The Relationship between Earnings Quality and Audit Quality: An Iranian Angle

Mohammad Seddigh Ansari Qeshmi*
Economics and Administrative Sciences, Payamenoor University, Tehran, Iran
Hamideh Nazaridavaji
Faculty of Economics and Administrative sciences, Ferdowsi University of Mashhad, Mashhad, Iran

Abstract
The present study is concerned about the relationship between earnings quality and audit quality of audit firms to figure out whether the earnings quality of firms audited by larger audit firms is more than that of the smaller firms or the earnings quality of firms audited by longer tenure audit firms is more than that of the shorter tenure firms or not.

The study's hypotheses were tested using a sample of 129 year-company listed on the Tehran Stock Exchange during 2012-2016 and by using the multiple regression pattern based on the data integration technique. Hence, the multivariable regression model is used for testing the hypotheses.

The obtained results show that the earnings quality of firms audited by small audit firms outweighs that of the large audit firms. Moreover, the findings indicate that those firms audited by longer tenure audit firms, compared with those audited by shorter tenure audit firms, enjoy a better earnings quality.

Keywords: Earnings Quality, Audit Firms’ Tenure, Mandatory Rotation, Audit Quality.

*Corresponding Author: Department of Accounting. Email: Andisheh23@gamil.com
1. Introduction

An audit firm's income is one of the items of financial statements that are of great importance for all users. According to declaration No. 1 of financial accounting concepts, financial reports are on firm performance information, presented through earnings calculation and its constituent components. The earnings quality is influenced and reduced by the imposed managerial opinions. By adopting special accounting policies, managers adjust the accounting estimations, discretionary accrual management, and reported profits. According to Barth et al. (2005), using estimations in financial statements will influence the earnings and may lead to a profit different from the firm's real performance. Thus, the reported profit went farther than the real profit and lost its required objectivity.

One of the main objectives of financial statements is to present useful information for a broad spectrum of users inside and outside an organization to make wise economic decisions. Auditing, among them, takes the role of accreditation to financial statements and auditors, as independent individuals with a professional qualification, ensure the users of financial statements that these documents are free from any distortion or significant error and financial status, financial performance, and financial flexibility will be shown favorably based on the accounting standards. However, the main question raised by beneficiaries about the performed audit is to what extent the audit process has been able to report and explore the shortcomings and errors and the overall quality of the performed audit. Following the recent restatement of firms’ profit and bankruptcy of large corporations, auditing firms' earnings information's accrediting role has increased significantly. Audit quality differences arise as a difference between auditors' presented credit and their clients' earnings quality. On the other hand, the increase in the number of frauds mingled with large corporations' bankruptcy arouses some concerns about the quality of financial reports. Accounting and auditing professions attempted to find some strategies for this issue. For example, the U.S. Congress established a particular committee to map out some strategies for combating fraud and distortion, which lead to the formation of the Sarbanes Oxley Act (2002). This Act results in the emergence of powerful supervisory authority, called accounting public companies’ supervisory board, to monitor accounting and auditing professions. Providing new audit standards, determining the required accounting principles, compiling quality control standards for auditors, and publishing a professional code of ethics are among this board's main duties. This role is even more significant than other previous regulatory boards' role and asks to develop the relationship between the audit committee and independent auditors (Cohen et al., 2007). Hence, auditing plays a significant role in the financial reporting process, so the present study attempts to realize whether the earnings quality of firms audit by larger audit firms outperform that of the smaller firms or the earnings quality of firms audited by longer tenure audit firms is more than that of the shorter tenure ones or not. It is noteworthy that this paper is the first study dealing with the comparative relationship between firms' earnings quality and firms' audit quality. This paper can contribute to the development of scientific knowledge in this field.

