



AENSI Journals

## Advances in Environmental Biology

ISSN-1995-0756 EISSN-1998-1066

Journal home page: <http://www.aensiweb.com/AEB/>

### Evaluation of accountability capacity of governmental financial accounting and reporting system (GFARS)

<sup>1</sup>Mehrdad Ghanbari, <sup>2</sup>Khosro Barzegarnezhad, <sup>3</sup>Nikzad Amiri, <sup>4</sup>Sayed Hesam Hesampanah

<sup>1,2</sup>Department of accounting, Islamic Azad university, kermanshah Branch, Kermanshah, Iran.

<sup>3</sup>Department of accounting, Islamic Azad university, Qom Branch, Qom, Iran.

<sup>4</sup>Department of accounting, Islamic Azad university, Boroejerd Branch, Boroejerd, Iran.

#### ARTICLE INFO

##### Article history:

Received 2 June 2014

Received in revised form

13 August 2014

Accepted 28 September 2014

Available online 10 October 2014

##### Keywords:

Public accountability, Governmental financial accounting and reporting system (GFARS), Budget control system, Accounting basis, Reporting unit.

#### ABSTRACT

In societies where governments are elected by public votes and power originates from public will, governments' public accountability has a special position. In such societies, to know facts about what governments do as their legal duties is regarded citizen's natural right and governments are required to transfer those facts to people publicly appropriately. Since the second half of 20<sup>th</sup> century on, especially 1890s, as a public form of transferring facts, governmental financial accounting and reporting system (GFARS) has played an important role in fulfilling governments' accountability and has been considered the principal tool to fulfill this serious duty. Main aim of this paper is to evaluate accountability capacity and potential of Islamic Republic of Iran (IRI) GFARS. To do this, 3 operational steps have been organized as follows: To study theoretical bases of sample governments' GFARS in order to determine key and effective factors in realization and enhancement of accountability of GFARS; To survey national expert society about key factors extracted from theoretical bases of GFARS through Delphi's research in order to select acceptable measures for evaluating accounting system practiced by the government; and, To compare GFARS features of I.R.I with measures selected by national expert society in order to assess said system's accountability capacity and potential. Results of research's 3-fold steps show that GFARS of I.R.I does not enjoy necessary potentials for fulfilling accountability in the areas of controlling approved budget, identifying and reflecting annual real revenues – costs, reflecting capital assets and general long-term debts, and reflecting status and results of financial operations in annual comprehensive financial reports. In conclusion and based on studies performed, results of this research, and his own experience of several years, researcher offers some recommendations to resolve major failures of I.R.I's GFARS and to design and implement an accountability-based system.

© 2014 AENSI Publisher All rights reserved.

**To Cite This Article:** Mehrdad Ghanbari, Khosro Barzegarnezhad, Nikzad Amiri, Sayed Hesam Hesampanah, Evaluation of accountability capacity of governmental financial accounting and reporting system (GFARS). *Adv. Environ. Biol.*, 8(12), 1612-1621, 2014

#### INTRODUCTION

In the age of knowledge and information, most governments and local reigns like municipalities face a considerable growth in public demands for the right to ask their elected and appointed officials and put realization and enhancement of accountability to people on the top of their agendas in order to acquire determinant votes of citizens in the next election and/or to gain a victory for the party or wing they belong to.

Since many years ago, governments and local reigns of democratic countries have reached a conclusion that they should recognize citizens', as the main owners of rights, right to ask and should be accountable to them in different aspects, especially for consumption of public financial resources. Accountability is considerably important because the relationship between providers of public financial resources and those who expend these resources as people's elected officials is not a voluntary one and citizens have no choice but paying taxes and tolls. For this reason, people have the right to know about the manner of public financial resource consumption as well as efficiency and effectiveness of elected officials' plans and the rate of effectiveness of said plans in raising the level of their well-being by exercising their citizenship and ask rights. Governments and local reigns consider continuation of gaining public trust and votes as depending on design and establishment of a publicly clear informational regime so that they meet citizens' ask right to have easy and quick access to their (non)financial information while contriving to defend their programs' performance. In this way and based on a

**Corresponding Author:** Mehrdad Ghanbari, Department of accounting, Islamic Azad University kermanshah Branch, Kermanshah, Iran.

defined accountability-based relationship, citizens have specified right to know facts, as the right owners and at their asker positions, while elected officials have the right to protect their legal privacy simultaneously with fulfilling their duties at their respondent positions, as those who are responsible for implementing plans and expending public financial resources.

