THE EFFECTIVENESS OF REPLACING ACCRUAL INSTEAD OF CASH BASE IN THE PUBLIC SECTOR ACCOUNTING AND BUDGETING

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ABSTRACT

Due to the economic crisis in recent years, one of the major issues in all countries has been the prevention of the crisis and poverty. It must be admitted that the public sector accounting can play a key role in relation to this matter through effective allocation of resources. In this regard, the public sector accounting as the ex post recording and reporting of financial operations of government that represents the general management trend in public sector entities is placed at the center of public attention and then reforms in this sector seem mandatory. So, since 1980 it has been on the agenda of major international organizations. Reforms focused mainly on modifying the state budgeting and accounting principles from cash flow to accrual basis. In accrual accounting, economic transactions and events are recognized as expense and income regardless of the timing of the related cash receipts and payments. Although the countries to improve public accounting information in state budgeting were often faced with challenges for the move from cash to accrual accounting principles, however, financial and economic crisis showed that the accrual accounting leads to the transparency in state budgeting. Therefore, in order to evaluate the relationship between the implementation stages of accrual accounting and government budgeting principles, this paper reviews the nature, advantages and disadvantages of accrual and cash accounting systems; the possible models of connection between accounting and budgeting; the need and process of reforms in the public sector budgeting and accounting system. At the end 3 different models of public sector accounting and budgeting (Slovenia, Croatia-Serbia) are also analyzed. No doubt the above assessment of the accounting and budgeting models can be useful for other countries.

Keywords: Accounting Reforms, Public Sector Accounting, Accrual And Cash Accounting And Budgeting

INTRODUCTION

In the second half of last century, radical changes took place in the management tools, information technology, ways of decision-making, performance measurements, accounting procedures, accounting systems etc. These changes were more transparent in the private sector in comparison with the public sector. No one would expect the private sector to manage, make decision, measure the performance, and use accounting procedures and practices as it did in the beginning of last century. In many parts of the public sector, especially central government, they are still using the management tools, accounting systems, accounting procedures, accounting standards, and performance measurements that have been used for more than a century ago. Although a few countries have implemented radical reforms in different levels of the public administration (such as: New Zealand, UK, Australia and Canada), in order to improve management efficiency and effectiveness, most of the countries do not use the new management tools, and the more informative accounting systems. The reason is that they are convinced that the new tools and the more informative accounting systems are appropriate for business organization, which aims at making profit. And this is not the aim of the public sector, which aims at serving the public interest.

In short, the governments are requested to be efficient and effective. This means that there should be emphasis on strategic control of spending and priority setting; and the facilitation of greater efficiency and effectiveness through delegation of management authority with accountability for results. In order to achieve that, the decision-makers in all levels in the public sector need a more improved and useful
information. This, in turn, requires from the government to perform radical changes in the public administration system. Basically, accounting as an information system plays an important role in whatever reform process any government entity would want to undertake. Thus, the move from cash to accrual accounting is an important step in developing the government accounting and budgeting system. In the past there was one unbreakable rule: "Do not spend more cash than Parliament has allocated unto you." The reform process entails a concerted move away from that mindset. The new focus is on contributing to outcomes within specified operating and capital budget. In addition, government should be positive and open with its public by not limiting the amount of information that reveals about its own performance. Therefore, the government should give greater attention towards developing more business-like reporting system within public sector. This in turn can contribute towards more transparent and informative public accounts and greater efficiency in the management of public resources. In this context, government accounting system has to be able to provide appropriate information for decision-making process. On the one hand, the accounting information has to be useful to politicians to choose the objectives and on the other hand, it has to be useful to managers to design the strategy in order to achieve the objectives (Gimeno, 1997).

The aforementioned radical changes in the public sector were a consequence of several reasons:

• The challenges arising from global economic integration are one of the essential reasons underlying these radical changes. Globalization is exerting great pressure on the governments to make fundamental changes to the administrative systems, accelerate enterprise reform, and open up the financial system to foreign competition (Fulin, 2001). Globalization demands a public sector that is responsive to an increasing competitive environment. It also demands that governments and public bodies harmonize their goals. Harmonization may ensure that economic development is not stifled and instead provides stimulus for the creation of improved standard living. Therefore, there is an increasing need for proper determination of how public resources are allocated and for monitoring the effective use of these resources. In short, the rapid integration of the world economy through increased trade and investment (an integration which has been fueled by new technologies, spread of information and the growing importance of knowledge-based industries) provides the potential for opening up new age for human development.

