AUDIT QUALITY AND FINANCIAL REPORTING QUALITY: CASE OF TEHRAN STOCK EXCHANGE (TSE)

Hasan Maleki Kaklar1, Saeid Jabbarzadeh Kangarlouei2, Morteza Motavassel3

1 Department of Accounting, Salmas Branch, Islamic Azad University, Salmas, Iran.
2 Department of Accounting, Urmia Branch, Islamic Azad University, Urmia, Iran.
3 Department of Accounting, West Azarbayjan Science and Research Branch, Islamic Azad University, West Azarbayjan, Iran.

ARTICLE INFO

Corresponding Author:
Saeid Jabbarzadeh Kangarlouei
Department of Accounting, Urmia Branch, Islamic Azad University, Urmia, Iran

KeyWords: Audit quality, financial reporting quality, audit firm size, auditor rotation and Tehran Stock Exchange.

ABSTRACT

The purpose of this study is to investigate the relationship between audit quality and financial reporting quality during the period of 2004-2009 in TSE. The population of study includes 91 firms obtained from systematic elimination. Using panel data, the results of study show that there is a weak and negative relationship between audit firm size and financial reporting quality. That is, when auditing is conducted by Iranian audit organization, financial reporting quality mitigates. However, no relationship is found between auditor rotation and financial reporting quality.

©2012, IJBM, All Right Reserved

INTRODUCTION

On the one hand, efficient capital markets bring high-quality financial reporting, which facilitates the efficient raising and allocation of corporate capital and thus creates benefits for investors (Wang and Wub, 2011:168), and on the other hand, the global financial crisis, corporate failures and scandals in many countries raise significant questions about the effectiveness of financial reporting and auditing. Auditing firms, professional and regulatory bodies are under fire and face pressures to restore confidence in auditing. Regulatory and professional bodies tried to promote audit quality in an attempt to cure tarnished image and augment their legitimacy and standing (Holma and Zaman, 2011:51).

Therefore, it is expected that high audit quality lead to high financial reporting quality which is a tool to prevent financial crises. Biddle et al. (2009) define financial reporting quality as "the precision with which financial reporting conveys information about the firm's operations, in particular its expected cash flows, that inform equity investors" (p:113). Their definition is consistent with the Financial Accounting Standards Board Statement of Financial Accounting Concepts No. 1 (1978), which states that one objective of financial reporting is to inform present and potential investors in making rational investment decisions and in assessing the expected firm cash flows. However, audit quality is not directly observable; therefore, it is difficult to measure empirically. However, there are proxies to measure audit quality. Accrual measure is one of the proxies for audit quality. High quality auditors are more likely to detect accounting irregularities, object to the use of questionable accounting practices, and limit discretion over accrual choices for client firms (Kim and Yi, 2009: 208). Giroux and Jones (2011) number five theoretical constructs to test audit quality: auditor type, audit experience (industry specialization), audit fee, demographics, and local government type (p. 62). Jamal and Sunder (2011) report from DeAngelo (1981) Mautz and Sharaf (1961) that "two key features of the financial reporting system are that an audit is mandated for publicly traded companies, and that it must be conducted by accountants who are independent in fact (i.e., have an objective state of mind) as well as in appearance. Both these dimensions of independence are assumed to be necessary for attaining audit quality" (P: 284).

Khurana and Raman (2004) define audit quality as "an auditor will (1) detect and (2) correct/reveal any material omission or misstatements in the financial statements"(p. 475). DeAngelo (1981) hypothesizes a two-dimensional definition of audit quality that has set the standard for addressing the issue. First, a material misstatement must be detected, and second, the material misstatement must be reported. According to Palmrose (1988) and Simunic and Stein (1987) there is two major drivers of audit quality are litigation costs and reputation loss. They argue that considering large investment on building their brand names, the large audit firms have an incentive to lower litigation risk and protect their reputational capital by providing more credible financial reports. These arguments are consistent with the notion that audit firm size is an important determinant of audit quality. Large size of audit firm has two consequences (1) enables audit firms to spend on training and audit technology (increasing their competence), and (2) Enables...
them to resist auditee pressure to issue a clean audit opinion since they are not dependent on an individual client.