Under public accountability relationship, the government along with officials elected by people, who administer national executive branch, are required to provide citizens with necessary and sufficient information on consumption of public financial resources and on the results of executive plans and programs based on agreement with people's legal representatives and to reassure them (citizens) of the existence of a correct, precise, and timely flow of information between parties by establishing an appropriate, fair information system. Most governmental finance experts believe that, as an information system, financial accounting and reporting system enjoys sufficient capabilities to play a vital role in realization and enhancement of financial/ operational accountability level and in meeting citizens' asking right and performing legal tasks of government in relation to public accountability. In other words, by establishing a correct, fair flow of information between people or their legal representatives and the government, GFARS supports the government by producing and publishing facts and information to be disclosed, on one hand, and meets citizens' rights by enabling them to have access to needed and sufficient information on performance and results of the government executive plans, on the other.

Given matters above-mentioned, a great number of scholars of public sector accounting insist on this idea that financial accounting and reporting play an important, substantial role in fulfillment of financial/operational accountability and some of them believe that theoretical framework of accounting of public sector, including the government, needs to be formulated based on accountability (Ijiri, 1983). Theoretical accountability-based accounting framework places emphasis on the relationship between information providers as respondents and its users as askers. For this reason, the aim of financial accounting and reporting is to establish an information system for its own programs' performance and results as well as for those who the right to ask and who, based on this right, can evaluate and judge the other party's accountability quality.

In this way, practical implementation, and realization and enhancement of financial/ operational accountability level as an important part of the government public accountability and institutionalization of this social right require a financial accounting and reporting system which is designed and implemented on the basis of a theoretical accountability-based framework in addition to its adoption by governmental authorities as a culture. During 2 last decades of 20<sup>th</sup> century, establishment of such accounting system was welcomed by governments and local reigns of countries with democratic political system, and most of these countries succeeded in doing this important task and their governments have considered financial accounting and reporting system as a tool for fulfilling their accountability – and democracy – the united Nations (U.N), International Money Fund (IMF), World Bank, etc, which emphasize on transparency of governmental information and prevention of economic corruption, have paid attention to implementation of accountability-based financial accounting and reporting system as a tool for realization of governments' financial health and meeting citizenship rights to have easy and free access to governmental financial and operational information and, now, they are using such systems as an acceptable measure in assessing governments accountability.

#### *Problem definition:*

As mentioned introduction, in societies where ruling governments are elected by referendum, elected governments are accountable to citizens for actions they do. Accountability duty requires governments to give logical reasons for cases like procurement of financial resources, increased finance, objectives for which such resources are expended, and, also, how these resources are expended. Given that, in such societies, accountability duty is fulfilled in the form of public statements, GFARS is one of main tools for transferring financial and operational information, helping governments fulfill their accountability duties correctly and properly.

According to conceptual statements and approved standards of governmental accounting, an appropriate financial accounting and reporting system must help the government fulfill its accountability duties desirably and correctly, on one hand, and assist citizens and their legal representatives to evaluate their government's public accountability. Due to basic and important role the financial accounting and reporting systems play in providing facilities necessary to realize and evaluate accountability, experts and boards setting accounting standards place emphasis on and pay attention to accountability duty as the solid foundation of financial accounting and reporting systems and formulate objectives of financial and governmental reporting on the basis of such duty.

Adoption of public accountability concept as the gravity center of governmental financial reporting by legal governmental accounting standards boards of developed countries and formulation of governmental accounting objectives based on the concept in question have provided grounds necessary to design and implement proper governmental accounting systems in order to realize objectives of accountability duty in such countries. Governments ruling in developed countries extract financial information from governmental accounting systems and provide it to 3 main user groups (citizens, people's representatives, investors and creditors somehow

participating in borrowing process) by publishing financial reports and these groups use information contained in financial reports to make economic, political, and social decisions while evaluating the governments' public accountability as follows:

- A) Comparing real financial results to approved budget;
- B) Evaluating financial status and operation results;
- C) Ensuring about observance of related financial and accounting laws and regulations; and
- D) Evaluation efficiency, effectiveness, and economic saving of government's operations.

Based on observations, experiences, and topics outlined by national experts and executive attendants, it seems that GFARS of Islamic Republic of Iran does not enjoy all features of an accountability-based financial reporting system. Therefore, many research questions can be raised about accountability competence of GFARS of I.R.I, the most important of which are as follows:

- 1) Does existing budget control system of accounting system have necessary ability to control all national annual approved programs, plans, and projects?
- 2) Does accounting basis used by GFARS enjoy necessary capabilities to reflect information about our fiscal years' real revenues/ costs?
- 3) Does GFARS provide needed information on control and correct use of public fixed assets?
- 4) Does GFARS provide information needed by citizens and their legal representative to evaluate status of public long-term debts, internal or external?
- 5) Does GFARS provide information needed by citizens to assess the government's financial status in the form of balance sheet?
- 6) Does GFARS provide information necessary to evaluate results of financial operations in the form of the list of revenues, costs, and surplus changes?
- 7) Does GFARS provide information needed by citizens to evaluate status of assets and rate of government investment in governmental corporations in the form of balance sheet?