2. Theoretical Issues, Literature Review, and Hypothesis Development

The increasing economic units' growth, information technology development, and a conflict of interests make the regulatory requirements. The economic globalization and information revolution have taken control of governments and have caused the audit profession to gradually not fall behind and move along with technological changes in line with communities' needs. In such a setting, users require different information, including economic firms' financial information for decision-making. Financial statements are considered the most important set of financial information. Still, the major point here is
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uncertainty about such information's reliability, which is the origin of conflict interests. In addition to the conflict of interests, there are some other issues involving lack of direct access of users to information, which puts forward the demand for independent audit services. The function of auditing is to evaluate the information quality for users. The word “quality” has more than one universal equivalent. To improve and control each aspect of quality, it should be defined and assessed initially. Sometimes, it is defined as a business unit feature, sometimes as a particular feature or a product, and sometimes as a superiority index. General definitions of quality include suitability for use and/or a set of characteristics and features which create desirability and satisfy the needs. Quality is applied lexically as quality control, level of quality, quality increase, etc. (Ghylin et al., 2008). Moreover, numerous studies are conducted on audit quality so far (including DeAngelo, 1981; Palmrose, 1988; and Baker et al., 1988), and various definitions are presented for quality. For example, the first definition of audit quality is proposed by DeAngelo (1981) as follows: “market evaluation of auditor’s competency in exploring significant distortions and reporting the detected frauds”. Further, he stressed that the auditor who explores and reports the erroneous issues is independent, literally. Therefore, according to the definition of DeAngelo, audit quality is the growth of audit capability in exploring accounting distortion and evaluating the auditor’s competency and independence in the market. When DeAngelo applied these concepts, the main assumption was that the market perceives the audit quality, indicating real audit quality. However, there is a difference between real audit quality and audit quality concepts because real audit quality is intangible and cannot be assessed unless it yields a result.

DeAngelo defined the audit quality based on two probabilities. Defect exploration measures the audit quality based on knowledge and competency, while its report depends on the auditor’s motivation for disclosure. Since DeAngelo’s definition for auditing financial statements is satisfactory, it can encompass other types of auditing. Although there is no comprehensive audit quality definition to contain different auditing types, we can logically imagine that audit quality includes regulating policies and audit standards. Years after DeAngelo’s definition, Palmrose (1988) defined audit quality. They said that “being assured of financial statements and that there is no chance of the presence of significant distortion is audit quality”. Moreover, DeAngelo (1986) believes that larger audit firms provide high-quality audit services because they try to gain more fame in the market, and since the number of their clients is high, they are not afraid of losing them.

Although various factors contribute to audit services' quality, limited studies are carried out to map out a framework or perceptual model for describing the quality structure of audit services. Catanach and Walker (1999) proposed a model which shows that audit quality relies on two factors related to audit performance, namely, auditor’s competencies (including knowledge, experience, matching power, and technical efficiency) and professional capabilities (involving independence, objectivity, professional care, conflict of interests, and judgment).

2.1. Relationship between audit quality and earnings quality

According to the conceptual declaration of financial accounting No. 1, financial statements are mostly audited by independent auditors to increase trust about their reliability (conceptual declaration of financial accounting No.1). Hence, to have an opinion about the quality of financial statement items, including earnings, the performed audit quality is a significant feature. The relationship between audit quality and earnings quality is not new and is well-documented in the accounting and auditing literature. Several studies have proven the relationship between size, high-quality audit, and high-quality financial reporting (Gul et al., 2009). So, earnings quality can be a sign of audit quality. When the audit quality is low, effective supervision is not exercised on the
auditor’s side to explore the client's suspicious accounting methods. Then it is more probable that he reported figures to contain some items hiding the appropriateness of financial status and operation results. In such circumstances, the low quality of earnings would probably lead to audit failure. Legal claims against auditors and larger discretionary accruals positively correlate with audit failure and subsequent legal cases (Chen et al., 2012). In this case, the auditor may even persuade the management to go away from the framework of accepted accounting standards, so the earnings quality reflects the audit quality. From this perspective, the financial reporting quality (earnings quality) may be considered the common product of management and auditing attempts (Gul et al., 2009). Moreover, Becker, DeFond, Jiambalvo, and Subramanvam (1998) indicate that high-quality audit lowers earnings management. Further, Watkins, Hillson, and Morecroft (2004) illustrate that a high-quality audit can lower indirect measurement errors. Higher-quality audits will increase the reporting reliability by lowering intentional and non-intentional measurement errors of previous earnings, and analysts use them for predicting future earnings. The higher the audit quality, the higher the precision of analysts’ earnings prediction (Becker et al., 1998; Watkins et al., 2004). Hence, we could claim that users are more likely to consider a high-quality audit reliable because it decreases reported errors in financial statements. In addition, recent studies (like Kwon et al., 2007; Barnet et al., 2015; Sun and Liu, 2013; Tavakol Nia and Makrani, 2015; and Habib et al., 2014) show that the expert auditors in the management industry decrease the profit and enhance the earnings quality instead. Kim et al. (2003) reveal that the difference between the effectiveness of large audit firms and small audit firms originates from the conflict between the motivation of firm managers and auditors for reporting. When managers are motivated enough to increase profit-increasing accounting methods, preserving impartiality by auditors would lead to the conflict between managers and auditors. They noticed that larger audit firms, compared with smaller ones, are more effective in preventing profit manipulation (by assuming conflict between management and auditors). Lam and Chang (1994) discovered that larger audit firms do not necessarily present better audit quality than the smaller ones. Lewis Henock (2005) carried out a study on the relationship between audit firms’ service quality and auditor’s size and found that larger audit firms do not always present better services than the smaller firms. Two Belgian researchers, Bauwhede and Willekens (2004), analyzed the effects of audit firms’ size on audit quality in the Belgium market and defined some marginal factors for audit size, including auditor’s market share, number of clients of the audit firm, etc. Finally, the results of this study show no significant relationship between auditor’s size and audit quality. Fuerman (2006) concluded in his study that larger audit firms have fewer audit faults. Deltas and Doogar (2004) claimed that the less the diversity of audit products, the higher is the audit quality of financial statements. Chuntao et al. (2007) carried out a study to analyze the stock market's familiarity with audit quality among a number of small audit firms in the Chinese audit market. They found a positive relationship between the audit firm’s size and the investors' understanding of earnings quality. This study indicates that audit quality is significantly associated with audit firms' size (Deltas and Doogar, 2004; Fuerman, 2006; Krishnan and Scheuer, 2000; Dies and Giroux, 1992; Palmrose, 1988; Lennox, 1999). There is other evidence, however, showing that larger audit firms do not necessarily provide better audit quality than smaller audit firms (Kim et al., 2003; Bauwhede and Willekens, 2004; Lewis Henock, 2004). Therefore, given the facts above, the research hypotheses are as follows:

