness. Accountability in public expenditure management means that there are clearly defined lines of responsibility so that public employees can be accountable for their actions. It would be desirable to establish an adequate system of rewards and sanctions within each budget organization so as to promote accountability among public.

Accountability is necessary in all segments of the public sector, from promises given by politicians during their election campaigns, to their performance during their term in office. There are different types of accountability: some are 'internal' i.e. within the executive branch of government, others pertain to the relationship between the executive government and other levels of government or with the public. Accountability to parliament is essential and it is one of the fundamental conditions for a sound budget. In this context one should also mention accountability to citizens, which could be strengthened by introducing mechanisms that ensure that campaign promises on publishing reports on government activities and the results achieved are honored. Transparency increases accountability. It implies regular, timely and complete sharing of information with all interested parties, from actors in the legislative and executive branch of govern-

ment, to the public, about the results achieved by budget organizations.

An adequate and functioning budget accounting information system, based on adequate instruments of cost and management accounting, would greatly contribute to the achievement of previously identified goals and would improve all aspects of governance in B&H. However, it is necessary to keep in mind that the reform of any part of public administration, budget accounting information system included, is a continuous process and, as such, it is an opportunity to learn as the necessary changes are being implemented. In each of the phases of this process, unexpected events may occur, potentially halting progress. Therefore, continuous assessment of performance is necessary to ensure that adequate changes are implemented. A comprehensive budgeting system with added elements of cost and management accounting represents a quality basis for enhancing internal financial control and enabling internal audit and various forms of external supervision of government units.

Performance measurement increases the level of performance, that is, the economy, efficiency and effectiveness of resource use in the operation of the body whose performance is being measured. Consequently, the research results presented in this paper may be used as a basis for future studies and development of good practices in the mentioned field.

One of the limitations of this paper is that the focus of interest is on budget organizations, which represent the greatest but not the only component of the public sector. Public enterprises, as a very important factor within the public sector, have not been included in this analysis because of their special nature. Specifically, public enterprises are business entities in which the state has majority ownership and which operate in the same accounting framework as private enterprises. This means that they are mainly established as profit-oriented enterprises. Nevertheless, it does not mean that they do not have to deal with problems in the delivery of goods and services similar to those faced by budget organizations. In that context, there is a possibility to conduct a similar research that would focus on this segment of the public sector. Such research would provide a more comprehensive insight into the advantages and disadvantages of the accounting information system of the entire public sector in B&H.

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ENDNOTES

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MODEL PRORAČUNSKOG RAČUNOVODSTVA I MJERENJE PERFORMANSI: PERCEPCIJA JAVNIH ZAPOSLENIKA U BOSNI I HERCEGOVINI

SAŽETAK

Cilj je rada ispitati je li računovodstveni sustav proračuna u BiH primjeren, omogućava li mjerenje performansi javne uprave te dati prijedloge za njegovo unaprjeđenje. U tu je svrhu provedeno istraživanje među javnim službenicima zaposlenima na poslovima iz područja financija, računovodstva i revizije na svim razinama vlasti u BiH, kao i među stručnjacima za računovodstvenu i revizorsku struku u BiH. Rezultati istraživanja ukazuju na nepotpunost računovodstvenog sustava proračuna u BiH zbog njegove nemogućnosti da mjeri i izvještava o učinkovitosti, djelotvornosti i ekonomičnosti javne potrošnje, što smanjuje transparentnost i stvara pogodno tlo za zlouporabu javnih dobara i usluga. Sudeći prema dosadašnjim istraživanjima iz ovoga područja, jedan od najučinkovitijih načina za prevladavanje ovakvoga stanja je uvođenje odabranih instrumenata troškovnog i menadžerskog računovodstva u računovodstveni sustav proračuna, čime bi se omogućilo mjerenje i izvještavanje o performansama javne uprave i samim time unaprijedila transparentnost i odgovornost javnih zaposlenika.

Ključne riječi: računovodstvo proračuna, mjerenje performansi, troškovno računovodstvo, menadžersko računovodstvo, transparentnost, odgovornost