



## The Structural and Environmental Challenges and Bottlenecks of Financial Supervision of the Accountants of the Executive Organs of the Country: An Approach to Optimal Implementation of the Public Sector Accounting System

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### Abstract

In this research, we examined the structural and environmental challenges and bottlenecks of financial supervision of the accountants of the executive organs of the country on the proper implementation of the public sector accounting system. So, we can provide suggestions to improve supervision to achieve the goals of the public sector accounting system by identifying current obstacles and challenges.

*Research Method:* The present research is applied in terms of purpose and descriptive and survey research to measure variables and data collection. In this research, we have used a combined approach of library or documentary methods as well as interviews, questionnaires, and data mining methods.

*Results:* we extracted statistical results regarding the components and barriers related to structural and environmental indicators in the form of 23 questions and a Likert scale questionnaire. Then we analyzed the data using SPSS and AMOS software. The results show the significant impact of structural and environmental barriers and challenges of accountants' financial supervision on the proper implementation of the public sector accounting system. Using structural equation modeling, we investigated the relationship and correlation between the two structural and environmental components. The results indicate a significant relationship and a positive correlation between these two challenges.

*Conclusion:* The research results show that the structural and environmental barriers and challenges of accountants' financial supervision significantly affect the proper implementation of the public sector accounting system.

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**Keywords:** Financial Supervision, Accountants, Public Sector Accounting, Ministry of Economic and Finance Affairs

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## 1. Introduction

The country's public sector's accounting system has undergone many changes since the beginning of 2015 and has moved from the cash accounting system to the gradual implementation of the accrual financial system. Changes in the public sector financial system will significantly impact the standards, structure, and organization of financial units, the list of accounts, operating procedures, accounting guidelines, and how financial management is handled and reported.

The public sector accounting system is a set of accounting concepts, assumptions, standards, procedures, and guidelines for identifying, measuring, registering, classifying, summarizing, and reporting the reporting units' financial events. Implementing the mentioned system is subject to all components' continuous observance to achieve the desired goals.

The change from accrual to cash accounting is a change in the accounting system and a conceptual change in applying accounting principles and standards in public sector management (Kordestani and Iranshahi, 2009).

Due to the change in accounting and the measurement approach in the public sector's accounting and financial reporting system, monitoring its proper and complete implementation is necessary and inevitable.

We can classify the public sector accounting and financial reporting system's main objectives into three groups as follows.

1. Assisting the public sector in fulfilling and evaluating public accountability
2. Providing information needs of users of financial reports of reporting units and
3. Creating the necessary platform for extracting and accurately calculating the cost of programs, activities, services, and products in line with performance-based budgeting.

Achieving these goals requires identifying and addressing the challenges of changing the financial system and creating the necessary mechanisms to implement them properly.

Financial supervision in the implementation of public sector accounting is supposedly one of the important issues. The General Accounting Law entrusts the accountant with supervision before and during the executive organs' expenditure. Therefore, it will be important to pay attention to the direct impact of accountants' performance in the financial supervision of public sector accounting in Iran.

Since the country's executive organs' accountants have a serious responsibility in implementing and establishing the accounting and financial reporting system of the public sector, the study and identification of structural and environmental challenges and bottlenecks of supervision for its proper implementation is the focus of this research.

The course of accounting developments in international institutions shows that the provision of binding laws and regulations has had a significant impact on changes in the administrative structure and providing services and creating a fundamental change in the public sector's accounting and financial reporting system. These infrastructures have recently been provided in our country to create a change in the public sector's financial system. Its complete and accurate implementation requires sufficient time, proper planning, and careful supervision. Given that monitoring and control in implementation are inevitable in the country's management, the existence of an effective supervision system financially will greatly contribute to social justice and the country's economic development. Overseeing government budget and expenditures is done through pre-expenditure supervision, supervision during expenditure, and post-expenditure one. In this regard, supervision during and before expenditure according to Article 90 of the General Accounting Law is the responsibility of the Ministry of Economic and Finance Affairs (accountants) and post-expenditure supervision according to Article 55 of the Constitution and Note 3 of Article 95 of the General Accounting Law is the responsibility of the Court of Accounts of Country; Article 174 of the Constitution is the responsibility

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of the General Inspection Organization, and Note 2 of the single article of the law on the Establishment of the Auditing Organization is the responsibility of the Auditing Organization (independent auditors).

