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**EVALUATING ACCRUAL ACCOUNTING SYSTEM AND THE CRITERION FOR
ECONOMIC RESOURCES FLOW APPLIED IN ACCOUNTING SYSTEM AND
FINANCIAL REPORTING OF QOM UNIVERSITIES AND HIGHER EDUCATION
INSTITUTION**

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ABSTRACT

This research study is conducted at Qom universities and higher education institutions including: Hazrat Masoumeh University, Qom University of Medical Science, Tehran University Campus, and Qom University. In fact, the study aims at evaluating the accrual accounting system in the studied universities. The research is conducted in a time period of 2007 to the end of 2012 fiscal year and includes the documents of the mentioned universities. To identify the position of the studied documents carefully, a checklist was provided including two options of Yes and No. To prepare this checklist, the standards provided by Audit Office and the research method of Hassanzade et al. (2012) was applied. To analyze the collected data, Chi-square, Cochran, and Kruskal-Wallis tests were applied. The results of testing hypotheses show that (1) the current system is inconsistent with the accrual accounting standards (public sector accounting standards); (2) the statement of financial position in the studied organizations doesn't include major classes of current assets, long-term assets, current liabilities, and net value; (3) revenues and expenses are not identified, measured, and classified according to accrual accounting standards; (4) the current system does not meet the requirements of performance - based budgeting; and (5) there is no possibility to calculate the cost of activities in current system.

KEYWORDS: accrual accounting, performance - based budgeting, Qom universities and higher education institutions, public sector.

INTRODUCTION

There are two mainstream thinking in public sector accounting and financial reporting method: (1) conventional thinking (based on cash accounting) and (2) modern thinking (based on accrual accounting). In conventional model (based on cash accounting) it is assumed that cash basis is more appropriate for public sector, because it is consistent with the regulations, and the net profit of its implementation is more than accrual basis. On the other hand, there is a full consistency with the program budgeting system in cash basis thinking, and it emphasizes on the amount of resources that the government owns and the way of consuming them in the same year; the accountability system in this method is based on government's performance along with the financial reporting with an emphasis on reporting the statement of resources and uses. (Tiron, 2007) 1

In current situation and in order to improve operational and financial accountability, a reform in accounting system and financial reporting of public and private sectors is inevitable. However, during the last three decades, and in the early years of the 21st century, most developed countries and international institutions, including European Union, attempted to change cash basis to various forms of accrual basis. But in developing countries, including Iran, the adjusted cash basis is still used in public sector institutions. Accrual accounting reports the proper performance of public sector activities and provides the possibility for promoting the managerial efficiency in order to achieve the objectives with the least possible cost. Transition to this new system is not an objective, but the important part is to

change the attitude from an inflexible position, in which the earned revenues and paid costs are just reported, to a position which is based on close - to - reality predictions of information focusing on budget preparation for future years and in this case, the promotion of efficiency is expected (Athukorala and Reid, 2003) 2. According to Nasiri poor et al.(2012) 3, the Ministry of Health and Medical Education, has attempted to modify its financial system in order to modify the health system and create administrative development in this sector, and also, to promote the management and the efficiency of resources in the universities of medical science and health services of Iran. The first step was to modify the accounting system and change from cash to accrual accounting to provide sufficient financial information for the decision-making on management and the combination of assets and financial resources. This has been done in 2010 and the universities of medical science and health services have been able to provide financial statements according to accrual accounting. Despite the necessity to change the basis from cash to full accrual in governmental organizations, the compliance of the registrations with accounting procedures of such organizations with the codified standards has not been seriously investigated and evaluated.

STATEMENT OF THE PROBLEM

According to accrual accounting standard, all governmental profit and non-profit organizations and institutions are required to apply accrual accounting system in order to facilitate accountability process and the realization of performance - based budgeting system to provide a fixed procedure for the realization of consolidating government's financial statements, presenting appropriate reports, and evaluating government's performance. So, the universities and higher education institutions have taken the lead in this area and have designed or somehow implemented the preliminary steps for a change in this basis and procedure, the examples are the universities of Medical Science .

Regarding the mentioned cases, the study aims at evaluating implemented system in order to identify an appropriate contingency model for basis change and also the problems and limitations of governmental accounting system for the realization of this matter. The research studies accounting documents of several universities and higher education institutions in Qom to specify the extent to which the current system of the universities and higher education institutions in Qom are consistent with the accrual accounting systems, legal requirements and the objectives of performance - based budgeting rules and guidelines.

