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# The Relationship between the Audit Outputs and Managerial Entrenchment

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## Abstract

The present study investigates the relationship between audit outputs (including audit quality, type of opinion, audit fee, and timeliness) and managerial entrenchment in firms listed on the Tehran Stock Exchange. The multivariate regression model is used for hypothesis testing, research hypotheses were tested using a sample of 678 listed observations on the Tehran Stock Exchange during 2012-2017, and the exploratory factor analysis of 12 variables (including CEO duality, financial expertise, and CEO industry, board compensation, managerial ownership, tenure, and CEO consistency, board independence, financial expertise, and board industry, correlation and board effort) is used for examining managerial entrenchment. As expected, the results show a significant relationship between audit outputs and managerial entrenchment, such that audit fee and audit quality are negatively associated with managerial entrenchment, and the relationship between report delay and type of opinion and managerial entrenchment is positive and significant. By adding new variables to measuring managerial entrenchment, the present study provides a better evaluation of this index. Moreover, it contributes to the field because the previous studies have benefited from limited proxies for this purpose.

**Keywords:** audit report delay, audit quality, audit fee, type of audit opinion, managerial entrenchment

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## 1. Introduction

Managerial entrenchment is one of the challenging global topics in accounting and auditing. The phenomenon occurs when managers exploit their executive and information power to benefit their interests. As the shareholders always seek to maximize their investment in the long-term, managers, especially if they are not the firm owner in the firm, hunt for their personal interests. The conflict of interests between owners and managers is among the main reasons for resorting to the audit profession. One of the main tools to ensure financial information clarity of firms is audited financial statements (Casterlla et al., 2004). In other words, audited financial statements make certain the external users that an expert checks the accuracy of financial information. Hence, confirming financial statements and their reliability causes the decline of information asymmetry and the convergence of managers and owners (Francis et al., 2004). Thus, we expect the growth of audit quality to contribute positively to the decrease of agency costs by attracting external users and, as controlling leverage, to lessen managerial entrenchment. Considering the proposed facts, we argue that audit outputs contribute to entrenchment. In the present study, audit outputs also include audit fees, type of auditor's opinion, audit report timeliness, and audit quality. Managerial entrenchment is a relatively new topic that is not discussed extensively in local and foreign studies. On the other hand, this paper is the first study to assess the relationship between audit outputs and managerial entrenchment separately. Therefore, the current study's main objective is to analyze the relationship between the outputs of audit procedures and managerial entrenchment and to assess the presence of a significant relationship between these two variables. In other words, we attempt to figure out whether audit outputs can increase or decrease managerial entrenchment in organizations or not. Moreover, by adding new variables to managerial entrenchment measurement, the present study has led to a better evaluation of this index. The previous studies have benefited from limited proxies as an index for measuring entrenchment. By adding new variables, however, this paper contributes to a better assessment of this variable. In the following, we discuss the theoretical principles and the conducted studies in this field.

## 2. Theoretical Principles, Literature, and Hypothesis Development

### 2.1. Managerial entrenchment

According to corporate governance mechanisms, the CEO always benefits from a high executive power in organizations, enabling them to influence the board considerably. Hence, the presence of a conflict of interests between managers and shareholders concerning managers' executive power encounters them with problems in organizations (Jensen, 1993). In other words, the agency theory states that managers always attempt to maximize their interests in the firm, so they may make some decisions that are not in conformity with shareholders' interests. One of the consequences of diverging shareholders' interests from managers in business firms is the increase in agency costs and information asymmetry. Besides, CEO duality would cause the managers to be easily dominated and control the collected information. Broadly, compared with other managers, dual managers are more likely to show better the firm's performance (Davidson et al., 2004). One of the incentive factors for manipulating the accounting earnings, or in other words, to better show the organization's performance by the managers is CEO compensation because one of the main criteria for allocating compensation is measuring managers' performance. Since there is no appropriate criterion for allocating compensation to managers, managerial performance evaluation has always been an index for paying the reward. Hence, accounting figures and information were used as an available metric for analyzing managerial compensation contracts. Accruals are among the major contributing factors in signing contracts with managers (Kazan, 2016). The presence of accruals provides an opportunity

for managers to manage the accruals and manipulate actual financial events of the firms by applying accounting policies to preserve the agent's personal interests. Li and Kuo (2017) also reveal a positive relationship between CEO compensation and earnings management. Moreover, managers with financial expertise can better manage earnings due to familiarity with accounting techniques and policies. Further, Managers with financial expertise guide more analysts concerning the earnings and commit fewer earnings management. They have more understandings of the advantages of financial information disclosure relative to the increase of firm value and decline of information asymmetry (Matsunaga and Yeung, 2009).