Execution of accrual accounting has been included in the budget circular since the beginning of 2015, and all executive organs are obliged to implement it. The most important part of it is monitoring government expenditures, i.e., monitoring during and before spending. It is carried out by the accountants appointed by the Ministry of Economic and Finance Affairs (Article 31 of the Law on Public Accounts) as the main custodians of monitoring the proper implementation of the public sector accounting system in the executive organs of the country.

Less than five years have passed since the establishment and implementation of the public sector accounting system. Examining the obstacles and problems of supervising the implementation of public sector accounting from the perspective of accountants due to their direct connection with and responsibility for its problems and challenges can pave the way for comprehensive and accurate financial oversight, increasing the efficiency of accountants, reducing administrative bureaucracies and eliminating parallel tasks with other supervision bodies.

The research's main objective is to identify the structural and environmental challenges of accountants' financial supervision of the proper implementation of the public sector accounting system. It has the following secondary objectives: 1) identifying structural obstacles and problems of financial supervision of accountants on the proper implementation of the public sector accounting system and 2) identifying environmental obstacles and problems of financial supervision of accountants on the proper implementation of the public sector accounting system

## 2. Theoretical Issues and Hypothesis Development

The role of the accountant as a supervisor during the expenditure of the executive branch is associated directly with accepting the principle of supervision and control by officials and executive managers, clear laws and regulations and raising the level of knowledge and awareness of persons at any level and position and facilitates matters (Hedayati and Ghandi, 2016).

In any political system, programs, budgets, and financial supervision are mutually interdependent. As the principle of supervision is necessary for any movement, in a sense, supervision is certainly not necessarily less than the government itself because the survival of the government depends on supervision (Bahman, 2015).

The efficiency and dynamism of political and social systems are directly related to how they are monitored. Due to its size and impact, the public sector, especially in Iran, is one of the most important sectors in any country's financial system. The need for financial supervision on its performance is of great importance (Bahman, 2015).

Mohammadian and Taghipour Kazemi (2016) showed that the performance of the General Directorate of Supervision on Accountantships based on Malcolm Baldrige's organizational excellence model is appropriate. The results of ranking the research variables have shown that the most emphasis is on the general administration's leadership area, and the least emphasis is on the customer area.

Rabiee Mandajin and Gholizadeh Nargesi (2017) identified staff empowerment and its dimensions that include a feeling of meaning, competence, and effectiveness, affecting employees' job performance by improving the level of motivation. But from among the dimensions of empowerment, employee independence cannot significantly affect employees' job performance by improving motivation.

Akhavan Alavi et al. (2014) have reviewed the effect of motivational factors on improving financial supervision of accountants and financial managers of Qom province.

The analysis results show that motivational factors, job factors, organizational factors, and individual factors are associated with financial supervision quality.

Raudla et al. (2015) show that auditors can find performance auditing useful, even if it does not lead to specific changes in organizational policies and practices.

Oyebisi et al. (2017) concluded that a lack of transparency and accountability in the public sector is a major risk to capital market efficiency, financial stability, Long-term economic stability, and economic growth. Unfortunately, accountability is a major problem in Nigeria. This is a result of the high rate of corruption in all sectors of the Nigerian economy.

Al-Wardat and Mohammad Bashikh (2017) examined the impact of general managers' factors, i.e., managers' experience, and competence, on the Saudi Audit Institute's contributions to facilitate commitments for changes in government offices. The results of a survey of 96 Saudi government officials show that the Saudi Supreme Audit Institution can achieve considerable gains in improving Saudi public affairs.

### **2.1. Public sector accounting system**

Public sector accounting in developing countries and developing economies often has historical roots (Antipova and Bourmistrov, 2013). Therefore, understanding the past, present, and future of public accounting cannot be separate from understanding the so-called accounting system (Jones and Dugdale, 2001). Due to the widespread need for accountability and the growth of financial needs at the level of various governments worldwide, public accounting systems have changed and required a more complete and comprehensive accounting system (Christians et al., 2013; Oulasvirta, 2014).

In accrual accounting, the statement of financial resources in the case of period activities will be similar to a business profit and loss statement that can provide comparability between public and private units (McPhee, 2006).

Chan (2008) showed that the choice of accrual accounting system in the public sector leads to increased government accountability to the people, better financial management by public sector managers, and comparability of management performance in different areas. Fundamental changes in the accounting system are rooted in a change in the public sector accounting outlook from cash changes to events that lead to cash changes.

