

Providing an audit quality model based on organizational structure, operating mechanism and the characteristics of auditing firms using structural equation modeling

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Abstract

This study aimed to provide an audit quality model based on organizational structure, operational mechanism and characteristics of audit firms. The sample size in order to collect the research required data was considered as 386 independent auditors from auditing firms, and the same number of questionnaires were distributed and collected after being answered. The data collected by the questionnaires were analyzed by SPSS and Smart PLS software using structural equation modeling. Analysis of research hypotheses using structural equation modeling at 99% confidence level showed that; the size of auditing firms, legal system, internal and external quality control of auditing firms and corporate governance mechanisms are among the factors positively affecting audit quality. Therefore, it can be said that with increasing each of the factors of the size of auditing firms, legal system, internal and external quality control of auditing firms and corporate governance mechanisms, the quality of auditing increases. The legal system and internal and external quality control are among the factors that enhance and affect the organizational structure of auditing firms. The size of audit firms and internal and external quality control are factors affecting the operational mechanism of the audit firm. Therefore, it can be said that by increasing the size of auditing firms and internal and external quality control of auditing firms, the operational mechanism of auditing will be improved. Finally, the results showed that the organizational structure of auditing firms and the audit operating mechanism have a positive and significant effect on audit quality.

Keywords: Audit, Organizational Structure, Audit Quality, Operating Mechanism.
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1 Introduction

Auditing can be one of the ways to prevent and reduce opportunistic behaviors of managers. Because it is believed that institutions and companies that provide audited financial statements have better information content and more qualitative profit. In addition, higher-quality audits are more likely to detect questionable accounting practices.

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Because quality auditing firms have more expertise, resources and incentives to detect mistakes and fraud [6]. One of the most common definitions of audit quality is that given by [1]. He defines the quality of auditing as two possibilities: first that the auditor discovers deficiencies in the accounting system, and second, that he reports those deficiencies. The auditor's likelihood of detecting material misstatement depends on the auditor's competence and the auditor's likelihood of reporting material misstatement detected depends on the auditor's independence [4]. Davidson and Neu [17] offered different definitions of audit quality; They stated that audit quality relates to the auditor's ability to detect and eliminate material misstatements and manipulations in the reported net profit. Titman and Trueman [38] and Beatty [10] define audit quality as the accuracy of the information that is provided to investors after the audit. The quality of the audit is also defined as the likelihood that the financial statements will be free of major distortion after the auditor's review. Das and Pandit [16] have pointed out that audit quality can have consequences such as increasing investment efficiency, reliance on accruals and earnings quality.

In situations where it is not possible to achieve organizational and individual goals in the usual way, the application of dysfunctional behaviors may also seem necessary. On the other hand, these behaviors can be a reaction to the stressful environment caused by strict managerial controls [14]. In other words, dysfunctional audit behaviors can be defined as dysfunctional reactions to the environment such as the control system. The use of audit programs, time budget and direct and accurate monitoring are among the factors that create a strong control structure in the organizational environment [24, 33]. Auditors will have far more unethical decisions and behaviors in a situation where they are under organizational pressure, legal requirements of work, strict control by supervisors, and requirements of employers. Therefore, it is expected that in unexpected situations where the achievement of individual and organizational goals is questionable, as well as in environments with strict supervision, the likelihood of dysfunctional behaviors will increase [19, 40]. These forms of dysfunctional behaviors have a direct and indirect impact on audit quality [9, 33]. On the other hand, auditors' personal ethics philosophy influences unprofessional behaviors that reduce the quality of the audit. The more the accountants consider their organizational environment as an ethical environment, the more ethical they act in terms of judging [28].

Employees' commitment to their organization is one of the issues that have been studied in many studies and if it is considered, it can create beneficial organizational consequences, desire and great effort in line with the goals of the organization and the desire to stay in the organization. The two factors of organizational commitment and professional commitment together can increase productivity in the organization. In organisations and commercial institutions, there is a need for personnel who are able to determine the accuracy and desirability of financial information; therefore, the existence of independent auditors in the light of this need is quite clear; That is, personnel with professional competence and behavior who can determine the financial information on which they rely provide a good picture. Principles of professional behavior and professional care such as competence, independence, confidentiality and honesty and so the observance of the operations standards and reporting principles like auditing teamwork quality and organisational presence of auditors are the most important factors of determining efficient auditors. And this, along with the auditor's sense of belonging and dependence on his profession and organization, creates a sense of identity and responsibility and affects his working quality [31]. Auditors are required to formulate and execute their audit plans within the framework of auditing standards, which is recognized as the benchmark for evaluating the quality of auditors' work. In addition, auditors are required to observe professional ethics and professional conduct in the performance of their duties, as performing unprofessional conduct can reduce the quality of auditing and destroy public confidence in the accounting and auditing profession and damage the reputation of the profession as a whole. All of this can be traced back to the auditors' commitment to the profession and the stakeholders who use the auditors' professional services. Professional ethics, professional behaviors and commitment of auditors can be influenced by various factors such as culture, feelings, views and attitudes of members of the organization and ultimately influenced by these factors lead to compliance or non-compliance with professional behavior and commitment among auditors. The direct relationship between the moral and cultural values of the organization causes the employees of the organization to have an ethical behavior to ensure the interests of the organization and its stakeholders [7]. According to Baron and Greenberg (1999), the impact of organizational culture on the organization members is such that by examining its dimensions, the behavior, feelings, views and attitudes of organization members and their possible reaction to the desired developments can be evaluated, predicted and guided. With the leverage of organizational culture, it is easy to facilitate change and establish new orientations in the organization [8]. Organization is more than horizontal and vertical levels, units, structures and hierarchies. An organization has a personality as an individual, a personality that has the characteristics of flexibility, conservatism and innovation, etc. In the organization, employees agree on a specific pattern of behavior, and this is the organizational culture [30]. Audit firms also have a hierarchy, organizational and operational structure that can affect the quality of auditors' work.