## **2.2. The relationship between audit outputs and managerial entrenchment**

One of the major and determining controlling tools for corporate governance mechanisms is the active and significant supervisory role of auditors, which lowers the basis for opportunism and misuse of managers (Chen et al., 2011) such that numerous studies (including Klai and Omri, 2011; Allsufy et al., 2013; Desender et al., 2013) are conducted concerning the corporate governance mechanisms and their relationship with audit outputs. Klai and Omri (2011) perceive that any enhancement in corporate governance mechanisms has an increasing impact on financial reporting quality. Moreover, Allsufy et al. (2013) indicate that applying corporate leadership causes financial information to benefit from high precision and quality. Further, Desender et al. (2013) argue that audit services and board independence during ownership dispersion are complementary. They also find that there is a significant relationship between board composition and the audit fee. Hence, the present study expects a significant relationship between audit outputs and managerial entrenchment.

## **2.3. Audit outputs**

In the present study, the following indices are used for measuring audit outputs:

### **2.3.1. Audit fees**

The audit fee will be determined based on the actual cost of provided services in the audit procedures and the estimation of damages due to the auditor's responsibility concerning the issued report (Stanley, 2011). Along with the growth of competition in the audit profession, the need for providing high-quality services with lower costs is more evident. Therefore, audit firms are willing to optimize the audit fee and offer the best propose price to the clients to maximize their income and preserve their work contract in the competitive status of the audit market. Thus, being aware of and acquainted enough with the contributing factors to audit fees can be useful in the current era (Choi et al., 2008). Moreover, realizing the contributing factors to the audit fee can help the clients understand the provided services' advantages. Therefore, this would lead to the client's more tangible presence in audit procedures, which is a basis for the increase of audit quality and acceleration of audit procedure (Gist, 1992).

### **2.3.2. Audit fee and managerial entrenchment**

The conflict of interests between owners and managers in firms is one of the contributing factors to the demand for audit services. Besides, such a conflict may occur in different types among the major shareholders and minorities, leading to agency costs for the beneficiaries and organization. Given that the costs derived from the owners' attempt to control the managers play a significant role in the agency costs, managers are willing to substantiate their appropriate performance for shareholders and their attempt to increase the owners' wealth (Jensen, 1986). Therefore, we can argue that both managers and owners are willing to use the audit services. Auditors play a significant role

in limiting managers' power and working as a controlling tool for decreasing managers' authority. However, audit services incur some costs for the firms, which are determined given the auditor's evaluation of the amount of risk and volume and complication of labor. Agency cost can also increasingly affect the audit fee via a direct impact on the factors above. Whinsenant et al. (2003) declare that the more the prevalence of agency costs in business firms, the more the auditor's effort to ensure the absence of fraud and significant errors in the financial statements, which would lead to the increase of audit fee. Hence, we can conclude that the increase in agency costs in firms will increase the level of risk, complication, operation volume, and the need for specialized force in the firm. Since these items are among the audit contract, they affect the audit fees. Desender et al. (2013) show a significant relationship between board independence and CEO duality, and audit fees. Moreover, Farooq et al. (2018) figure out a positive and significant relationship between the audit fee and the board quality. Additionally, Jizi and Nehme (2018) posit that firms with an independent board and efficient audit committees are more inclined toward high-quality auditing. Thus, they pay higher fees to back up shareholders' interests against misuse and opportunism of managers with higher executive power. Further, Gul et al. (2003) suggest that the audit fee is positively and significantly associated with the accruals. The amount of such an association has an inverse relationship with managerial ownership. The relationship between the audit fee and accruals is weaker in firms with higher managerial ownership. Given the abovesaid facts, we expect from the audit fee in organizations dealing with the entrenchment phenomenon to be higher than other firms, such that auditors, when planning audit procedures, administer more tests in firms with managers with higher executive power, which in turn increases the audit fee, so the first hypothesis of the study is as follows:

H<sub>1</sub>: There is a significant relationship between the audit fee and managerial entrenchment.

