

Public Sector Accounting: Transparency Issues

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Abstract

Public accounting systems differ among countries so the reform towards harmonization is needed especially for EU Member Countries. The transition from cash-based to accrual-based accounting is necessary in order to provide the wide scope of relevant information to the internal and external users. The objectives of the paper are: to examine the level of conversance with IPSAS (International Public Sector Accounting Standards) among public sector accountants in Croatia, to outline the potential benefits and improvements of accrual principle application, and to determine the implication of increased effectiveness and efficiency of the administrations' actions on greater transparency of financial statements. Empirical research is based on survey addressed to the accountants employed by local government. The findings suggest that accrual principle application in Croatian public sector accounting would lead to the increase of effectiveness and efficiency of the public sector and eventually to the higher level of transparency.

Keywords: Accounting, public sector, EPSAS, IPSAS

Introduction

The public financial crisis in Europe has underlined the need for more rigorous and even more transparent reporting of accounting (and also fiscal) information. The issue of transparency is especially important in the countries that do not apply accrual-based accounting in public sector. Scholars often emphasise many benefits of implementation of accrual-based accounting standards. The main advantages of government accrual accounting given in the literature are (Bergmann, 2012, p. 16): reliable cost and pricing information, stewardship or accountability for assets and liabilities, faster information availability, the provision of forward-looking information, similarity to private sector accounting (which facilitates training and understanding), and also standard-based accrual accounting correlates well with other public sector financial disciplines, such as budgeting or cash

management. Grossi and Soverchia (2011, p. 528) state that accrual accounting is expected to provide more useful information for long-term assessment of public policies' financial sustainability, both for internal use (for cost and price calculation, make-or-buy choices, outsourcing, etc.) and for external use, thus improving government's transparency, accountability and performance evaluation. Proponents of accrual-based accounting also argue that decision-making processes on public resources would be facilitated that can lead to prevention of the debt accumulation increase and improvements in effectiveness and efficiency of the administrations' actions.

On the other side, the literature review (Bergmann, 2012, p. 16) reveals the disadvantages of accrual-based accounting like: significant cost of implementation, increased complexity, the not-for-profit orientation, and low use of balance sheet information made by decision-makers, fear of absence of cash or liquidity information.

The adoption of a full accrual framework in the public sector is differentiated country by country both for budgeting and for reporting phases (Giosi, Brunelli and Caiffa, 2015, p. 297). An increasing demand for the adoption of IPSASs for compatibility and comparability reasons is noticed in the developed countries (Berger, 2012, p. 12). The IPSAS are a set of accrual-based accounting standards for use in public sector entities in preparation of financial statements. The IPSASs could be regarded as a reference model for the reform of governmental accounting in EU (Berger, 2012, p. 12). Being derived from international accounting standards for private sector, IPSAS are not entirely well-suited for public entities so the need for new framework emerged - European Public Sector Accounting System (EPSAS). The EPSAS are being created with the main purpose - to harmonize and unify accounting and budgeting system for all EU Member States allowing comparison of financial indicators and ultimately higher level of transparency.

In the light of potential future reform that will inevitably lead to accrual-based accounting and budgeting, this study explores the views of public sector accountants in Croatia on this matter. The objectives of this paper are threefold:

- 1) To analyse the conversance with IPSAS,
- 2) To explain the expected improvement of the introduction of accrual-based accounting,
- 3) To determine the effect of increased effectiveness and efficiency of the administrations' actions on greater transparency of the financial statements.

The potential benefits of introduction of accrual-based accounting in Croatian public sector could lead to the resolution of transparency issues. Bearing this in mind, the hypothesis is defined as follows:

H₁: Introduction of accrual-based accounting would increase efficiency in public sector that leads to higher transparency of financial statements.

The paper is organized as follows. Next section describes the present regulatory framework of the public sector accounting in Croatia with the focus on potential path of development. Empirical research methodology is elaborated in the third section where the results are discussed before concluding remarks.

Public sector accounting in Croatia – current issues and perspectives

Public sector accounting is often defined as a system which collects, records, classifies and summarises transactions occurring in the public sector entities and provides information to users enabling them to make economic, social and political decisions. Public sector entities are entities that implement public policy through the provision of primarily non-market services and the redistribution of income and wealth, with both activities supported mainly by compulsory levies on other sectors (Jovanović, 2015, p. 792). The public sector entities in Croatia are obliged to apply adjusted (modified) accrual accounting system. According to the current regulation on public sector accounting expenses are defined as decreases in economic benefits during the reporting period, which means that they are recognized at the time of the transaction, regardless of the time of payment (accrual principle). Revenues are defined as an increase in economic benefits during the reporting period in the form of inflows of cash and cash equivalents so the recognition of revenue retained at cash concept. The adjusted accrual accounting principle is marked by the following (Dražić Lutitsky and Dragija, 2012):