**H1:** The earnings quality of audited firms with larger audit firms is more than that of the smaller audit firms.

**H2:** The earnings quality of audited firms with longer auditor’s tenure is more than that of the shorter auditor’s tenure.
3. **Research Methodology**

This paper is causal-correlational and, in terms of the methodology, is quasi-experimental and post-event in the realm of positive research in accounting with real data. This paper is practical in terms of nature and objective. Practical studies aim to develop practical knowledge within a certain field. However, in terms of data collection and analysis, this study is causal-correlational.

3.1. **The population under study**

The present study's statistical population includes all listed companies on the Tehran Stock Exchange during 2012-2016.

3.2. **Sampling method**

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

1. Companies should be listed on the Tehran Stock Exchange until the year 2011;
2. Companies should continue activity during the study, and their shares should be dealt with (no more than 6 months of transaction halt would be listed);
3. Companies should provide the required financial information during the study, thoroughly; and,
4. Companies should not be affiliated with investment companies, banks, insurance, and financial intermediaries.

As depicted in Table (1), the final sample is selected, given the gathered information at the end of 2016.

<table>
<thead>
<tr>
<th>Description</th>
<th>No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total No. of companies listed on Tehran Stock Exchange</td>
<td>489</td>
</tr>
<tr>
<td>Investment companies, financial intermediaries, banks, and leasing</td>
<td>(78)</td>
</tr>
<tr>
<td>No. of inactive companies during study</td>
<td>(129)</td>
</tr>
<tr>
<td>No. of unavailable companies during study</td>
<td>(125)</td>
</tr>
<tr>
<td>No. of companies with no change in their financial period during the study</td>
<td>(28)</td>
</tr>
<tr>
<td>Remaining companies</td>
<td>129</td>
</tr>
</tbody>
</table>

3.3. **Data collection method and tools**

The required data were gathered based on their types from different resources. Data related to the study's literature and theoretical issues were collected from library resources, involving books, Persian and English journals, and websites. Data related to firms (balance sheet and profit and loss statements) were used as the research tools.

Initial information and raw data required for hypothesis testing were gathered using an information bank related to Tehran Stock Exchange, including Tadbir Pardaz and Rah Avaran-e Novin as well as published information of Tehran Stock Exchange and by direct observation (by analyzing the disclosed reports of the Codal website and manually) and presented in CDs and also on the website of [www.rdis.ir](http://www.rdis.ir).

