

## APPLICATION OF INTERNAL FINANCIAL STATEMENTS IN BUDGETARY USER MANAGEMENT IN CROATIA

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### ABSTRACT

*The subject of this paper is to investigate the level of use of the internal financial statements of budgetary users in their management process. The main objective of this paper is to determine the importance of internal financial statements prepared according to the specific requirements of managers in decision making and budgetary user management. Another goal of this paper is to assess the implications of using a wide range of accounting information on efficiency of budgetary users management, rational spending of public resources, providing quality public services and satisfaction of public needs. As the result of application of the modified accrual basis in government accounting in Croatia, the current system provides a limited range of information presented in external financial statements.*

*Initial hypothesis of the paper is that the internal financial statements in the Croatian public sector are underdeveloped and insufficiently used in decision making and budgetary user management. By applying the survey method, this paper aims at investigating the current level of using external and internal financial statements in decision making and management of Croatian budgetary users. The results obtained from the survey show that managers of most budgetary users consider that information presented in external financial statements are generally sufficient for decision making and successful management. Furthermore, the research results indicate that public managers are only partially familiar*

*with the cost accounting and management accounting instruments. The information offered in the internal financial statements are not exploited enough in the pricing of services, performance measurement and the performance monitoring of service provision.*

**Key words:** internal financial statements, management, budgetary users, Croatia

**JEL:** M40, M41, M48

### 1. INTRODUCTION

In the last few decades, public sector management is exposed to many modifications which imply that public managers are expected to provide more effective and efficient management of the budgetary users and public sector as a whole and the rational and efficient spending of scarce public resources. Good and quality public sector management is necessary for establishing public confidence in government and responsibility for quality public resources management imposes that public managers, while making their duties, should meet a variety of political, economic and social goals (Budimir 2010, p. 22). In order to satisfy public expectations, public managers should manage public goods and resources entrusted to them in a responsible and transparent way.

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Accordingly, within the public sector reform many new goals and tasks are set in front of government accounting, which transform the role of government accounting from a traditional and neutral system for transaction data processing into the contemporary and management system of the new public management. One of the fundamental goals of the new public management is to supply public managers with reliable, comprehensive and timely information that are required for effective and efficient public sector management. Accounting information presented in external financial statements are of high quality but they are not aimed at and sufficient for efficient decision making in the public sector. Hence, it is necessary to develop the system of internal financial reporting with the existing external financial reporting for increasing the efficiency of financial management. This implies the necessity for the implementation of cost accounting and management accounting instruments in the government accounting information system to inform public managers about the cost structure. Thereby, public managers will be informed on a number of non-standardized information that are oriented to the future processes and are a precondition for preparing numerous planning reports essential for efficient public resources management.

Consequently, the fundamental aim and purpose of this paper is to investigate the level of use of internal financial statements by the Croatian public managers for decision making and budgetary user management. Another goal of this paper is to investigate the fields of application for some of the cost accounting and management accounting instruments in the decision making process. The purpose of this paper is to point out insufficient use of internal financial statements in decision making and budgetary user management in Croatia. In achieving the above mentioned goal, relevant theoretical features of management process and the connection between

accounting information and management process are elaborated below. Moreover, the specifics of financial reporting of Croatian budgetary users are discussed in this paper. The initial hypothesis of this paper is that in the Croatian public sector the internal financial statements are undeveloped and insufficiently used in decision making and budgetary user management. In order to confirm this hypothesis, the research was conducted by using the survey method on the selected sample that consists of the state budgetary users and the local and regional budgetary users. Public managers filled the survey questionnaires. The hypothesis is tested on empirical data from the selected sample by using the analysis of frequency of respondent percentage in offered modalities in the survey and graphical presentation of the response structure and by using chi-square test. Certain conclusions are brought by using the methods of synthesis and generalization.

The research results indicate that public managers are partially familiar with cost accounting and management accounting instruments. Public managers use information from the internal financial statements in planning, calculating and cost control, as well as in measuring the results of operation. The disadvantage is in insufficient use of this information in the pricing of services, performance measurement and performance monitoring of service provision. It is obvious that public managers in Croatia require certain internal financial statements, but they are insufficiently introduced with the system of internal accounting and internal financial reporting in order to recognize the benefits it provides and successfully use it in a quality budgetary user management operation. Internal reporting as a basis for quality decision making for budgetary users management is undeveloped in Croatia and is used only in making daily and operating decisions.

## 2. PUBLIC MANAGER'S REQUIREMENT FOR INFORMATION NECESSARY FOR MANAGEMENT

Effective public sector management, responsible spending of public resources and transparent financial reporting are the prerequisites for creating public confidence in the public sector and public managers. Regarding the objectives that are put before the public managers and taking into account that they manage public resources, public managers are obliged to use public resources rationally in accordance with regulations and "best practice". Efficient and effective management implies and requires clear communication channels, openness and transparency in maintaining activities and the clear elaborated line of accountability.

Financial statements of the budget and budgetary users are a source of data and information on the spending of public funds, and as such, they are the basis for achieving communication between the state (local and central) and the public (population). Furthermore, financial statements, as the source of information about events and business processes that incurred during the financial year, represent background and instructions for planning, decision making and budgetary user management operation. "Financial statements of budget and budgetary users have to satisfy, primarily, two conditions:

1. provide relevant and reliable information needed for making economic, social and political decisions – information as a management support;
2. provide information that will enable effective control of management of public resources and help the development of financial management by implementing accountability standards – information as a support of internal control and audit" (Vašiček 1997, p. 138).