- The costs of procuring a fixed asset are not capitalized and they are not systematically apportioned on a time or functional basis as expenses during the period of useful life. Therefore, the annual amounts of depreciation are not calculated and the cost of the asset becomes an expense of reporting period when the asset is purchased. This principle applies also to advances that have been given in the process of procurement as well as investments in progress regardless if the process of procurement is not completed, or that asset is not ready for use.
- Increase in assets during the procurement fixed non-financial assets without the costs (capital received donations) are not recognized as revenue but directly increased the sources of ownership (public capital).
- Spending fixed non-financial assets during the estimated life-cycle is expressed as the expense of the sources of ownership (public capital) using the proportional method of value adjustment.

- Residual value of the fixed non-financial asset that is sold or decommissioned is not reported as an expense that arises from the fact that the total expense was recognized at the time of purchase.
- The changes in value and volume of assets and liabilities are not reflected in the financial result, but they directly reflect on the value of sources of ownership (public capital).

The main features of public sector accounting system in Croatia are (Vašiček and Roje, 2010, p. 42):

- All general government entities (central and local government and their component entities) are obligated by the law to apply governmental accounting and financial reporting model. The fact that all entities within general government are obligated to do so assures complete accounting and reporting on general government activities.
- Unified chart of accounts and consistent appliance of rules for recording cash transactions and economic events are regulated by the law as well. This assures standardized information base for conducting additional data analysis when needed.
- Regarding the information on budget (budget planning and budget execution), accounting and financial reporting, the appliance of organizational, economic, functional, location and program classifications of the budget is obligatory.
- Entities that apply government accounting are obligated to make periodical and annual financial statements.
- There is the obligation for consolidated semi-annual and annual settlement of budget accounts of the Republic of Croatia.

Most of the criticisms to the current accounting system are related to its potential of providing relevant information for decision-making. Dražić Lutilsky and Dragija (2012, p. 46) point out that the goal of the existing system is primarily in satisfying legal terms in the form of external reporting, but not in providing quality information to the internal users for effective management. Accounting systems (of public sector entities) cannot provide basic information about the costs of special programs or international projects. Grubišić, Nušinović and Roje (2009, p. 355) argue that modified accrual accounting makes public asset accounting difficult, because it does not enable proper recognition and valuation of public assets. When comparing Croatian and Slovene public sector accounting, Jovanović (2015, p. 791) states that regardless of the stage of accrual implementation in national accounting legislation, the planning and execution of state budgets (that is, budgetary accounting) is still based on the cash principle.

On the other hand, certain existing procedures/solutions applied in Croatian public sector accounting practise comply with those recommended

in IPSASs, even though IPSASs have not been enacted on a mandatory basis (Roje et al., 2012, p. 27). Roje, Vašiček and Hladika (2012) examined areas where IPSASs have been influential in Croatian public sector accounting practise, and specified certain eligible tendencies and possible courses towards more comprehensive compliance with IPSASs. They concluded that Croatia has implemented modified accrual accounting as a gradual transition from cash to accruals in its government financial reporting, that its budget(s) are publicly available, and that it has consistently applied internationally recognised and comparable analytical framework of financial and statistics reporting. The process of complying with IPSASs requirements in Croatia as being directed towards three goals: the introduction of accruals in governmental financial reporting, the reconciliation and eventual consistency 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 (Roje et al., 2012, p. 40). According to Ball (2015), Greek economy would benefit of adoption of IPSAS. Being committed to using IPSAS will also help build trust and confidence in Greek government (Ball, 2015, p. 398). This might be also a potential advantage for Croatia when public sector accounting shifts to accrual principle. Another study (Roje et al, 2010) shows that transition countries (among which is Croatia) have put effort in following the international developments regarding governmental accounting. The authors also acknowledge that further development of the governmental accounting system is needed to allow transition countries to be linked with wider international public sector reforms' trends.