Although governmental organizations are necessitated to change from cash to full accrual, there has not been a comprehensive theoretical model for this process and the compliance of accounting registrations with codified standards. So, along with the implementation of this method, there seems to be a necessity to study, assess, identify, measure, and classify the items of revenue and expenses, and also, the items of financial statements which are compatible with the criterion for economic resources flow according to business and governmental accounting standards in order to codify a proper model, and then, identify and remove the problems and obstacles.

It should be mentioned that most researches on governmental accounting are conducted through questionnaire which has an intrinsic limitation. In this study, a checklist is used rather than a questionnaire; using documents mining, the way of registering and reporting the items of governmental financial statements is taken into account. Therefore, more reliable results are obtained.

RESEARCH QUESTIONS AND HYPOTHESES

Due to the changes of governmental accounting in recent decade which is considered as a big development, and 34GASB Statement in June 1999, which recommends applying accrual basis, modifying accounting and financial reporting system in public and private sectors is an inevitable necessity in order to promote operational and financial accountability. On the other hand, a change in budgeting system with an emphasis on performance - based budgeting is implemented on the recommendation of International Monetary Fund to 179 countries including Iran; the first steps of the implementation were taken from 1381 onwards (International Monetary Fund, 2001) 4.

During the last three decades and at the early years of 21st century, most developed countries and international institutions including European Union have attempted to change from cash basis to various forms of accrual basis. But, in the developing countries like Iran, public sector institutions still applied adjusted cash basis. Regarding the role and importance of financial reporting as a tool for accountability, implementing an accurate method consistent with the listed accounting standards, has a significant role in the accurate presentation of information in comprehensive

financial statements of government and subsidiaries, and consequently, better performance of accountability (Babajani and Madadi, 2009) 5.

Accrual accounting reports the accurate performance of public sector activities, and provides the possibility for increasing management efficiency in order to achieve the objectives with the least expenses. The goal is not the transition to this new system, but to change the attitudes from an inflexible position_ in which just the obtained revenues and paid expenses are reported_ to a position that is based on close-to-reality predictions of information which emphasizes on budget preparation and edit for the coming years, and in this case efficiency improvement is expected (Athukorala and Reid, 2003).

According to accrual accounting all organizations and governmental profit and non-profit organizations are necessitated to apply accrual accounting system to facilitate accountability process and the realization of performance - based budgeting system in order to provide a fixed procedure towards achieving the objective of consolidating governmental financial statements, presenting appropriate reports, and evaluating government's performance; therefore the universities and higher education institutions have taken the lead and have designed the basics of this basis and procedure transition and somehow implemented them; the universities of Medical Sciences can be referred to as an example.

According to Nasiri poor et al.(2012), the Ministry of Health and Medical Education, has attempted to modify its financial system in order to modify the health system and create administrative development in this sector, and also, to promote the management and the efficiency of resources in the universities of medical science and health services of Iran. The first step was to modify the accounting system and change from cash to accrual accounting to provide sufficient financial information for the decision-making on management and the combination of assets and financial resources. This has been done in 2010 and the universities of medical science and health services have been able to provide financial statements according to accrual accounting. Despite the necessity to change the basis from cash to full accrual in governmental organizations, the compliance of the registrations with accounting procedures of such organizations with the codified standards has not been seriously investigated and evaluated.

Hence, the research aims at studying the consolidation and consistency of the current system in Qom universities and higher education institutions (as a case study) with accrual accounting standards and the amount of meeting the requirements of performance - based budgeting through this systems. So, we attempt to answer the following questions:

1. Does the statement of financial position include the main classes of current assets, long-term asset, current liability, and net value?
2. Are the revenues and expenses identified, measured, and classified according to accrual accounting standard?
3. Is there a possibility for calculating the cost of activities in the current system?

In order to achieve a result which provides the answer for the mentioned questions, some hypotheses are provided according to studies and experiences. To Abu-Alhalaj (2011) 6, there has been various problems facing the implementation of accrual accounting in the universities of Medical Science which is common in other universities, as well; some examples are mentioned below:

- The geographical extent, diversity of activities, presentable services by the universities and subsidiaries;
- The distribution of units, including the deputies;
- Inappropriate organizational financial structure and technical weakness of financial managers on accrual accounting due to years of being away from it;
- Lack of motivation for the transparency of financial information in various departments;
- Having deterrent laws, regulations and circulars, and sometimes, against accounting standards;
- A heavy bulk of banking operations and the need for a comprehensive and integrated financial software;
- Lack of hardware (computer and network) in operational units and headquarter; and
- Lack of hardware and software experts.