Regardless of the defined goals, successful performance and execution of business tasks of any business entity and budgetary user is a consequence of their actions in the environment and adaptation to the changes in the environment. The management of business entity should make quality decisions in order to provide success of the business entity. The quality of decision making process and management is directly related to the quality and comprehensiveness of the information basis. Managers and other users define information needs and the structure of information. It is necessary here to respect specific tasks, activities and the responsibility of information users, and subject's management information system should enable their ensuring. It can be concluded that "the task of management information system is to provide each of previously analyzed groups of activities and management levels with specific and relevant information" (Gulin et al. 2010, p. 14).

Good accounting information required for decision making should have at least these features (Hočevár 2004, p. 23):

- Appropriateness, which means that it should be tailored to the needs for decision making. That requires the participation of individuals who prepare and use information in their design.
- Timeliness and accuracy, which means that users of information should have timely and accurate information. Given that information management are mainly focused towards the future, their accuracy is lesser than that of return information that are focused to the past.
- Intention, which means that the right information should get to the right people. The management needs different information from those needed in other subordinate decision making levels.
- Completeness, which means that it should include all data relevant for decision making.

The content and structure of the accounting and reporting system is increasingly set towards look more and more in the function of increasing operational efficiency of financial management and evaluation of public management, and not only the function of execution of budget objectives (Vašiček & Dražić Lutilsky 2007). Management process is based on information. From the financial statements of the budgetary user it is possible to see the achievement of its basic operation objective, and its fulfilment determined by the available financial resources. Also, the financial position and business performance of each budgetary user can be seen from its financial statements. Taking into account the achievement of fundamental goal of budgetary users operation, it is obvious that decision making and management process cannot be imagined or maintained without the information that are based on financial statements as a result of accounting process. In this context, it can be concluded that the dominant source of information used in decision making and management process is exactly accounting information arising as a result of the accounting process and data processing.

### 3. INTERNAL FINANCIAL REPORTING OF THE BUDGETARY USERS

Accounting has the role to collect data about the operation of business systems and their presentation to the interested users in a standardized or non-standardized form. Financial statements of the budgetary users should ensure actual and reliable information needed for management and oversight of the spending of public funds, as evidenced by planning, voting and executing the budget and supervision of budget execution. The most important objective of financial statements is to provide quality information required for making different decisions. "Depending on the types of users and their needs, there are two basic types of financial statements:

- External financial statements that are, typically, prescribed and standardized with the meaning of content synthesized and comprehensive information and that meet the needs of most users in the environment of the reporting entity, and
- Internal financial statements that are non-standardized (non-unified) because they are prepared according to the requirements of each user within the reporting entity" (Vašiček 2004, p. 49).

The above classification on the internal and external financial reporting reflects different needs of certain users of financial statements. The characteristics, types, structure and content of the individual financial statement are different according to the individual (internal and external) user. External financial statements are compiled at least once a year and are designed for a wide range of users. Opposite, the form, content and scope of information in internal financial statements are determined by the requirements of individual internal users, and the purpose of internal financial statements is to satisfy specific user requirements. Applied accounting basis is the key determinant in defining the scope of information, which is the result of accounting process. Financial statements prepared consistently according to different accounting basis in different ways comprise and present elements of financial statements, which means that the application of different accounting basis provides a different view of the financial position and business performance of the reporting entity (Vašiček 1997; Vašiček 2000; Vašiček & Vašiček 1998). The objectives of general purpose financial reporting in the public sector should be to provide information useful for decision making, and to demonstrate the accountability of the budgetary user for the resources entrusted to it, by (IFAC – IPSASB 2011, p. 35):

- a) providing information about the sources, allocation, and uses of financial resources,



- b) providing information about how the budgetary user finances its activities and meets its cash requirements,
- c) providing information useful in evaluating the budgetary user's ability to finance its activities and to meet its liabilities and obligations,
- d) providing information about the financial position of the budgetary user and changes in it,
- e) providing aggregate information useful for evaluating the budgetary user's performance in terms of service costs, efficiency and accomplishments.

Also, financial statements should provide information whether the resources are acquired and used in accordance with the adopted budget, and indicate whether the resources are acquired and used in accordance with legal and contractual requirements, including financial constraints given by the competent authorities (IFAC-IPSASB 2011).

With the above information which are primarily oriented to the past and former business events, financial statements can also provide future oriented information useful in predicting the level of resources required for continued operations, the resources that may be generated by continued operations, and the associated risk and uncertainties (IFAC – IPSASB 2011, p. 35). The role and importance of internal financial reporting in the budgetary system, which primarily implies the implementation of cost accounting and management accounting, is to provide public sector managers with information about costs and to allow the preparation of numerous plan reports that can improve their functioning. Cost information can be used in many areas of the public sector (IFAC – IPSASB 2000, p. 7): budgeting, cost control and reduction, setting prices and fees, performance measurement, program evaluations and a variety of economic choice decisions. Better use of the information from internal financial statements

can significantly raise the quality of accounting information used in decision making of public management, which would directly reflect on effectiveness and efficiency in delivering public services. Furthermore, the existence and use of cost information about certain programs and activities would facilitate the planning of future budgets. Also, the usefulness of information from internal financial statements is reflected on the performance measurement of individual programs, and in these activities, groups of financial and non-financial indicators already used in the profit sector can be used. Knowledge on cost information of certain programs is crucial in making decisions on the choice between individual programs. Accordingly, it is evident that, besides information from external financial statements, public management also needs information from internal financial statements for successful decision making.