Kazemi and Karbasi Yazdi (2012) examined five factors of lack of theoretical and conceptual framework, laws and regulations in the financial and Accounting system, standards and methods of government accounting, lack of full implementation of operational budgeting, lack of performance auditing in the public sector. Findings showed that all five factors examined are obstacles to implementing accrual accounting in the public sector.

Amini Mehr et al. (2015) examined the usefulness of the accrual accounting basis for reporting transparency and accountability of universities affiliated with the Ministry of Science. Findings indicated that accrual accounting improves public sector accountability. Accrual accounting also has no significant effect on reporting transparency. In addition, the results showed that accrual accounting is effective in determining the cost of services at Kharazmi University.

Akrami et al. (2017) examined the conditions and resources needed to implement accrual accounting in the public sector, the factors affecting the transition period and reviewed experiences in some countries and have concluded that the time frame set out in the law is not realistic due to the vastness of Iran's public sector, limited resources, and infrastructures.

Kordestani et al. (2016) showed that a lack of real will on the part of politicians for developing and implementing Transition program, lack of public demand for government performance, government economy and the extent of government ownership in the

economy, and lack of appropriate standards and laws in the public sector are among the most important obstacles to the implementation of accrual accounting in the public sector.

Caperchione (2015) suggests that central governments should implement international standards of public sector accrual accounting.

McPhee (2015) shows that the selection of accrual accounting in the public sector leads to increased government accountability to its clients, better financial management of public service managers, and comparability of management performance in different areas; ultimately, this improves the quality of reported information.

Becke et al. (2014) showed that different accountants have had different challenges in being coordinated with budgeting based on accrual accounting and have made many efforts to implement accrual accounting.

Christians et al. (2013) show that the current laws, especially those related to budget accounting and the importance of budget accounting concerning financial reporting's general purposes, are reasons for not accepting international standards.

In interventional research using accrual accounting system in public sector organizations, Bruns (2014) showed that the implementation of accrual accounting system motivates and promotes public services and beneficiaries' satisfaction.

Caperchione (2015) examined the application of accrual accounting in Australian municipalities. Findings indicate that this system has been effective in the performance of municipalities. System complexities and risks such as fraud, corruption, and compromising domestic capital are also less common.

Ritonga (2018) investigated the quality of accrual accounting. The quality of accrual accounting is calculated based on five types of accrual transactions, which are: conversion of assets into cost transactions, collection of costs of illegal transactions, collection of illegal transactions of assets, collection of illegal transactions of income, and conversion of debt into income transactions. This study shows no significant quality difference in accrual accounting implementation between different types of local governments, i.e., local government, municipal local government, and provincial, local government. The main question of the research is that what are the important structural and environmental challenges and barriers related to the financial supervision of the accountants of the executive organs of the country regarding the proper implementation of the public sector financial reporting and accounting system? It is divided into secondary questions as follows: 1) what are the important structural challenges and obstacles related to the financial supervision of the accountants of the executive organs of the country regarding the proper implementation of the public sector financial reporting and accounting system? 2) what are the important environmental challenges and obstacles related to the financial supervision of the accountants of the executive organs of the country regarding the proper implementation of the public sector financial reporting and accounting system?

### **3. Research Methodology**

#### **3.1. Research Hypotheses**

##### **3.1.1. Main research hypothesis**

Structural and environmental challenges and bottlenecks in accountants' financial supervision hinder the proper implementation of the public sector accounting system's establishment.

It is finally classified into two secondary hypotheses.

##### **3.1.2. Secondary hypotheses**

Hypothesis 1: Structural challenges and bottlenecks in accountants' financial supervision hinder the public sector accounting system's proper implementation.

Hypothesis 2: Environmental challenges and bottlenecks in accountants' financial supervision hinder the public sector accounting system's proper implementation.

### 3.2. Research method

In fact, the present research is applied in terms of purpose and descriptive and survey research to measure variables and collect data. This research has used a combined approach of library or documentary methods and interviews, questionnaires, and data mining methods. In this method, the researcher has used the tool of taking notes from library resources as well as designed tools such as specialized checklists designed to collect the required information and interviews and questionnaires in combination.

### 3.3. Data collection

Since this research is descriptive, in the first part, we extracted demographic information and descriptive statistical indicators about the collected data, and, in the second part, through data mining and analysis of relevant information, we extracted the necessary findings inductively to answer each of the research questions.