• Another reason for public sector reforms in the last two decades has been global economic crisis. In New Zealand, for instance, the major public sector reforms that began in 1984 were integrally linked with the economic crisis and the conditions leading to it, as well as with political change - namely the election of the labor government in 1984. Following the election in mid-1984 the incoming government faced an economy with an extended history of slow economic growth, high fiscal deficits, high debt including substantial liabilities resulting from various guarantees given by previous governments.

• Yet another reason is, the pressure that is exerted by the international financial institutions, such as International Monetary Fund (IMF) and World Bank (WB), on most countries to make the required economic reform, including the public sector reform. This pressure can be more observed in underdeveloped and transitional economies where international organizations require particular accounting innovations to be effected as a sine qua non of assistance being provided (Ouda, 2003).

• Finally, increasing the international experience with respect to the public sector reform will result in stimulation of other countries, which have not started yet with the public sector reform, to follow this trend.

As a result of the aforementioned reasons, it can be concluded that although a lot of countries use traditional accounting and budgeting system (cash-based system), this system cannot present the necessary information to an effective government and the public sector reform (accounting and budgeting) is a must. It will take place whether the countries want it or not. It is a matter of time where some countries have the ability to quickly response to the external and internal events and other countries take some time to response, but in the end they will follow. Therefore, it is necessary to have better information and understanding about the different types of accounting and budgeting systems and their
impacts on the public sector, in order to know which accounting system can present useful information to help the government be responsive and make decisions effectively about budget. Therefore, in order to evaluate the relationship between the implementation stages of accrual accounting and government budgeting principles, this paper reviews the nature, advantages and disadvantages of accrual and cash accounting systems\(^1\) the possible models of connection between accounting and budgeting\(^1\) the necessity and process of reforms in the public sector budgeting and accounting system. At the end three different models of public sector accounting and budgeting (Slovenia, Croatia-Serbia) are also analyzed. Perhaps this evaluation of accounting and budgeting models can be useful for other countries. The structure of the paper is as follows: section 1 discusses the conventional and common systems of government budgeting and accounting, section 2 deals with models of connection between accounting and budgeting, the need and process of accounting and budgeting reform in the public sector, section 3 tackles the three different public sector accounting and budgeting systems (Slovenia, Croatia-Serbia) and conclusion is presented in section 4.

**COMMON SYSTEMS OF GOVERNMENT BUDGETING AND ACCOUNTING**
IFAC-PSC (International Federation of Accountants – Public Sector Committee) identifies four different bases of accounting: cash, modified cash, modified accrual and full accrual.
A modified cash accounting system recognizes transactions and other events on a cash basis during the year, but it also takes into account the unpaid accounts and/or receivables at year’s end. In fact, the books are held open for around a month after year end while a modified accrual accounting system recognizes transactions and other events on an accrual basis, but certain classes of assets or liabilities are not recognized. A typical example is the expensing of all non-financial assets at the time of purchase. (Christiaens and Reyniers, 2009)

But there are other two basic accounting methods used to determine when and how to report income and expenses in the books: full cash method and full accrual method. These methods represent two end points on a spectrum of possible accounting and budgeting bases that differ only in the timing of when transactions, including sales and purchases are counted to accounts. Because of the importance of the full cash and accrual methods, they are detailed in this part.

**Cash accounting**
Here, first the concept and nature of cash flow accounting system and then its advantages and disadvantages are explained.

**The nature of cash accounting**
Currently, OECD countries use the traditional cash basis accounting for their public sector activities. Based on the cash method, expenses and revenues are not recognized unless payment has been made in cash. According to the fiscal rules as long as the cash receipt and payment are different this method can not provide appropriate information for users. This system also does not provide complete information about the public entity's assets and liabilities because in this method the balance sheet has no information but the cash left.
Cash accounting principles have undoubtedly many restrictions because the assets, liabilities, obligations and cash flow are not reported. Asset purchases are reported as expenditures at the end of the financial period but they are not reported in the financial statements. On the other hand cash payments are reported as expenses on the date of debt payment. so:
- Assets are not reported
- There is no debt
- There is only capital and cash
- receipts and payments are reported as expense and income.
As a result of using a cash accounting basis, no information about the true financial position of the government agency can be presented at the end of the fiscal year. In addition, since changes in the financial condition are not reported, therefore, a true and correct view of the financial position of the government can not be presented based on cash accounting system. Generally, it can be said that in a cash accounting system, transaction books merely reflect cash receipts and payments without any recording of accounts, the sums getting quit or not paid claims and debts in the intended period. In this system, preparing financial statements and providing information about the cash receipts and payments take place during the fiscal period in question and the government units and agencies can use the resources in terms of allocated budgets (Rafii, 2008)

The advantages of cash accounting
A number of the cash accounting advantages include:
-It is simple, relatively cheap and easier to understand than accrual-based accounting;
-The estimates on cash basis are meeting the requirements, which are placed by the control function;
-As a result of its widely use, it facilitates the international comparison of the budgets and accounts;
-It provides useful data that permit analysis of the monetary impact of fiscal transaction and facilitates review and assessment of the cash position (United Nations, 1984).
-It produces the same data as accrual basis when expenditures are mainly for salaries, travel and for goods and services which are received, paid for and consumed within a fiscal year.