### 2.3.3. Audit quality

The oldest and most salient of which is proposed by DeAngelo (1981), who said that audit quality is "market evaluation of the chance of exploring and reporting significant deviations by the auditor in the financial statements". Like Titman and Trueman (1986), other opinion leaders consider the precision and soundness of published information by the auditor as a criterion for audit quality. According to DeAngelo (1981), using a criterion or index directly associated with the audit quality is extremely economical in terms of time and cost for measuring the audit quality, which has a non-observable nature. In addition, larger audit firms are also more inclined to preserve their reputation in society, which causes clients' financial statements to be audited with higher quality. In general, we can declare that larger audit firms always have more customers, which leads to the independence of the client, so the bargaining power of such firms is more than that of the smaller firms.

### 2.3.4. Audit quality and managerial entrenchment

Any change in the ownership and/or the agency theory is one of the contributing factors to audit quality, which shows the separation of an owner from managers and a change in this formation can influence the demand for high-quality audit services (Chan et al., 2007; Watts and Zimmerman, 1986).

While in firms with a higher percentage of ownership, the demand for high-quality audit services is less evident due to the decline of the conflict of interests between clients and agents (Al Qadasi and Abidin, 2018). Moreover, firms with independent boards are less inclined toward the use of high-quality auditors (Jiraporn et al., 2018), which makes the financial statements clearer than before. On the other hand, concerning the relationship between the quality of auditors and corporate governance mechanisms in the organizations, the required basis is provided for adding value to financial reporting and lowering the information asymmetry among internal and external users. In other words, managers

are always willing to disclose information and useful news concerning their performance, so they need some mechanisms to secure related information's precision and reliability. One of these accreditation mechanisms is the high quality of audit. According to the agency theory, independent auditing as a controlling factor reduces agency costs by limiting managers' manipulation of accounting information (Fama, 1980). Moreover, Jensen and Mackling (1976) argue that an independent auditor works as a controlling factor who increase the firm value by supervising and reducing the infractions of the CEO in the organization. In general, if auditors have the required qualification, they would be able to diagnose, explore, and disclose fraud in the financial statements without being affected by the managers' opportunism. Concerning the relationship that exists between audit quality and managerial entrenchment, we can argue that the increase of audit quality causes the decline of conflict of interests between managers and owners, the reduction of accounting earnings manipulation by managers, and the growth of reliability and financial reporting quality, while audit quality drop would lead to the elevation of agency costs. Hence, we expect audit quality to contribute to the managerial entrenchment, so the second hypothesis of the study is as follows:

H<sub>2</sub>: There is a significant relationship between audit quality and managerial entrenchment.

### **2.3.5. Audit report timeliness**

Understanding the contributing factors to the characteristic of information quality is of great importance because they directly impact the timeliness of financial statements. The previous studies show that firms' timely presentation of financial statements raises the richness of information content and adds value to the economic firms (Blankley, Hurtt, and MacGregor, 2014). Generally, the annual return of audit is considered one of the major determining factors in the financial report's timeliness (Givoly and Palmon, 1982). Further, regarding recent financial corruption in the international setting, managerial characteristics are among the leading factors in the timely disclosure of financial information (Samaha and Khalif, 2017).

### **2.3.6. Audit report timeliness and managerial entrenchment**

According to the agency theory, the conflict of interests between owners and shareholders in firms with ownership dispersion is more than that of the other firms because minor shareholders with a smaller share cannot influence the management decisions (Samaha and Khalif, 2017). Thus, one of the methods for decreasing or dealing with the agency problem in organizations is to use an appropriate trend in the framework of corporate governance, among which we can refer to delay reduction in the audit report as one of the components of such a trend (McGee and Yuan, 2012). In this regard, Abdelsalam and Street (2007) declare that the increase of concentration and ownership contribute to the delay in the audit report and reduce the duration of audit report presentation.