So far, much research has been done on the factors affecting audit quality. The issue of audit quality and the factors affecting audit quality is not a new subject in many countries. Many studies have examined the relationship between independent auditing super visionary organizations and audit firms and the quality of auditing. But the organizational model of audit quality includes two main factors, namely organizational structure and operational mechanism, which have been addressed in a few kinds of research [21]. Auditing firms differ from other organizations in three important aspects studied. First, auditing firms are formed as an organization in which auditors oversee each other both as partners and as CEOs. Second, they are independent of the audited client organizations, and this is a professional principle because the auditor's independence values the auditor's comments. And third, the auditor's professional involvement is in the direction of the public interest [19]. Based on the above, auditing firms are practically faced with two organizational environments. The first environment is the client organization and the second environment is the auditing firm, these two environments together may cause fundamental ambiguities in the auditors' organizational structure and operational mechanism, which ultimately affect the quality of the audit, so the main issue of the present study is to answer this question; What are the factors affecting the audit quality in auditing firms, based on the auditing quality model.

2 Theoretical Foundations

The growing development and complexity of companies have necessitated the processes that provide the information needed to make decisions. Expanding the need for auditing as part of the financial information transferring process is also in line with this. The auditing profession has undergone rapid and significant changes in the last 20 years. The lack of strong regulation in the auditing labour market has allowed auditing firms to pursue more economic goals and seek to increase their revenue and reduce costs in any audit work. In such a situation, a successful auditor can, according to the characteristics of the unit under review, have the best estimate of his highest salary in order to maintain the quality of work and do it at the lowest cost. The low quality of the audit reduces the confidence of the users of the financial statements and this not only leads to the failure to achieve the audit objectives but also reduces the credibility of the audit process on a large scale. According to the accreditation theory, achieving a higher quality of audit requires increasing the skilled audit workforce, increasing the audit time, and continuous training to increase the skills and knowledge of audit staff [1]. The continuity of the activity of each profession and the employment of the members working in it depends on the type and quality of services provided. Also, the credibility and reliability that the auditors gain as a result of providing these services are very important. This credibility and trust are the main capital of any profession; which is very important to maintain. From this point of view, auditors are no exception to this rule and are required to observe ethics and professional behaviour in performing their organizational and professional duties, because performing unethical behaviours can reduce the quality of auditing, destroy public confidence in the auditing and accounting profession and ultimately hurts the reputation of the entire profession [34].

Survival in the current competitive market, and attracting and retaining new customers are among the most important and vital issues for auditing firms. Therefore, maintaining quality in line with customer-centricity culture is one of the important concepts that is used in the audit profession. Also, the incentive to make more money and compete in the auditing market may reinforce the willingness to make monetary benefits rather than retain the customers. These issues may affect the independence and opinion of the auditor as well as the quality of the audit and thus reduce public confidence in the auditors [27].

Recently, auditing firms have introduced new titles such as knowledge-based organizations, multinational professional service networks, and professional service companies under the name of their Institute [13]. These titles may simply be new forms of auditing firm names, and they may also reflect changes in the operational nature of companies and their services. These principles largely refer to the development of title commercialization in the auditing industry. For example, titles such as profitability, productivity, market strategy, customer orientation, corporate, and business process are used as labels to describe the development of audit firms in relation to organizational orientations [11]. Few studies have sought to discover operational and business trends in the auditing industry, which were mainly exploratory or theoretical studies. Accordingly, the professional and organizational identity of auditors in the emerging commercialization processes in the auditing industry remained unclear [12].

High-quality independent auditing is one of the main components of good capital markets. Companies with high financial reporting reliability are more likely to change auditors when questioning their inadequate audit quality to avoid capital market consequences from unreliable financial reporting [22]. The quality of an audit depends simultaneously on audit firm characteristics such as the auditor's independence, the auditor's experience, and the auditor's accountability [18, 37]. The work experience improves the auditor's ability to audit. The auditor's work experience affects the amount of time and number of tasks to be performed by the auditor, and both of these increase the auditor's

expertise in performing the audit. On the other hand, professional competence includes individual quality, general knowledge and specific skills. Increasing individual quality, general knowledge and specific skills increase professional competence and provides a higher quality to the auditor [41]. Previous studies, with the main purpose of providing a basic basis for increasing the quality of the audit, have identified various aspects of several effective characteristics of the audit firm on the quality of the audit. Some studies test a single factor, while others consider multiple factors. Most importantly, these studies vary in characteristics such as sample size, indicators used, country, and time period. Thus, narrative reviews are ambiguous and misleading because different researchers may arrive at different conclusions about a set of studies due to differences and deviations in these features and characteristics [2].

3 Research Review

Salem et al. [35] in a study that examined the auditing quality and doubtful receivables storage in Islamic and conventional banks. Examining the effect of audit quality on adjusting the reserve of doubtful receivables among Islamic and conventional banks, they found that the size of audit firms, the size of the audit committee and the independence of the audit committee control the methods of manipulating profits by storing doubtful receivables. In contrast, the audit committee's mechanisms do not affect the performance of earnings manipulation in conventional banks. They also found that the level of manipulation in the interest rates of Islamic banks operating in troubled countries was lower than conventional banks. In addition, the research results indicate that the quality of auditing in conventional banks is low compared to Islamic banks.

