

Explaining the Effectiveness between Auditor Independence and Changing the Audit Rate in the Tehran Stock Exchange (Iran)

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Abstract

This study examines the relationship between auditor independence and audit fees of listed companies in Tehran Stock Exchange. Discretionary accruals used to measure independent auditors. Research data using statistical sample of 80 companies listed in Tehran Stock Exchange for the period 2014-2019 have been analyzed in the method of least squares regression analysis and the combined data. Study includes two hypotheses that they investigate the relationship between company auditor independence and changing the audit fees with the change of company size. It means, with increasing auditor independence, audit fees paid to auditors also increased. Also, the hypothesis test results showed that the larger the size of the client company, additional fees paid to the auditors.

Keywords: audit fees, discretionary accruals, auditor independence, corporate size

1- Introduction

The main reason for the demand for audit services as a monitoring tool can be considered a conflict of interest between owners and managers of companies. Therefore, the validity and reliability of this information and audit quality, as evidenced by the quality and reliability of financial statements credited to current and future investors, creditors and other users of financial statements would seem very important. (Ghorbani, 2010)

People outside the organization, such as investors and creditors cannot directly control the operation and management of opportunistic behavior. Because accruals earnings are largely under management and he can look better company performance and increase predictability of future profits in the interest accruals and as today's word manage earnings. (Sjadi & Arabi, 2009).

2 – Research subject and Theoretical principles

Accounting and Auditing Standards and legislators who are trying to establish through legislation affecting auditor independence increase quality and independence audit. Because, by increasing the independence of auditors complete their investigation and will be more effective (Ettredge, Li, and Scholz 2007)

Auditing can be one of the ways to prevent and reduce the use of accruals. Because it is believed that the companies have the audited financial statements can offer benefit with greater quality. Accruals depend on managers judgments and accounting firms that include accruals are more difficult. Auditing of higher quality was more likely to detect questionable accounting practices. Because institutions of higher audit quality and independence involve more expertise, resources and motivation to detect errors and fraud. (Janin and Piot 2005)

Clearly, the audit firms with higher incomes, more volume and audit more companies; therefore, to protect the interests and reputation of the audit firm and the client has done the best maintaining their independence. Larger institutions also protect the reputation of their professional time and spend more carefully to discover important distortions. (DeAngelo 1986 & Ghosh and Moon 2005).

In this study, the relationship between the independent auditor and the auditor's fee will be assessed and the question is whether the auditor's independence, most leading to a change (increase) the remuneration of the auditor of the listed companies the Tehran Stock Exchange?

3 – Research background

About the subject from different aspects, several studies have been done in domestic and abroad that some of them are mentioned in this section.

Hoai Nam (2011) In the course of researching his doctoral dissertation in the form of changes in the factors affecting the independence of the audit fee payments and concluded that the size of the company, type of industry very reason, it financial leverage, probability in the profits or losses the size of the Institute unexpected changes may affect the audit on the audit fee.

Paul et al (2010) also found that audit fees and audit quality change its rates and there is a significant relationship between the levels of discretionary accruals.

Choi et al (2009) also obtained evidence that showed a significant positive relationship between auditor independence, audit quality. They were used to measure discretionary accruals quality audit.

Brown, Falaschetti and Orlando (2009) the research examines the relationship between auditor independence and financial reporting quality and concluded that by rising auditor independence, financial reporting quality increases.

Choi, Kim and Zang (2006) reviewed the effect of audit quality on abnormal audit fees. The results of their study showed increasing the quality of auditing firms, abnormal audit fees also increased.

Johl, Jubb and Houghton (2005) in their study to measure audit quality in addition to the size of the audit firm, the audit firm's expertise in the industry- own work were also used.

Chung and Kallapur (2003) and Larcker and Richardson (2004) in their study experimentally demonstrated that there is a significant relationship between audit fees and audit quality.