3.4. **Data analysis method**

Since no variable is manipulated in this study, and there is no laboratory condition, this study is descriptive (nonexperimental). Descriptive studies include a set of methods, the aim of which is to explain the conditions of phenomena under study. The main objective of descriptive studies is to realize the status quo or to help the decision-making process. Based on nature, the present study can also be considered as a sample of
evaluative studies. These types of studies are a process for data collection, analysis, and decision-making. For this study, initially, the design records, then the main topic of the thesis is studied. The F significance test of multiple regression is used in the Stata Software, and for creating the required database, the EXCEL Software is employed.

3.5. The statistical model of the study
This paper attempts to assess whether the audit quality contributes to the earnings quality or not. Given that the following multivariable regression model is used for hypothesis testing:

\[ EQ_{1t} = \beta_0 + \beta_1 A_{it} + \beta_2 B_{it} + \beta_3 C_{it} + \beta_4 D_{it} + \beta_5 BIG_{it} + \beta_6 TENURE_{it} + \epsilon_{it} \]

Where

- \( EQ \) is earnings quality, a dependent variable, for the calculation of which the model of Francis et al. (2005) is used as follows:

\[ \frac{TA_{i,t}}{Asset_{i,t-1}} = \beta_1 \times \frac{1}{Asset_{i,t-1}} + \beta_2 \times \frac{(\Delta Rev_{i,t} - \Delta AR_{i,t})}{Asset_{i,t-1}} + \beta_3 \times \frac{PPE_{i,t}}{Asset_{i,t-1}} + \epsilon_{i,t} \]

Where

- \( \Delta AR_{i,t} \) are changes in accounts receivable of the firm i from year t-1 to t and \( \epsilon_{i,t} \) is the error sentence in the year t, the absolute value of which is indicative of the absolute value of abnormal discretionary accruals. The higher this value, the lower is the earnings quality. In this paper, error residuals are used as the dependent variable of the study.

A: firms audited by large audit firms (by large firms, we mean the audit organization and Mofid Rahbar) 1, otherwise 0 will be assigned.

B: firms audited by small audit firms (firms other than the organization and Mofid Rahbar) 1, otherwise 0 will be assigned.

C: firms audited by longer tenure audit firms 1; otherwise, 0.

D: firms audited by shorter tenure audit firms 1; otherwise, 0.

BIG: if the audit firm is organization 1, otherwise, 0.

TENURE: audit firm’s tenure is a period the audit firm performs auditing in a certain firm.

Change: auditor change if the auditor has changed within the year under study 1; otherwise, 0.

Size: firm size, the natural logarithm of firm assets.

ROA: return on assets, net profit to book value of equity.

ROE: return on equity, net profit to book value of equity.

MTB: book value to equity market ratio.

LEV: financial leverage, which is equal to total debts to total firm assets.

LOSS: firm loss, if the firm is losing 1; otherwise, 0 will be assigned.

GROWTH SALES: sales growth, sales of the current year minus sales of the previous year divided by sales of the previous year.

Afee: audit fee, which is equal to the natural logarithm of the audit fee.

Year: dummy variable of year.

Industry: dummy variable of year.

4. Data Analysis
4.1. Descriptive statistics
In this paper, the absolute value of abnormal discretionary accruals (EQ1) is used for
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assessing the effect of audit quality on earnings quality in listed companies on the Tehran Stock Exchange. In addition, the present study has used the panel data method, including 129 firms from 2012 to 2016, in its basic data. In order for assessing the impact of audit firm size and auditor’s tenure, several variables, including dummy variable of firms and large firms (A), dummy variable of firms and small firms (B), dummy variable of firms and long tenure (C), dummy variable of firms and short tenure (D), dummy variable of auditing by the organization (BIG), auditor’s tenure (TENURE), auditor change (Change), firm size (Size), return on assets (ROA), return on equity (ROE), market to book value (MTB), financial leverage (LEV), dummy variable of firm loss (Loss), firm age (Age), sales growth (Growth sales), audit fee logarithm (Afee), and dummy variable of industry and year were added as descriptive variables to the model. The main source of these data is Central Bank, the official website of Tehran Stock Exchange, Codal Website, and Rah Avaran-e Novin Software. Table (2) briefly shows the information related to the variables of the model.