Of course the essential point is not whether the accounting system is simple, easy to understand, cheap or objective, it is the extent to which it provides the required and useful information that satisfies the users needs. This will lead us to pose the following questions: Does cash basis, in accordance with the above-mentioned advantages, provide effective information which can lead to an effective management of government programs, activities and for result assessment? What are the problems that arise by the use of cash accounting in governmental entities?

The disadvantages of cash accounting
There are important shortcomings in cash-based government accounting system:
• One of the main shortcomings of the cash basis of accounting is the fact that it fails to provide governments with complete information on all the total liabilities which take place in a given year (IFAC 97). Under a pure cash basis of accounting, no liabilities are recognized.
• Under the cash basis of accounting the revenues will only be recognized in the financial statements in the period in which cash is received. However, the cash receipts do not make distinction between current receipts and capital receipts. So an excess of receipts over payments cannot be called income because receipts might encompass capital receipts. This will result in that the revenues, which are earned in a given fiscal year, are not known.
• No information on the total cost of services is provided. Under the cash basis of accounting, it is difficult to know how much resources have been consumed in carrying out the operations during the accounting period (operating costs).
• The total value of stocks is not disclosed. Cash-based accounting system does not present information regarding the value of stocks that are consumed during the fiscal year or the stocks, which are still existed at the end of that year. This is because the accounts are not concerned with recording the usage; they are rather concerned with the cash outflow, which has been paid for purchases. As a consequence, there are no stock adjustments, stock valuation and stock measurement.
• No information on the total assets is provided. The elements, which are included in the financial statements under the cash-based accounting system, are cash receipts, cash disbursements and cash balances. Accordingly, there is no information provided on the total assets (financial and physical).
• The cash-based accounting is inadequate for control purposes Cash accounting is not a complete accounting system and its internal control is very weak.
Cash-based accounting system is not cost effective. According to the nature of cash-based accounting, items such as fixed assets, creditors, commitments, debtors, payroll cannot be integrated into one system, where this system includes only cash receipts and cash disbursements. On the other hand in order to get information on items such as creditors, debtors, and commitments, etc. there should be other separate accounts used.

It gives rise to a deliberate manipulation. Finally, one of the greatest limitations of cash accounting relates to the potential for deliberate manipulation of the accounts to produce preferred results (Jones & Pendlebury 1984). For example, the real spending of a department or services might be the same under whatever system of accounting is adopted but in a given year, using cash accounting, the cash payments could be postponed by as little as twenty-four hours so that the accounts record a lower figure.

The accrual accounting
In this part the same as the section related to cash accounting, first the concept and nature of accrual accounting system, and then its advantages and disadvantages are explained.

The nature of accrual accounting
Accrual accounting is an accounting methodology under which transactions and other events are recognized as they occur (regardless of the timing of the related cash receipts and payments). So transactions and the events as the ex post recording of accounting are recognized in financial statements of the related period. According to accrual base the recognized elements include assets, liabilities, surplus assets, incomes and expenses.

Accrual accounting in public sector emphasizes on better management of assets, including better maintenance, more appropriate replacement policies, identification and disposal of surplus assets, and better management of risk such as loss due to theft or damage, the identification of assets in the delivery of services, and encourages managements to consider alternative ways of managing costs and delivering services. Therefore, accrual accounting provides a broader measure of overall fiscal stance than cash accounting.

Accrual reporting also enhances the quality of decision-making through improved balance and accuracy of macro-economic forecast and monitoring of the composition of fiscal accounts. Because it provides a longer term perspective for fiscal policy implications, and is more consistent with conventional accounting used in the private sector, credit agencies and financial markets also support it. Overall, accrual framework enhances confidence and transparency, and contributes to faster economic growth, it can also be useful in interpretation of information. Generally, accrual accounting means:

- Providing a necessary platform for using the facilities related to supplying of budget finance and guarantee of fund to major projects;
- Preparation and implementation of significant operational budget for exact forecasting of revenues and costs, and creating the opportunity for the saving and reducing the cost of the projects;
- Access to accurate and comprehensive management information for the allocation and use of resources available;
- Transparency and clarification of revenues, expenses, assets and inventories via the recording of all financial events;
- Reflection of all the financial operations in legal books and enabling a drastic reduction of corruption;
- Cost transparency and clarification of services in the serving process;
- Ability to provide transparent financial reporting to auditing organization for accounting and auditing comment.