### 3.4. Defining research variables

Dependent variable: Optimal financial supervision with the approach of implementing the public sector accounting system

Independent variables: 1. Environmental factors, 2. Structural factors

### 3.5. Statistical population

The statistical population is all accountants of the country's executive organs, and the size of the population is 742 people. We used Cochran's formula to select a statistical sample from the statistical population. According to the mentioned formula, the sample size has been 253 people:

$$n = \frac{\frac{Z^2 pq}{d^2}}{1 + \frac{1}{N} \left[ \frac{Z^2 pq}{d^2} - 1 \right]}$$

The value of n represents the sample size.

The values of p and q are the success and failure ratios, which are considered 0.5.

The value of Z is the percentage of the standard error of acceptable reliability at the error level of 0.05 being equal to 1.96.

The error value of the desired degree of confidence or probable accuracy is also considered 0.05.

The value of N represents the size of the target population.

### 3.6. Sampling method

According to the size calculated by Cochran's formula, we should distribute at least 253 questionnaires among the country's accountants of the country's executive organs. Accordingly, we distributed 320 questionnaires among the statistical population. We distributed this number of questionnaires among 12 provinces of the country.

Considering that the subject under study is the problems and bottlenecks of financial supervision of accountants and the main task of accountants is to monitor the expenditure of government credits, financial resources, and the budget of the whole country, we ranked first the provinces of the country with an average of the last 5 years of the share of budget credits of the whole country extracted from the statistical yearbook of the country between the years (2013-2017). Then we divided it into three groups, the first group up to 2%, the second group from 2% to 4% and the third group above 4% of the total budget share of the country and finally we randomly selected 4 provinces from each

group and distributed the questionnaire among accountants as follows:

First group: Provinces of Qazvin, Ardabil, South Khorasan, and Hamedan.

Second group: Provinces of Kurdistan, Golestan, Hormozgan, and East Azerbaijan.

Third group: Provinces of Sistan and Baluchestan, Kerman, Fars, and Tehran.

Then we received 260 questionnaires from 10 provinces and continued the research.

### 3.7. Research reliability

We have used a questionnaire based on the Likert scale (Figure 1). So, after selecting the subject and determining the research hypotheses, to obtain information about the obstacles and problems of structural and environmental financial supervision of accountants in the public sector accounting system by referring to articles and books in relevant fields and translating articles and dissertations which were available outside of Iran and through the Internet and journals, and referring to accountants, university professors and elites in the field of research, we identified and extracted factors and influential components; then we developed the relevant questionnaire.

I agree completely 2. I agree 3. I have no opinion 4. I disagree 5. I disagree completely

Figure 1: Likert spectrum

We have used Cronbach's alpha to obtain reliability, as described in Table 1, which is acceptable for research purposes (greater than 0.7).

Table 1: Cronbach's alpha

Questionnaire	Cronbach's alpha	Number of questions	Number of sample
Structural factors	0.790	11	260
Environmental factors	0.840	12	260
Total questionnaire	0.876	23	260

## 4. Research Findings

### 4.1. Descriptive statistics

The results of descriptive statistics are shown in Table 2, which was obtained from 260 questionnaires collected.

Table 2: General Information of Questionnaire

Variable	Frequency	Frequency percentage	
Degree	Financial	168	64.6
	Non-financial	92	35.4
Education	Diploma	6	2.3
	BSc	86	33.1
	MSc	160	61.5
	PhD	8	3.1
Experience	Below 15 years	42	16.2
	15-20	76	29.2
	21-25	92	35.4
	26-30	39	15
	Above 30 years	11	4.2

### 4.2. Descriptive statistics of research variables

We will calculate the minimum, maximum, average, standard deviation, skewness, and kurtosis for each of the research variables with the data collected from the questionnaire.

Table 3 shows the descriptive indicators of the research variables. As you can see, the averages of environmental and structural factors are 1.69 and 1.97, respectively. Standard deviation values for research variables, environmental and structural factors are equal to

0.47 and 0.51, respectively.

**Table 3:** Descriptive statistics of research variables

Research variables	Minimum	Maximum	Mean	Standard deviation	Skewness	Kurtosis
Environmental factors	1	75.3	69.1	47.0	07.1	97.1
Structural factors	1	36.3	97.1	51.0	37.0	37.-0

### 4.3. Inferential statistics

This section will first use the Kolmogorov-Smirnov normality test to determine the parametric or non-parametric tests to test hypotheses. If the data is normal, we use one-sample t-test parametric tests, and if the data is not normal, we will use the Wilcoxon non-parametric test.