Table 2. Descriptive statistics of variables

<table>
<thead>
<tr>
<th>Sign</th>
<th>Name</th>
<th>NO. of observation</th>
<th>Total average</th>
<th>Std. dv.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>EQ1</td>
<td>The absolute value of abnormal discretionary accruals</td>
<td>645</td>
<td>0.0591</td>
<td>0.0539</td>
<td>0.0002</td>
<td>0.6189</td>
</tr>
<tr>
<td>A</td>
<td>dummy variable of firms and large firms</td>
<td>645</td>
<td>0.2558</td>
<td>0.4367</td>
<td>0.000</td>
<td>1.00</td>
</tr>
<tr>
<td>B</td>
<td>Dummy variable of firms and small firms</td>
<td>645</td>
<td>0.7442</td>
<td>0.4367</td>
<td>0.000</td>
<td>1.00</td>
</tr>
<tr>
<td>C</td>
<td>Dummy variable of firms and long tenure</td>
<td>645</td>
<td>0.2000</td>
<td>0.4003</td>
<td>0.000</td>
<td>1.00</td>
</tr>
<tr>
<td>D</td>
<td>Dummy variable of firms and short tenure</td>
<td>645</td>
<td>0.8000</td>
<td>0.4003</td>
<td>0.000</td>
<td>1.00</td>
</tr>
<tr>
<td>BIG</td>
<td>Dummy variable of auditing by the organization</td>
<td>645</td>
<td>0.3039</td>
<td>0.4603</td>
<td>0.0000</td>
<td>1.0000</td>
</tr>
<tr>
<td>TENURE</td>
<td>Auditor tenure</td>
<td>645</td>
<td>3.9473</td>
<td>3.9370</td>
<td>1.0000</td>
<td>15.0000</td>
</tr>
<tr>
<td>Change</td>
<td>Auditor change</td>
<td>645</td>
<td>0.2775</td>
<td>0.4481</td>
<td>0.0000</td>
<td>1.0000</td>
</tr>
<tr>
<td>ROA</td>
<td>Return on assets</td>
<td>645</td>
<td>0.1111</td>
<td>0.1513</td>
<td>-0.7896</td>
<td>0.6313</td>
</tr>
<tr>
<td>ROE</td>
<td>Return on equity</td>
<td>645</td>
<td>0.2564</td>
<td>0.9418</td>
<td>-16.8456</td>
<td>6.8885</td>
</tr>
<tr>
<td>MTB</td>
<td>Market to book value</td>
<td>645</td>
<td>3.5143</td>
<td>8.2390</td>
<td>114.4768</td>
<td>103.1528</td>
</tr>
<tr>
<td>LEV</td>
<td>Financial leverage</td>
<td>645</td>
<td>0.6023</td>
<td>0.2268</td>
<td>0.0902</td>
<td>2.3152</td>
</tr>
<tr>
<td>Loss</td>
<td>Dummy variable of firm loss</td>
<td>645</td>
<td>0.1256</td>
<td>0.3316</td>
<td>0.0000</td>
<td>1.0000</td>
</tr>
<tr>
<td>Age</td>
<td>Firm age</td>
<td>645</td>
<td>38.0310</td>
<td>12.8016</td>
<td>10.0000</td>
<td>65.0000</td>
</tr>
<tr>
<td>Growth.Sales</td>
<td>Sales growth</td>
<td>645</td>
<td>0.2079</td>
<td>0.5455</td>
<td>-0.8453</td>
<td>7.7053</td>
</tr>
<tr>
<td>Afee</td>
<td>Audit fee logarithm</td>
<td>645</td>
<td>6.7540</td>
<td>0.7740</td>
<td>3.2453</td>
<td>8.4726</td>
</tr>
</tbody>
</table>

Resource: research findings
By evaluating all model variables' unit root, these variables are mostly united (stationary) at an unrooted level. The obtained LM statistic for each variable is reported in Table (3). Only the variables of A, C, Big, Age, and Afee are united at the root level. The obtained LM statistic for the unit root test of these variables rejects the null hypothesis concerning the absence of unit root at 99% probability level.

Differentiating the variables for one time, A, C, Age, and Afee have no unit root. The first-order difference of the big variable has a unit root at a 99% significance level. The second order of this variable has no unit root.