Thus, the first and second hypotheses of the study are defined as follows:

The main hypothesis 1: The current system is inconsistent with accrual accounting standards (public sector accounting standard).

Sub- hypothesis 1-1: The statement of financial position does not include the main classes of current assets, long-term assets, current liability and net value.

Sub – hypothesis 1-2: Revenues and expenses are not identified, measured and classified according to accrual accounting standards.

Main hypothesis 2: The current system does not meet the requirements for performance - based budgeting.

Sub – hypothesis 2-1: There is no possibility to calculate the cost of activities in the current system.

RESEARCH METHOD

Since the evaluation of accrual accounting system and the criterion for economic resource flow used in financial accounting and reporting system in universities and higher education institutions might provide a better and more complete insight to law-makers, managers and decision-makers to make better decisions and leads to the optimal allocation of resources and finally economic growth, this research is an applied research, considering the objective. It might be said that the documents-mining method is used in this research and field study is the method of study.

The information used in this research is divided into two groups. The first group is the information related to theoretical framework and research literature which will be gathered from studying various articles and thesis available at reliable websites and various journals through documentary research. The second group is the information and accounting documents of Qom universities which is obtained through document mining and financial reports of universities.

STATISTICAL METHOD

To study the conformity and harmony of the current system in Qom universities and higher education institutions with accrual accounting standards and the amount of meeting performance - based budgeting requirements through this system, Chi – square test is used (to compare a group with the assumed value). In fact, in this part each university and higher education institution is compared with the optimal position in accrual accounting. It is worth mentioning that the collected data are nominal data (0 and 1) where 0 represents the observation of accrual accounting and 1 represents non – observation of accrual accounting. The assumed value in Chi – square test is to devote number 1 to all the data and the full observation of accrual accounting where the comparison of collected data for each university or higher education institution with the assumed position can measure the conformity and harmony of the current system of universities and higher education institutions with the standards of accrual accounting and the amount of meeting the requirements of performance - based budgeting through this system. Meanwhile, for internal comparison and also the comparison of universities and higher education institutions, Cochran's test (to compare three or more dependent groups) and Kruskal - Wallis (to compare three or more independent groups) are used. In fact, we compare and study the collected data related to a university or higher education institutions together, considering that if the observation of various items of accrual accounting and meeting the requirements of performance - based budgeting during the years are different or don't have a significant difference. In fact, the data collected through the years are compared together. But, in Kruskal - Wallis test, the position of accrual accounting and meeting the requirements of performance - based budgeting in universities and higher education institutions are compared with each other (for five years, in general). While using this test, each collected item (the mean of financial statement items, the mean of change statement in financial position, and the mean of performance - based budgeting values) are compared together, as well.

RESEARCH FINDINGS

The findings are presented in two parts: (1) descriptive statistics and (2) inferential statistics.

DESCRIPTIVE STATISTICS

As it was mentioned earlier, in order to achieve research objectives, the data is gathered artificially (0 and 1) through the worksheet. Since there are many items on the worksheet (40 ones) and they are codified as numbers, presenting descriptive statistics for each item individually does not provide beneficial information. So, in this part, the mean, medium (central criteria), standard deviation, maximum and minimum (distribution criteria) and the total point of

universities for the studied years are calculated and presented in Table.1. It is worth mentioning that the maximum point for each university in each year is 40 and the minimum is 0.

Table 1. Descriptive Statistics

Research Variables	Frequency	Mean	Medium	Standard Deviation	Maximum	Minimum
Universities' point	22	16.772	16	11.657	40	0

According to Table 1. The mean point for universities is 16. 772. So, it can be concluded that the mean point for the studied universities is not an appropriate value (the mean point is lower than 50% of the total achievable point). There has not been an appropriate position in governmental accounting and performance - based budgeting, totally.

According to Table 1. The mean point for medium is 0.16 which belongs to Farabi Campus of Tehran University in 2008, 2009, 2010, 2011, and 2012.