#### 4.3.1. Kolmogorov-Smirnov test for investigating the normality of research variables

For this purpose, we use the Kolmogorov-Smirnov valid test to check the normality of the main variables' distribution. This test compares the observed cumulative distribution function with the expected cumulative distribution function in a variable at the distance measurement level in the single-sample mode. In interpreting the test results, if the amount of error level observed is greater than 0.05, then the observed distribution is the same as the theoretical distribution. There is no difference between the two. That is, the obtained distribution is a normal one. However, if the significance value is less than 0.05, then the observed distribution is different from the expected distribution, and the above distribution will not be normal. This test examines the normality of the data according to the following hypotheses.

$H_0$ : Data distribution is normal.

$H_1$ : Data distribution is not normal.

The results of the test of normality of the research variables are shown in the table below.

**Table 4:** Kolmogorov-Smirnov test results

Research variables	Test statistic	Significance level
Environmental factors	0.091	0.000
Structural factors	0.066	0.007

According to the results of the table above, the significance level of the Kolmogorov-Smirnov test for all research variables is less than 0.05, so we conclude that the distribution of all research variables is not normal.

Since the research variables were not normal, we use the Wilcoxon test to examine the hypotheses' status. The hypothesis test in the Wilcoxon method is as follows.

$H_0$ : The factor in question is ineffective in the proper implementation of the establishment of the public sector accounting system. (Median of observations is not significantly different from the number 3).

$H_1$ : The factor in question prevents or does not prevent the proper implementation of the public sector accounting system (median is significantly different from the number 3).

Therefore, when examining research hypotheses, if the null hypothesis is accepted, the median of the variable or index under test is not much different from the number 3; in other words, the desired factor is ineffective in the proper implementation of the public sector accounting system. But suppose hypothesis zero is rejected, and the median of the



observations is more than 3. In that case, it means that the factor in question does not prevent the proper implementation of the public sector accounting system's establishment. Finally, suppose the null hypothesis is rejected, and the median of the observations is less than 3. In that case, the factor in question prevents the proper implementation of the public sector accounting system's establishment. We should note that because in the 5-option Likert spectrum, the average and median are 3, this number is considered the criterion and moderate status.

**4.4. Testing the hypotheses**

Hypothesis 1: Environmental challenges and bottlenecks in accountants' financial supervision hinder the public sector accounting system's proper implementation. The questions are given in the questionnaire, according to the following table. The answers are in this order: *I completely agree, I agree, I have no opinion, I disagree, and I'm afraid I have to disagree.*

The results of the Wilcoxon test for this hypothesis are shown in the table below.

**Table 5:** Results of the Wilcoxon test for testing the first hypothesis

Index	Median	Test statistic	Significance level
Environmental factor	1.66	-13.87	0.000

According to the above table, the significance level is zero, which is less than 0.05, so the null hypothesis is rejected. In other words, according to the previous explanations, the environmental factor is not ineffective in the proper implementation of the establishment of the public sector accounting system. Because the median of this factor is less than 3, we can say that the environmental challenges and bottlenecks in accountants' financial supervision hinder the proper implementation of the public sector accounting system.

**4.5. Ranking of environmental challenge items**

The table below shows the ranking results of this challenge.

**Table 6:** Results of environmental challenge ranking

Challenge items	Mean Rank	Rank
First item	6.42	Sixth
Second item	6.02	Second
Third item	5.60	First
Fourth item	6.67	Ninth
Fifth item	6.96	Eleventh
Sixth item	6.30	Fifth
Seventh item	6.55	Eighth
Eighth item	6.05	Third
Ninth item	6.49	Seventh
Tenth item	7.85	Twelfth
Eleventh item	6.82	Tenth
Twelfth item	6.26	Fourth

According to the ranking table, the third item is one of the most important environmental challenge items. The ranking of the other items is written in the rank column in front of each item. (We should note that the items with lower average rank were considered top ranks because the numbers from one to five in the questionnaire were given to the options *I completely agree* to *I can't entirely agree*, respectively).