### Table 3. The results of the Hadri unit root test

<table>
<thead>
<tr>
<th>Name</th>
<th>Level</th>
<th>First-order differentiation</th>
<th>Second-order differentiation</th>
<th>Name</th>
<th>Level</th>
<th>First-order differentiation</th>
</tr>
</thead>
<tbody>
<tr>
<td>EQ1</td>
<td>0.9999</td>
<td>0.9824</td>
<td></td>
<td>ROA</td>
<td>0.9824</td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>0.0000</td>
<td>0.0000</td>
<td></td>
<td>ROE</td>
<td>0.9999</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>0.2227</td>
<td>0.9984</td>
<td></td>
<td>MTB</td>
<td>0.7314</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>0.0000</td>
<td>0.9999</td>
<td></td>
<td>LEV</td>
<td>0.9153</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>0.4045</td>
<td>0.0000</td>
<td></td>
<td>Loss</td>
<td>0.0000</td>
<td></td>
</tr>
<tr>
<td>BIG</td>
<td>0.0000</td>
<td>0.0000</td>
<td></td>
<td>Age</td>
<td>0.0144</td>
<td>0.9832</td>
</tr>
<tr>
<td>TENURE</td>
<td>0.7074</td>
<td>0.0000</td>
<td></td>
<td>Growth.Sales</td>
<td>0.9523</td>
<td>0.9906</td>
</tr>
<tr>
<td>Change</td>
<td>0.9976</td>
<td>0.0000</td>
<td></td>
<td>Afee</td>
<td>0.0045</td>
<td>0.9906</td>
</tr>
<tr>
<td>size</td>
<td></td>
<td>0.5917</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: the null hypothesis is the absence of a unit root in variables. LM statistic is reported. *, **, and *** are 90, 90, and 99% level of significance.

### Table 4. Results of model estimation

<table>
<thead>
<tr>
<th>Name</th>
<th>Coefficient (Standard error)</th>
<th>Name</th>
<th>Coefficient (Standard error)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-0.4524 (0.4110)</td>
<td>ROA</td>
<td>-0.1000’ (0.0783)</td>
</tr>
<tr>
<td>Large firms and institutions (A)</td>
<td>0.0556 (0.0357)</td>
<td>ROE</td>
<td>-0.0156” (0.0119)</td>
</tr>
<tr>
<td>Small firms and institutions (B)</td>
<td>-0.0717” (0.0371)</td>
<td>MTB</td>
<td>-0.0017” (0.0011)</td>
</tr>
<tr>
<td>Firms and long tenure (C)</td>
<td>-0.0478” (0.0333)</td>
<td>LEV</td>
<td>-0.0508 (0.0283)</td>
</tr>
<tr>
<td>Firms and short tenure (D)</td>
<td>0.0477” (0.0334)</td>
<td>Loss</td>
<td>0.0481” (0.0230)</td>
</tr>
<tr>
<td>Big</td>
<td>0.0124” (0.0036)</td>
<td>Age</td>
<td>-0.0186” (0.0087)</td>
</tr>
<tr>
<td>Tenure</td>
<td>-0.0177” (0.0084)</td>
<td>Gross.Sale</td>
<td>-0.0216” (0.0126)</td>
</tr>
<tr>
<td>Change</td>
<td>0.0108” (0.0165)</td>
<td>Afee</td>
<td>-0.0196” (0.0149)</td>
</tr>
<tr>
<td>Size</td>
<td>0.1098” (0.0362)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Number of obs. | 182
Adj. R -squared | 0.0012

Note: *, **, and *** are 90, 95, and 99% level of significance.

The results of the robust model estimation are reported in Table 4. In this panel data model, four classic econometrics hypotheses were analyzed, and reliable results will be reported. These four hypotheses include the absence of collinearity among variables, the
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According to the performed estimation, the model's fixed coefficient is -0.4524, which is not significant. The dummy variable of firms and large firms (A) has a coefficient of 0.0556 with a level of significance of 90%. Hence, the larger the firms and institutions, the higher is the abnormal discretionary accruals. In contrast, the coefficient of the dummy variable of firms and small institutions (B) is -0.0717. Therefore, the smaller the firms and institutions, the lower is the abnormal discretionary accruals at 95% confidence level and the higher the earnings quality, so we can say that companies audited by small audit firms, compared with those audited by large audit firms, have higher earnings quality. Hence, the first hypothesis of the study is rejected.

The estimation coefficient of firms' dummy variable and long tenure (C) is -0.0478 at a 90% level of significance. Hence, the longer the tenure, the lower is the abnormal discretionary accruals. On the other hand, the dummy variable of firms and shorter tenure (D) is 0.0477, so the shorter the firm tenure, the higher is the abnormal discretionary accruals. Thus, we can say that firms audited by longer tenure firms, compared with those audited by shorter tenure firms, have higher earnings quality. Hence, the second hypothesis of the study is accepted.