In addition, an audit report is timely in the board of firms with the required independence, so board independence via more supervision on managers' performance and behavior would lead to the reduction of intrinsic risk and delay in audit report (Afify, 2009). On the other hand, the phenomenon of CEO duality occurs in those organizations where the CEO is the board manager at the same time, which leads to the increase of executive power of the CEO in decision-making. On the other hand, CEO duality lowers the board's interdependence. Hence, this phenomenon's unfavorable effect is the board's inability to utilize its supervisory role over the CEO's performance, increasing the duration of the audit report (Mohamad Nore et al., 2010). In addition, Samaha and Khalif (2017) posit that audit committee features, independent auditor, and the firm's strategic factors contribute significantly to audit report presentation and accounting information timeliness. Further, Afify (2009) declares that several variables, including board independence, CEO duality, audit committee, firm profitability,

firm size, and type of industry, influence audit reports' timeliness. Additionally, Salehi et al. (2018) perceive a negative and significant relationship between CEO financial specialization and audit report delay. Regarding the effect of corporate governance mechanisms on audit report timeliness, we expect delayed audit reports to be considered an unfavorable issue in society. Therefore, the required basis should be provided concerning the impacts such a phenomenon exerts on business firms for lowering managers' opportunism. Hence, the third hypothesis is formulated as follows:

H<sub>3</sub>: There is a significant relationship between managerial entrenchment and the timeliness of audit reports.

### 2.3.7. Type of auditor's opinion

In today's world, large corporations with a considerable volume of capital obtained via shareholders can control the economic resources at the national and international levels, known as an economic index in industrial and advanced countries. Firm shareholders, among them, to ensure the effectiveness and efficiency of managers in using the available resources, can benefit from a major assurance instrument called audited financial statements. Concerning the chance of bias in firms' financial statements by board members and managers, the need for performing audit operations is growing increasingly (Joli, Jubb, and Houghton, 2007). In addition, performing audit operations causes increased reliability of financial information by giving credit financial statements under study (Rumsin and Evans, 2017).

Therefore, auditors' opinions concerning the compatibility of financial statements with audit standards are significant criteria in decision-making that the users and investors consider when making decisions. DeAngelo (1981) declares that the auditor's opinion is performing independent audit operations for the firm's financial statements supplied by the management.

### 2.3.8. Auditor's opinion and managerial entrenchment

According to Jensen and Mackling (1976), the divergence of interests in an organization between owners and agents and lack of required ability of owners for monitoring the managers have incurred high agency costs on the organizations, among which the relationship between corporate governance mechanisms and high-quality reporting has brought about the decline of agency costs (Cohen et al., 2004). Thus, we can consider the audit services as a controlling tool in the corporate governance structure. By analyzing the financial statements presented by the management, auditors give credit to these documents. Still, a question always arises here that "whether the auditor's opinion relative to the presented information is under the influence of other factors or not". In other words, did the auditor mind the independence correctly in his/her opinion? In general, the audit procedure and making an opinion about financial statements is a complicated story for which evaluation, a realization of the client's activity, internal control structure, decisions on accepting the client's project, collecting positive documents concerning the claims of firm management are required for a suitable opinion (Felix and Kinney, 1982; Rittenbery et al., 2012). Hence, the final product of auditing financial statements will be presented in the form of an audit report which contains the auditor's opinion concerning the reliability of financial statements. Moreover, Susanto and Pradipta (2017) also figure out that auditors' chance of conditional opinions is higher in organizations with earnings management, audit quality, and tenure indices. Besides, Uzun et al. (2004) indicate that the chance of presenting adjusted opinions for published financial statements is higher when the percentage of ownership of unbounded members and audit committee is lower, which increases the chance of bias in financial statements. Moreover, Abad et al. (2015) declare that high-quality opinion increases information asymmetry in an organization. Therefore, we argue that receiving the adjusted report can be an alarm for managers. Broadly, the auditors' adjusted report indicates violating control

mechanisms and accounting standards that pave the way for managerial opportunism, so we expect from the favorite report of auditors to have a decreasing effect on managerial entrenchment. Hence, the fourth hypothesis is as follows:

H<sub>4</sub>: There is a significant relationship between auditor's opinion and managerial entrenchment.

### 3. Research Methodology

The current study's statistical population includes all listed firms on the Tehran Stock Exchange from 2012 to 2017.

The systematic elimination method is used for sampling, and finally, after applying the following conditions, the statistical population of the study will be selected:

- 1- Firms should be enlisted until the end of 2011 on the Tehran Stock Exchange;
- 2- Firms should be active during the period of the study, and their shares should be transacted (transaction halt of more than 6 months is not accepted);
- 3- The required financial information should be presented during the period of the study; and,
- 4- Firms should be affiliated with investment firms, banks, insurance, and financial intermediaries.