The circle of users of accounting information is very wide, which complicates the standardization of accounting information in financial statements that would be acceptable and understandable to most users. The most important users of the accounting information for making management decisions are management structures of the budgetary user. Accounting information from external financial statements which are important for the management of the budgetary user, refer to the relationship between used and planned resources, sources and types of revenue, financial position and changes in it and planned dynamics and scope of the cash flow. Observed through the perspective of the needs of the new public management, such as “improving efficiency and effectiveness in the public sector, encouraging accountability of government units to users and buyers of their services, reducing public expenditures, improving and strengthening the accountability of management” (Vašiček 2006, p. 2), the need for the expansion of accounting information

through the target-oriented quantitative and qualitative, financial and nonfinancial information is evident. Management looks for assistance in making high quality decisions through different types and formats of internal financial statements.

A starting point in establishing the system of internal financial reporting in the public sector should be the recognition of the objectives of an individual budgetary or extra-budgetary user in accordance with the methodological approach that is successfully applied in the profit sector (Peršić 2009, p. 258).

“Cost accounting comprises accounting concepts and practice of recording, measuring, planning and forecasting of costs in the realization of various business activities” (Habek & Peršić 1995, p. 7). Consequently, cost accounting can be defined as the process of cost accumulation in order to determine the total costs of each activity, whether on goods production, providing services or execution of certain functions.

Management requires the statement of costs according to different classifications, for stocks valuation, determination of operating result, financial planning, control of operations and decision making (Gulin et al. 2006).

Cost accounting can be observed separately or as a part of management accounting. The basic task of cost accounting is to ensure collecting, evaluating, organizing, summarizing and publishing relevant data which will be transformed in the target information eligible for goal oriented decision making (Peršić & Janković 2006, p. 5). Therefore, the task of management accounting is to provide relevant information to the internal users (managers) to assist them in decision making and in planning, control and organization of processes. Information from management accounting is not statutory nor there is a prescribed form of its presentation.

“In order to satisfy management needs, management accounting extends beyond the borders of traditional measurement of costs and revenues of past transactions, including statements information about unperformed orders, unit costs, prices, demand and existing capacities, as well as comprehensive efficiency indicators based on quantitative or non-financial measures” (Kaplan & Atkinson 1998, p. 1). Information that is a product of management accounting is useful for better decision making, development of new strategies and evaluation of the existing strategies, increasing the efficiency of business entity and the evaluation impact and outcome of organizational units or individuals.

Cost accounting and management accounting of budgetary users differs from the previously highlighted features of internal reporting for profit entities. Differences in approach to internal financial reporting arise from the appreciation of specificities of budgetary users that are listed below. Through the processes of public sector reform, a necessity was imposed on budgetary users for more efficient and cheaper operations, better allocation of public resources with reference to better management of collected tax revenues with less tax burden. For the successful public sector management that is based on efficient decision making process, true, reliable and quality information is needed. It is necessary to introduce cost accounting and management accounting as the tool of the “new public management” in order to improve the management of budgetary users and public sector as a whole, which is reflected in the need for reducing costs while simultaneously improving the quality of provided services. It is impossible to implement cost reduction without the knowledge of the cost structure and different concepts of cost evaluation. The current experiences and practice in our country as well as in many other countries indicate the

low level of the application of cost accounting and management accounting instruments in the public sector. Acceptance and development of cost accounting and management accounting instruments in the public sector is a prerequisite for efficient governance of public management (Dražić Lutilsky 2006, p. 164).

“Cost accounting has a number of primarily management functions, including:

- budgeting,
- cost control and reduction,
- setting prices and fees,
- performance measurement,
- program evaluations and
- variety of economic choice decisions“ (IFAC – IPSASB 2000, p. 7).“

Cost information has an important role in the public sector as a mechanism of control and management of budget and budgetary users. One of the reasons for this is a need for management based on transparent results and a need for allocation of limited resources to a large number of individually significant programs that often have complex goals and, at the same time, are not profit-oriented. Information about the costs of past programs and activities is necessary for the estimation of future costs and the preparation of future budgets. Cost information is required in the process of decreasing and control of costs of the budgetary users.

Since the main objective of the public sector is to meet the public needs, budgetary users (as well as the public sector in general) do not often have defined performance and profitability indicators or indicators to assess return of investment in different programs and activities. Therefore, budgetary users do not have some basic economic indicators to be able to manage costs. Information about costs is an important element for public management in making decisions about prices and fees for delivered goods and services. Full cost evidence is important in situations where, due

to political or social reasons, goods or services are supplied at prices lower than the actual costs, as well as in situations in which the price of these goods and services is determined by the market. In Croatia, the practice of establishing fees for delivered services is usually a political issue and a certain amount of fees or charges have more political and social than economic characteristics (Vašiček 2006, p. 7). Information about costs and prices is extremely significant for internal calculations.

Although many consider performance measurement for budgetary users questionable because indicators of these measurements do not affect their existence, the governments of many countries perceive the importance of establishing the system of performance indicators for program execution. The performance indicators of executing the goals of the public sector are equivalent to the profitability measurement that is characteristic for the profit sector. In Croatia planning by programs is adopted, which shows costs primarily according to the defined programs and their holders, and only then according to the type of expenses (Dražić Lutilsky 2006, p. 171). Program planning is focused on measuring and reporting on the results of activities and projects carried out, where there is a problem of defining the objectives of programs, the costs of achieving set goals and the performance measurement of programs. The use of cost accounting in the evaluation of programs is of help in making decisions on the authorization of programs, continuation or termination of programs and their changes. The choice among competitive programs is complicated when there are incomplete data about costs (Dražić Lutilsky 2006, p. 171). Information from cost accounting and management accounting is necessary in the series of management processes in the public sector. The cost information should be used as the basis for the estimation of future costs in preparing and planning the budget,

while the calculation and control of costs in the execution of the budget should be used to assess the sustainability of the budgetary users programs. Information on planning, calculating and cost control can be used with the goal of cost reducing and increasing the efficiency of service provision (Dražić Lutilsky 2006, p. 405).