Kuang et al. [26] using a sample of audit mandatory partner rotation from the Stock Exchange reports, examined the relationship between mandatory audit rotation and audit quality in the United States. The results showed that the auditor's rotation does not improve the quality of the audit. There was also evidence of customer disclosure that the mandatory rotation rules cause the auditor and the client to change again. The results provided important evidence on the desirability of mandatory audit rotation laws in the United States.

Ernstberger et al. [19] examined the relationship between audit firms' remuneration policies and audit quality. The mandatory remuneration disclosure policies in German audit firms were used to analyze this study. The results showed that remuneration policies are different in auditing firms. Also, the profit-sharing leads to high variable remuneration, and the auditor's remuneration will lead to lower auditing quality. There is also some evidence that audit quality carries a high risk of audit quality in cases where partners rely too heavily on variable rewards.

Yuen [40] stated that the financial statements are written records that express the business and financial performance of a company and directly affect the decisions of investors. In this article, through quantitative research methods and multivariate regression analysis, the effect of factors affecting the audit quality of the financial statements was measured. These factors included (1) the size of the audit firm, (2) the in-depth skills of the auditors, (3) the quality control procedures in the audit firm, (4) the cost of the audit, and (5) the scope of the audit firm's services.

Alarini [2] examines the relationships between auditing firm characteristics (e.g., audit firm size, non-audit services, auditor industry expertise, and auditor tenure) with special indicators of audit quality. Hunter et al. [23] method was used as a meta-analysis method to test research hypotheses and achieve the objectives of the study. A collection of 71 articles published from 1992 to 2017 was reviewed. There is a positive and significant relationship between all the characteristics of the audit company and the quality of the audit. In addition, the relationship between all the characteristics of the audit firm and the quality of the audit is adjusted by the audit quality indicators. In addition, these relationships are adjusted via other variables such as US and non-US studies, pre-SOX and post-SOX periods, legal system, auditing power, and country reporting and classification standards (developed or developing countries).

Hai et al. [21] determined the effective factors and their impact on organizational structure, operating mechanism and audit quality in the Vietnam audit market. The methodology used by the authors in this study was a combined method. The method was a combination of qualitative research method and quantitative research method based on meta-analysis and review of available information from various sources and the results of interviews conducted in early 2018 using 270 questionnaires from auditing companies in Vietnam. The results showed that the factors affecting the operating mechanism of auditing companies include the legal system, quality control and internal governance of companies. Factors affecting audit quality and organizational structure are the performance mechanism of audit firms. Among these factors, the operational mechanism has the most impact and a decisive role in audit quality.

Alavi et al. [4] investigated the effect of auditing firm size on audit quality in auditing firms that are members of the Iranian Society of Certified Public Accountants. The sample of the research consists of 192 auditing firms that are members of the Iranian Society of Certified Public Accountants for the period 2012-2017. The results of testing the hypotheses show a positive and significant relationship between audit quality variables including number of partners,

number of professional staff, number of certified public accountants, number of jobs, and auditing firm age on the quality of audit reports and also the significant negative relationship between annual income variable on audit reports quality.

Jamei and Mohammadi Kelareh [25] in a study identified the factors affecting the quality of auditing from the perspective of auditing services customers. The data required for this study were collected using a questionnaire. Also, to achieve the research goal, 29 variables related to audit quality from the perspective of customers of these services have been identified and divided into 3 components. The subjects of this research include credit managers working in the country's banks and according to the sampling method, 123 credit managers of the country's banks have been determined as a statistical sample. The factor analysis method has also been used to analyze the data and hypotheses of the research. The results of the research show that ethical values have the greatest impact and on the other hand competence has the least impact on audit quality from the perspective of customers of these services. Salimi et al. [36] in a study entitled: "The Effect Of Auditors' Self-Efficacy and Audit Quality: An Analysis of the Understanding of the Individuality Culture" examined the relationship between auditor self-efficacy and audit quality based on the moderating role of individualism culture. In this study, 294 auditors working in the auditing organizations and private sector auditing institutions participated and the research was conducted in 2019. The research tool was a questionnaire and in order to analyze and test the research hypotheses, the partial least squares analysis method was used. The results of testing the research hypotheses showed that the auditor's self-efficacy improves the level of audit quality. Also, it was found that the individualistic culture affects the positive relationship between self-efficacy and audit quality and strengthens this relationship positively.

Nonhal Nahr and Akbarpour [32] in a study entitled: "The effect of auditor experience on audit fees and audit quality in companies listed on the Tehran Stock Exchange" investigated the effect of auditor experience on audit fees and audit quality in companies listed on the Tehran Stock Exchange. The statistical population of the research was the companies listed on the Tehran Stock Exchange and using the systematic elimination sampling method, 95 companies were selected as the research sample, and its time period is between 2009 and 2014. Panel data method and ordinary least squares regression were used using EVIEWS software to test the hypotheses. The results showed that the auditor's experience has a positive and significant effect on the audit fee. That is, the more experienced the auditor, the more remuneration he receives, and the auditor's experience does not affect the quality of the audit.

