

**Research Article**

**EVALUATING THE ACCOUNTING INFORMATION QUALITY AND THE USEFULNESS OF GOVERNMENTAL FINANCIAL REPORTING: EVIDENCE OF A CHANGE FROM ADJUSTED CASH BASIS TO ACCRUAL BASIS (CASE STUDY: QOM MUNICIPALITY)**

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**ABSTRACT**

The study aims at evaluating the quality of accounting information and the usefulness of financial reporting in municipalities. The study evaluates the quality and usefulness of governmental financial reporting with the evidence for the way of changing adjusted cash basis to accrual basis. Qom municipality is selected as the sample. The study is an applied research, considering the aim, and a descriptive-survey research, considering data collection method; the questionnaire is used for data collection. To measure the validity of questionnaire, content validity is studied and the reliability is estimated as 0.84 using Cronbach's alpha. Data analysis is conducted on statistical and inferential statistics levels (one - sample T- test and independent samples T- test). The results show that the quality of accounting information and the usefulness of financial reporting in municipalities are increased due to a change in accounting basis.

**Keywords:** *the Quality of Accounting Information, Usefulness, Accrual Accounting, Governmental Financial Accounting*

**INTRODUCTION**

In societies where governments are elected through popular vote, the government is responsible to answer the citizens for its actions. The accountability bounds the governments to provide reasonable proofs for the cases such as financing, increasing financial resources, the objectives to which these resources are used to be achieved, and also, the way of using such resources. Since the accountability is performed through public comments, so accounting system and governmental financial reporting has been one of the main mediums for transferring financial and operational information, and they help the government to perform its accountability accurately and properly.

The quality of accounting information, accuracy rate, and financial reporting in presenting accounting information and company's operations, cash flow in particular, is expected to be provided for the investors. Accounting information is an important and beneficial source for the contract party's decision-making, and the main source in the evaluation of director's stewardship (Gaio and Raposo, 2010). The information plays such an evident and clear role in economic decision-making that it can be said today, it is impossible to start and continue any economic activity without adequate and comprehensive information about that subject matter; and those who have access to more information are more successful. Information would be useful if it changes investor's beliefs and actions, and moreover, if it could be measured based on the rate of change in prices after the release (Tehrani *et al.*, 2006).

In this study, we evaluate the accounting information quality and the usefulness of governmental financial reporting from adjusted cash basis to accrual basis.

**Significance of the Study**

Today, in addition to the wide applications in private sector, accounting plays a significant role in governments' administration. Over the past three decades and along with the developments in citizens' awareness of their social rights and the increase in their demands for the accountability of their elected officials, the government has attempted to find applicable tools for public accountability. However,

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accounting and financial reporting act as important tools for accountability in the field of social and political activities in the public sector. The size and the duties of the new governmental structure are of great importance.

According to the requirements of the World Bank in the form of a sentence saying "more money needs a more robust accounting system", it can be concluded that managing government's financial resources requires the application of accounting system and procedures that bring efficiency and economy to the organization. On the other hand, in the current conditions, governmental accounting and preparing governmental financial reports are considered as a weapon against fraud and error in governmental structures. International organizations and governmental suppliers consider the accounting value as harmless in controlling and establishing a financial system. To them, lacking a set of reliable accounting numbers, they are not aware of the way of using their own payment (Heydari, 2009).

The municipalities of the country as one of the main institutions of Iranian public sector are looking for the development in financial reporting system. The development of municipalities' accounting and reporting will happen in a case that in addition to providing the necessary conditions for it, the basic concepts prevailing this system and the theoretical basics are provided, as well. Moreover, financial and operational reporting covers a wide area of financial and operational accountability of the government, municipalities, and other main organizations in the public sector; and since the municipalities are responsible for non-state public service, the importance and necessity of their financial reporting is more obvious than before.

### **Theoretical Framework and Literature**

According to conceptual statements and adopted standards of governmental accounting, a proper financial accounting and reporting system should help the government to fulfill its accountability properly and correctly, and on the other hand, help the citizens and their legal representatives in the evaluation of government's public accountability. Due to the fundamental and important role of financial and accounting reporting system in providing necessary facilities for the fulfillment and also the evaluation of the mentioned responsibility, authorities and governmental accounting standards board's emphasize on the accountability as the strong infrastructure of financial accounting and reporting system and have codified governmental financial reporting objectives upon the accountability (Babajani, 2004).

The theoretical framework based on the accountability which was first introduced by Ijiri (1984), the objective of accounting is to create a proper system of information flow between the accountant and the accountee. This framework is built on a mutual relationship. According to this relationship, which is named as accountability relationship, the accountee has the right to know as the accountant has the right to consider a legitimate privacy for himself while disclosing the information. Hence, the theoretical framework based on accountability emphasizes on the usefulness of accounting in return for accounting information in decision-making in order to provide necessary and sufficient information to fulfill and evaluate public accountability through this system and according to the agreement between accountant and accountee (Babajani, 2011).