The use of cost accounting and management accounting is significant and important for the economical and efficient public sector management and is a useful tool for budgetary users making effective decisions.

#### **4. ACHIEVED LEVEL OF THE APPLICATION OF INTERNAL FINANCIAL STATEMENTS IN BUDGETARY USERS MANAGEMENT IN CROATIA**

##### **4.1. Overview of the previous researches**

There are only a few studies about the importance and use of internal financial statements in budgetary user management in Croatia. In 2006, the Faculty of Economics and Business in Zagreb conducted a survey for the internal research project "The possibility of applying calculating costs methods in the budgetary sector". The aim of this study was to test the hypothesis about the impact of insufficient use of cost accounting and management accounting instruments and procedures on the quality of public management decisions.<sup>1</sup> The research results suggest that the costs information is insufficiently used and that the administrative ability of the budgetary users is low. Costs reports are carried out at the level of the whole organization and not by individual programs or services. The budgetary users in Croatia do not have the possibility of independently setting the prices of services and they do not express interest in the precise determination of the same. The program

success is evaluated solely on the basis of acquired knowledge and experience or this assessment is not conducted at all.

The research conducted by Lutilsky<sup>2</sup> was aimed to determine the opportunities and needs to use the cost accounting and management accounting information in higher education institutions and their importance and scope in the management process. The research results suggest the use of certain internal reporting instruments with the low level of information required by higher education public management. The current budget accounting system is not supportive enough for the management of budgetary users. The development of the "new public management" requires the establishment of cost accounting and management accounting as management tools. The existing budget accounting system has not developed the models of internal accounting reporting and is intended for the external users only.

In the context of a broader research on the feasibility and possibility for selective implementation of International Public Sector Accounting Standards in the Croatian budgetary system, the survey was conducted about accountant attitudes on the quality and the appropriateness of the current accounting and financial reporting system<sup>3</sup> (Vašiček, 2009). The study was conducted in the Croatian public health system. The objective of this study was to examine the situation and the need for improving the current budgetary accounting system as well as the reporting system, the state and development of cost accounting and management accounting in this very important part of the public sector. Based on the research results, it was concluded that the current system of national government accounting is not appropriate for objective monitoring of the business and performance reporting of healthcare institutions. Basic financial statements do not present the objective financial position and financial system performance. They are used



primarily for compliance with the formal legal requirements of reporting and only secondarily for the conducting of business policy and comparison among the budgetary users. The level of development and the application of cost accounting and management accounting in public healthcare are low and should be significantly improved.

In order to determine the public sector management information requirements as well as the achieved level of development and use of external and internal financial reporting and performance measurement in the function of the Croatian budgetary user management, the empirical study was carried out in 2009 on a representative sample of selected budgetary users (Budimir, 2011). As a part of this research, a questionnaire was developed and sent to the selected sample of budgetary users. The primary objective of the survey was to get the answer to the question: Which accounting information do public managers use in order to make quality decisions and whether they measure and evaluate business performance through financial and nonfinancial indicators. Accordingly, the questionnaire was structured into six parts:

1. Basic information on the subject.
2. Information about the compliance of operations with the mission of the institution.
3. Data on the public management information requirements.
4. Information on the use of external and internal reports in the management the budgetary users operation.
5. Information on the use of performance indicators in budgetary user management operations.
6. Information about the need for performance measurement in the function of control and supervision.

The research results about the achieved degree in using internal financial statements

in the Croatian budgetary user management are presented in the remaining part of the paper.

## 4.2. Research hypothesis

The research aim is to verify the assumption that public managers in Croatia are insufficiently familiar with the advantages and benefits of the information contained in internal financial statements and that these statements are insufficiently used in making quality management decisions and rational spending of public resources.

The following hypotheses are set:

H1: Internal financial statements as the basis for budgetary user making quality decisions are insufficiently developed in Croatia.

H2 - H6: Decisions about the requirement for internal financial statements as well as about the costs (expenses) and the application of cost accounting and management accounting instruments in the process of decision making are mutually independent. The instruments of cost accounting and management accounting are: planning, accounting and controlling of costs (H2), pricing of services (H3), measurement of results (H4), performance measurement of provided services (H5) and performance monitoring of provided services (H6).

## 4.3. Research sample

The hypotheses in the further part of this paper were tested by using the chosen statistical methods on empirical data. The survey was conducted by interviewing public managers. The selected sample consists of state budgetary users, as well as budgetary users of local and regional governments, included in the Register of budgetary users (Data from The Register of budgetary users, Official Gazette 81/2007). According to the above mentioned Register, 818 state budgetary users and 2153 beneficiaries of

local and regional budgets operated in 2008. The sample included budgetary users within all state functions, subjects with a different number of employees as well as the different amount of available annual revenues<sup>4</sup>. The study was conducted from July to December 2009. The survey results are based on a sample of 165 respondents.