Given the gathered information at the end of 2017, the final sample is depicted in Table 1.

**Table 1.** Number of firms in the statistical population

Description	Eliminated firms in total periods	Total number of firms
Total listed firms on Tehran Stock Exchange		445
Eliminating financial intermediaries, financial supply, insurance, and investment firms	88	
Firms with more than 6 months of transaction halt	112	
Eliminating firms entered the Stock Exchange during the study period	4	
Eliminating due to lack of access to information	113	
Statistical population		128

#### 3.1. Data collection and method

The primary and raw information and data for hypothesis testing were collected using the Tehran Stock Exchange information bank, including Tadbir Pardaz and Rah Avard-e Novin, and the published reports of the Tehran Stock Exchange via direct access.

#### 3.2. Data analysis

The data analysis method is cross-sectional and panel data. In this paper, the multivariate linear regression model is used for hypothesis testing. Descriptive and inferential statistical methods are used for analyzing the obtained data. Hence, the frequency distribution table is used for describing data. The F-Limer, Hausman test, normality test, and a multivariate linear regression model are used for hypothesis testing at the inferential level.

#### 3.3. Research model

The following multivariate regression model (1) is used for hypothesis testing

Model (1)

$$ME_{it} = a_0 + a_1AQ_{it} + a_2ART_{it} + a_3dealy_{it} + a_4LnAfee_{it} + a_5Tenure_{it} + a_6Rest_{it} + a_7Size_{it} + a_8LEV_{it} + a_9ROA_{it} + a_{10}ROE_{it} + a_{11}MTB_{it} + a_{12}Age_{it} + a_{13}Growth.sales_{it} + a_{14}ICW_{it} + a_{15}Change_{it} + a_{16}year_{it} + a_{17}Industry_{it} + \varepsilon_{it}$$

### 3.3.1. Dependent variable

The dependent variable of the present study is managerial entrenchment, which is measured by using the following variables:

**CEO-CHAIR:** if the CEO is the chief or vice president of the board at the same time 1; otherwise, 0 will be used.

**FSM:** financial specialization of the manager: if the CEO has a university degree related to one financial discipline, including accounting, economics, and financial management 1, otherwise, 0.

**CEO-COM:** CEO compensation: The firm's total assets are divided by the general annual assembly's compensation.

**ISM:** CEO industry specialization: if the CEO has a university degree related to one of the industries 1, otherwise, 0.

**CEO-SHARE:** the amount of managers' ownership: total shares available to the management divided by total published shares.

**CEO-TENURE:** CEO tenure: is equal to the duration the CEO holds the position consistently during the study.

**CEO-STAB:** CEO stability: if the CEO has changed in the year under study 1, otherwise, 0.

**CEO-IND:** board independence: is equal to the proportion of unbounded members to the board's total members.

**BSE:** board financial specialization: if at least one of the board members of the firm has a university degree related to one of the financial disciplines, including accounting, economics, and financial management 1, otherwise, 0.

**BSI:** board industry specialization: if at least one of the firm's board members has a university degree related to one of related industries 1, otherwise, 0.

**BLNTER:** CEO correlation: if at least one of the firm's board members is the common member of the board of other firms 1, otherwise, 0.

**BEF:** board effort: number of sessions held by the board in the year under study.

### 3.3.2. Independent variable

**Auditor opinion:** in this paper, the type of auditor's opinion is classified into two unqualified reports and qualified financial reports. In case the type of opinion is unqualified 1, otherwise, 0.

**Audit quality:** the variable of audit firm classification, which is disclosed annually by the official accountants' association, analyzes the audit quality. Such that rank A firms will be determined by 3, rank B firms with 2, rank C firms with 1, and rank D firms with 0, but since rank D firms cannot audit the Stock Exchange firms, they were excluded from the study.

**Audit fees:** is equal to the logarithm of audit fees in the year under study.

**Audit report delay:** is equal to a time interval between the end of the year and reporting data in the year under study.