Empirical research – methodology and results

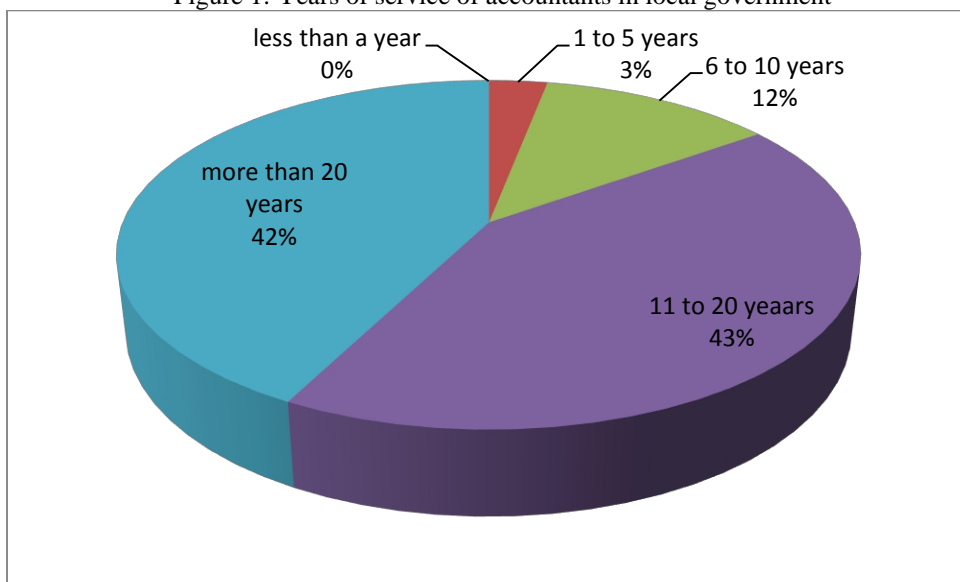
The empirical research methodology is based on a survey. In order to test the hypothesis, a research instrument in form of questionnaire was created. Web-based survey using *Google docs* platform was performed during June and July 2016. The link for the on-line survey was emailed to accountants in 21 counties and 65 towns in Croatia. The questionnaire was filled by 33 accounting professionals employed in local government among which 13 accountants who work in counties and 20 in towns so the response rate is 38.37%.

Data collected from this survey was statistically analysed using SPSS 17.0. Descriptive and univariate statistics (Mann-Whitney U test) was performed.

Demographic analysis shows that most of respondents are women (69.7%). Professional accountants employed in local government are

experienced (most of them are more than 10 years in service) as shown in figure 1.

Figure 1: Years of service of accountants in local government



Source: Authors' calculation

When asked if the introduction of accrual-based accounting would make local government financial statements more transparent, most of the accountants agreed (63.6% of respondents). Their opinion is relevant because accountants in Croatian public sector are familiar with IPSAS so they can foresee the outcomes of its adoption. The level of conversance with IPSAS (self-assessed) is presented in tables 1 and 2. Using a 5-point Likert scale (where: 1 – “not familiar” and 5 – “completely familiar with”) most of the accountants admitted that they are well acquainted with IPSAS (appointing level 3).

Table 1: Mean values of conversance with IPSAS level

| | | |
|----------------|---------|------|
| N | Valid | 33 |
| | Missing | 0 |
| Mean | | 3,52 |
| Median | | 3,00 |
| Std. Deviation | | ,939 |
| Variance | | ,883 |
| Minimum | | 2 |
| Maximum | | 5 |

Source: Authors' calculation

Table 2: Conversance with IPSAS - ranks

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|---|-----------|---------|---------------|--------------------|
| Valid | 2 | 4 | 12,1 | 12,1 | 12,1 |
| | 3 | 14 | 42,4 | 42,4 | 54,5 |
| | 4 | 9 | 27,3 | 27,3 | 81,8 |
| | 5 | 6 | 18,2 | 18,2 | 100,0 |
| Total | | 33 | 100,0 | 100,0 | |

Source: Authors' calculation

When asked about possible implications of accrual-based accounting introduction on the increase of effectiveness and efficiency in public sector, most of the accountants were optimistic (75.8% of respondents). Also, they have positive expectations of accrual-based accounting adoption on quality and scope of the accounting information (tables 3 and 4). Most of the respondents (60.7%) perceive great increase of accounting information quality and scope due to the shift to accrual principle (levels 4 and 5 on 5-point Likert scale).

Table 3: Mean values of perceived improvement of accounting information quality and scope

| | | |
|----------------|---------|------|
| N | Valid | 33 |
| | Missing | 0 |
| Mean | | 3,61 |
| Median | | 4,00 |
| Std. Deviation | | ,933 |
| Variance | | ,871 |
| Minimum | | 2 |
| Maximum | | 5 |

Source: Authors' calculation

Table 4: Perceived improvement of accounting information quality and scope

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|---|-----------|---------|---------------|--------------------|
| Valid | 2 | 5 | 15,2 | 15,2 | 15,2 |
| | 3 | 8 | 24,2 | 24,2 | 39,4 |
| | 4 | 15 | 45,5 | 45,5 | 84,8 |
| | 5 | 5 | 15,2 | 15,2 | 100,0 |
| Total | | 33 | 100,0 | 100,0 | |

Source: Authors' calculation

The potential disadvantages of accrual principle adoption were explored as well so those accountants were asked if it could cause the

overload of data that could interfere with decision-making. Most of the respondents (60.6%) are not convinced that greater scope of data would create difficulties to the users of accounting information. Accountants who work for the local government (60.6% of respondents) believe that the lack of experience regarding IPSAS implementation is a huge obstacle of IPSAS implementation in Croatia.