Table 4.1. Budgetary users by source of budget funding

Budget	Number of budgetary users
State Budget	79
Regional government budget	35
Local government budget	51
<b>Total</b>	<b>165</b>

Source: Empirical Research

#### 4.4. Research results

Public managers were asked about the extent in which they apply some of cost accounting and management accounting instruments in decision making. The elements of cost accounting and management accounting were ranked by the budgetary user management as follows:

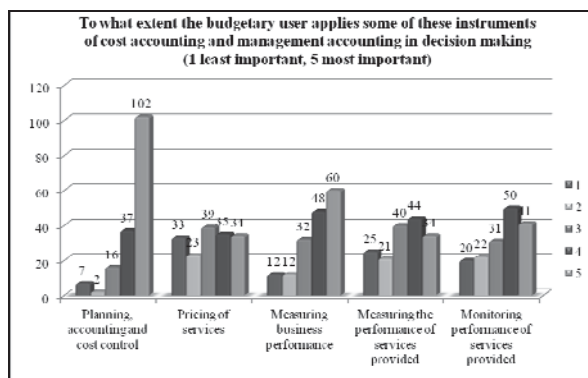


Figure 4.1. Ranking of the importance of internal financial statements

Source: Empirical Research

The research results show that budgetary users apply cost accounting and management accounting instruments mostly for planning, accounting and cost control (average grade 4.37) and for the measurement of performance (average grade 3.80). They use them

least for the pricing of services (average grade 3.09). Public managers use internal financial statements less for control (average grade 3.43) and the performance measurement of provided services (average grade 3.25).

Public managers were asked for their opinion whether detailed costs information contribute to better governance and effective decision making. Managers had the option of ranking grades 1 (least important) to 5 (most important) for the importance of cost information for planning, accounting and cost control, pricing of services, business performance measurement, performance measurement of services provided, and monitoring performance in service delivery. The responses show that managers are aware of the importance of costs information in the management process and quality business decisions. Most managers said that the costs are of primary importance (grade 5) on all the elements proposed.

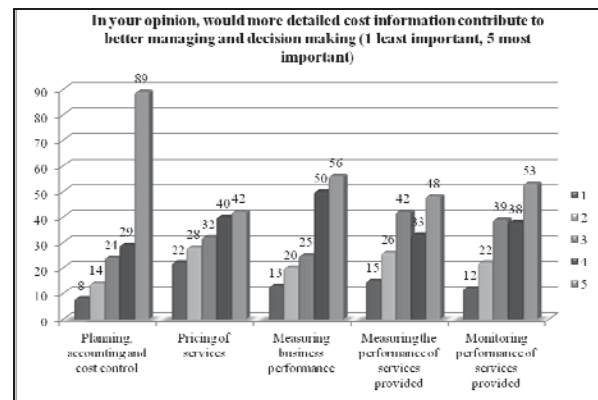


Figure 4.2. Ranking of the importance of cost information

Source: Empirical Research

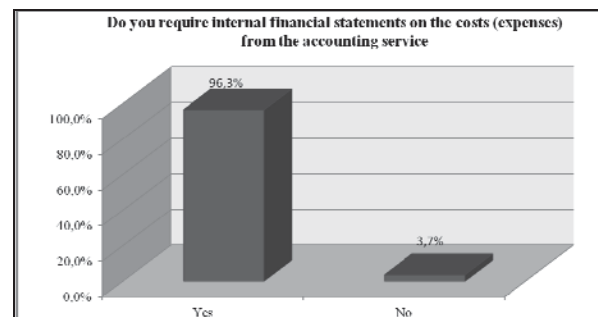


Figure 4.3. Internal financial statements on the costs (expenses) of the budgetary user

Source: Empirical Research

Internal financial statements on the costs (expenses) from the accounting services are required by 96.3% of respondents.

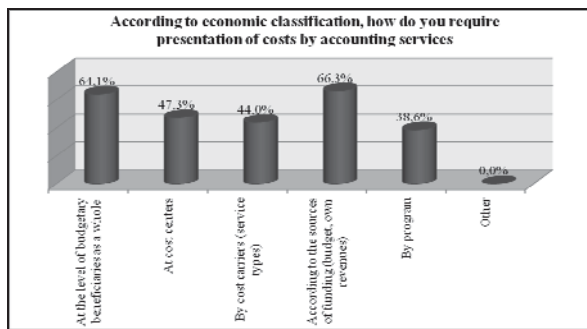


Figure 4.4. Ways of presenting the costs in internal financial statements  
Source: Empirical Research

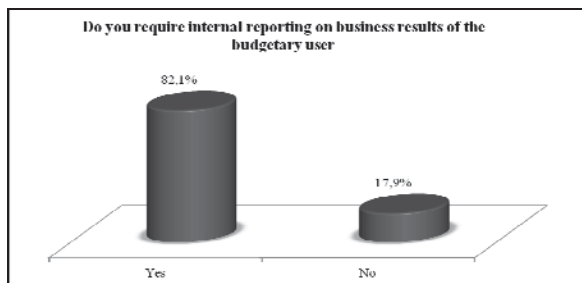


Figure 4.5. Internal reporting on business results of the budgetary user  
Source: Empirical Research

Most of the budgetary users require the cost information by sources of funding, 66.3% of them, and at the level of budgetary beneficiaries as a whole, 64.1%. Less than half of the respondents require the cost information at cost centers (47.3% of them) and by cost carriers (44%), and least of them require the presenting of cost information by programs (38.6%).

A number of 82.1% of the respondents require internal reports about business results. The respondents who require internal reports about the results, require them usually for the budgetary user as a whole, then by the programs, and a smaller number of them require these reports by the service. Four of the budgetary users require reports about the results for cost centers, or organizational units, and only one budgetary

user requires these reports by the source of funding.