Moshtaridoost and Dastgir [29] in a study entitled: "Investigating Factors Affecting Internal Audit Quality" stated that strengthening the internal audit unit in state-owned companies as one of the corporate strategic internal indicators has an effective relationship with audit quality in internal audit. The quality of internal audit also has a consistent and significant relationship with indicators such as level of education, professional background, membership in professional associations and independence of internal auditors as well as internal audit unit size. Also, this research shows that the lack of relationship between the experiences of the head of the internal audit with audit quality can be related to the lack of consideration of his experience as head of internal audit. This study also concludes that the quality of internal auditing can be increased by employing auditors with effective education and professional background and sufficient knowledge of internal auditing standards and aristocracy over accounting standards and deep understanding of management principles and general knowledge of economics and communication technology as well as the full observance of independence and impartiality and their membership in domestic and international professional associations. Also, the professional background of the head of internal audit in his/her position can make a significant contribution to strengthening internal audit quality.

4 Research Hypotheses

Over the past two decades, corporate financial scandals have led to auditors being blamed for the quality of the audit. In response to these events, the quality of auditing by lawmakers in leading countries has been seriously demanded and considered. The Sarbanes-Oxley Act in the United States since 2004; the Financial Reporting Council in Britain since 2003; European Union Number 8 Act (2008); Canadian Public Accountability Board since 2003, Australian Securities and Investments Commission, demanded the existence of a quality control system for auditing firms and its upgrading [3].

The purpose of the audit process is to examine whether the numbers and descriptions in the financial statements present the results of the operation and the financial position of the company in a true and fair manner. A high level of audit quality increases the assurance of the accuracy of reported financial results, while a low level of audit quality reduces the quality of reporting [15]. Low audit quality leads to various negative consequences that affect investors, employees, customers and suppliers and consequently cause huge losses for countries and individuals. In 1991, for example, six auditing firms in the United States incurred 447 million in self-defence to settle the financial cases [5].

Arthur Andersen paid 40 million to Enron in 2009. The plaintiffs claim that the auditing firms neglected the audit and consulting in the energy business, which led to their bankruptcy. PwC, the world’s largest accounting firm, is facing a 2 billion case involving Bernard Madoffs 65 billion investment fraud. Some of these financial scandals can be avoided or reduced by increasing the quality of auditing [2]. Based on the stated principles, the hypotheses are:

1. The size of auditing firms has a significant effect on audit quality.
2. The characteristics of the audit professional staff have a significant effect on the quality of the audit.
3. The legal system has a significant effect on the quality of auditing.
4. Internal and external quality control of auditing firms has a significant effect on audit quality.
5. Corporate governance mechanisms of auditing firms have a significant effect on audit quality.
6. The size of auditing firms has a significant effect on the organizational structure of auditing firms.
7. The characteristics of the audit professional staff have a significant effect on the organizational structure of auditing firms.
8. The legal system has a significant effect on the organizational structure of auditing firms.
9. Internal and external quality control of auditing firms has a significant effect on the organizational structure of auditing firms.
10. Corporate governance mechanisms of auditing firms have a significant effect on the organizational structure of auditing firms.
11. The size of auditing firms has a significant effect on the operational mechanism of auditing.
12. The characteristics of the audit professional staff have a significant effect on the operational mechanism of the audit.
13. The legal system has a significant effect on the operational mechanism of the audit.
14. Internal and external quality control of auditing firms has a significant effect on the operational mechanism of auditing.
15. Corporate governance mechanisms of auditing firms have a significant effect on the operational mechanism of auditing.
16. The organizational structure of auditing firms has a significant effect on audit quality.
17. The operational mechanism of the audit has a significant effect on the quality of the audit.

The research model based on theoretical foundations and hypotheses is designed as figure 1.

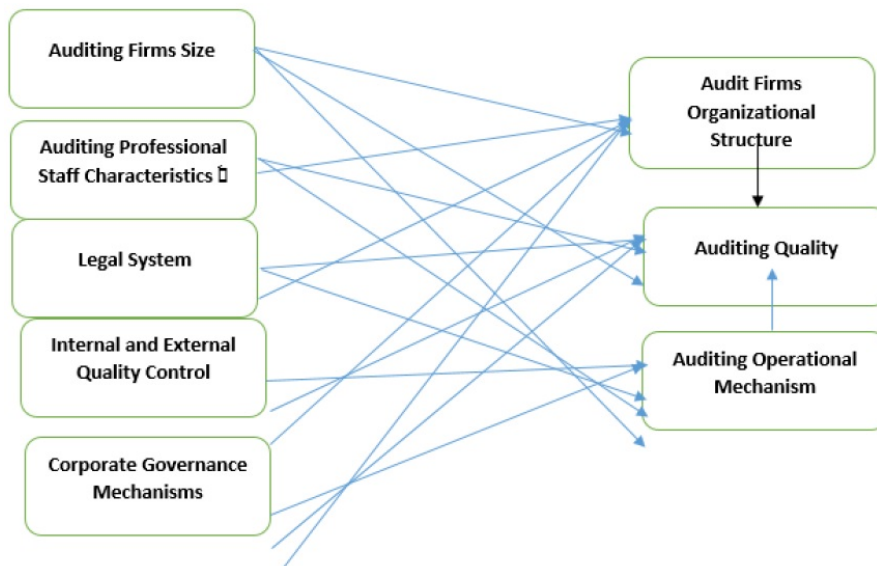


Figure 1: Conceptual model of the research

5 Research Methods

In terms of the purpose, this research is applied research; From the point of view of the data collection method, it is descriptive and survey type (due to the use of a questionnaire). Survey researches are used to examine the

characteristics of a statistical population. The purpose of descriptive researches is the descriptive expression of a phenomenon or situation under study. Conducting descriptive research can be to raise awareness of the current situation or to assist in the decision-making process. In this research, two methods are used to collect information:

Library method: Library method is used in all scientific researches and in some of them the subject of research is based on the library research method from the beginning to the end. The researcher’s library data collection instrument includes all printed documents such as books, encyclopedias, journals, newspapers, weeklies, periodicals, dictionaries, yearbooks, print interviews, research journals, conference books, professors and their textbooks, and any identifiable text sources.