On the other hand, when asked if disclosure of the complete and comprehensive accounting information on general government would lead to greater responsibility towards users, accountants were very positive (93.9% of respondents). Furthermore, they state (97% of accountants) that increase of responsibility towards users would improve transparency of financial statements.

The empirical research results indicate that the level of accounting information relevancy for economic, social and political decision-making is high. Descriptive statistics (tables 5 and 6) show that at 5-point scale (from 1 – “at least” to 5 – “the most”), the median value is 4 suggesting that accounting information as a result of the reformed system would be very useful in decision-making.

Table 5: Mean values of usefulness of accounting information in economic, social and political decision-making

| | | |
|----------------|---------|------|
| N | Valid | 33 |
| | Missing | 0 |
| Mean | | 3,79 |
| Median | | 4,00 |
| Std. Deviation | | ,781 |
| Variance | | ,610 |
| Minimum | | 2 |
| Maximum | | 5 |

Source: Authors' calculation

Table 6: Usefulness of accounting information in economic, social and political decision-making: ranks

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|-----------|---------|---------------|--------------------|
| Valid 2 | 2 | 6,1 | 6,1 | 6,1 |
| 3 | 8 | 24,2 | 24,2 | 30,3 |
| 4 | 18 | 54,5 | 54,5 | 84,8 |
| 5 | 5 | 15,2 | 15,2 | 100,0 |
| Total | 33 | 100,0 | 100,0 | |

Source: Authors' calculation

In order to test the hypothesis according to which the introduction of accrual-based accounting would increase efficiency and effectiveness in public sector that leads to higher transparency of financial statements, the Mann-Whitney U test was performed. The test results are presented in tables 7 and 8.

Table 7: Mann-Whitney test of hypothesis

| Implications of accrual-based accounting on the increase of effectiveness and efficiency in public sector | | N | Mean Rank | Sum of Ranks |
|---|---------|----|-----------|--------------|
| Transparency of financial statements due to accrual principle | 0 - No | 8 | 10,63 | 85,00 |
| | 1 - Yes | 25 | 19,04 | 476,00 |
| | Total | 33 | | |

Source: Authors' calculation

Table 8: Test Statistics^b

| | Transparency of financial statements due to accrual principle |
|------------------------|---|
| Mann-Whitney U | 49,000 |
| Wilcoxon W | 85,000 |
| Z | -2,570 |
| Asymp. Sig. (2-tailed) | ,010 |

b. Grouping Variable: Introduction of accrual-based accounting leading to the increase of effectiveness and efficiency in public sector

The statistically significant results (p-value is 1%) support the hypothesis regarding the positive effect of accrual principle application in Croatian public sector accounting that leads to the increase of effectiveness and efficiency of administrations' actions and ultimately to higher level of transparency. These findings are in line with claims of EPSAS proponents and some mentioned studies (Roje et al, 2010; Grossi and Soverchia, 2011).

Conclusion

Harmonisation of public accounting system in EU is inevitable and the introduction of accrual-based accounting in every EU Member State will be the first step on this path. Accrual principle should be applied due to several benefits it brings like wider scope of useful information for long-term assessment of public policies' financial sustainability, improvements in effectiveness and efficiency of the administrations' actions with, consequently, many valuable implications. The set of accounting standards for public sector already exists (known as IPSAS) although many EU

countries still do not apply it. These standards rely on IAS/IFRS (International Accounting standards and International Financial Reporting Standards) that are created for business sector so more adjusted (to the operations of governmental entities) framework is announced in form of EPSAS. EPSAS can be considered as improved version of IPSAS, more in line with public sector activities enabling accrual-based budgeting.

The empirical research is focused on the perspectives of accrual principle adoption in Croatian public sector. Accountants who work for local government (in towns and counties) were included in the survey. The results show that most of them are familiar with IPSAS. The positive effect of accrual-based accounting introduction on the increase of effectiveness and efficiency in public sector is expected. Furthermore, the accrual principle application should reflect on higher quality and wider scope of the accounting information. The anticipated increase of responsibility towards users of accounting information would improve transparency of financial statements. All of this enables accounting information to be relevant for economic, social and political decision-making of internal and external users.

The main finding of this paper is the positive effect of the accrual principle application in Croatian public sector accounting that leads to the increase of effectiveness and efficiency of administrations' actions and eventually to higher level of transparency. The shift to the accrual-based accounting in the public sector would enable resolving the transparency issues in the public sector.

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