Hypothesis 2: Structural challenges and bottlenecks in accountants' financial supervision hinder the public sector accounting system's proper implementation. The questions are described in the questionnaire, according to the following table. The

answers are in the form of I strongly agree, I agree, I have no opinion, disagree, and strongly disagree, respectively.

The results of the Wilcoxon test for this hypothesis are shown in the table below.

**Table 7:** Results of the Wilcoxon test for testing the second hypothesis

Index	Median	Test statistic	Significance level
Structural factor	2	-13.82	0.000

According to the above table, the significance level is equal to zero, which is less than 0.05, so the null hypothesis is rejected. In other words, considering the previous explanations, the structural factor is not ineffective in the proper implementation of the establishment of the public sector accounting system. Since the median of this factor is less than 3, we can say that the structural challenges and bottlenecks in accountants' financial supervision hinder the proper implementation of the public sector accounting system.

#### 4.6. Ranking of structural challenge items

The table below shows the ranking results of this challenge.

**Table 8:** Results of Structural challenge ranking

Challenge items	Mean Rank	Rank
First item	5.41	Fourth
Second item	5.06	Second
Third item	6.82	Ninth
Fourth item	7.45	Eleventh
Fifth item	6.49	Eighth
Sixth item	5.58	Sixth
Seventh item	4.69	First
Eighth item	5.12	Third
Ninth item	5.64	Seventh
Tenth item	7.28	Tenth
Eleventh item	5.46	Fifth

According to the ranking table, the seventh item is one of the most important structural challenges. The ranking of the other items is written in the rank column in front of each item.

Main Hypothesis: Structural and environmental challenges and bottlenecks in accountants' financial supervision hinder the public sector accounting system's proper implementation.

Based on the results of the first and second hypotheses, we concluded that the environmental and structural challenges and bottlenecks of accountants hinder the proper implementation of the public sector accounting system. Accordingly, the main hypothesis is confirmed.

We compare the two structural and environmental challenges using the Friedman test; we have given the test result in the following table.

**Table 9:** Results of structural and environmental challenge ranking

Challenge	Mean Rank	Rank
Structural	1.73	First
Environmental	1.27	Second

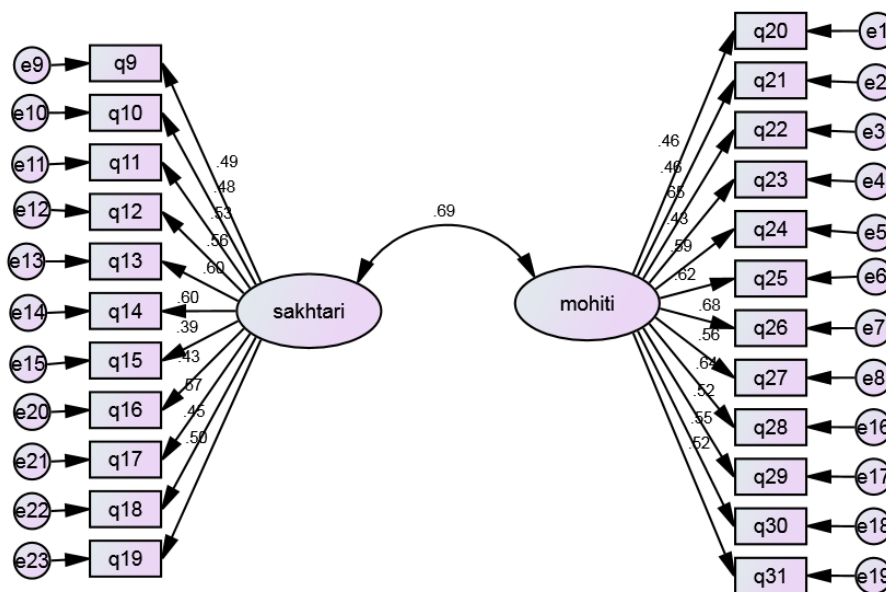
According to the above table results, the structural challenge is of higher priority than the environmental.

### 4.7. Modeling of structural equations

The structural equation model is a specific causal structure between a set of invisible constructs. A structural equation model consists of two components: a structural model that defines the causal structure between the hidden variables and a measurement model that defines the relationships between the hidden variables and the observed variables. We can analyze structural equation models using Amos software. Using this technique, we can study and analyze various conceptual models of different researches.