The standard deviation for universities' point is 11. 657. The high standard deviation represents the high difference between different universities.

The highest point belongs to Qom University of Medical Science and Hazrat Masoumeh University in 2012 which is 40. The lowest point belongs to University of Medical Science in 2007.

INFERENCE STATISTICS

The inferential statistics in this research include Chi - square, Cochran, and Kruskal-Wallis in order to identify the position of accrual accounting and meeting the requirements of performance - based budgeting. Of course, using the above mentioned tests leads to some results beyond the codified hypotheses.

Testing the First Sub- Hypothesis 1-1

To test the first sub-hypothesis 1-1 saying that " the statement of financial report does not include the main classes of current asset, long - term asset, current liabilities, and net value", Chi - square is applied. In fact, in this part, each university or higher education institutions is compared with the appropriate accrual accounting position. The collected data is in the form of nominal (0 and 1) data in which 1 represents observing accrual accounting and 0 represents the non-observation of accrual accounting. The assumed value of Chi- square test is devoting number 1 to the most absolute data (N- 0.1) and the full observation of accrual accounting where the comparison of the collected data for each university or higher education institution can measure the conformity and harmony of the current system of universities and higher education institution with accrual accounting standards and the amount of meeting performance - based budgeting requirements through this system. But, to test sub - hypothesis 1-1, just the collected data on the statement of financial position is taken into account. The questions here are about presenting items of the statement of financial position: (1) tangible fixed asset, (2) investments, (3) intangible assets, (4) inventories, (5) prepaid, (6) accounts and accounts receivables from exchange operations, (7) accounts and accounts receivables from non-exchange operations, (8) cash, (9) accounts and accounts payable from exchange operations, (10) accounts and accounts payable from non-exchange operations, (11) advances, (12) resources, (13) non-current liabilities, and (14) net value. The results of Chi-square test are presented in Table. 2-4. it should be noted that Chi-square test assumptions are as follows:

H0= There is no difference between the frequency of classes,

H1= There is a significant difference between the frequency of classes.

As it was mentioned earlier, we compared the values collected from universities in 2012 with the desired value to study the sub-hypothesis 1-1, and we study the results. And also, to make the test applicable, the expected value of H1 for the collected data in 2012 is considered as equal to N - 0. 1. The results of Chi-square test for sub - hypothesis 1-1 are presented in Table. 2.

Since calculated significance level is less than 0.05, the results of Chi-square test indicate that there is a significant difference between the current position with the optimal position, and therefore, the first sub-hypothesis of the first hypothesis which is " the statement of financial position does not include the main classes of current assets, long-term assets, current assets, and net value" is accepted.

Testing the first sub - hypothesis 1-2

To test the sub-hypothesis 1-2 saying "the revenues and expenses are not identified, measured, and classified according to accrual accounting standard", Chi-square test is conducted. The cases used in this test include the following questions and items:

(1) Is the budget revenue identified at the time of realization? (2) Is the revenue of students' tuition identified at the time of realization? (3) Is the revenue of financial assets abandonment identified at the time of realization? (4) Is the revenue of capital assets abandonment identified at the time of realization? (5) Is depreciation expense identified for fixed assets? (6) Are the expenses of assets value reduction identified and measured? (7) Are the expenses of staff accounts reserve created and calculated? (8) Are the expenses of students' welfare identified at the time of realization? (9) Are the staff expenses identified at the time of realization? And, Are such items reported in financial position in case of changes? (10) Public assets; (11) Deposits to the Treasury from the public revenue; (12) Receivables of the Treasury from allocated credits; (13) receivables of the Treasury from special revenue; (14) grants; (15) other revenues; (16) the expenses of separate expense chapters (including depreciation and assets value reduction); and (17) the net change in financial position of the course.

Similar to the same case, Chi-square hypotheses are as follows:

H0 = There is no difference between the classes.

H1 = There is a significant difference between the classes.

As it was mentioned earlier, we compare the value from universities in 2012 with the desired value and calculate the results in order to study sub-hypothesis 1-2. It should be noted that the data collected in 2012 is used in this test. And also, for the applicability of the test, the expected value H1 is considered equal to $N - 0.1$ for the data collected in 2012. The results of Chi-square for the sub-hypothesis 1-2 are presented in Table 2.