Frankel, Johnson and, Nelson (2002) in their study concluded that the fee - incoming auditor has significant relationship with earnings management. It means by increasing the amount of audit fees and accruals decreased by earnings management increases subsequently.

1-Research variable

A) The auditor independence

It is expected, if the auditor is more independent, reducing the amount of discretionary accruals will be participating employer. To assess the independence of the auditor used previous financial period accruals (Simonic, 1984).

Accounting earnings is made up of two parts, cash and accrual. Managers cannot manipulate the cash earnings items. Total accruals of the financial statements cannot manipulate. Managers manipulate discretionary accruals more likely to be the case. On other hand, Myers et al (2003), Lee and Sony (2007) and Choi and others (2009) high quality audit reporting knew as limitation the unconventional management decisions and point out that it is possible to demonstrate the unusual decision to use discretionary accruals. In this study, discretionary accruals will be used for calculation the independent auditor. Thus, whatever the level of discretionary accruals in the financial statements audited by a smaller, higher quality auditors of the Company and therefore, the auditor has been more than independence. The discretionary accruals result the difference between total accruals and non-discretionary accruals (current).

Current accruals are measured using the following equation:

$$CACC_{i,t} = ((\Delta CA_{i,t} - \Delta CASH_{i,t}) - (\Delta CL_{i,t} - \Delta STD_{i,t})) \quad (1)$$

In the equation:

$\Delta CA_{i,t}$ Changes in current assets for firm i in year t

$\Delta CASH_{i,t}$ Change in cash in year t for firm i

$\Delta CL_{i,t}$ Change in current liabilities for firm i in year t, and

$\Delta STD_{i,t}$ Current portion of long-term debt in year t for firm i.

All variables in relation to the total assets of the firm i divided in year t. To calculate total accruals based model cash flows are as follows:

$$TACC = EARN - CFO \quad (2)$$

In this respect, EARN net profit and cash flow from operations is defined as CFO. Finally, the issue of discretionary accruals from equation (3) is obtained:

$$CACC - TACC = DA \quad (3)$$

In this regard, DA represents discretionary accruals, TACC and CACC represents total accruals, non-discretionary accruals (current). In this research, the level of discretionary accruals equation (3) is used to measure the relative number of auditor independence. What this amounts to is a

smaller for a company; the company's auditor independence has been higher. However, to quantify independent in year t the value of this variable is used in the previous year t-1.

B) The percentage change in the auditor's remuneration

The amount of remuneration paid to the auditor of the financial statements and explanatory notes are extracted sample companies. Changes in payment rates are measured using the following equation.

$$AFCR_t = \text{Log}\left(\frac{AF_t}{AF_{t-1}}\right) \quad (4)$$

In this regard, AFCRt represents the rate of AFt and AFt-1 fee of the auditor and audit fees in the current year and the previous year.

C) The size of the company

Participated in this study to measure the size of the natural logarithm of total assets is used (De Angelo, 1986 and Hoai Nam, 2011).

$$SIZE_{it} = \text{Log}(TotalAssets_{it}) \quad (5)$$

6 - Research hypotheses

According to previous research and theory, research hypotheses, the following hypotheses were developed to answer the research questions include:

First hypothesis: there is a significant positive relationship between auditor independence and change the rate of audit fees.

Second hypothesis: there is a significant positive relationship between the size of the company and change the rate of audit fees.

7- Materials and Methods

The aim of the present study, cross - functional and based on the nature and methods of correlation. This study is based on a quasi-experimental research design was used to casual approach (from the past).

8 - Statistical population and sample

Population in this study which included all firms listed in Tehran stock exchange between the years 2014-2019 and has retained their membership in the course.

The sampling method in this research is the systematic elimination method.

Thus, among all the listed companies, which are not eligible for any of the following conditions removed and finally the remaining companies were selected for testing.

Firms should have complete information for all financial statements including balance sheet, income statement and cash flow statements. The fiscal year end is 19th March. Businesses are not the kind of investment or financial intermediation. By examining the listed companies in Tehran Stock Exchange and the conditions and restrictions of the number 80 (the equivalent of 480 years – company) to estimate the model and test the research hypotheses have been chosen.