In present research, the author tries to offer proper answers to above research questions by doing a theoretical study and field research.

#### *Research hypotheses:*

Based on above research questions, some hypotheses including one major and seven minor ones as a subset of the former are listed as follows:

#### *Major hypothesis:*

GFARS of Islamic Republic of Iran does not enjoy capabilities expected from a desirable financial accounting and reporting system to fulfill accountability duty.

☞ **H1:** There is a significant difference between capabilities of budget control system practiced by GFARS and those of a desirable one to fulfill accountability duty.

☞ **H2:** There is a significant difference between financial information extractable from an accounting system based on accrual or modified accrual basis and that from accounting system practiced by the government.

☞ **H3:** There is a significant difference between features expected from an ideal financial accounting and reporting system and those of present one to fulfill the government's accountability for fixed assets and public long-term debts.

☞ **H4:** There is a significant difference between funds needed to fulfill accountability for the government's financial resources and funds practiced by present financial accounting and those present in governmental accounting system of I.R.I.

☞ **H6:** There is a significant difference between features expected from financial reports extractable from an accountability-based financial accounting and reporting system and those of financial reports extractable from financial accounting and reporting system practiced by the government.

☞ **H7:** There is a significant difference between existing approved laws, regulations, and rules and those needed to formulate theoretical framework, principles, and standards of an accountability-based financial accounting and reporting system and monitoring their correct implementation.

#### *Research objectives:*

Comparison is one of important reasons for doing comparative studies on countries' financial accounting and reporting systems (Parker, 1983). The idea behind the importance of comparison reason to performing comparative studies is that it is completely possible for a country to improve its practiced accounting system through observation and study of other countries'. Also, this is true that some differences among countries' accounting systems are not accidental, but rather they may be created under influences of economic regimes, laws and regulations, and social environments.

In this way, to do comparative research and studies on accounting systems reveals capabilities of Iranian

governmental accounting system scientifically. In order to determine acceptable measures of an ideal governmental accounting system, study of such systems established in developed countries can provide suitable indexes for evaluating governmental accounting system practiced in Iran. Acceptable measures based on this project's comparative research and studies are used to evaluate national present accounting system's capabilities in the field of government's public accountability, on one hand, and, as key effective factors in formulating theoretical framework and Iranian national standards of governmental accounting, can draw attention of legal organizations concerned, on the other hand.

So scientific aim of this research is to assess capabilities of GFARS in order to enhance qualitative level of discussed system and to identify key effective factors of ideal accounting systems which have been designed and implemented based on accountability duty. Results can provide appropriate scientific grounds for formulating theoretical framework and national standards of Iranian governmental accounting.

In another perspective, by doing this research, it is expected that real position of governmental accounting system and its major weaknesses and strengths to be identified and a ground to be provided for making fundamental improvements in GFARS of I.R.I. In other words, by doing present research, initially, a real picture of capabilities of GFARS in domain of accountability is offered and, next, the governmental accounting system is evaluated in comparison with other systems practiced in developed countries. In this way, practical aim of this research project is for authorities to apply results of present research to making fundamental improvements in practiced accounting system.

#### *Research method:*

To do this research correctly and to achieve scientifically reliable results, 3 basic steps were foreseen and objectives of each step were set and following steps were taken to realize them.

☞ **Step 1:** Study of developed countries' theoretical bases of financial accounting and reporting systems in order to determine common key factors expected from a financial accounting and reporting system based on the government's public accountability.

In this step using library method, following items were studied carefully: theoretical frameworks, principles, and standards of GFARS; researches done in this field during recent years; and also laws and regulations approved and enforced in order to make fundamental improvements and changes into developed countries' financial accounting and reporting systems. In this research, theoretical bases and features of GFARSs of the U.S., Australia, U.K., and Canada were studied as those countries making considerable progress in the field of governmental accounting. In this step, in addition to study of theoretical frameworks, principles, standards, and laws and regulations governing financial accounting and reporting systems practiced in mentioned countries, their financial accounting and reporting models were studied and analyzed.

☞ **Step 2:** General survey of national expert society about key factors of accountability-based GFARS by using Delphi's research model to determine acceptable measures for evaluating accountability capabilities of GFARS of I.R.I.