**LITERATURE REVIEW**

The classic agency problem between shareholders and corporate managers promotes the hiring of auditors to provide independent assurance to the investors that the firm’s financial statements is under Generally Accepted Accounting Principles (Watts and Zimmerman, 1983). However, global financial crisis, corporate failures and scandals in many countries brought doubts as to the effectiveness of auditing to do so. There have been so many attempts to restore confidence for auditing work by passage of regulatory Acts. The passage of these Acts supposed to increase audit quality. For example, DeFond and Lennox (2011) find that the passage of SOX results in a large reduction in the number of small audit firms operating in the market. They report that nearly 50%, 607 of 1,233 small audit firms that were active during 2001–2008 exited the market and the majority of these exits occur in 2002–2004, coinciding with passage of SOX, the advent of PCAOB registrations, and the beginning of inspections. They also show that the presence of fewer small auditors coincides with a doubling of the average number of clients per small audit firm. Thus, they document a significant shift in the composition of the market for small auditors after the adoption of SOX. In addition, they argue that low quality auditors are more likely to find it cost beneficial, at the margin, to exit the market for public company audits in response to the new regulatory environment implemented under SOX (P.22). These results show that the passage of these Acts increased audit quality if audit size supposed to be proxy for audit quality. Moreover, as we put forward it is expected that high audit quality lead to high financial reporting quality. However, the passage of Acts led to increase financial quality.

Al-Ajmi (2009) studied perceptions of credit and financial analysts with regard to the relationship between the effectiveness of audit committee, size of the auditing firm and audit quality in the context of Bahrain. By survey of 300 credit and financial analysts, he shows four major findings: 1- both credit and financial analysts see the credibility of financial statements to be a function of the size of the auditing firm. 2- Both groups assume that the characteristics of Big-Four firms allow them to produce better-quality reports than non-Big firms. 3-Non-audit services affect auditor’s independence hence impair audit quality. 4-Both the groups of analysts believe that effective audit committee enhances the quality of audit reports. 5- Financial analysts perceive financial statements to be more credible than do credit analysts. Ding and Jia (2012) & Cullinan et al. (2012) examined whether the stock market reacts negatively when clients switch from a Big 4 to a non-Big 4. They find that the market does not react more negatively when clients move from a Big 4 to a Second Tier auditing firm than when clients move from a Big 4 to another Big 4 firm. Their results suggest that a negative market reaction may not represent a significant barrier to entry among Second Tier auditing firms. Boone et al. (2010) examined audit quality for Big 4 and Second-tier auditors during 2003–2006 and find weak evidence that the Big 4 have a higher propensity to issue going concern audit opinions for distressed companies. In addition, they find that the level of performance-adjusted abnormal accruals for Big 4 and Second-tier audit firm clients appears to be similar. With respect to investor perceptions, the client-specific ex ante equity risk premium to be lower for Big 4 clients than for Second-tier audit firm clients. Overall, their findings suggest little difference in actual audit quality but a more pronounced difference in perceived audit quality. Lai (2009) examined the association of firms with high investment opportunities with high quality audits and whether that association results in a lower likelihood of earnings management. She find two results: First, firms with high investment opportunities are more likely to hire Big 5 auditors, than firms with low investment opportunities. Second, firms with high investment opportunities are more likely to have more discretionary accruals but this relationship is weaker when they have Big 5 auditors. Rainsbury et al. (2009) examined the association between the quality of audit committees on financial reporting quality and external audit fees. Their study uses a sample of 87 New Zealand firms in 2001 when no regulations or listing rules existed for audit committees. They do not find significant association between the quality of an audit committee and the quality of financial reporting after controlling alternative measures of earnings quality. Kim and Yi (2009) investigated whether the auditor designation rule in Korea is effective in deterring managers from making income increasing earnings management. They find that the level of discretionary accruals is significantly lower for firms with designated auditors than firms with a free selection of auditors. They also find that firms with mandatory auditor changes (i.e., auditor designation) report significantly lower discretionary accruals compared to firms with voluntary auditor changes. Overall, their results are consistent with the notion that the auditor designation enhances audit quality and thus the credibility of financial reporting. Firth et al. (2012) using auditors’ propensity to issue a modified audit opinion as a proxy for audit quality report a positive effect of mandatory audit partner rotation on audit quality in regions with weak legal institutions. However, they fail to find robust evidence that mandatory audit firm rotation is significantly superior to other forms of auditor rotation. Daniels and Booker (2011) surveyed the effects of audit firm rotation on perceived auditor independence and audit quality and indicate that loan officers do perceive an increase in independence when the company follows an audit firm rotation policy. However, the length of auditor tenure within rotation fails to significantly change loan officers’ perceptions of independence. Moreover, their findings also indicate that neither the presence of a rotation policy nor the length of the auditor tenure within rotation significantly influences the loan officers’ perceptions of audit quality.