The auditor tenure variable (Tenure) is negative, with a 95% level of significance. Therefore, with a 1% increase in auditor tenure, the abnormal discretionary accruals will decrease by -0.0177%. The firm size variable's coefficient is positive in the estimated model, with a 99% level of significance. Thus, by 1 increase in the variable (Size), the abnormal discretionary accruals will increase by 0.1098%.

The coefficient of both variables of return on assets and return on equity are negative. Therefore, with a 1% increase of ROA and ROE at 90% of significance level, the abnormal discretionary accruals will decrease by -0.1000 and -0.0156, respectively. The coefficient of the variable of MTB is negative, with a 90% level of significance. Thus, by 1 increase in market value to book value, the abnormal discretionary accruals will decrease by -0.0017%.

The coefficient of the variable of financial leverage is -0.0508 at a 90% level of significance. Given the model estimation, by a 1% increase in the LIV variable, the abnormal discretionary accruals will decrease by -0.0508%. The coefficient of the dummy variable of firm loss is positive at a 95% level of significance. So, the more losing the firm, the abnormal discretionary accruals will increase by 0.0408%.

On the other hand, firm age has a negative coefficient with a 95% level of significance. With a 1% increase in age, abnormal discretionary accruals will decrease by -0.0186%. Sales growth of the firm has a negative coefficient of -0.0216 at a 90% level of significance. Therefore, by a 1% increase in Gross sales, abnormal discretionary accruals will decrease by -0.0216%. The coefficient of the audit fee logarithm variable is negative, with a 90% level of significance. Hence, with a 1% increase in Afee, abnormal discretionary accruals will decrease by -0.0196%.

It is worth mentioning that the organization's dummy variables (Big), auditor's change (Change), and industry and year dummy variables do not affect abnormal discretionary accruals. Moreover, given the performed estimations, the descriptive power of the model is 0.0012. By considering the above variables, the model could describe 0.0012% of abnormal discretionary accruals fluctuations.

5. Conclusion

The present study is concerned about the relationship between the earnings quality of firms and the size of audit firms to figure out whether the earnings quality of firms audited by larger audit firms is more than that of the smaller audit firms or not. The hypothesis
testing results show that the more audit firms’ size, the more abnormal discretionary accruals because the coefficient of firms’ dummy variable is positive for larger audit firms (A). Hence, the larger the firms and institutions, the higher is abnormal discretionary accruals. In contrast, the coefficient of small firms’ dummy variable and institutions (B) is negative. Hence, the smaller the size of firms and institutions, the lower is the abnormal discretionary accruals, and the higher is earnings quality. Thus, we can say that those firms audited by small audit firms, compared with those audited by large audit firms, benefit from better earnings quality, so the first hypothesis of the study is rejected, which is in contrast with that of the Gul et al. (2009) and Chen et al. (2004), who declare when the audit quality is low, effective supervision will not be exercised by the auditor to explore suspicious accounting methods of the client. Hence, the reported figures and numbers are more likely to hide the soundness of financial status and operation results. In such a situation, the low quality of earnings is more probable to result in an audit failure and law claims against accountants. Some larger discretionary accruals will positively correlate with audit failures and their subsequent law cases against auditors. Moreover, this finding is in line with that of Lawrence et al. (2011). They argue that discretionary accruals are more influenced by audit firms’ characteristics, not the employers themselves, so it cannot be an index for measuring the audit quality. Further, this paper also analyzes another concept about earnings quality, named audit firms’ tenure, to find whether the earnings quality of firms audited by longer tenure audit firms is more than that of the shorter tenure or not. The results of related hypothesis testing show that the longer the tenure, the less is abnormal discretionary accruals because the estimating coefficient of dummy variable of firms and longer tenure (C) is negative, so the longer the tenure, the less is the abnormal discretionary accruals. On the other hand, the dummy variable of firms and shorter tenure (D) has a positive coefficient. Thus, the shorter the tenure of firms, the higher is the abnormal discretionary accruals. Therefore, we can say that those firms audited by longer tenure audit firms, compared with firms audited by shorter tenure audit firms, have better audit quality. In other words, the second hypothesis of the study is accepted, which conforms with that of the Hamilton et al. (2005), who declare that in firms in crisis, the extremely aggressive reporting of the client which occurs as a result of debilitation of an auditor’s independence, would lead to secrecy about profitability losses of the so-called firms.

References
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