In step 2, Delphi's method was used to perform general survey, which is a scientifically valid and well-known model. In this method, a number of qualified experts were selected from national expert society as the sample and participated in survey process as members of Delphi group. In this research, 170 persons were selected as members of Delphi group through oral negotiations and written invitations 150 of who in 2 75-person groups with different subgroups participated actively in this research and completed sent questionnaires vesting due care and time. The first group of Delphi members consisted of accountable officers and directors general of finance of ministries, governmental agencies, and their deputies; audit supervisors of national general accounting office; and other people with sufficient expertise and experience with GFARS of I.R.I (as members of this profession). The second group of Delphi members consisted of faculty members of universities and higher education institutions; accounting PhD and M.A. students; top managers of audit office, and auditors. In this step, 2 types of questionnaire including 35 common items related to 8 key proposed factors extracted from study of theoretical bases and standards accepted by developed countries' governmental accounting boards were prepared and distributed to 170 members of 2 Delphi groups. Of 170 sent questionnaires, 150 were completed perfectly and returned. Information gathered on items related to 8 key proposed factors was analyzed by performing appropriate statistical tests in order to ensure that agreement existed among members of Delphi groups. Results of that analysis were used in order to achieve steps 2 and 3 of the research. Questionnaires were organized in such a manner that members of Delphi groups indicated agree/ disagree option for each of proposed factors, then, indicated degree of their agreement/ disagreement with each item related to 8 factors by scoring in the limit 0-9 on the continuum included below options mentioned.

☞ **Step 3:** to compare features of GFARS of Islamic Republic and Iran to measures acceptable to members of Delphi groups in order to assess capacity and capabilities of accountability of governmental accounting system.

In this step, key factors agreed upon by Delphi members as acceptable measures to realize and enhance accountability level of GFARS were compared with those of I.R.I and evaluated. In order to collect needed

information on the situation of each of 8 key factors in present system, a particular continuum was used, which was included in the questionnaires of the first Delphi group (as profession members) (as profession members) / for this purpose. Initially, this 75-person group indicated their agreement / disagreement with each item related to each key factor, reflecting their importance by scoring them from 0 to 9 on continuum of the first row of questionnaires; then, they indicated their opinions on present status of cases set out in each item related to each factor by putting proper scores on the continuum of the second row of questionnaires.

Scores given to components of key factors of an accountability-based financial accounting and reporting system by this group of experts were compared with scores given to the present status of the same components in accounting system practiced by the government by the some group, in which appropriate statistical tests were used and accountability capabilities of GFARS of I.R.I. were evaluated.

#### Research findings:

Findings of each of research steps, which were obtained in relation to objectives of each above step, are described as follows:

#### Findings of theoretical bases study:

Study of theoretical frameworks, principles, and standards of financial accounting and reporting of the sample governments and laws and regulations governing them along with the researcher's long time experience resulted in extraction of 8 key factors being considerably important to theoretical and executive bases of said government's financial accounting and reporting systems. Findings from theoretical studies were indicated in the form of 8 factors given in table 1 in order for them to be surveyed from national expert society as factors effective in enhancing accountability level of GFARSs by using Delphi's research.

**Table 1:** Proposed factors effective in realization and enhancement of GFARS's accountability level

	Proposed factors	N	Number of items
1	To design and implement a budget control system based on mutual accounting method related to financial accounting system.	5	1-5
2	To use accrual and/ or modified accrual accounting basis	7	6-12
3	To keep accounts of and report general long-term debts.	3	13-15
4	To keep accounts of and report general capital assets.	4	16-19
5	To apply fund theory and funds accounting system.	4	20-23
6	To identify main reporting entity and financial reporting levels.	3	24-26
7	To determine basic features of annual comprehensive financial reports.	4	27-30
8	To approve laws and regulations binding financial accounting and reporting.	5	31-35
	Total	35	

In other words, findings of theoretical studies of research step 1 were proposed as measures for evaluating accountability capacity of GFARS of I.R.I. and offered to gain opinions and Conesus of national expert society.

#### Finding of Delphi's research:

Results from analysis of information gathered from 2 respondents groups by relying on non-parametric statistical tests performed in research step 2 showed that members of Delphi group agreed on key factors extracted from theoretical and executive bases of sample countries' financial accounting and reporting systems and accepted factors proposed by researcher as measures for evaluating an accountability-based GFARS. In research step 2, steps were taken as follows in order to gain general view of expert society on proposed factors:

1- First, non-parametric binomial tests were used to see whether members agreed/ disagreed with the existence of a relationship among 8 factors, proposed by researcher in 35 items said, and realization and enhancement of accountability level of GFARS. Results of this test showed that Delphi members agreed completely with 35 items outlined and confirmed all 8 factors proposed by researcher as key ones for realizing and enhancing accountability level of GFARS.

2- A secondary binomial test was performed in order to make sure of intensity of (dis)agreement of Delphi members with each item related to 8 factors proposed by researcher. In this test, right-hand side of the continuum mean point, that is, point of indifference of 4.5 that is mean of 2 scores of 4 and 5, indicates agreement and left-hand side indicates disagreement, namely, if the score given to each item approaches right-hand end of continuum (9 to 4.5) and is more than 4.5 and significantly different from indifference point at level 2.5 of probability, it signifies intensity of agreement; but if it approaches left-hand side of continuum and is less than 4.5 and significantly different from indifference point at level 2.5 of probability, it signifies density of disagreement.