**HYPOTHESES DEVELOPMENT**

Main hypothesis: there is a significant relationship between audit quality and financial reporting quality in firms listed in TSE.
Sub-hypothesis 1: there is a significant relationship between audit firm size and financial reporting quality in firms listed in TSE.

Sub-hypothesis 2: there is a significant relationship between auditor tenure and financial reporting quality in firms listed in TSE.

**METHODOLOGY**

Considering that the present study uses historical data, it is post facto research; researcher has no control on collected data in these sorts of study. In addition, because the relationship between audit quality and financial reporting quality is investigated in TSE, the research is descriptive-correlation study using documental method to collect data. Research data are drawn from financial statements and notes of firms listed in TSE and audit reports from DenaSahm, Sahra and TadbirPardaz.

**STATISTICAL POPULATION**

Population of this study consists of firms listed in TSE and sample firms must have following conditions:
1. Firms' fiscal year must be ended at the end of year and they have not changed their fiscal year during the period of study.
2. Sample firms must handed out their financial statement to TSE and three years must have passed form their listing.
3. Sample firms financial statements must be audited during the research period.

As a result of these conditions, a sample of 91 firms are obtained to be studied.

**RESEARCH VARIABLES**

In the present study, audit quality is considered as independent variable and financial reporting quality as independent variable. Followings present models of each variable measurement.

**FINANCIAL REPORTING QUALITY MEASUREMENT MODEL**

Financial information preciseness is considered as its quality. Empirically, to evaluate financial information preciseness, absolute value of regression errors of future cash flows using components of operating profit in previous period is used (Barth et al., 2001:36).

\[ CFO_{t-t+1} = \beta_0 + \beta_1 CFO_{t} + \beta_2 AR_{t} + \beta_3 INV_{t} + \beta_4 AP_{t} + \epsilon_{t-t+1} \]

Where:
- CFO: operating cash flow
- AR: changes in receivables
- INV: changes in inventories
- AP: change in accounts payable
- DEPR: tangibles and intangibles depreciation expense
- OTHER: the aggregate of other accruals, i.e., OTHER \( \equiv \text{EARN} - (\text{CF} + \Delta AR + \Delta INV - \Delta AP - DEPR - \text{AMORT}) \)
- OP: operating profit
- \( \epsilon \): error term supposing zero mean and fixed variation

Empirical measure of financial reporting quality is absolute value of errors that is \( RQ_{t} = |\epsilon_{t-t+1}| \), smaller absolute value of errors, and more financial reporting quality.

As it is mentioned before, variables to measure audit quality are auditor size ans auditor tenure as following:

**Auditor size**: audits conducted by Iran audit organization is considered as big size audit firms and other smaller audit firms are considered small audit firms.

**Auditor tenure**: in the present study, once auditor tenure is considered less than 3 years and the other time is considered 3 and more years. Then the results are compared.

**Research hypotheses test**

To test research hypotheses, first, descriptive statistic and correlations between variables is conducted and finally regression models analyzed.

**Descriptive statistic**

Descriptive statistic is presented in Table 1 in which auditor tenure has less coefficient of variation and standard deviation than size, both as independent variable. This is while financial reporting quality as dependent variable according to Barth et al. (2002) model has more coefficient of variation and standard deviation than independent variables then has less consistency. This shows that: 1-auditor tenure is reliable than audit firms size and 2. Less amount of standard deviation of audit quality compared to standard deviation of financial reporting quality shows that financial reporting quality is affected by other factors other than audit quality.

**Correlation between variables**

Matrix correlation between variables is presented in Table 2. As it is shown the most correlation between variables is between financial audit quality and audit firm size (-0.403). This shows that audit conducted by audit firm organization approximately 40 percent has low financial reporting quality. In addition, the correlation between audit size and audit tenure is positive and strong (0.151) indicating that auditor tenure related to audit organization.