The advantages of accrual accounting
The accrual accounting has many advantages, including:
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• Fast access to the comprehensive, accurate, complete information about the current status of the organization;
• Ability to recognize the needs to be spent, based on the accurate information of resources and requirements;
• Determining the extent of revenues not collected in each fiscal period and making possible plans for achieving them;
• Access to full and accurate information about revenues and costs of any period (both cash and non-cash);
• Ability to establish a relationship between costs and their performance by which a context is created for the discussion of operating budget;
• Ability to determine the break-even point of revenue and cost per period, along with comparison of incomes and expenses for each period and the results of their purchase;
• Ability to calculate and record the depreciation as the period costs;
• Access to essential information for planning and management controls;
• Ability to determine the cost of each project using data from the accounting system;
• Ability to assess more accurately the proportion of supporting units required to operating units and determine the relevant proportion between them and also their annual assessment;
• Ability to measure accountability of organization authorities and managers and evaluate their performance at the end of each period and at different organizational levels;
• Having knowledge about the extent and value of inventory and assets of the organization with a record of material holdings and fixed assets such as property, machinery and equipment in the accounting system;
• Ability to assess and reflect all assets acquired, including the purchase or transfer for other organization rights based on the associated principles;
• Ability to compare the current situation with the ideal situation and the appropriateness of the institution's mission from point view of resources, assets and services;
• Making a correct and more accurate information and financial reports available to managers for decision making and planning and other operations;
• Determining the actual revenues and costs of the fiscal period and using the result of the correct financial activities and real financial situation at the end of the year by the government-profit institutions. (Secure processing world company, 2013).

The disadvantages of accrual accounting

Although accrual framework enhances confidence and transparency, and contributes to faster economic growth, but it can also give rise to false interpretation and manipulation of results (Tudor and Mutiu, 2006). The reality is that accrual accounting system in most cases does not offer better solution to important issues such as allocation of resources or common costs among programs and in fact it may lead to incorrect or confusing information for users of financial reports. Because many issues related to the potential benefits of accrual accounting system reforms, including asset evaluation methods in the public sector remain unresolved. This theory has been repeatedly emphasized that the proposed definition of assets according to their economic interests may not be appropriate for many of the assets controlled by the public sector. It is not an appropriate monetary assessment for assets such as art collections, school buildings, museums, roads, bridges, libraries, public property, parks and public buildings. (Secure processing world company, 2013) The Association of Charted Certified Accountants and IMF have also expressed their doubts considering the necessity and rationality of accrual based accounting.

After examining the nature, advantages and disadvantages of major accounting systems in this section, it is deserved to discuss the models of connection between accounting and budgeting, the need and process of accounting and budgeting reform in the public sector.
MODELS OF CONNECTION BETWEEN ACCOUNTING AND BUDGETING, THE NEED AND PROCESS OF ACCOUNTING AND THE BUDGETING REFORM IN PUBLIC SECTOR

In this section, in addition to presenting the possible models of connection between accounting and budgeting systems, traditional and accrual budgeting systems are reviewed using cash and accrual accounting systems. In the following, the need and process of accounting and budgeting reform in the public sector are also analyzed.

Models of connection between accounting and budgeting

How to create the connection between the accounting system and the budget (Roje, 2007) believes that public sector accounting system affects financial reports of public law units whereby put the state budget in effect. It is believed that there are three possible models of connection between accounting and budgeting in the international context:

- the accounting system is limited to the registration of budgetary operations which means that the financial accounting is limited to the budgetary information and only the transactions that affect the budget are registered (i.e. Germany);
- the budgetary system and the accounting system are connected which means that the connection between accounting and budgetary information is established in such a way that the accounting system allows the monitoring of the budget. Therefore, given that the resources are allocated through the budgetary process, the budget is converted to the primary instrument for accountability i.e. Italy, Portugal, France, Romania and Spain (Rahmani and Rezaï, 2011)
- the budgetary and the financial accounting systems are two independent systems which means that there is no connection between the budgetary and the accounting information, so that on the one hand accounting statements are produced and contained in the financial report, and on the other hand budgetary statements are produced to fulfill legal requirements. The public institutions produce the financial information presenting the same statements as the business entities, without taking into account budgetary obligations.