Disagree

Agree

0	1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---	---

It is noteworthy that above test was performed merely on agreement in order to make sure of intensity of agreement of Delphi members with components of effective factors proposed by researcher in the form of items included below each factor. Results of secondary binomial test abovementioned indicated this fact that Delphi members expressed confidently intensively their favorable opinions on realization and enhancement of accountability level of GFARS.

3- Next, one way variance analysis test was used to ensure that opinions of Delphi members are compatible with their different educational degrees and experiences with key factors. Results of this test also confirmed compatibility of Delphi members' opinions of proposed factors. In other words, results of this test indicated that no significant difference existed among educations, and study major of respondents and their views of proposed factors and that consensus was reached on components surveyed.

4- Delphi members were separated into 2 75- person groups. First group consisted of accountable officers and directors general of finance of ministries and governmental agencies; deputies of accountability units, and chief auditors of general accounting office as profession members and those people familiar with structure of GFARS. Second group consisted of universities' faculty members, directors and chief auditors of audit office who were teaching in accounting major, and accounting PhD and M.A. students. One-group Kolmogorv - Smearnov test was used to make sure of consensus with each of 2 above groups on outlined items and factors proposed by researcher, results of which showed that participants of each of 2 Delphi groups generally agreed on all items related to proposed factors and consensus of each 75-person group of Delphi members resulted separately.

5- Although reaching intergroup consensus on factors proposed by researcher is important and necessary among members of each group participating in Delphi research, in Delphi research, expert's consensus is reached when favorable opinions of both participating groups are not significantly different in their intensity at level 2.5% of probability. Two-group Kolmogorv-Smearnov test was used to ensure that there existed no significant difference between favorable opinions of both groups and compatibility of intensity of their agreement with each of factors effective in realization and enhancement of accountability level of GFARS, results of which indicated that at level of 2.5%, such a significant difference was not observed and that both groups had consensus on effectiveness of 8 proposed factors in realization and enhancement of accountability level of GFARS. In other words, consensus of both groups on the matter in question was reached through results of mentioned test. In step 3 of research, targeted factors were used as a basis for evaluating accounting system practiced by the government of I.R.I. Results of test under sections 4 and 5 are given in table 2.

**Table 2:** Results of 1- and 2- group Kolmogorv-Smearnov tests on both groups' consensus and lack of significant difference between their opinions.

	Proposed factors	Group comment		Intergroup
		Group 1	Group 2	
1	To design and implement a budget control system based on mutual accounting practice and related to financial accounting system	Agree	Agree	No
2	To use accrual or modified accrual accounting basis	Agree	Agree	No
3	To keep accounts and report general long-term debts.	Agree	Agree	No
4	To keep accounts and report public capital assets	Agree	Agree	No
5	To apply fund theory and fund accounting system	Agree	Agree	No
6	To identify major reporting entity and levels of financial reporting	Agree	Agree	No
7	To determine basic features of annual comprehensive financial reports	Agree	Agree	No
8	To approve laws and regulations binding financial accounting and reporting	Agree	Agree	No

6- After performing Delphi research, multivariate stepwise regression analysis was performed on agreed key factors in order to analyze and rate degree of changes each of factors selected by Delphi members explained for realization and enhancement of accountability level, results of which in view of 2 respondent groups are given in table 3.

**Table 3:** Comparison and multivariate regression analysis of respondent groups

Group 1 Accountable officers; Finance directors general; Deputies of accountability units, etc.	Group 2 Faculty members; Audit directors; Auditors, etc.
Step 1 Variable: Accrual basis Correlation coefficient: .82 Explanation coefficient: .675	Step 1 Variable: Financial report features Correlation coefficient: .838 Explanation coefficient: .703
Step 2 Variable: Financial report features Correlation coefficient shared by 2 variables: .91	Step 2 Variable: Budget control system Correlation coefficient shared by 2 variables: .926

Explanation coefficient: .83	Explanation coefficient: .858
Step 3 Variable: Budget control system Correlation coefficient shared by 3 variables: .947 Explanation coefficient: .889	Step 3 Variable: Accrual basis use Correlation coefficient shared by 3 variables: .985 Explanation coefficient: .919
Step 4 Variable: Fund accounting Correlation coefficient shared by 4 variables: .97 Explanation coefficient: .94	Step 4 Variable: Approval of laws and regulations Correlation coefficient shared by 4 variables: .97 Explanation coefficient: .95
Step 5 Variable: Approval of laws and regulations Correlation coefficient shared by 5 variables: .98 Explanation coefficient: .969	Step 5 Variable: Keeping accounts of public fixed assets Correlation coefficient shared by 5 variables: .985 Explanation coefficient: .97
Step 6 Variable: Keeping accounts of public fixed assets Correlation coefficient shared by 6 variables: .993 Explanation coefficient: .986	Step 6 Variable: Fund accounting Correlation coefficient shared by 6 variables: .97 Explanation coefficient: .98
Step 7 Variable: Reporting entity Correlation coefficient: .996 Explanation coefficient: .992	Step 7 Variable: Reporting entity Correlation coefficient: .996 Explanation coefficient: .993
Step 8 Variable: Keeping accounts of general long-term debts Correlation coefficient: 1 Explanation coefficient: .1	Step 8 Variable: Keeping accounts of general long-term debts Correlation coefficient: 1 Explanation coefficient: 1