Understandability and comparability are among the important qualitative characteristics of financial information. Accordingly, all administrative organizations are bound to follow the same procedures and patterns in order to make the integrity and comprehensiveness of the accounts, and also, the incorporation and comparison of the numbers possible; and prevent from presenting unrelated and unclear information.

One of the fundamental prerequisites for ensuring the investors and creditors towards the economic effective activities is to provide and present information that are beneficial for financial and economic decision-makings. Having mechanisms to ensure the investors and other users about the financial information quality with objectives such as helping the efficiency of capital market and finally optimal allocation of capital, is necessary. A kind of accounting which enters the information society with the task of unbiased informing, plays a vital role in increasing information quality. To achieve what is established as an objective for accounting, accounting has developed standards and has bound the accountants and other reports and accounting information providers to perform them. Therefore, accounting standards are properly codified in order to increase accounting information quality and fulfilling the informing role

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(Saqafi and Ebrahimi, 2009). To Thornton (2002), accounting information quality and financial reporting are the joint product of at least four factors: managerial creativity and attitudes, accounting quality, the experience of auditing committee, and high-quality accounting standards. A weakness in each of these four rings might disturb the entire chain. The important point here is the parameters, variables, and measures which evaluate the accounting information quality.

Rees and Sutcliffe (1989) applied the variables of predictability and economic measurement to evaluate the quality of accounting data and information.

Kohlbeck and Warfield (2005) applied the measures of the ability to explain evaluation models based on the data from balance sheet and profit and loss, error and dispersion of analysts prediction, and profit stability to study accounting information quality. Some used the accruals as the measure for accounting information quality.

Every data source that is of better quality in prediction overcomes other information sources. Financial reporting, as a financial medium, is not excepted from this matter and always considers it in a way that the theoretical framework of financial reporting considers providing useful information in decision-making as the main objective of accounting. Following such an approach, accounting is a strong source in decision-making and predicting future financial events (Karami and Seyedhosseini, 2012).

The adjusted cash basis is a method so similar to full cash accounting. The difference between full cash accounting and adjusted cash basis is in the way of cost identification and registration. The revenues, both in full cash flow and adjusted cash flow, are just identified and registered at the time of collection, so these two basis have the same performance considering the revenues, and there is no difference between them.

In full accrual basis, revenues are identified and registered in accounting books while they are collected or realized. On this basis, the time for the collection or realization of revenues is when the revenues are definitely identified or collected due to continuing the services. Therefore, the time for collection is not considered in this method, but the time for collection or realization of expenses is of great importance in identifying and registering the revenue. Also, in this basis the time for identification and registration of expenses is the time for generation and realization of expenses, and when a good is delivered or a service is done payable debt is created equal to the cost for delivered good or the service.

In accrual accounting system, more emphasis is on performance effectiveness and results, and the directors are responsible for full costing. Also, a better accrual accounting system might reflect long-term commitments and total financial position. In addition, it must be acknowledged that the adoption of accrual accounting system in public sector leads to increased governmental accountability to its clients and strengthening the financial management in public service sector and the possibility for comparing the management in different areas (Rafiee, 2008).

Saqafi and Ebrahimi (2009) conducted a research study entitled "the Relationship between Codifying Accounting Standards and Accounting Information Quality". The results indicate that the standards didn't have a significance influence in all models except for the stability model. In other words, there is a significant relationship between accounting standards and the importance of accounting information quality. According to research objectives, the standard-makers are advised to use the results of this research in their evaluation of codifying future standards. The investors, also, must ask for the accounts according to the standards. Mahdavi and Mohammadi (2011) studied the possibility of full accrual basis implementation in municipalities. Their findings indicate that there is proper bed for the implementation of accruals basis in municipalities. In other words, the findings show that nowadays there are necessary and sufficient conditions for applying accruals basis in order to develop accounting in mentioned organizations. Babajani and Chardah Cheriki (2011) conducted a research entitled "Identifying the Users of Financial Reports in Municipalities, their Information Needs and Objectives for Using Financial Reports." Their findings show that the users use such reports mostly with the objective of evaluating financial and operational accountability of municipalities' activities.

Karami and Seyedhosseini(2012) conducted from a research study entitled " the Usefulness of Accounting Information to the Market Information in Predicting Bankruptcy" that accounting information

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is more useful than market information in predicting bankruptcy, and market information is not a good complement for accounting information in predicting bankruptcy.