In structural equation modeling, we can trust model estimates when the model has sufficient fit. Model fit means that the variance-covariance matrix observed with the variance-covariance matrix predicted by the model must have values close to each other or so-called fit. The closer the values in the two matrices are, the more the model fits. Amos calculates a goodness-of-fit index (the ratio of the sum of the squares explained by the model to the total sum of the squares of the matrix estimated in the population). This index is similar to the correlation coefficient in terms of optimality. These criteria vary from zero to one, although they may theoretically be negative (this should not be the case, as this indicates that the model does not fit the data definitively). The closer the goodness-of-fit index and the adjusted fit index are to one, the greater the goodness-of-fit model with the observed data.

The following figure shows the two-way relationship between structural and environmental challenges.



**Figure 2:** Diagram of the two-way relationship between structural and environmental challenges

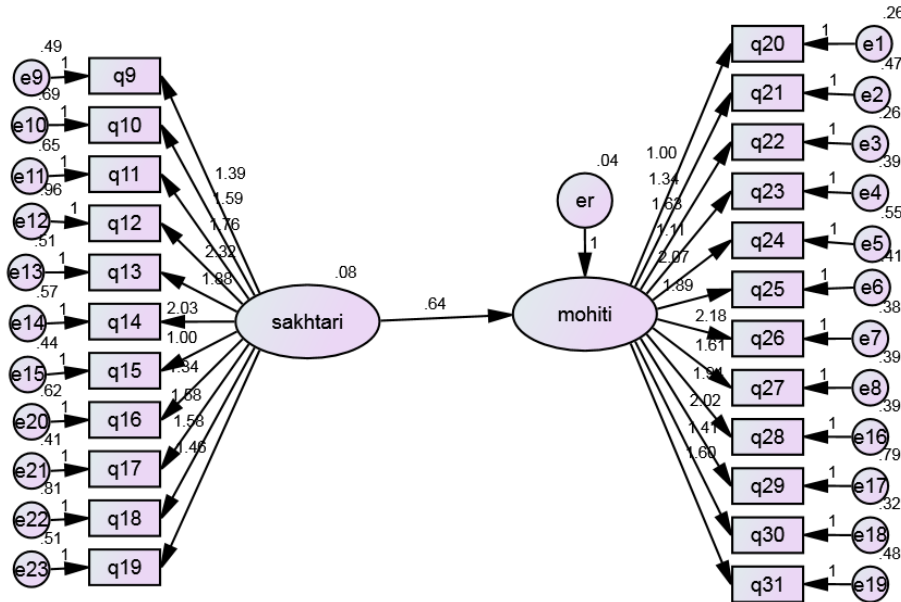
According to the above figure, the correlation between environmental and structural challenges is equal to 0.69; this relationship's significance level is less than the test level, so the relationship between these two challenges is significant. Since the sign of the correlation between these two is positive, the direction of the relationship between them is also direct, directly affecting each other.

The following table shows the results of the above model:

**Table 10:** Results of fitting the model of the two-way relationship between environmental and structural challenges

Relationships between challenges	Correlation	Significance level
Environmental --> Structural	0.69	0.000

Considering the higher rank of structural challenges than environmental ones, we examine the impact of structural barriers on environmental barriers. The following figure shows the model of the impact of the structural challenge on the environmental one.



**Figure 3:** Diagram of the impact of the structural challenge on the environmental one

In the above figure, er1 is considered as a standard variable with a standard coefficient of 1.

According to the above figure, the effect of structural challenge on the environment is equal to 0.64, indicating and confirms structural problems' effect on environmental ones. This relationship's significance level is less than the test level, so the structural challenge's effect on the environment is significant.

**Table 11:** Results of fitting the model of the one-way relationship between environmental and structural challenges

Relationships between challenges	Correlation	Significance level
Structural --> environmental	0.64	0.000

## 5. conclusion

As explained in the research's reliability, after reviewing and processing articles, journals, dissertations, referring to accountants, elites, and university professors, we prepared and extracted the questionnaire. The results obtained from the research show that the structural and environmental obstacles and challenges of accountants' financial supervision have a significant effect on the proper implementation of the public sector accounting system. Due to the ranking of items and structural factors, we identified the following cases as the most important structural obstacles to the implementation of the public sector accounting system: lack of accountability system, lack of costing activities and services of each executive organ, multiplicity of supervision organs with different attitudes, lack of operational budgeting structure in Executive organs, inadequacy of