#### Findings of evaluation of accountability capacity:

As stated earlier, Results of binomial tests, and of 1- and 2- group Kolmogorv – Smearnov tests done in research step 2 indicated that experts participating in groups 1 and 2 of Delphi research not only agreed on proposed factors effective in enhancement of accountability level of GFARS, but also showed no significant difference in their agreement intensity. In other words, both groups agreed on factors effective in creating and increasing accountability capabilities of GFARS and accepted those factors as measures for evaluating accountability capacity.

Since the first group participating in Delphi research consisted of people who enjoyed sufficient experience with GFARS in addition to accounting knowledge, comments of this group were used to compare existing states of any key factors in GFARS. Information was collected from this group in this way that questionnaires distributed to this group members containing 35 items related to 8 key proposed factors used 2 types of continuum as follows instead of using 1 type of continuum for giving a score to each item. Individuals participating in group 1 of Delphi research, initially, indicated their views of degree of effectiveness of components to each factor in creating or increasing accountability capabilities of each factor in creating or increasing accountability capabilities of GFARS on first-type continuum by giving proper scores and, next, expressed their opinions on the presence or absence of such factors in I.R.I.'s GFARS as well as in Rial affiliated units.

Scores given by first group of respondents (as Delphi group and profession members) to the components of key factors and to their existing state in GFARS were used to compare and assess accountability capacity of GFARS of I.R.I, which is the main objective of present research. To make sure of presence/ absence of significant difference between existing and ideal states of key factors, correlated-group t-test was performed on each item designed for 8 agreed factors, results of which showed that values of t calculated for all items were considerably higher than theoretical t value (which is in range of 2.326 and 2.358 at probability level of .1% and freedom degree of 74). Thus, it is concluded that a significant difference exists between features of financial accounting and reporting system practiced by the government and those expected from an accountability-based system. Results of t-test are given in table 4 for correlated groups.

**Table 4:** Comparison of accountability capacity of GFARS of I.R.I.

Hypotheses	Item no.	Status	Mean	SD	T value	Support (Reject)

H1: A significant difference exists between capabilities of budget control system practiced by GFARS and those expected from an ideal one to fulfill accountability.	1	Ideal	7.85	1.78	14.87	supported	
	2	Existing	3.22	2.48	15.54		
	3	Ideal	7.62	1.77			
	4	Existing	2.16	2.26			
	5	Ideal	7.61	2.03	16.73		
H2: A significant difference exists between information extractable from an accrual-or modified accrual-based accounting system and financial information extractable from a cash accounting system practiced by the government.	6	Existing	2.93	2.04	14.72	supported	
	7	Ideal	7.38	2.15			
	8	Existing	2.85	2			
	9	Ideal	6.65	2.87			15.37
	10	Existing	1.32	1.71			
H3: A significant difference exists between features expected from and existing financial accounting and reporting system to fulfill government's accountability for fixed assets and public long-term debts and those of an ideal system.	6	Ideal	8.09	1.71	15.90	supported	
	7	Existing	2.41	2.82	17.78		
	8	Ideal	8.54	1.04			
	9	Existing	1.97	2.97			
	10	Ideal	8.61	1.81	13.42		
H4: A significant difference exists between funds needed to fulfill accountability for government financial resources and funds practiced by existing financial accounting and reporting system.	13	Existing	2.84	3.17	17.23	supported	
	14	Ideal	7.76	2.32			
	15	Existing	1.30	2.35			
	16	Ideal	8.28	1.44			14.36
	17	Existing	2.85	3.16			
H5: A significant difference exists between levels of governmental financial reporting expected to fulfill accountability and those of financial reporting existing in governmental accounting system of I.R.I.	13	Ideal	8.29	1.35	23.34	supported	
	14	Existing	1.65	2.09	19.02		
	15	Ideal	7.88	1.86			
	16	Existing	1.89	2.35			
	17	Ideal	8.01	1.54	17.91		
H6: A significant difference exists between	16	Existing	2.06	2.55	25.79	supported	
	17	Ideal	8.20	1.58			
	18	Existing	1.13	1.94			
	19	Ideal	8.20	1.33			26.42
	20	Existing	1.36	1.82			
H7: A significant difference exists between	20	Ideal	8.34	1.42	9.77	supported	
	23	Existing	5.45	2.53	22.03		
	23	Ideal	8.49	1.23			
H8: A significant difference exists between	23	Existing	1.93	2.24	22.03	supported	
	24	Ideal	8.36	1.15			12.58
	25	Existing	4.28	2.76			
H9: A significant difference exists between	25	Ideal	8.20	1.23	16.27	supported	
	26	Existing	2.82	2.60	16.49		
	26	Ideal	8.33	1.51			
H10: A significant difference exists between	26	Existing	3.82	2.33	17.06	supported	
	27	Ideal	8.17	1.63			12.59
	28	Existing	3.81	2.50			23.51
	28	Ideal	8.25	1.50			
H11: A significant difference exists between	29	Existing	1.56	1.94	20.75	supported	
	29	Ideal	8.41	1.02			
	30	Existing	2.16	2.30			
	30	Ideal	8.10	1.72			
H12: A significant difference exists between existing approved laws, regulations, and rules and those required to formulate theoretical framework, principles, and standards of an accountability-based financial accounting and reporting system.	30	Existing	2.96	2.61	17.06	supported	
	31	Ideal	8.21	1.67			16.27
	32	Existing	3.06	2.40			18.86
	32	Ideal	8.22	1.93			
	33	Existing	2.44	2.04			21.72
H13: A significant difference exists between	33	Ideal	8.45	1.34	21.78	supported	
	34	Existing	2.20	2.09			
	34	Ideal	8.13	1.57			
	34	Existing	2.22	2.04			
H14: A significant difference exists between	35	Ideal	8.36	1.64	15.94	supported	
	35	Existing	3.28	2.40	15.94		
	35	Ideal	8.36	1.64			