The cash accounting and traditional budgeting system

Currently, many countries still use the traditional budgeting system. The traditional budget is designed to ensure legislative control over the expenditure of public money. However, it does not indicate the relationship between the expenditure and results, and this prohibits the formulation and execution of economically meaningful budgetary policy. Moreover, it prevents proper political choice among objectives and rational allocation of resources as well as limiting the public understanding of government activity (Wilenski 1982). This budget is a short term process that makes rational planning more difficult. It stresses inputs rather than outputs and controls only the inputs, this in turn, results in inhibiting the ability of the managers to flexibly manage resources to achieve program objectives., so this budget system does not satisfy the information needs of the efficient and effective government. In short Cash-based information alone does not provide indication of long-term fiscal strength and the relationship between revenues, expenses and changes in net worth, and the tradeoff between the burdens of current and future taxpayers. Furthermore, the cash-based government accounting does not provide the users with complete and comprehensive financial information that they need for decision making purposes and does not assist to a great extent in discharging the accountability. The above contents indicate the need to reform the accounting and budgeting systems in the public sector.

Accrual accounting and budgeting system

Full accrual budgeting means that budgets and allocation of resources are done using accrual accounting figures. The difference between cash and accrual figures can be important.
If accrual budgeting system is elected for the allocation of cash resources, it seems there will exist a special paradox in measuring the cost of programs at the inflation. In fact, it may be argued since cash

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resources are allocated by the community and the parliament to be given the government for presenting services to the community, the budgeting based on accrual base does not meet the requirements of the government accountability.

Terms such as "surplus of budget" or "deficit of budget" are powerful political symbols. If the politician reduce the deficit of budget or balance, they can claim success. There are some controversies between accountants and managers about defining of the budget deficit. Figures may reflect the results of cash transactions, but borrowings will be ignored. The calculation of budget deficit or surplus is affected by the method that the state records capital or current expenditure as well as accounting systems by which it is reporting.

Traditionally, government officials allocated the budget on the cash basis. But, recently, it has been suggested that this situation is changed to the accrual basis in order that the costs such as depreciation or deferred employee salary can be considered in the annual budget. This resulted in an emphasis on resource allocation based on accruals rather than cash by Parliament.

**The need for accounting and budgeting reform in the public sector**

As pointed out in section 2, cash accounting is not an informative accounting system and as it does not underpin the development of government accounting and budgeting system, hence, it is not relevant for an efficient and effective government. So, at the world level because of the shortcomings of this system were likely to cause concerns about the performance of governments in many many ways in all the countries that used the cash basis reporting and budgeting for public sector until the 1980s. The concerns can be include the following cases:

- the growth rate of government activities;
- massive increase in government debt;
- the need to increase transparency and accountability to citizens about the activities of government;
- Question about the nature of the information provided by governments to help in making appropriate decisions.

In order for the government accounting system to be relevant for an efficient and effective government, it should be an informative accounting system. Namely, it should provide the information that can demonstrate the accountability of government for the financial affairs and resources entrusted to it, and be useful for decision-making. In short, government accounting should disclose the total physical and financial assets, total liabilities, the net worth, expenses and revenues, and to what extent the economic resources were used in an efficient and effective way, and to what extent the fiscal policies are in the interest of both current and future taxpayers. Therefore, there is an urgent need for additional information, one of the important accounting reforms, which merits serious consideration in providing additional information for policy formulation, management and control of resources and effective audit is the use of accrual accounting. In addition to an accrual accounting system, the government would also need an accrual budgeting system so that actual results can be measured against plans and budget. The accounting system would need to be on the same basis as the budgeting system to avoid the possibility of conflicting objectives.

So in order to innovate the government accounting and budgeting system, there is an urgent need for:

- A shift from cash accounting to accrual accounting system; and
- A shift from traditional (line item) budget to program-performance budget, in other words, from cash budget to accrual budget. (In short: from cash accounting and budgeting system to accrual accounting and budgeting system).

Thus, for the revolution in the public sector, the upward changes in accounting and reporting were created and the formulating institutions of the public sector accounting standards came into existent in the developed countries. For example: Governmental Accounting Standard Board and Canadian Institute of Chartered Accountants were established in the U.S. and Canada respectively.
The process of accrual accounting evolution