#### **Pros and Cons of Accrual Basis**

##### *Advantages of Accrual Method*

1. Improving the managerial accountability through presenting a true picture of their performance based on the earned revenues and consumed sources.
2. The increase in transparency and better evaluation of fixed assets and fundamental assets.
3. Facilitating the planning and providing a wide area facing the public sector for a more effective management of financial sources including assets and cash.
4. Stating financial position and its evaluation, and also, evaluating the financial flexibility through offering a wide range of required information especially in relation to all the sources and commitments of public sector.
5. Facilitating the evaluation of various applications performance through showing the details of cost. That is, increasing the transparency of expenses, and consequently, helping better management of performance with the least cost for the society.
6. Creating the necessary groundwork in order to implement operational budgeting as the optimal method of budgeting accepted at international level.
7. Increasing the possibility of the effective comparison of aspects similar to financial performance between the sectors and government agencies. (Robinson, 2002; Thomas, 2007; Tudor, 2005).

##### *Disadvantages of Accrual Method*

1. Compared to cash accounting, understanding accrual accounting is more difficult and it's because of more complexities of accrual financial statements to cash financial statements..
2. High expenses of using accrual method due to the need for teaching more skills of accrual accounting method than cash accounting method (Wynne, 2003; Thomas, 2007).

Thus, despite the relative shortcomings of accrual accounting, thanks to more benefits of this method compared to cash basis method, it is necessary to implement accrual accounting in public sector. In this method, some requirements of financial reporting of public sector is similar to private sector. Although due to environmental differences of reporting requirements, the public and private sectors might not be of perfect match. The experience of different countries in applying accrual accounting strengthens the impression that using this system in public sector could help the government to achieve its main objective of attempting to improve the material and spiritual welfare of citizens through improving the efficiency of using the material (Mahdavi, 2000).

#### **Towards the Accrual Basis**

In the last three decades, there has been a slow but continues global movement by most governments for change from cash basis to full accounting accrual basis (Boxali, 1998; Carlin, 2003). This change demands for more accountability, increasing information transparency and more informed decision-making in public sectors (Dickenson, 2000). Therefore, it is anticipated that in few years all countries (including developing countries) apply accrual basis in their accounting system.

Public Service Committee (PSC) and International Federation of Accountants (IFAC) believe that the accrual basis of financial statements provides more relevant, more reliable, more comparable, and more useful information for the users of financial statements, compared to cash basis (Public Service Committee, 2002). Public Service Committee encourages all countries of every level of development to move towards accrual basis and use the international accounting standards of public sector. The importance of improving government's financial reporting is also recognized by international and regional financial institutions such as World Bank, International Monetary Fund, Asian development Bank, and the United Nations Development Program (Hepworth, 2003). Also, these institutions' financial aid is mostly conditioned by these countries' shift in their accounting information system and applying accrual basis (Pina et al., 2009)

Financial Accounting Standards Board generally emphasizes on applying full accrual basis in non-commercial activities of public sector's institutions and has attempted to realize that. Accordingly, a

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change from cash accounting basis to accrual accounting basis in non-commercial activities of public sector institutions has been fulfilled in the United States, Australia, Canada, England, and New Zealand and most European countries in 1980s and 1990s, and planning for providing necessary groundwork for using full accrual basis was performed in the early years of 21<sup>st</sup> century. Such measures indicate the importance of applying accounting basis in promoting accountability of accounting systems and financial reporting of public sector (Rafiee, 2008).

### **Research Questions**

1. Does the accounting information quality of governmental (municipal) financial statements increase with a change from adjusted cash basis to accrual basis?
2. Does the accounting information usefulness of governmental (municipal) financial statements increase with a change from adjusted cash basis to accrual basis?

### **Research Hypothesis**

#### *First Hypothesis*

The accounting information quality of governmental (municipal) financial statements increases with a change from adjusted cash basis to accrual basis.

#### *Second Hypothesis*

The accounting information usefulness of governmental (municipal) financial statements increases with a change from adjusted cash basis to accrual basis.

#### *Population and Sample*

The population of this research includes all Iranian municipalities. According to the homomorphism of accounting basis regarding the identification of municipalities' income and expenses, Qom municipality is studied in this research. Nearly 70 questionnaires were distributed between administrative and financial assistants, financial managers and accountants. After constant pursuits and visits, 54 questionnaires (which is 77% of the distributed questionnaires) were collected from this municipality which forms a reasonable amount of the distributed questionnaires.