Field method: In this method, the researcher enters the field and collects information. One of the most common methods of collecting field information is the questionnaire method, which makes it possible to collect information on a large scale. In descriptive researches as well as research which has a large geographical area or a large number of people in the statistical population and its sample, the questionnaire method is usually used.

The statistical population of the present study was all independent auditors in Iranian auditing companies. Because the exact number of the research population was not known, the research population was considered unspecified. Therefore, according to Morgan’s table, the sample size was selected at 384 persons and for more assurance, the number of 390 questionnaires were randomly distributed among independent auditors in Iranian auditing companies. Out of 390 questionnaires, 386 questionnaires were completely completed and could be analyzed.

The variables of the current research were measured by a questionnaire based on Hai et al. [21]. The research hypotheses are analyzed by structural equation modelling by SPSS and Smart PLS software and finally, a graphical structural model is presented in line with the research topic. The research instrument is also standardized in terms of validity and reliability by Smart PLS software. An optimal structural model was also provided by Smart PLS software. The calculation of Cronbach’s alpha is based on the following formula that is calculated in the software:

$$\alpha = \left(\frac{K}{K - 1} \right) \left(1 - \frac{\sum_{i=1}^k S_i^2}{S^2} \right), \tag{5.1}$$

in which K is the number of items and S^2 is the variance of the sum of the scores of each respondent. The calculation of the combined reliability is done as follows:

$$CR = \frac{(\sum \gamma_i)^2}{(\sum \gamma_i)^2 + (\sum \epsilon_2)} \tag{5.2}$$

Table 1: Questionnaire reliability

Variable	Cronbach Alpha Coefficient	Composite Reliability
Audit Firm Size	0.9032	0.9286
Organizational Structure	0.8902	0.9194
Legal System	0.9025	0.9277
Corporate Governance Mechanism	0.7855	0.8624
Operational Mechanism	0.8642	0.9174
Staff Characteristics	0.8879	0.9309
Internal and External Quality Control	0.8445	0.8946
Auditor Quality	0.9500	0.9565

As shown in table 1, the value of Cronbach’s alpha coefficient and composite reliability for all variables in the research model is greater than 0:7. Therefore, these variables have the necessary composite reliability.

Fornell and Larcker [20] introduced the average variance extracted (AVE) criterion for measuring convergent validity and stated that in the case of AVE, the critical value is 0:5; This means that a value of AVE above 0:5 indicates acceptable convergent validity, and this latent variable cannot, on average, explain more than half of the dispersion of its reagents. According to the values obtained for this criterion, which can be seen in table 2, it can be said that all structures of the measurement model have high convergent validity.

In PLS Software, it is checked by a matrix that the matrix cells contain the values of the correlation coefficients between the structures and the square root of the AVE values of each structure. Table 3 reports the values of the

Table 2: Average variance extracted value

Variable	AVE	Variable	AVE
Audit Firm Size	0.7230	Operational Mechanism	0.7876
Organizational Structure	0.6960	Staff Characteristics	0.8182
Legal System	0.7200	Internal and External Quality Control	0.6800
Corporate Governance Mechanism	0.6143	Auditor Quality	0.6157

correlation coefficients between the structures along with the square root of the AVE values which are located on the original diameter; this model has an acceptable divergence validity if the numbers in the original diameter are more than their lower side and right side values. According to the results of table 3, the value of the AVE root of all latent variables is greater than the correlation value between them, so it can be said that the divergent validity of the measurement models is confirmed.

Table 3: Divergence validity matrix according to Fornell-Larker

	Firm Size	Organizational Structure	Legal System	Corporate Governance Mechanism	Operational Mechanism	Staff Characteristics	Quality Control	Audit Quality
Firm Size	0.8502							
Organizational Structure	0.7580	0.8342						
Legal System	0.7598	0.7789	0.8485					
Corporate Governance Mechanism	0.7964	0.7718	0.7474	0.7837				
Operational Mechanism	0.8348	0.7196	0.7440	0.7091	0.8874			
Staff Characteristics	0.6985	0.7777	0.7518	0.6989	0.7324	0.9045		
Quality Control	0.8463	0.7558	0.6350	0.6270	0.8038	0.8719	0.8246	
Auditing Quality	0.8027	0.7790	0.6005	0.7897	0.8670	0.8152	0.7317	0.7846

6 Findings

In this section, the data collected from the questionnaire of 386 participants were analyzed. Table 4 shows the descriptive findings of the research variables related to the questionnaire scales. According to the obtained results, it was found that among these variables, the highest mean is related to the variable of corporate governance mechanism with the value of 4:0071 and the lowest mean is the variable of staff characteristics with a value equal to 3:886.