Since, the significance level is less than 0.05, Chi-square results show a significance difference between the current position with the desired position; and thus, the second sub - hypothesis saying that " the revenues and expenses are not identified, measured, and classified according to accrual accounting standard" is acceptable.

Testing the First Hypothesis

Although the results of testing the sub-hypotheses of the first hypothesis led to the same results, the accuracy of the results for the whole issue is reviewed through the same test. Therefore, to achieve a general response for the first hypothesis that is "the current system is inconsistent with the accrual accounting standards (public sector standards)", Chi-square test is conducted. It is worth mentioning that the items and applied method is similar to the previous case. The results are presented in Table 2.

Since the calculated significance level is less than 0.05, the results of Chi-square test indicate a significant difference between the current position and the desired position, and therefore, the first research hypothesis that is "the current system is inconsistent with the accrual accounting system (public sector accounting standard)" is accepted. It is worth mentioning that the result shows that the more extensive the investigation range, the more significant is the difference (according to the values of Chi-square statistics).

Testing the Second Hypothesis

To study the second hypothesis which is " the current system does not meet the requirements of performance - based budgeting" and its sub - hypothesis saying that "there is no possibility for calculating the cost of activities in the current system", a method similar to the previous cases which studies the following items is applied:

- (1) The goods and services are identifiable and separable; (2) the conducted activities are identifiable and separable; (3) the basis for allocating the expenses to activities is identifiable; and (4) the incentives for activities in each activity resource (which allocates the expense from the activity to services or goods) is identifiable and separable. The results of testing this hypothesis through Chi-square test is presented in Table 2.

Table 2. Testing Research Hypothesis

	Testing sub-hypothesis 1-1	Testing sub-hypothesis 1-2	Testing the First Hypothesis	Testing the second hypothesis
Value	9419.341	6456.297	15556.181	2242.506
Df	1	1	1	1
Significance	0.000	0.000	0.000	0.000

Since the calculated significance level is less than 0.05, the results of Chi-square test indicate a significance difference between the current position and the desired one, and therefore, the second hypothesis which is " the current system does not provide the requirements of performance - based budgeting", and its sub-hypothesis which is " there is no possibility for calculating the cost of activities in current system", is accepted. Therefore, the first and second research hypotheses are accepted. This test takes the domestic analogy, year to year analogy, and also, the comparison of universities together into account. These tests are presented with explanations.

Additional Test – Internal Comparison

To compare the presentation of information about each suggested item (in the six years of study), Kruskal - Wallis test is conducted. In this test, we study whether there is a significant difference between the position of various items of the study or not. To do so, test conduct is divided into two parts. In the first part, the questions about a complete set of financial statements are applied, and in the second part, the other cases under study (the mean of items on the statement of financial position, the mean of items on the statement of changes in financial position, and the mean of performance - based budgeting values) are compared. So at first, the position of presenting a complete set of financial statements is studied through Kruskal - Wallis. It is noteworthy that in this test, the hypotheses are as follow:

H0 = the samples belong to one society.

H1 = the samples do not belong to one society.

According to the results of Table 3, there is a significant difference between presenting a complete set of financial statements; and the statement of financial position owns the highest rank (a rank equal to 83.5). However, the statement of budget comparison and performance has the second rank with a mean of 43.5. Then, the position of presenting other studied cases (the mean of items on the statement of financial position, the mean of items on the statement of changes in financial position, and the mean of performance - based budgeting values) is compared using Kruskal - Wallis test. According to the results of Table 3, there is no significant difference between the other studied cases (the mean of items on the statement of financial position, the mean of items on the statement of changes in financial position, and the mean of performance - based budgeting values). In other words, although the calculated ranks are different, the differences is not significant.

Table 3. Kruskal – Wallis Test- Ordinal Mean

Kruskal – Wallis Test- Ordinal Mean					
Variable	Frequency	Ranks Mean	Variable	Frequency	Ranks Mean
Statement of financial position	22	83.5	The mean of items in the statement of financial position	22	34.73
Statement of changes in financial position	22	48.5	The mean of items in the statement of changes in financial position	22	38.23

Change accounts turnover in net value	22	43.5	The mean of performance - based budgeting values	22	27.55
The statement of budget and performance comparison	22	56			
Explanatory notes	22	46			
test The statistics of Kruskal- Wallis					
Chi - square	32.054		Chi - square	3.614	
Df	4		Df	2	
significance level	0.000		significance level	0.164	