### Conclusions:

As stated previously, evaluation of accountability capacity and capabilities of GFARS practiced by I.R.I. requires using scientific and professional measures acceptable for national expert society. In present research,

initially, it was attempted to have key measures and features of accountability-based GFARS supported by a group of scientific and professional experts as a sample of national expert society by doing a comparative study through Delphi research. Then, key features of GFARS practiced by I.R.I. were compared with key features resulted from theoretical and comparative studies acceptable for national expert society and its accountability capacity and capabilities were evaluated.

Results from tests performed to compare features of GFARS of I.R.I. with those expected from an (ideal) accountability – based one showed that accounting system practiced by the government did not enjoy capacity and capabilities needed to control approved plans, to identify and record real revenues-costs of fiscal year, and to reflect status and results of financial operations of each of funds. Although ministries and governmental agencies attempt to report financially by formulating and providing monthly and annually financial statements, they are not able to fulfill financial accountability duty due to abovementioned shortcomings. On the other hand, status and results of financial operations of government as the main reporting unit are not reflected in annual and inter period comprehensive and integrated financial reports. For this reason, the government does not fulfill perfectly and correctly its accountability to people and their legal representatives for expending public financial resources. Results of this research indicate that, presently, no binding laws and regulation exist for formulating theoretical framework, principles and standards of governmental financial accounting and reporting and for making necessary changes into practiced accounting system.

In this way, results of present research, which was done for the first time in Iran and supported theoretically by the latest scientific and experimental studies agreed upon by national expert society, indicates this fact that, as a tool important to fulfillment of accountability duty, financial accounting and reporting system of the government suffers fundamental failures. In other words, the government of Islamic Republic of Iran is not able to fulfill its accountability duty asserted under constitution through practiced accounting and reporting system, as a result, citizen and their representatives are deprived of having free, public, quick access to financial information, which needs to be realized by organizing publication of governmental comprehensive and integrated financial reports.

Finally, it should be noted that, since the beginning of the year of 1381 (about mid of 2002), some changes have been made into the manner of keeping accounts of Iranian governmental agencies and ministries due to publication of guidelines of Economic Affairs and Finance Ministry, but they have no effects on the results of this research which was done prior to making said changes, and shortcomings of GFARS of I.R.I. still remain in effect.

Following brief recommendations are offered in order to resolve major shortcoming of Islamic Republic government's financial accounting and reporting system (GFARS) and to provide necessary grounds to make fundamental changes into governmental accounting and to design and implement an effective accountability-based financial accounting and reporting system.

1- To propose and approve binding legal plans or bills to do sufficient studies and research in the field of governmental accounting and to use developed countries experiences in order to make fundamental changes into the system practices.

2- To approve clear laws and regulations and to determine legally qualified authority (or authorities) for formulating theoretical framework, principles, and standards of governmental accounting.

3- To formulate theoretical framework of financial accounting and reporting on the basis of accountability, principles, and national standards for the government and affiliated units.