Table 4: Descriptive statistics of research variables

Variable	Number	Minimum	Maximum	Mean	Standard Deviation	Variance
Firm Size	386	1.00	5.00	3.9870	0.9136	0.8352
Staff Characteristics	386	1.00	5.00	3.866	0.9250	0.866
Legal System	386	1.00	5.00	3.9456	0.9152	0.8298
Internal and External Quality Control	386	1.00	5.00	3.9989	0.8935	0.7994
Corporate Governance Mechanism	386	1.00	5.00	4.0071	0.9001	0.812
Organizational Structure	386	1.00	5.00	3.962	0.8981	0.8118
Auditing Quality	386	1.00	5.00	3.9229	0.9239	0.8571
Operational Mechanism	386	1.00	5.00	3.9164	0.8987	0.8092

According to the PLS path modelling structure, the researcher must control the overall part fit after examining the t of the measurement part and the structural part of the research model. The GOF index considers the fit of both measurement and structural models and is used as a measure to predict the overall performance of the model. This index is calculated according to the following formula:

$$GoF = \sqrt{\text{communalities} \times \bar{R}^2} \tag{6.1}$$

where $\overline{communalities}$ is the sign of the average of the communality values of each structure (first-order), which according to table 5 is equal to 0:706. In this formula, \overline{R}^2 is the value of the determination coefficient average of model endogenous structures, which according to the table for the present model is equal to 0:9491. Finally, the GOF of the present model was extracted equally to 0:736 and $GOF = 0:8190$. Wetzels et al. [39] introduced three values of 0:01, 0:25 and 0:36 as weak, medium and strong values for GoF. Since the GoF value for the present model was calculated to be 0:819, it indicates a strong overall fit of the model. In order to test the research hypotheses, first, the path coefficients related to each of the hypotheses must be calculated. Therefore, in figure 2, the output of the structural equation model path coefficients are presented to test the research hypotheses, which have also been confirmed in the previous stages of the fitting. Since the significance of those coefficients cannot be commented on through the magnitude or smallness of the coefficients of the standard estimation model, the model of significant numbers (T-value) is used to measure the significance of the path coefficients, and if the significant values are greater than the absolute value of the number 1:96, these relationships are significant at the 95% confidence level. Figure 3 shows the model of significant numbers related to each of the paths. At this stage, according to the results of the standard coefficient model and the model of significant numbers, the results of the research hypotheses can be examined. According to table 5, the results obtained are as follows:

Table 5: Communality values

Variable	Communality	Determination Coefficient
Firm Size	0.723	–
Organizational Structure	0.696	0.976
Legal System	0.720	–
Corporate Governance Mechanism	0.614	–
Operational Mechanism	0.787	0.887
Staff Characteristics	0.818	–
Quality Control	0.680	–
Auditing Quality	0.615	0.983
Total	5.654	2.847
Average	0.706	0.949

Hypothesis 1: The size of auditing firms with a significance coefficient of 3:204 at the 95% confidence level has a significant effect on audit quality and the first hypothesis is confirmed. The path coefficient is equal to 0:133, which means that with increasing the size of auditing firms, the quality of auditing increases by 13:3%.

Hypothesis 2: The characteristics of the audit professional staff with a significance coefficient of 0:599 do not have a significant effect on the quality of the audit and the second hypothesis is rejected.

Hypothesis 3: The legal system with a significance coefficient of 6:240 at a confidence level of 99% has a significant effect on audit quality and the third hypothesis is confirmed. The path coefficient is equal to 0:518, which means that with the increase in the legal system, the quality of auditing increases by 51:8%.

Hypothesis 4: Internal and external quality control of auditing firms with a significance coefficient of 1:965 at the 95% confidence level has a significant effect on audit quality and the fourth hypothesis of the research is confirmed. The path coefficient is 0:209, which emphasizes the existence of a positive relationship. This means that with increasing internal and external quality control, the quality of auditing increases by 20:9%.

Hypothesis 5: Corporate governance mechanisms of auditing firms with a significance coefficient of 6:703 at the level of 99% confidence has a significant effect on audit quality and the fifth hypothesis of the research is confirmed. The path coefficient is equal to 0:315, which means that with the increase in corporate governance mechanisms of auditing firms, the quality of auditing increases by 31:5%.

Hypothesis 6: The size of auditing firms with a significance coefficient of 1:907 does not have a significant effect on the organizational structure of auditing firms and the sixth hypothesis is rejected.

Hypothesis 7: The characteristics of the audit professional staff with a significance coefficient of 1:681 do not have a significant effect on the organizational structure of auditing firms and the seventh hypothesis is rejected.

Hypothesis 8: The legal system with a significance coefficient of 11:306 at a confidence level of 99:9% has a significant effect on the organizational structure of auditing firms and the eighth hypothesis is confirmed. The path coefficient is equal to 0:612, which means that with the increase of the legal system, the organizational structure increases by 61:2%.