Additional Test – Year to Year Comparison

In order to conduct a year to year comparison of universities position, we study whether there has been changes in the position of conformity and harmony of universities and higher education institutions systems with accrual accounting standards and the amount of providing performance - based budgeting during 2007 to 2012 or not through Cochran test. In Cochran test, the hypotheses are defined as follows:

H0 = There is no difference between the values

H1 = There is a difference between the values

Additional Test - Year to Year Comparison: Farabi Campus of Tehran University

The results of this test in Farabi Campus of Tehran University is presented in Tables 4 and 5. According to the results of table, there has been no significant change in the position of conformity and harmony of Farabi Campus of Tehran University with accrual accounting standards and the amount of providing performance - based budgeting requirements through this system during 2007 to 2012 (since the significance level is higher than 0.05).

Additional Test - Year to Year Comparison: Qom Industrial University

The results of this test are presented in Tables 4 and 5. It should be noted that this university started activity in 2009, therefore, the data for previous years is not available. According to the results of the tables, there has been significant changes between the position of conformity and harmony of Qom Industrial University with accrual accounting standards and the amount of providing performance - based budgeting requirements through this system during 2007 to 2012 (significance level is less than 0.05). It might be said that the changes are related to the improvements in 2009, 2010, and then, 2011.

Additional Test – Year to Year Comparison: Qom University of Medical Science

The results of Cochran test in Qom University of Medical Science are presented in Tables 4 and 5. According to the results of the table, there has been significant changes in the position of conformity and harmony of Qom University of Medical Science system with accrual accounting standards and the amount of providing performance - based budgeting requirements through this system during 2007 to 2012. According to the table, it is evident that these changes have been extensive and fast.

Additional Test - Year to Year Comparison: Hazrat Masoumeh University

The results of Cochran test in Hazrat Masoumeh University are presented in Tables 4 and 5. According to the results of the table, there has been significant changes in the position of conformity and harmony of Hazrat Masoumeh University with the accrual accounting standards and the amount of providing performance - based budgeting requirements through this system(particularly) during 2011 and 2012. According to table, it is evident that these changes have been more extensive and faster than other universities.

Table 4. Cochran test replication

year	Farabi Campus of Tehran University		Qom Industrial University		Qom university of Medical Science		Hazrat Masoumeh University	
	H1	H0	H1	H0	H1	H0	H1	H0
2007	17	23	-	-	0	40	12	28
2008	16	24	-	-	8	32	12	28
2009	16	24	1	39	20	20	12	28
2010	16	24	3	37	27	13	12	28
2011	16	24	7	33	38	2	33	7
2012	16	24	7	33	40	0	40	0

Table 5. Cochran test statistics

	Farabi Campus of Tehran University	Qom Industrial University	Qom university of Medical Science	Hazrat Masoumeh University
Q- Cochran	5.000	14.727	129.314	121.897
Df	5	3	5	5
significance	0.416	0.200	0.000	0.000

Additional Test – Comparing Universities Together

In this part, we compare the conformity and harmony of universities and higher education institutions' system with accrual accounting standards and the amount of meeting performance - based budgeting requirements through this system. The results are presented in Tables 6 and 7.

Table 6. Kruskal - Wallis test, Ranks Mean

Variable	frequency	Average rating
Farabi Campus of Tehran University	240	433.83
Qom Industrial University	160	305.4
Qom university of medical science	240	499.83
Hazrat Masoumeh University	240	477.83

Table 7. Kruskal - Wallis Test Statistics

Value	87.005
Df	3
significance	0.000

According to Tables 6 and 7, there is a significant difference between universities. According to table 6, Qom University of Medical Science, (with a mean of 499.83) has the highest rank in the studied universities. As it is obvious, Hazrat Masoumeh University has the second rank with a mean of 477.83. Farabi Campus of Tehran University and Qom Industrial University have the third and fourth ranks with means of 433.83 and 305.5, respectively.

The Summary of Hypothesis Tests Results

The results of research hypothesis test, along with the results of additional tests, is as follows.