**Hypotheses test**

Sub-hypothesis 1: there is a significant relationship between audit firm size and financial reporting quality in firms listed in TSE. The results of this hypothesis test are presented in Table 3.
As it is shown in Table 3, the relationship between two variables is negative, that is, if audit is conducted by audit organization, financial reporting quality mitigates. It should be noticed that the relationship between audit firm size and financial reporting quality is weak (-0.081) but statistically significant considering t-Statistic (0.0000). Weakness and significance of regression coefficient indicates that other variables other than audit firm size affect financial reporting quality. The result of F-statistic (0.0000) shows that the model is significant considering t-Statistic (0.0000). The result of Durbin-Watson Stat (1.718) shows that there is no auto-correlation problem in the model. The result of R² (0.1001) shows that financial reporting quality is related to audit firm size. Overall, the first sub-hypothesis is accepted considering the significance of effect of audit firm size on financial reporting quality.

Sub-hypothesis 2: there is a significant relationship between auditor tenure and financial reporting quality in firms listed in TSE. The result of this hypothesis test are presented in Table 4.

As it is shown in Table 4, the relationship between two variables is positive, that is, if auditor tenure increases by audit organization or other firms, financial reporting quality increases. It should be noticed that the relationship between auditor tenure and financial reporting quality is very weak (0.011) and statistically not significant considering t-Statistic (0.2513). Weakness and insignificance of regression coefficient indicates that other variables other than auditor tenure affect financial reporting quality. The result of F-statistic (0.2513) shows that the model is not significant considering the insignificance of effect of audit firm size on financial reporting quality but there is no auto-correlation problem considering Durbin-Watson Stat (1.521). The result of coefficient of determination shows that approximately 0.16 of changes in financial reporting quality is related to auditor tenure. Overall, the first sub-hypothesis is not accepted considering the insignificance of effect of auditor tenure on financial reporting quality.

Considering results and considering insignificance of effect of one of variables, that is, auditor tenure on financial reporting quality, main hypothesis is not accepted.

### Table 4. Regression model of the relationship between auditor tenure and financial reporting quality

<table>
<thead>
<tr>
<th>variable</th>
<th>coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auditor tenure</td>
<td>0.0117</td>
<td>0.0102</td>
<td>1.1488</td>
<td>0.2513</td>
</tr>
<tr>
<td>constant</td>
<td>0.0316</td>
<td>0.0082</td>
<td>3.8614</td>
<td>0.0000</td>
</tr>
<tr>
<td>R²</td>
<td>0.0031</td>
<td>Mean</td>
<td>0.0392</td>
<td></td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>0.0007</td>
<td>S.d. dependent var</td>
<td>0.1001</td>
<td></td>
</tr>
<tr>
<td>S.E of regression</td>
<td>0.1001</td>
<td>Akaike info criterion</td>
<td>1.7596</td>
<td></td>
</tr>
<tr>
<td>Sum squared resid</td>
<td>4.1920</td>
<td>Schwarz criterion</td>
<td>1.7404</td>
<td></td>
</tr>
<tr>
<td>Log likelihood</td>
<td>371.5319</td>
<td>F-statistic</td>
<td>1.3199</td>
<td></td>
</tr>
<tr>
<td>Durbin-Watson Stat</td>
<td>1.5215</td>
<td>Prob (F-statistic)</td>
<td>0.0000</td>
<td></td>
</tr>
</tbody>
</table>

### RESULT AND SUGGESTIONS

1- Auditor tenure is reliable variable than audit firm size due to its less amount of standard deviation and coefficient of variation.

2- Less amount of standard deviation of audit quality compared to standard deviation of financial reporting quality shows that financial reporting quality is affected by other factors other than audit quality.

3- In this research, it is shown that there is weak and significant relationship between audit firms size and financial reporting quality and approximately 0.16 of changes in financial reporting quality is affected by audit firms size.

4- Research shows that there is weak, positive and significant relationship between auditor tenure and financial reporting quality and approximately 0.03 of changes in financial reporting quality is affected by audit tenure.

### SUGGESTION REMARKS

1- Considering weak and significant relationship between audit firms size and financial reporting quality, it is suggested that audit organization increases its oversight on audits conducted by them in order to increase financial reporting quality.

2- Considering weak and significant relationship between audit firms size and financial reporting quality, it is suggested that financial information users and lenders to consider low audit quality conducted by audit organization in investment decision.

### REFERENCES