### 3.3.3. Control variable

**Tenure:** auditor tenure equal to the years the audit firm is responsible for pursuing the desired firm.

**Change:** if the auditor has changed in fiscal year 1; otherwise, 0.

**Rest:** if the firm has had a restatement in the year under study 1; otherwise, 0.

**Size** is equal to the natural logarithm of total assets calculated at the end of the fiscal year.

**Lev:** is equal to the amount of debt utilization in the firm's capital structure, which is obtained from dividing total debts by total assets.

**ROA:** Return on assets or operational earnings after depreciation divided by total assets.

**ROE:** stock return rate, which is calculated by dividing the net profit into equity.



MTB: market value to book value of equity of the firm *i* in the year under study.

Age: a record of the audit firm *i* in the year *t*

Growth sales: The current year's sales minus sales of the previous year divided by sales of the previous year.

Icw: if the weakness in internal control is reported in audit report 1, otherwise, 0.

## 4. Data Analysis

### 4.1. Descriptive data

In this paper, one model is used for analyzing the relationship between audit outputs and managerial entrenchment. In addition, the present study has used the panel data method. In order to analyze the models, the variables of audit outputs are employed. Moreover, the virtual variables of industry and year were added to the model for modeling. The main source of these data is the Central Bank, Tehran Stock Exchange, Codal website, and Rah Avard-e Novin Software. Table 2 illustrates, in brief, the information related to firm variables.

**Table 2.** Descriptive statistics of variables

variable	obs	Mean	Std. dev	Min	Max
ME	768	1.969	2.524	-5.346	13.702
AQ	762	2.812	0.416	1	3
ART	768	0.485	0.500	0	1
dealy	766	4.237	0.388	2.890	4.983
LnAfee	706	7.604	1.861	3.245	14.390
Tenure	768	3.761	3.981	1	16
Change	768	0.346	0.476	0	1
Rest	768	0.799	0.400	0	1
Size	768	14.246	1.526	10.532	19.374
LEV	768	0.611	0.263	0.090	4.002
ROA	767	0.091	0.583	-12.273	2.618
ROE	768	0.225	0.868	-16.845	6.888
Age	768	38.436	12.839	10	66
Growth.sales	768	0.207	0.519	-0.845	7.705
ICW	739	0.307	0.461	0	1

According to the Table, the maximum financial leverage is 4.003. Besides, the maximum and minimum value of the return of equity is 6.8884 and -16.8455, respectively. On the other hand, maximum audit quality is 3, which is indicative of firms with rank A and its minimum is 1, which is indicative of firms with rank C. Further, maximum managerial entrenchment, which is obtained from exploratory factor analysis of 12 variables, is 13.7023 and its minimum is -5.3436.

### 4.2. The results of the unit root test of variables

We realized that all variables are at no unit root level by analyzing the unit root of variables. The obtained LM statistic for each variable is reported in Table 3. All variables of the study are stationary and have no unit root.

**Table 3.** The results of Hadari unit root test

Variable	Level	Variable	Level
ME	0.325	Changea	0.285
AQ	0.957	Rest	0.215
ART	0.987	LEV	0.124
Dealy	0.254	Size	1.000
LnAfee	0.879	ROA	0.853
Tenure	1.000	ROE	0.874
Age	0.203	Growth	0.258
ICW	0.189	Sales	

Note: the null hypothesis is the absence of unit root in variables. The LM statistic is reported.

Resource: research findings

### 4.3. Combining ability and Hausman tests

The null hypothesis is rejected at a 99% confidence level regarding the synthetic test results demonstrated in the following table. Thus, a panel data model should be used for estimating the coefficients of the model. Moreover, as depicted in the Table, the Hausman test statistic based on the estimation for the model is 22.52, with a probability level of 0.068, which is smaller than the table's value. Therefore, the null hypothesis is not rejected, so the random-effects model is more appropriate for the research model.

**Table 4.** The results of synthetic and Hausman tests

Model 1	Synthetic test		Hausman test	
	Calculated statistic	Probability level	Calculated statistic	Probability level
	1.56	0.000	22.52	0.068

Resource: research findings

#### 4.3.1. Inferential test

The following model is used for hypothesis testing, the results of which are depicted in Table 5.

$$ME_{it} = a_0 + a_1AQ_{it} + a_2ART_{it} + a_3dealy_{it} + a_4LnAfee_{it} + a_5Tenure_{it} + a_6Rest_{it} + a_7Size_{it} + a_8LEV_{it} + a_9ROA_{it} + a_{10}ROE_{it} + a_{11}MTB_{it} + a_{12}Age_{it} + a_{13}Growth_{it} + a_{14}ICW_{it} + a_{15}Change_{it} + a_{16}year_{it} + a_{17}Industry_{it} + \varepsilon_{it}$$