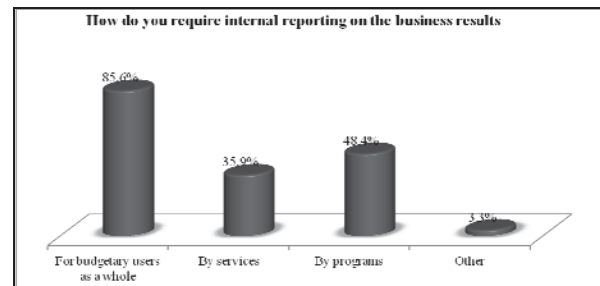


Figure 4.6. Ways of presenting business results in internal reporting  
Source: Empirical Research

Given that the tasks of cost accounting and management accounting are related to planning and calculation of revenues and expenses for the unit of product (or service), quality internal financial statements should include such information. The surface for quality budgetary user management is a relevant and complete information on revenues, costs and business results by cost carriers and programs. The results of this study suggest that Croatian public managers require from their accounting services certain additional information on the revenues and expenditures, but public managers show insufficient accounting knowledge to collect high-quality, relevant and complete information about costs and results by the carriers and programs.

In order to determine the connection between requirements for internal financial statements and the use of cost accounting and management accounting instruments in the process of decision making, a test for the independence of characteristics was conducted using the chi-square test. Testing included the following questions: 1. Do you require internal financial statement on the costs (expenses) from the accounting service? (Figure 4.3) and 2. To what extent the budgetary users apply some of these cost accounting and management accounting instruments in decision making (1 least important, 5 most important) (Figure 4.1) for testing the hypotheses H2 and

H3. Questions: 1. Do you require internal reports on business results of the budgetary user? (Figure 4.5) and 2. To what extent the budgetary users apply some of these cost accounting and management accounting instruments in decision making (1 least important, 5 most important) (Figure 4.1) for testing the hypotheses H4-H6. The null hypothesis contains the assumption that the decision on request for internal financial statements on the costs (expenses) and the application of cost accounting and management accounting instruments in the process of making business decisions are mutually independent, while the alternative hypothesis has the opposite assumption.

Table 4.2. Results of chi-square test analysis

Internal accounting instrument	Critical Value	Chi-Square Test Statistic	p-value
Planning, accounting and cost control	9.487729	22.95889	0.000129
Pricing of services	9.487729	9.268161	0.054735

Source: Author's calculations

With the significance level of 5% *hypothesis H2 is rejected: the decision on the request for internal financial statements on the costs (expenses) and the application of cost accounting and management accounting instruments in the process of planning, accounting and cost control are mutually independent. Hypothesis H3 is accepted: the decisions made by budgetary users are independent on the request for internal financial statements on the costs (expenses) in the process of pricing the services.*

Table 4.3. Results of chi-square test analysis

Internal accounting instrument	Critical Value	Chi-Square Test Statistic	p-value
Business results measurement	9.487729	3.653382	0.454943
Measuring the performance of services provided	9.487729	9.003752	0.061006
Monitoring the performance of services provided	9.487729	14.55802	0.005711

Source: Author's calculations

With the significance level of 5% *hypothesis H4 is accepted: the management of the budgetary user is independent on information about business results in the process of the measurement of business results. Hypothesis H5 is also accepted: the budgetary user decisions are independent on the request for internal financial statements in the process of measuring the performance of services provided. Hypothesis H6: the budgetary user decisions are independent on the request for internal financial statements in monitoring the performance of provided service is not accepted.*

The cost accounting and management accounting instruments are partially represented in the processes of planning, accounting and cost control and monitoring the performance of services provided. The above is consistent with the fact that the area of planning and monitoring is developed and regulated by law, and thus widely represented within the budgetary users.

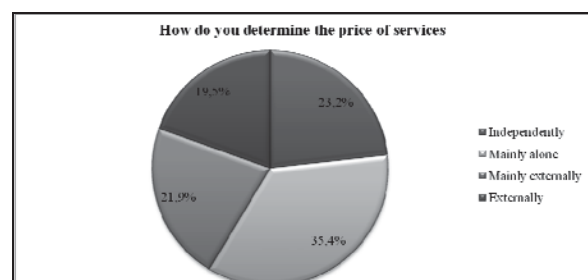


Figure 4.7. Way of determining prices of services

Source: Empirical Research



The answers to the question about the way of pricing services provided by budgetary users suggest that the different budgetary users apply different methods and that there is not a generally accepted form of the determination of the prices of public services. Most respondents determine the price of services mainly alone (58) or totally independently (38). In 32 examines the pricing is carried out externally, and in 36 subjects mainly externally.

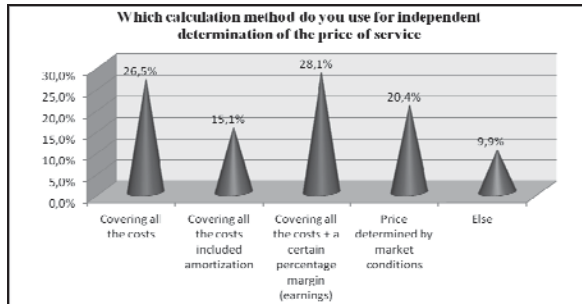


Figure 4.8. Application of the calculation method for determining the price of services  
Source: Empirical Research

Budgetary users that determine the prices of services partially or completely independently use some of the calculation methods. The largest number (37 respondents) of the budgetary users apply the method of covering costs plus a percentage margin. A number of 35 subjects determine the price of services to cover all costs and for 27 subjects price is determined by market conditions.

Twenty subjects determine the service price on the basis of covering all the costs included amortization and 13 subjects in some other way.

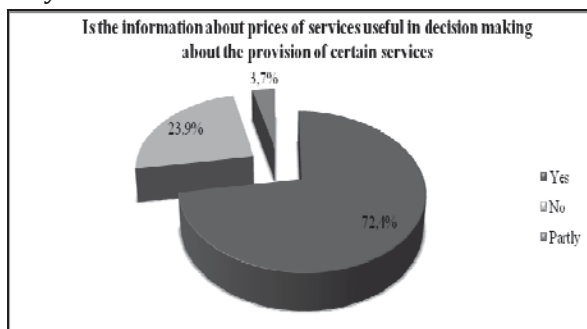


Figure 4.9. Usefulness of the information about the price of service  
Source: Empirical Research

For most of the respondents, information about service price is useful in making decisions about the provision of certain services.