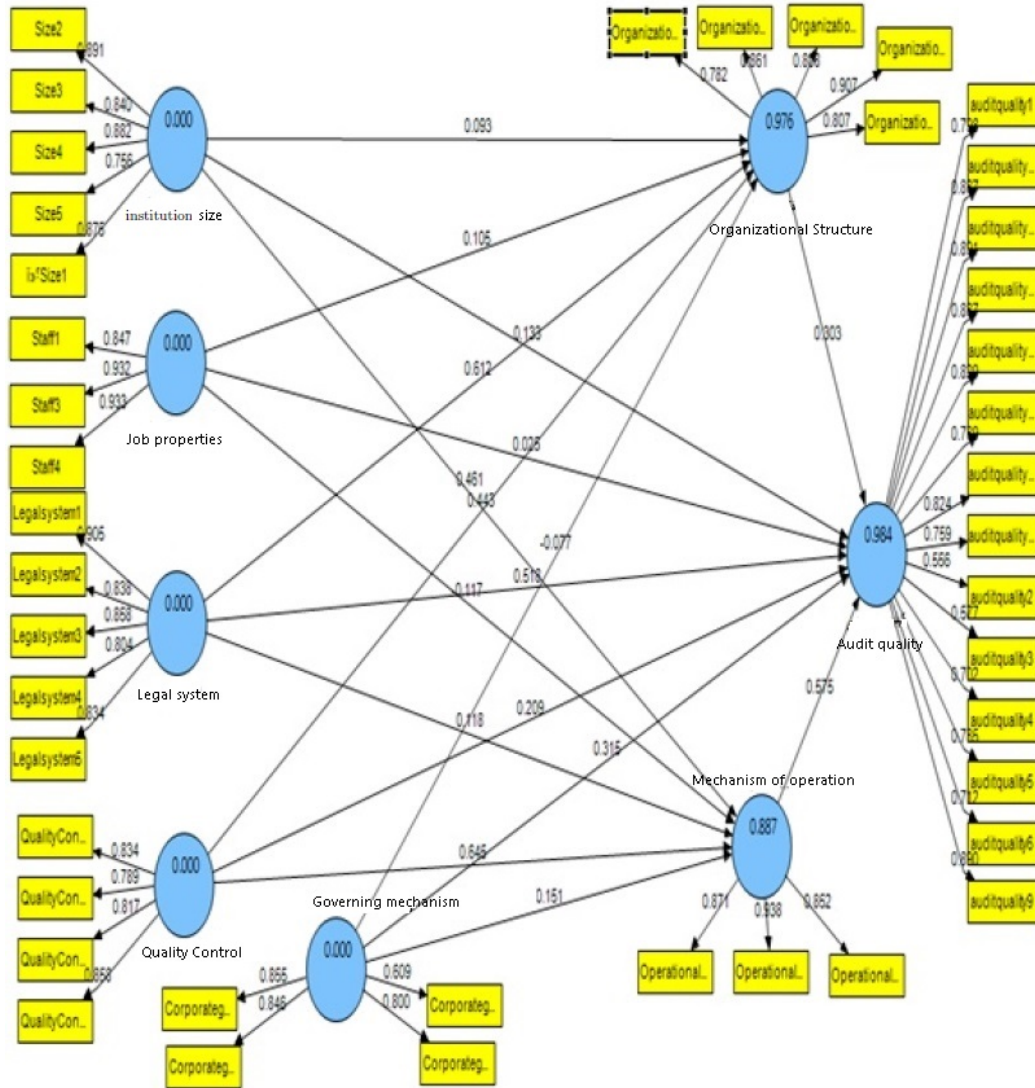


Figure 2: Path coefficients of research hypotheses

Hypothesis 9: Internal and external quality control of auditing firms with a significance coefficient of 5:262 at the level of 99% confidence has a significant effect on the organizational structure of auditing firms and the ninth hypothesis of the research is confirmed. The path coefficient is equal to 0:443, which means that with increasing the internal and external quality control of auditing firms, the organizational structure increases by 44:3%.

Hypothesis 10: The corporate governance mechanisms of auditing firms with a significance coefficient of 1:102 do not have a significant effect on the organizational structure of auditing firms and the tenth hypothesis is rejected.

Hypothesis 11: The size of audit firms with a significance coefficient of 4:415 at the level of 99% confidence has a significant effect on the operational mechanism of the audit and the eleventh hypothesis of the research is confirmed. The path coefficient is equal to 0:461, which means that with increasing the size of auditing firms, the audit operational mechanism increases by 46:1%.

Hypothesis 12: The characteristics of the audit professional staff with a significance coefficient of 1:073 have no significant effect on the operational mechanism of the audit and the twelfth hypothesis is rejected.

Hypothesis 13: The legal system with a significant coefficient of 0:990 does not have a significant effect on the operational mechanism of the audit and the 13th hypothesis of the research is rejected.

Hypothesis 14: Internal and external quality control of auditing firms with a significance coefficient of 3:408 at the 95% confidence level has a significant effect on the operational mechanism of the audit and the fourteenth

hypothesis is confirmed. The path coefficient is equal to 0:645, which means that with increasing internal and external quality control, the operating mechanism increases by 64:5%.

Hypothesis 15: The corporate governance mechanisms of auditing firms with a significance coefficient of 1:116 have no significant effect on the operating mechanism of the audit and the fifteenth hypothesis is rejected.