In the last 20 years we have witnessed a radical wave of organizational, managerial and accounting reform in the public sector of many countries and jurisdictions. The public sector accounting reform is the part of the general public sector management reform recognized as the concept of New Public Management (NPM). The public sector has been subjected to transformations in order to enhance the efficiency and accountability of public service delivery. This idea of striving for a rational economics defines business point of view in government necessitated the abandonment of the traditional cash accounting system and the introduction of accrual accounting systems that had been transferred from the profit sector (Burkitt and Whyman, 1994; Broadbent and Guthrie, 1992; Barton, 2004). The public sector accounting reform presents the idea of transferring the accounting from cash flow to accrual principles. Government accounting reform is a shift from a cash flow and cash balances concept to a total-economic resources concept. Namely, it is an extension of measurement focus to encompass the total economic resources of governmental entities instead of only concentrating on the cash resources. An extensive international study (Lüder and Jones, 2003) focusing explicitly on governmental accounting reforms in several European countries and European Commission, pointed out that the accounting reforms consist of introducing accrual accounting in governmental organizations. Regarding the development of accrual accounting Chile is the first country that introduces accrual accounting for public sector entities in the early 1970s and New Zealand followed this matter in 1990. But unlike New Zealand that has implemented abrupt change method, other countries preferred gradual change. For example, in the U.S. generally accepted accounting principles (accrual accounting), have been accepted only in some states. In the U.S. and Australia, the change of the accounting basis happened in 1997, but these changes occurred only at the level of central governments but more recently some changes have been made at the level of local governments too. Canada also began to change the public accounting basis in 2001 and 2002. Public sector accounting and auditing association of certified accountants in Canada after 25 years of the establishment of a modified accrual basis, from the first of April 2005, has obliged the use of full accrual accounting basis for preparation of financial statements for state, federal, local government. In the early 1990s (1993), Bourn made the method of change from the cash to accrual accounting

Basis of New Zealand as a model for England. Britain adopted accrual accounting in 2000 at the entity level, and prepared the financial statements based on a scheduled plan at the state level (the state as a reporter unit) in 2006. According to the international comparative study by (Brusca and Candor 2002), it can be concluded that in Anglo-Saxon countries, the accrual criterion has predominated in public sector accounting since 2000 while Continental European countries by adopting the cash and the modified accrual systems instead of full accrual accounting system are still in the process of converting to accrual accounting for both reporting and budgeting. (Vašiček et al., 2008)

ASSESSMENT OF DIFFERENT PUBLIC SECTOR ACCOUNTING AND BUDGETING SYSTEMS – EXPERIENCES OF OTHER COUNTRIES (SLOVENIA, CROATIA AND SERBIA)

Countries have different experiences in conducting public sector accounting reforms while the area is very complex and contains many factors that could potentially affect the reform course and the results of the reforms themselves (Vašiček et al., 2008). As undoubtedly assessment of different experiences and models of public sector accounting and budgeting can be useful for other countries that have not started the reforms yet or intend to accomplish reforms in their public sector budgeting and accounting systems. So here 3 different models of public sector accounting and budgeting (Slovenia, Croatia-Serbia) are analyzed.
Slovenia (modified cash principle)
The national framework for the public sector accounting and preparation of financial statements for public sector entities are Public Finance Act and Accounting Act as well as their implementing regulations. Public Finance Act is the legal basis for budgetary and financial planning and execution while Accounting Act enacts the book-keeping (recording) of the transactions caused by budget execution. “The provisions of the Accounting Act shall apply to bookkeeping and preparing annual reports for the 4 main entities; state, municipal budgets, indirect and direct budget users, the Medical Insurance Institute of Slovenia and Institute for Pension and Disability of Slovenia.” (Article 89 of the Public Finance Act). Annual report comprises the balance sheet, the income statements, the notes to the Financial Statements, and business report. The financial statements of the four public finance treasuries in Slovenia are prepared on the principle of cash flow. The financial plans of the state, the municipal and both insurance funds (ZPIZ and ZZZS) prepare, accept and implement according to the principle of cash flow. The Accounting Act on the other hand prescribes accounting for the indirect budgetary users based on the principle of cash flow and the accrual principle as well. In Slovenia direct and indirect budgetary users keep the books and prepare the financial statements according to the cash flow principle, while the indirect budgetary users do both according to the cash but also accrual principle. The duality is used from the enforcement of The Accounting Act, while the double book-keeping causes a lot of additional work, the confusion of the accounting information receivers, the lack of transparency and finally a lot of reporting problems.

The Slovenian public accounting system is the modified version of accounting system based on the cashflow principle. Researching the public sector accounting legislation reveals that the public entities in Slovenia do prepare their financial reports on the cash flow basis but are simultaneously obliged to prepare it on accrual principle in some cases. As the reforming process of public sector (known as Public Sector Management) in general and the public sector accounting is going on for a couple of decades, Slovenia has started to reconsider the possibility of modifying the accounting principles. In the last years all the international professional analyses have exposed the accrual principle on the top of the public sector accounting profession because of the positive effects of this approach.

Croatia (modified accrual principle)
The legislative framework regarding governmental accounting is determined by The Budget act and supplemental set of regulations. The regulations (decrees, instructions, and policies) define and analyze certain parts of The Budget Act more precisely and thus enable faster and easier qualitative adoption of regulated solutions. According to the mentioned regulations all general government entities (central and local government and their component entities, i.e., departments, boards, agencies, commissions, etc.) are obligated by the law to apply governmental accounting and financial reporting model.