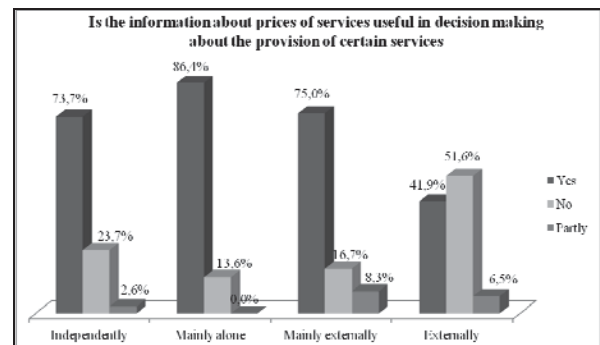


Figure 4.10. Usefulness of the information about prices of services in relation to the way of pricing

Source: Empirical Research

Examinees, who determine the price of services externally, assume that the information about the prices of services do not assist or only partially assist in the process of making decisions about service provision.

The information about the price of service is the most significant for the state budgetary users, and 74.4% of the respondents gave a positive answer. The same response was given by a slightly lower number of respondents, 72.5%, financed from the city or municipal budget, and 68.6% of the budgetary users financed from the county budget.

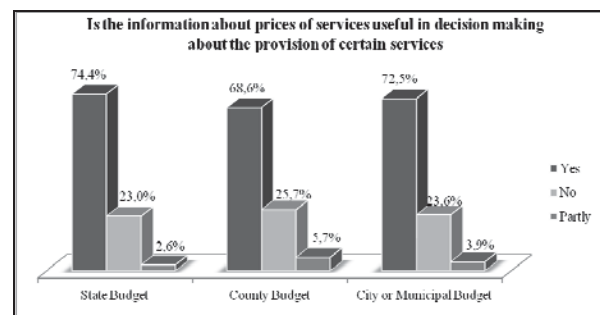


Figure 4.11. Sources of financing and the usefulness of information on service price  
Source: Empirical Research

## 5. CONCLUSION

Effective budgetary user management and successful execution of tasks is the result of

the quality decisions made by public managers, which are determined by relevant, timely and complete information. For public sector managers, the key role in making decisions is given to accounting information contained in internal and external financial statements of the budgetary users. External financial statements provide information about the financial position, business performance and changes in the budgetary user financial position. The information contained in external financial statements is related to the past as the result of previously incurred business events and public sector managers' past decisions. In contrast, internal financial statements try to provide information aimed to the future and future events that will be the basis for the assessment and the prediction of the level of resources necessary to carry out the already initiated budgetary user activities and programs. The key role of internal accounting and internal financial reporting is to supply public management with cost information on the basis of which they can: make decisions on the public services prices, facilitate the process of budget planning for future periods, provide program assessment, measure the performance of individual programs, and allocate public resources more rationally and equitably.

In order to test the initial hypothesis about the insufficient development of internal reporting in the Croatian budgetary system, the paper presents the results of the empirical research conducted on the selected sample of budgetary users. Respondents were asked about the importance of internal financial statement for decision making as well as their opinions on the need for developing internal reporting in order to offer quality business management.

The hypothesis that request for internal financial statements on the costs and the application of cost accounting and management accounting instruments in the process of planning, accounting and cost control are mutually independent, is dismissed. Further-

more, the hypothesis that decisions made by the budgetary users are independent on the request for internal financial statements on the costs (expenses) in the process of making decisions on the services pricing is accepted. The hypothesis that budgetary user management does not depend on the information about business results in the process of measuring business results is also accepted. The results of the empirical research show that hypothesis by which the budgetary user decisions are not dependent on a request for internal reporting in the process of performance measurement of provided services is accepted. The hypothesis that the budgetary user decisions are independent with the request for internal reporting in monitoring the performance of provided services is rejected.

Public managers are partially familiar with the cost accounting and management accounting instruments. Namely, public managers use the information provided by internal financial statements in planning, calculating and controlling costs as well as in measuring outcomes. However, the same information is insufficiently used in the pricing of services, performance measurement and performance monitoring. The conclusion is that public managers require certain internal financial statements, but they are only partly familiar with the system of internal accounting and internal financial reporting to recognize the benefits it provides, and to use it successfully in budgetary user management. Internal reporting as the basis for making quality budgetary user management decisions is insufficiently developed in Croatia and is used only in the process of making daily and operational decisions. Public sector managers are of the opinion that detailed cost information could contribute to better management and decision-making and that in order to increase budgetary user efficiency, appropriate cost accounting and management accounting instruments need to be developed

as well as internal reporting with the focus on the comprehensive monitoring of past, present and future events.

Since this study has included budgetary users from all state functions, it would be very useful in future research to investigate the role of internal financial statements in budgetary user management separately by individual state functions and thus explore possible similarities and differences in the management of individual budgetary users, the representation of cost accounting and management accounting instruments and the way of pricing services provided by budgetary users.