The Result of Testing the First Hypothesis

To test the first research hypothesis "the current system is inconsistent with the accrual accounting standards (public sector accounting standards)", sub- hypothesis test and then the full test of the mentioned hypothesis were used. The results of testing the sub-hypotheses of the first hypothesis using the Chi-square test indicate that "the statement of financial position in the studied institutions does not include the major classes of current assets, long-term asset, current liabilities and net value" and "revenues and expenses are not identified, measured, and classified under accrual accounting standards". The results of the first hypothesis full testing showed that "the current system is inconsistent with the accrual accounting standards (public sector accounting standard)." The reason might be found in the explanations of Abu- Alhalaj (2011) who believes that there has been various problems facing the implementation of accrual accounting in the universities of medical science which is common in other universities, as well; some examples are mentioned below:

- The geographical extent, diversity of activities, presentable services by the universities and affiliate units;
- The distribution of units, including the deputies;
- Inappropriate organizational financial structure and technical weakness of financial managers on accrual accounting due to years of being away from it;
- Lack of motivation for the transparency of financial information in various departments;
- Having deterrent laws, regulations and circulars, and sometimes, contrary to accounting standards;
- A heavy bulk of banking operations and the need for a comprehensive and integrated financial software;
- Lack of hardware (computer and network) in operational units and headquarter; and
- Lack of hardware and software experts.

The Result of Testing the Second Hypothesis

To test the second research hypothesis which is "the current system does not meet the requirements of performance - based budgeting", its sub- hypothesis test which is "the current system does not provide the possibility for calculating the cost of activities" was used. Using Chi-square test, the results of testing the hypothesis indicates that "there is no possibility to calculate the cost of activities in current system". In other words, " the current system does not meet the requirements for performance - based budgeting". The causes of having such a result lies in the mentioned cases for the previous hypothesis.

The Result of Additional Tests

In order to achieve more results on the accounting position and performance - based budgeting of the case study, the additional tests were used, as well. First, using the Kruskal- Wallis test, " whether the position of various items under the question has a significance difference or not" was studied. The results of the two-step test showed that "there is a

significant relationship between presenting a full set of financial statements; and the statement of financial position owns the highest rank." Also, "there is no significant relationship between the other cases under the question (the mean of items on the statement of financial position, the mean of items on the statement of changes in financial position, and the mean of performance- based budgeting values)".

Then, using the Cochran test for each university, it was investigated that "whether there has been changes during 2007 to 2012 in a position of conformity and harmony between the systems of Qom universities and higher education institutions with the accrual accounting standards and the amount of meeting performance - based budgeting requirements through this system". The results indicate that " although there is no significant difference between the position of conformity and harmony in the system of Farabi Campus of Tehran University with accrual accounting standards and the amount of meeting performance - based budgeting requirements through this system, there has been a significant increase in Qom Industrial University, Qom university of Medical Science, and Hazrat Masoumeh University". After that, the universities were compared again, using Kruskal- Wallis test. The results show that "there is a significant increase between universities". That is, the University of Medical Science is ranked the first among the studied universities and Hazrat Masoumeh University is ranked the second. Farabi Campus of Tehran University and Qom Industrial University are ranked the third and the fourth, respectively.

CONCLUSIONS

This research attempts to conduct some comparisons in and between the universities, along with evaluating the conformity and harmony of the current system of Qom universities and higher education institutions (as a case study) using accrual accounting and the amount of meeting the requirements of performance - based budgeting through this system. The summary of research results is presented in Table 8.

Table 8. The summary of research results

The current system is inconsistent with accrual accounting standards (public sector accounting standard)
The statement of financial position in the studied institutions does not include the main classes of current assets, long-term assets, current liability, and net value.
The revenues and expenses are not identified, measured, and classified according to accrual accounting standard.
The current system does not meet the requirements of performance - based budgeting.
There is no possibility for calculating the cost of activities in current system.
There is a significant difference between presenting "a full set of financial statements" and "the statement of financial position" has the highest rank.
There is no significant difference between "the mean of items on the statement of financial position", " the mean of items on the statement of changes in financial position", and " the mean of performance - based budgeting values".
Although there is no significant difference between the position of conformity and harmony in the system of Farabi Campus of Tehran University with accrual accounting standards and the amount of meeting performance - based budgeting requirements through this system, there has been a significant increase in Qom Industrial University, Qom university of Medical Science, and Hazrat Masoumeh University
The University of Medical Science is ranked the first among the studied universities and Hazrat Masoumeh University is ranked the second. Farabi Campus of Tehran University and Qom Industrial University are ranked the third and the fourth, respectively

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