The fact that all entities within general government are obligated to this model, assures the complete accounting and reporting on general government activities. Croatia has regulated the uni-form chart of accounts and consistent appliance of rules for recording cash transactions and economic events, with the aim to assure standardized information base for conducting additional data analysis when needed. As far the information on budget (budget planning and budget execution) and accounting and financial reporting is concerned, the appliance of organizational, economic, functional, location and programme classifications of the budget is obligatory.

From 2002 Croatia has established the new governmental accounting system based on accrual accounting principle and finally left behind a cash flow system. This system is a kind of moderated or adjusted accrual principle system in which national public sector accounting standards have not been developed. This is mainly due to the fact that accounting framework in Croatia has been set up as a law-based system.
Serbia (IPSAS on cash flow base)
The legislative framework regarding governmental accounting is determined by The Budget System Act and by Regulation for budget accounting. Regulation for budget accounting specifies the accounting system and Treasury General Ledger defined in article 62. of The Budget System Act. The budgetary accounting includes the conditions and methodology of accounting but also preparation, presentation, submission and publication of financial statements. This regulation applies to the state budget, the budgets of territorial autonomy and local governments, as well as their direct and indirect budget beneficiaries, the Health Insurance, Republic Pension and Disability Insurance Fund and Republic Fund responsible for the employment as well as the beneficiaries of the Health insurance Fund. The budgetary accounting is conceived on the cash flow basis which means that the transactions and other events are recognized when cash is received or payment.
The financial statements should be prepared according to IPSAS – for a cash basis and contain information about the source of the funds collected during a specific period and the purpose for which the funds were used in the cash balance at the reporting date. Budget beneficiaries and mandatory social insurance may keep accounting records for internal reporting purposes on the accrual basis as well, as long as the financial statements are prepared on a cash basis because of the consolidated reporting.
Starting from 2010 the regulation application of international public sector accounting standards referring to Article 75 of the Budget System Law entered into force. It defined that the IPSAS shall apply to keeping books of account and preparation, presentation, submission and disclosure of financial statements of the direct and indirect beneficiaries of budget funds, beneficiaries of compulsory social insurance organizations' funds, the Republic of Serbia budget funds and the budget funds of autonomous regions and local self-government units.

Comparison
The selection of countries for the comparison has not been random. All three belong to the group of ex-Yugoslavia Republics and arise from the common public sector accounting and budgeting system. After the deconsolidation in 90s they have gone their own development path of their political, legal, economic and social system.
The development of their own public finance and all the flanking elements was more or less full of potholes events. The cross section of situation regarding public sector accounting shows that each of them has chosen different accounting method as far as cash – accrual principle is concerned.
Slovenia enforces the cash flow principle based on national accounting rules, Croatia has modified accrual accounting principle and Serbia has adopted cash flow principle based on IPSAS.
Slovenia has not changed its system in the last 20 years but is intensively considering the transition into accrual principle accounting, maybe even IPSAS implementation. The professional public is considering two approaches to accrual accounting transition; the immediate adoption of accrual-based accounting or gradual transition.
The gradual transition should be understood in the manner that in the first phase, all public finance funds continue to use cash-based accounting for preparing their books of account and for recording income and other receipts as well as expenses and other outflows, while all direct and other indirect budget users both at the state and local level begin applying accrual-based accounting methods. Nevertheless which of those the profession will choose, similar steps have to be taken in order to achieve goal; transition on accrual-based accounting. Croatia has gone through different stages and has modified accrual accounting principle in public sector. From 2002 Croatia has had its own accounting framework set up as a law-based system and has not had national public sector accounting standards developed, nor has applied accruals in government accounting system, nor has had IPSAs enacted as obligatory, has complied certain existing accounting procedures with those recommended in IPSAs. The gradual transition from cash to accruals in the government financial reporting lead Croatia towards the introduction of accruals in governmental financial reporting, the reconciliation and eventual consistency.
Review Article

of accounting basis adopted for financial reporting with the accounting basis adopted for the budget, and the reconciliation and presentation of differences between statistics’ reports on public expenditures’ and the amounts in financial statements. Despite the Regulation on application of international public sector accounting standards in Serbia IPSAS have not yet come to use. The professional organizations and consulting firms conduct periodic training of public sector accountants but that seems to be all for now. Discussing public sector accounting in context of improving the government financial reporting towards the accrual based accounting brings inevitable question. What is the final purpose of the improvement of the informative value of the financial reports of public sector organizations? The state budget or the budgetary accounting, indeed. The budget accounting systems of the majority of European countries, including Slovenia, Croatia and Serbia, are based on cash flow principle. Only Australia, New Zealand, Denmark and United Kingdom use accrual budgeting system. The significant trend towards accruals in financial statements of public sector entities has not resulted in accrual budgeting. Many assume that the focus of good fiscal policy must be primarily on cash fiscal aggregates. The others believe that the accrual accounting has often been introduced as an accounting system separate from the budgetary accounting, which remains on a commitment basis and cash or near cash basis. The pragmatic attraction of this is that the wealth of additional data provided in the accrual accounts is just that: additional data. These data do not necessarily change the way that a government functions, not least because the budgets still occupy most people attention when concerned with financial matters.