According to Table 5, since the respective p-value of quality and audit fee is 0.035 and 0.001 lower than the 0.05 significance level and their coefficients are 0.5118 and 0.0341, there is a significant and negative relationship between quality and audit fees, managerial entrenchment, so the null hypothesis is rejected. Moreover, the results of Table 6 show that there is a positive and significant relationship between the type of report and audit report delay and managerial entrenchment because the p-value of type of report and audit report delay is 0.046 and 0.041, respectively, lower than the 0.05 significance level and their coefficients are 0.3632 and 0.5058, so the null hypothesis is rejected, and its opposite hypothesis is approved. Moreover, the study's other findings revealed no significant relationship between auditor tenure, the return of equity, and restatement and managerial entrenchment at 95% confidence level, but a positive and significant relationship is observed between auditor change and managerial entrenchment. In addition, a negative and significant relationship was discovered between internal control weakness and firm size, and managerial entrenchment at a 95% level with a degree of tolerance. On the other hand, the study's findings suggest a positive and significant relationship between firm age and managerial entrenchment. As depicted in Table 6, sales growth, financial leverage, and return on assets are negatively and significantly associated with

managerial entrenchment.

**Table 5.** The results of model estimation

ME	Coef	Std.Err	z	p-value
AQ	-0.511	0.242	-2.11	0.035
ART	0.363	0.180	2.01	0.046
dealy	0.505	0.247	2.04	0.041
LnAfee	-0.034	0.010	-3.32	0.001
Tenure	0.048	0.029	1.66	0.098
Change	0.293	0.127	2.29	0.022
Rest	1.315	0.724	1.82	0.072
Size	0.189	0.099	1.90	0.057
LEV	-1.342	0.513	-2.61	0.009
ROA	-0.183	0.061	-2.98	0.003
ROE	.0837	0.045	1.85	0.064
Age	0.009	0.003	2.86	0.004
Growth.sales	-0.695	0.277	-2.50	0.012
ICW	0.002	0.001	1.90	0.057
-Cons	-0.966	1.698	-0.57	0.569
Number of obs	672			
R-sq	0.4092			

## 5. Discussion and conclusion

The results indicate a negative and significant relationship between quality and audit fee and managerial entrenchment. The relationship between report type and audit report delay and managerial entrenchment is positive and significant. This means that managerial entrenchment decreases along with the increase of audit quality and audit fee, which is a function of audit quality. Management entrenchment goes up in the Iranian firms by increasing delays in audit reports and type of opinion. The results of the study are in line with that of the Desender et al. (2013), Watts and Zimmerman (1986), Chan et al. (2007), Ahmad and Bouri (2017), who declare that there is a negative and significant relationship between audit quality and corporate governance (including board independence, CEO tenure, and audit committee characteristics) and are in contrast with that of the Jiraporn et al. (2018) who posit that there is a negative and significant relationship between audit quality and the board independence index of managerial entrenchment because entrenchment is itself one of the components of corporate governance. Moreover, the results of the study are in line with that of Samaha and Khalif (2017), McGee and Yuan (2012), Mohammad Nore et al. (2010), and Afify (2009), who claim that there is a significant relationship between auditor's report delay and managerial entrenchment and are in contrast with that of the Salehi et al. (2018) who state that there is a negative and significant relationship between auditor's report delay and managerial entrenchment. On the other hand, the present study results conform with Farooq et al. (2018) and Desender et al. (2013), who suggest a significant relationship between audit fees and managerial entrenchment. The hypothesis testing results relative to the type of opinion and managerial entrenchment align with that of Susanto and Pradipa (2017). They express that there is a significant relationship between the type of opinion and CEO tenure (one of the managerial entrenchment indices) and also with that of the Uzun et al. (2004) This is because larger audit firms are more inclined to save their reputation in society, which, in turn, causes the financial statements of clients to be audited with higher quality. On the other hand, larger audit firms always have a large number of clients, which leads to the client's independence. Hence, the growth of audit quality and even the audit fee, which is one example of audit quality, leads to the decline of managerial entrenchment.

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