#### *Research and Data Collection Methods*

The research method is a survey method which is among the descriptive researches. In order to explain theoretical topics and gather the data, both field and documentary methods are used. The documentary method is used to explain the theoretical topics of research, and field method is used to gather municipal information through questionnaire. The questionnaire includes 20 questions in three parts within the research hypothesis. Also, to analyze the data acquired from the questionnaire, descriptive and inferential statistical methods are used. In this case, the normality of data is studied through K-S test which results indicate the normality of the data. The data was analyzed in two steps. The first step the frequency and frequency percent of the acquired general information from general questions was analyzed. In the second step, the research hypothesis were tested through one-sample T-test.

To evaluate the validity of questionnaires' questions, the questions were modified in several steps. Therefore, the questions are valid. Also, to evaluate the reliability of questionnaire, Cronbach' alpha was calculated 84% by SPSS, indicating that the questionnaire has a reasonable reliability.

#### *Reliability and Validity*

Validity discussed whether the questions of questionnaire can lead us to the stated objectives? And, is the questionnaire correctly arranged to lead to a clear response, and answer the research hypothesis? To evaluate the validity of questionnaires' questions, the questions were modified in several steps. Therefore, the questions are valid. To evaluate the reliability of questionnaire in this research, Cronbach's alpha is calculated by SPSS, considering the preliminary sample Cronbach's is calculated as 84%.

### **The Results of Hypothesis Test**

Respondents were first asked to express their agreement and disagreement about each subject and specify the intensity of their agreement within Likert scale, if they agree. Then, to insure the amount of agreement intensity relevant statistical tests were used.

As previously stated, the research attempts to answer two questions regarding the quality of accounting information and the usefulness of governmental financial reporting. To acquire and ensure respondents'

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agreement rate with subset questions of each main research question, the one-sample T-test is used. In other words, the test shows that respondents' agreement rate with the proposed variables is higher than the mean value of Likert scale or is lower than this value. The test statistic is expressed as follows and its results of each research question are reflected.

**First Hypothesis:** The accounting information quality of governmental (municipal) financial statements increases with a change from adjusted cash basis to accrual basis.

$$H_0 = \mu \leq 3$$

$$H_1 = \mu > 3$$

**One-Sample Statistics**

	N	Mean	Std. Deviation	Std. Error Mean
quality	16	3.5863	.23821	.05955

**One-Sample Test**

	Test Value = 3					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
quality	9.844	15	.000	.58625	.4593	.7132

According to the value of test statistic of 9.844, df of 15, and a significance level of 0.000, and comparing this significance level with  $\alpha$ (sig<0/05), it could be concluded that the null hypothesis is rejected; and since the mean value is 58.3 the opposite hypothesis ( $H_1$ ) is approved. That is, the quality of municipalities financial reporting is increased according to a change from adjusted cash basis to accrual basis.

**Second Hypothesis:** The accounting information usefulness of governmental (municipal) financial statements increases with a change from adjusted cash basis to accrual basis.

$$H_0 = \mu \leq 3$$

$$H_1 = \mu > 3$$

**One-Sample Statistics**

	N	Mean	Std. Deviation	Std. Error Mean
usefulness	4	3.7025	.15218	.07609

**One-Sample Test**

	Test Value = 3					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
usefulness	9.233	3	.003	.70250	.4603	.9447

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According to the value of test statistic of 9.233, df of 3, and a significance level of 0.003, and comparing this significance level with  $\alpha$  (sig<0/05), it could be concluded that the null hypothesis is rejected; and since the mean value is 3.70 the opposite hypothesis ( $H_1$ ) is approved. That is, the quality of municipalities financial reporting is increased according to a change from adjusted cash basis to accrual basis.

### Conclusion

With the emergence of dramatic developments in financial accounting and reporting systems of developed countries' governments and regional governments, the last decade of the twentieth century is called the decade of revolution in public sector's accounting and financial reporting. Since such countries first codified the theoretical framework and principles of public sectors' accounting and financial reporting, they have been successful in developing, designing, and implementing the new accounting and financial reporting system. To codify a theoretical framework, the identification and determination of basic concepts and objectives of financial reporting seems necessary. The qualitative characteristics of financial reporting are one of the most important cases for codifying a theoretical framework which should be considered in every committee. The results show that the quality of municipalities' accounting information and the usefulness of financial reporting has increased according to a change in accounting basis.

It is claimed that accrual accounting system is more capable of assessing the effectiveness and results of organizational performance, and management might cost the organization's activities in a better way. Moreover, accrual accounting system reflects the organization's long-term commitments and the entire financial position in a better way. In addition, the adoption of accrual system in public sector leads to an increase in government's accountability to its clients, a better financial management of public service managers, and an increase in comparability of management performance in different areas. These important changes originate in a change of viewpoint in public sector's accounting from cash changes to the events which lead to cash changes. Improving the accountability and increasing the financial information transparency is the result of applying accrual accounting.

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