Table 1: The accounting and budgetary system in Slovenia, Croatia and Serbia (Jovanović, 2013)

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<th>Serbia</th>
<th>Croatia</th>
<th>Slovenia</th>
<th>Criteria</th>
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<td></td>
<td>2010</td>
<td>2002</td>
<td>1999</td>
<td>Enactment date</td>
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<tr>
<td>IPSAS – cash principle</td>
<td>Adjusted (modified) accrual</td>
<td>Adjusted (modified) cash</td>
<td>Public sector accounting system</td>
<td></td>
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<tr>
<td>Regular expenditures and liabilities recognized on accrual basis; revenues generally recognized on cash basis (only certain on accrual basis); recognition of fixed assets causes the expenses in the reporting period in which the purchase was made (are not capitalized).</td>
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<td>The advantages of accrual elements in the system</td>
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<td>Cash flow principle</td>
<td>Cash flow principle</td>
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There is much greater acceptance of accruals for financial reporting than for budgeting purposes. This does not appear to be a temporary snapshot as countries migrate to accrual budgeting but rather a firm view among a number of member countries. Two reasons are most often cited for this. First, an accrual budget is believed to risk budget discipline. The political decision to spend money should be matched with when it is reported in the budget. Only cash provides for that. If major capital projects, for example, could be voted on with only the commensurate depreciation expense being reported, there is a fear that this would increase expenditures for such projects. Second, and somewhat contradictory to the first reason, legislatures have often shown resistance to the adoption of accrual budgeting. This resistance is often due to the shear complexity of accruals. In this context, it is noteworthy that the legislatures in those countries that have adopted accrual budgeting generally have a relatively weak role in the budget process. But we should not forget that the cash accounting does not provide the information about the
assets value that were used and about the incurred liabilities caused by certain decisions. Consequently, the financial statements and the budget do not provide the information about how current spending influences changes in surplus of assets over liabilities. The cash accounting system focuses only on cash flow of the ongoing year. The same reason can be expressed as far as taking the responsibility of the governance is concerned. The more precise reporting about the receipts and expenditures in cash - base accounting could cause only reduction in intelligibility. Finally, we should keep in mind that cash principle cannot provide the information about potential liabilities which influence the deficit of the budget in coming years. Under the cash basis of accounting the revenues will only be recognized in the financial statements in the period in which cash is received. However, the cash receipts do not make distinction between current receipts and capital receipts. So an excess of receipts over payments cannot be called income because receipts might encompass capital receipts. This will result in that the revenues, which are earned in a given fiscal year, are not known. As such it is difficult to evaluate the efficiency of the collection staff, and to discover the losses during the collection process. In addition, under cash basis, receipts and revenues are identical since no difference exists between the time when they are recognized and when they are collected. But under accrual basis, the recognition of revenues is required at the time when they are earned, and the receipts occur when revenues are collected (Jovanović, 2013)

CONCLUSION
The increasing changes in the areas of governance and public sector entities have caused these institutions take the financial and operational accountability of the acquisition and deployment of public resources seriously, and upgrade the level of these responsibilities to the benefit of themselves and citizens as the major right owners. Since the accounting and budgeting systems are of the active and effective systems in the assessment of accountability for using public resources, these systems must be able to provide necessary information for an effective and efficient government. But in recent years, particularly with the economic crisis, it became apparent that traditional cash system could not play its role in relation to this. So the reform in this sector was inevitable. However, before the start of reforms in accounting and budgeting systems for public sector institutions, a scientific study should be conducted to ensure the availability of the necessary context for basic reforms so that from a diversity of accounting practices an acceptable method appropriate with the particular circumstances of a country's public sector institutions can be selected and implemented. Without doubt, comparative international studies and researches done about various models of accounting and budget public sector institutions in different countries can provide a rather proper and effective road map to recognition and selection of the accounting and the budgeting system for the government and this will facilitate their implementation. For the realization of such an approach, this paper analyzes three different models of accounting and budgeting systems of the public sector (Slovenia-Croatia-Serbia) to provide a more appropriate context for assessing and judging about the accounting and budgeting systems by the countries that intend to accomplish reforms in their public sector budgeting and accounting systems as well as the countries that has not started the reforms yet.

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