public accounting education system, including inadequate training and non-conformity of educational materials with the real situation, inconsistency of resources and sufficient budget, lack of quality control structure affecting the functioning of supervision bodies, ambiguity in the attitude of supervision bodies regarding performance of Public sector accounting system, defects and problems of some topics and instructions, lack of control and continuous monitoring of the Ministry of Economic and Finance Affairs regarding the implementation of the public sector accounting system in achieving the objectives and centrality of the accountant as responsible for monitoring and implementing most laws. Ahmadi and Jamshidi Navid (2016) concluded in their research that there is a significant relationship by 76% between structural and organizational weakness and improving the quality of government audit by the country's financial monitoring system. In another research, Hozoori et al. (2015) considered human factors and the current government accounting system as effective factors in the occurrence of financial deficiencies in the executive organs' financial control system.

We identified the following defects as the most important environmental obstacles to the proper implementation of the public sector accounting system: lack of familiarity of managers with the rules and instructions of the public sector accounting system, non-compliance between the number of manpower and the volume of activities of the executive bodies, unfamiliarity of executive staff with the rules and instructions of the public sector accounting system, lack of integration of Financial systems software, non-participation and decision-making of accountants in the appointment and transfer of financial personnel, lack of necessary specialized capacity in the financial body, unfamiliarity of executive staff with the objectives of the public sector accounting system, non-participation and decision-making of accountants in encouraging and punishing public sector employees, unfamiliarity of managers with the objectives of the public sector accounting system, absolute decision of senior managers in the distribution of credits and budget resources, ambiguity in the organizational position of the accountant in the administrative hierarchy of the executive organ and lack of appropriate public and social supervision structures. In their research, Blume and Voigt (2011) introduced environmental factors of auditing as one of the criteria for improving government auditing quality. In another research, Ramezani et al. (2016) emphasized the great impact of environmental factors on improving financial supervision.

Given the first hypothesis that the structural challenges and bottlenecks of accountants' financial supervision hinder the proper implementation of the public sector accounting system, we make the following suggestions:

- A) Elimination of parallel monitoring activities of supervisory bodies with the supervisory duties of accountants.
- B) Allocating sufficient resources and budget to improve and complete the infrastructures required to implement the public sector accounting system properly.
- C) Existence of continuous and periodic training following the chapter headings and accountants' needs related to the public sector accounting system.

Given the second hypothesis that the environmental challenges and bottlenecks of accountants' financial supervision hinder the proper implementation of the public sector accounting system, we make the following suggestions:

- A) Employing specialized and sufficient human resources in the financial sector of the executive organs.
- B) Providing necessary and sufficient training to familiarize employees and managers of executive organs with the public sector accounting system's objectives.
- C) Training the executive organs' financial department's employees with the instructions and chapter headings of the public sector accounting system.
- D) Using more integrated and comprehensive software at the executive organ level

following changes in the public sector accounting system.

### Research limitations

Apart from the inherent limitations of the research, i.e., using a questionnaire and lack of access to all accountants of the executive organs of the country, as well as limitations due to sampling and use of statistical methods, there are other influential factors and components as follows that we did not use in the research:

A) Using a set of documents, models, standards, and executive measures to change from the current situation to the desired situation with the focus on information technology under the title of organizational architecture

B) Using superior business process documentation methods as a determining factor to achieve success in implementing business process management in the executive organs.

C) Investigation of various activities that lead to improving executive organs' performance and manage all data and processes in a software system and the form of a database in a continuous, regular and accurate manner, called the creation of integrated organizational systems.

D) Study comprehensive knowledge and information on all the factors that affect the executive organ, namely organizational intelligence.

### Further to the study

According to the researcher, the following researches will be effective to complete and achieve a single result for eliminating the obstacles and structural and environmental challenges of the financial supervision of the accountants regarding the public sector accounting system and considering the mentioned limitations:

A) Investigating the obstacles to the proper implementation of the public sector accounting system with a focus on organizational architecture, organizational intelligence, integrated organizational systems, and business process documentation

B) Investigating the structural and environmental problems of the managers of the executive organs of the country in the proper implementation of the public sector accounting system

C) Investigating the structural and environmental challenges of the optimal implementation of the public sector accounting system from the perspective of the employees of the executive organs of the country

D) Study of structural and environmental barriers to the proper implementation of the public sector accounting system from the perspective of the staff of supervisory organs (Court of Accounts, Inspection Organization, and Audit Organization)

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