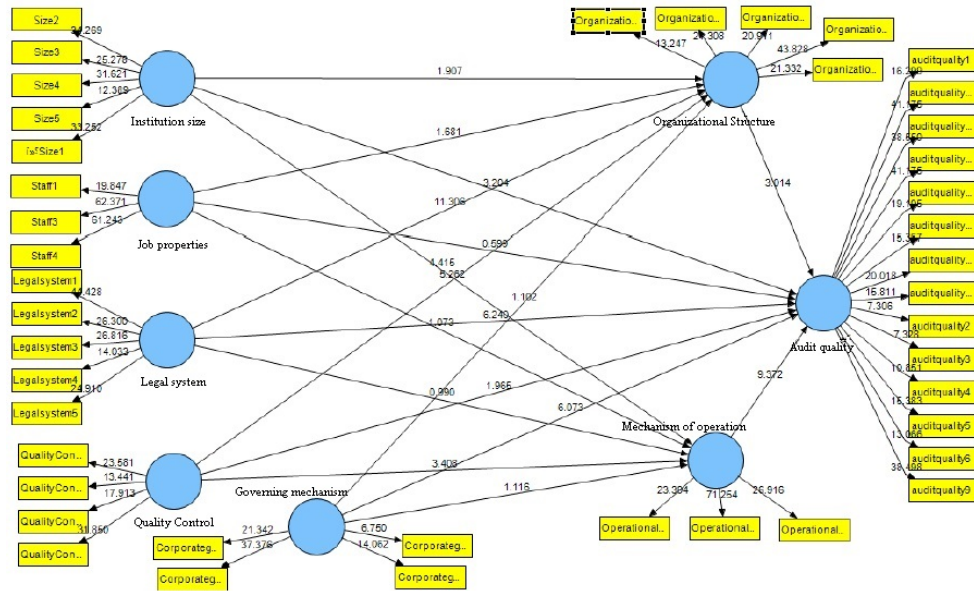


Figure 3: Significant numbers of research hypotheses

Hypothesis 16: The organizational structure of auditing firms with a significance coefficient of 3:014 at the 95% confidence level has a significant effect on audit quality and the 16th hypothesis of the research is confirmed. The path coefficient is equal to 0:303, which means that with increasing the organizational structure, the quality of auditing increases by 30:3%.

Hypothesis 17: The operational mechanism of the audit with a significance coefficient of 9:372 at a confidence level of 99:9% has a significant effect on the quality of the audit and the seventeenth hypothesis of the research is confirmed. The path coefficient is equal to 0:575, which means that with increasing the operational mechanism of the audit, the quality of the audit increases by 57:5%.

7 Conclusion

Analysis of research hypotheses using structural equation modelling at 99% confidence level showed that the size of auditing firms, legal system, internal and external quality control of auditing firms and corporate governance mechanisms are positive factors affecting audit quality. Therefore, it can be said that with increasing each of the factors of the size of auditing firms, legal system, internal and external quality control of auditing firms and corporate governance mechanisms, the quality of auditing increases. The legal system and internal and external quality control are among the factors that enhance and affect the organizational structure of auditing firms. The size of audit firms and internal and external quality control are among the factors affecting the operational mechanism of the audit. Therefore, it can be said that by increasing the size of auditing firms and internal and external quality control of auditing firms, the operational mechanism of auditing is improved. Finally, the results showed that the organizational structure of auditing firms and the audit operating mechanism have a positive and significant effect on audit quality. Hai [21] determined the effective factors and their impact on the organizational structure, operating mechanism and quality of auditing in the Vietnam audit market and showed that the factors affecting the operating mechanism of auditing firms include the legal system, quality control and internal governance of companies. Factors affecting audit quality and organizational structure are the performance mechanism of audit firms. Therefore, the results of this study are consistent with the present study.

Based on the results, the following suggestions are presented:

Table 6: Investigation of research hypotheses and its results

Hypothesis	Sig	Path Coefficient	Results
The size of auditing firms has a significant effect on audit quality	3.204	0.133	Confirmed
The characteristics of the audit professional staff have a significant effect on the quality of the audit.	0.599	0.025	Rejected
The legal system has a significant effect on the quality of auditing	6.240	0.518	Confirmed
Internal and external quality control of auditing firms has a significant effect on audit quality	1.965	0.209	Confirmed
Corporate governance mechanisms of auditing firms have a significant effect on audit quality	6.073	0.315	Confirmed
The size of auditing firms has a significant effect on the organizational structure of auditing firms	1.907	0.093	Rejected
The characteristics of the audit professional staff have a significant effect on the organizational structure of auditing firms	1.681	0.105	Rejected
The legal system has a significant effect on the organizational structure of auditing firms	11.306	0.612	Confirmed
Internal and external quality control of auditing firms has a significant effect on the organizational structure of auditing firms	5.262	0.443	Confirmed
Corporate governance mechanisms of auditing firms have a significant effect on the organizational structure of auditing firms	1.102	0.077	Rejected
The size of audit firms has a significant effect on the operational mechanism of the audit	4.415	0.461	Confirmed
The characteristics of the audit professional staff have a significant effect on the operational mechanism of the audit	1.073	0.117	Rejected
The legal system has a significant impact on the audit mechanism	0.990	0.118	Rejected
Internal and external quality control of auditing firms has a significant effect on the operational mechanism of auditing	3.408	0.645	Confirmed
Corporate governance mechanisms of auditing firms have a significant effect on the operational mechanism of auditing	1.116	0.151	Rejected
The organizational structure of auditing firms has a significant effect on audit quality	3.014	0.303	Confirmed
The audit operating mechanism has a significant effect on the quality of the audit	9.372	0.575	Confirmed

- It is suggested to all managers and administrators of auditing firms to increase the quality of their auditing in order to detect fraud and mistakes in the companies under review by using the methods of large auditing firms.
- It is recommended to all managers and administrators of auditing firms to comply with their audit affairs with criminal and civil laws by employing and consulting experienced and professional lawyers in order to increase the quality of auditing by creating an effective legal system.
- It is recommended to all managers and administrators of auditing firms to increase the quality of auditing by setting up an appropriate internal and external quality control system in their firms and the employer company.
- It is recommended to all managers and administrators of auditing firms to increase the quality of auditing by applying corporate governance mechanisms based on more oversight of auditing practices and the work of auditing staff.
- All managers and administrators of auditing firms are recommended to set up a legal department in their organizational structure to control and comply with new accounting and auditing standards to improve the organizational structure of the firm.
- All managers and administrators of auditing firms are recommended to set up a strong internal and external quality control system to hire and fire employees in their organizational structure.
- Small audit firms are encouraged to implement the audit operating mechanism by imitating large firms.

- All managers and administrators of auditing firms are recommended to implement a high-quality and uniform operational mechanism that has consistent procedures by employing an integrated and regular organizational structure in their offices and branches, in order to increase the quality of auditing.

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