4- To design and implement a financial accounting and reporting system based on theoretical framework, principles, and standards under section 3, considering following features:

a) To predict an appropriate budget control system by using 2-way accounting method;

b) To apply accrual/ modified accrual basis to accounting of governmental-type activities;

c) To emphasize on reflecting capital and underlying assets and public long-term debts and to predict proper mechanisms for its implementation, correctly exercising management, protecting them, and using them accurately;

d) To complete and continuous use of funds accounting based on fund theory to control uses of each fund for approved objectives;

e) To determine reporting levels and to prepare financial reports on this basis while observing ruling regime of I.R.I.; and

f) To foresee and design comprehensive annual and inter period financial reports in order for government accountability to be fulfilled and for citizens' right to know facts to be met.

5) To approve laws and regulations binding government and affiliated units to observe theoretical framework, principles and standards of GFARS approved by legally official authority in keeping accounts and formulating financial statements.

6) To establish a governmental accounting research center in order to perform continuous research activities and use of developed countries' research and experience to make improvements and to enhance standards of GFARS and to update them.

*Suggestions for future research:*

1- Given that the government is financially and operationally accountable to people and their legal representatives for consumption of public financial resources and for capacity and capabilities of GFARS of I.R.I, it is suggested that another research be done on capacity and capabilities of GFARS's accountability in order to clarify shortcomings of existing system in aspects of operational accountability.

2- Since each of 8 key factors discussed in this research, which were considered as being effective in realization and enhancement of financial accountability level of GFARS, are significantly important and since identification and determination of appropriate mechanisms to realize and implement such factors through an accountability-based financial accounting and reporting system need more studies and research to be done, it is recommended that each factor be studied separately so that results of each study can be used to set principle and standards of governmental accounting and to design and implement and ideal accounting and reporting system.

**REFERENCES**

- [1] Babajani, Jafar, 1999. "Evaluation of Islamic Republic of Iran's financial accounting and reporting system's accountability", PhD thesis, AllameTabatabaee University.
- [2] Babajani, Jafar, "Comparative study of accounting concepts of for-profit and governmental units", offered by theoretical accounting lesson.
- [3] Canadian Institute of Chartered Accountants, Public Sector Accounting and Auditing Committee 1989. Accounting and Reporting for Physical Assets by Governments. CICA, Toronto.
- [4] Codification of Governmental Accounting and Financial Reporting Standards, 1993. Published by Governmental Accounting Standard Board.
- [5] Financial Accounting Standards Board (FASB). 1980. Objectives of Financial Reporting by Nonbusiness organizations. Statement of Financial Accounting Concepts No. 4. Stanford, CT, FASB.
- [6] Gray, A. and w. Jenkins, 1993. "Codes of Accountability in the NewPublic Sector", Accounting Auditing & Accountability Journal, 6(3): 52-67.
- [7] Gray, R.H., 1986. "Accounting and democracy". Accounting, Auditing & Accountability Journal, 2(3): 52-56.
- [8] Harold, I., Steinber, 1996. "The CFO ACT: A Look at Federal Accountability". Journal of Accountancy,
- [9] HMSO, 1994. "Better Accounting for the Taxpayers Money", The Government, HMSO CM 2929, London.
- [10] John J. Glynn, 1993. "Public Sector Financial Control and Accounting", Second Edition, Blackwell Published.
- [11] June, Pallot, 1995. "Elements of Theoretical Framework for Public Sector Accounting". Accounting Auditing. Accountability journal, 5(1): 35-54.
- [12] Liston, H., M. Turoff (eds), 1975. The Delphi Method: Techniques and Applications.
- [13] National Council on Governmental Accounting (NCGA), 1979. Governmental Accounting and Financial Reporting Principle. Statement No. 1. Chicage, IL: NCGA.
- [14] Norman, C., Dalkey, 1969. The Delphi Method: An Experimental study of Group Opinion, memorandum Rm-5888 (santa Monica), CA: Corporation.
- [15] Parker, L. and J. Guthrie, 1993. "The Australian Public Sector in 1990s:" New Accountability Regimens in Motion". Journal of International Accounting, Auditing and Taxation, 2: 1.
- [16] Roberts, J. and R. Scapens, 1985. "Accounting Systems and Systems of Accountability", Understanding Accounting Practices in Their Organizational Contexts, Accounting Organizations and Society, pp: 443-456.
- [17] Stewart, J.D., 1984. "The Role of Information in Public Accountability", in Hopwood. a. & Tomkins, c. (eds). Issues in Public sector Accounting, pp: 13-34.
- [18] Vatter, William, 1974. "The fund Theory of Accounting and Its Implications for Financial Reports". Midway reprint.
- [19] Yuji Ijiri, 1983. "on the Accountability-Based Conceptual Framework of Accounting", Journal of Accountant and Public Policy, 2.