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## REFERENCES

### Books

1. Budimir, V. (2011) *Računovodstvene informacije i mjerenje uspješnosti u funkciji upravljanja proračunskih korisnika*. Doctoral thesis. Zagreb: Faculty of Economics and Business.
2. Dražić Lutilsky, I. (2006) *Informacije o troškovima u funkciji upravljanja javnim sektorom*. Doctoral thesis. Zagreb: Faculty of Economics and Business.
3. Gulin, D. et al. (2006) *Računovodstvo trgovačkih društava uz primjenu MSFI/MRS i poreznih propisa*. Zagreb: Hrvatska zajednica računovođa i financijskih djelatnika.
4. Gulin, D. et al. (2010) *Računovodstvo*. III. izmijenjeno izdanje. Zagreb: Hrvatska zajednica računovođa i financijskih djelatnika.
5. Habek, M. and Peršić, M. (1995) *Menadžersko računovodstvo*. Zagreb: RRIF plus.
6. Kaplan, R. S. and Atkinson, A. A. (1998) *Advanced Management Accounting*. New Jersey: Prentice Hall International.
7. Peršić, M. and Janković, S. (2006) *Menadžersko računovodstvo hotela*. Zagreb: Hrvatska zajednica računovođa i financijskih djelatnika.
8. Vašiček, D. (2004) *Učinci izbora računovodstvenog koncepta na kvalitetu financijskih izvještaja proračuna*. Master thesis. Rijeka: Faculty of Economics.

### Journal articles (printed journal article)

1. Budimir, V. (2010) Mjerenje uspješnosti poslovanja proračunskih korisnika. *Riznica*. 5(7), pp. 14-21.
2. Hočevar, M. (2004) Kako poboljšati računovodstvene informacije za poslovno odlučivanje. *Računovodstvo, revizija i financije*. 14(4), pp. 23-35.
3. Vašiček, V. (2006) Stanje i pravci primjene računovodstva troškova u javnom sektoru. *Riznica*. 1(4), pp. 2-7.

### Conference Papers

1. Peršić, M. (2009) Interni obračun i upravljanje troškovima u javnom sektoru. In *Zbornik referata III. Konferencije Hrvatski javni sektor – u aktualnim gospodarskim uvjetima*. Opatija, Friday 2<sup>nd</sup> to Saturday 3<sup>rd</sup> April 2009. Zagreb: Hrvatska zajednica računovođa i financijskih djelatnika, pp. 253-271.
2. Vašiček, D. (2009) Računovodstvo u funkciji menadžmenta u javnom zdravstvu. In *Zbornik referata III. Konferencije Hrvatski*

- javni sektor – u aktualnim gospodarskim uvjetima*. Opatija, Friday 2<sup>nd</sup> to Saturday 3<sup>rd</sup> April 2009. Zagreb: Hrvatska zajednica računovođa i financijskih djelatnika, pp. 313-338.
3. Vašiček, V. (1997) Računovodstvena osnova kao determinanta oblikovanja financijskih izvještaja proračuna. In *Zbornik XXXII Simpozij Hrvatske zajednice računovođa i financijskih djelatnika: Računovodstvo, financije i revizija u suvremenim gospodarskim uvjetima*. Pula.
  4. Vašiček, V. (2000) Perspektiva primjene načela nastanka događaja u proračunskom računovodstvu. In *Zbornik XXXV Simpozij Hrvatske zajednice računovođa i financijskih djelatnika: Računovodstvo, financije i revizija u suvremenim gospodarskim uvjetima*. Pula.
  5. Vašiček, V. and Dražić Lutilsky, I. (2007) Financijski izvještaji u funkciji upravljanja javnim sektorom. In *Zbornik referata VII. Međunarodni simpozij „Reforme u BiH – Put ka europskim integracijama“*. Sarajevo: Revicon, pp. 593-618.
  6. Vašiček, V. and Vašiček, D. (1998) Prednosti i nedostaci novčane računovodstvene osnove u proračunskom računovodstvu i računovodstvu neprofitnih organizacija. In *Zbornik XXXIII Simpozij Hrvatske zajednice računovođa i financijskih djelatnika: Računovodstvo, revizija i financije u suvremenim gospodarskim uvjetima*. Pula.
- [sector-accounting-standards-board/studies-and-research-reports](http://web.ifac.org/publications/sector-accounting-standards-board/studies-and-research-reports) [Accessed: 12 January 2011].
2. IFAC – IPSASB (2011) IPSAS 1 Presentation of financial statements. [Online]. Available from: <http://web.ifac.org/publications> [Accessed: 11 April 2011].
  3. Narodne novine (2007) *Podaci iz registra korisnika proračuna*. Croatian Official Gazette 81/2007. [Online]. Available from: [http://narodne-novine.nn.hr/clanci/sluzbeni/2007\\_08\\_81\\_2536.html](http://narodne-novine.nn.hr/clanci/sluzbeni/2007_08_81_2536.html) [Accessed: 12 January 2011].

## NOTES

<sup>1</sup> Professor Vesna Vašiček, Ph.D., Ivana Dražić Lutilsky, M.Sc. and Hrvoje Perčević, M.Sc. participated in the project. The study was conducted on the sample of 123 of budgetary users. The questionnaire contained 24 questions (Dražić Lutilsky 2006, p. 174-192).

<sup>2</sup> The study was conducted in 2006 for the purpose of writing a doctoral thesis. The survey was conducted at the higher education institutions in two ways because it was sent to the vice dean for finance and to the accounting managers. 17 vice deans and 25 heads of accounting responded to the questionnaire. The questionnaire comprised six sets of questions (Dražić Lutilsky 2006, p. 193-287).

<sup>3</sup> The survey was conducted during 2007. The selected sample consisted of 36 hospitals in Croatia (Vašiček 2009, p. 313-338).

<sup>4</sup> For the purpose of this study, respondents were asked about the number of employees and available annual revenues. The survey results are based on the analysis of collected responses from different sizes of the subjects (Budimir 2011, p. 94-101).

## Website

1. IFAC – IPSASB (2000) *Study 12 Perspectives on Cost Accounting for Government*. [Online]. Available from: <http://web.ifac.org/publications/international-public->