9 - Model estimation and hypothesis testing

In this study, data econometric methods combined (total study period) for the investigation model is used to test the hypotheses. In this research, on the one hand quantitative values of independent and dependent variables related to about 80 different companies and on the other hand, it covers the period 2014-2019.

To test the hypothesis by investigating the relationship between the rate of remuneration and auditor independence model introduced by Simonic (1984) and applied to the research of Francis (2006) Hoai Nam (2011) is used. The model is as follows:

$$AFCR_t = \beta_0 + \beta_1 DA_{t-1} + \beta_2 X_{it} + \beta_3 SIZE_{it} + e_{it} \quad (7)$$

In this model:

DA, t-1; levels of discretionary accruals in year t-1 (previous) as a measure of auditor independence

AFCR i, t; changing the auditor's remuneration rates at year t for firm i

X i, t; sized audit firm to firm i (the dummy variables are used, this means that if the auditor is an audit of the company and the auditor is a member of the institute of certified public accountants of

Iran, zero should be consider. Obviously, audit institute means that the larger size of the audit and other audit institutions are meant to be small.) And
 SIZE_{i, t}; measure for firm i in year t is the natural logarithm of total assets, is acquired.

10 - Research Findings

10-1 - Descriptive statistics

Descriptive statistics for the dependent and independent variables used in the models are visible in Table 2. This table provides the overview of the research data.

Table 2: Descriptive statistics for outcome variables

DA _{t-1}	SIZE _t	AFCR	Description
-0.0208	5.2436	0.3902	Average
-0.0078	5.0192	0.1573	Middle
0.8525	1.8220	2.2520	S
-0.4382	-0.6323	0.5520	Coefficient of skewness
11.0433	2.7632	10.5173	Domain
-5.8339	4.2875	-4.1373	Minimum
5.2005	7.0489	6.3800	Maximum
480	480	480	Number of observation

Source: Researcher Calculations

10-2 - Chow test results

In this research, the Chow test is used for choosing suitable method for estimating the model in levels and different time periods combined data. Chow test results are presented in Table 3.

Table (3): Chow test results

Test result	p-value	The Chow test statistic
Pooled data	0.2839	2/1326

Source: Researcher Calculations

Chow test tests confirmed the null hypothesis that the intercept is the same in all of period and rejected the null hypothesis. Therefore, pooled data method is a more appropriate option to estimate the research model.

10-3 - Results of test research hypotheses

The test result of the research model is shown in Table 6 by using the data value.

Table 6: Results of significance test the research model
 $AFCR_t = \beta_0 + \beta_1 DA_{t-1} + \beta_2 X_{it} + \beta_3 SIZE_{it} + e_{it}$

Durbin-Watson	p-value	F-static	Adjusted R ²	R ²	t-static p-value	Coefficient t	Description
1.68392 6	0.00000 0	16.2175 2	0.329982	0.34621 1	8.14767 6	0.014115	DA
					11.4413 1		
					13.8997 1	7.925641	SIZE
					- 1.07365 3		
					0.2839		

Source: Researcher Calculations

As shown in Table (6), the F-statistic is significant at the 99% confidence level. Thus, the overall model was significant research and independent variables and control variables are able to explain.

The adjusted coefficient of determination of the model is equal to 0.3299. This means that almost 33% of the variability resulting from changes in audit fees, auditor independence, and the size of the company and other changes (about 67%) due to other factors and the variables.

According to the statistic of Watson Dorbin is obtained 1.6839, the amount of autocorrelation is rejected in the error model.

The results suggest that the value of t-statistics is for the first independent variable, auditor independence and its significance level (p-value) and 8.1476, respectively 0.027/0. Note that the error level is considered for this study, 0.05/0 and the error is related to the coefficient of this variable is less than 1%, Therefore, it is concluded that a significant positive relationship between auditor independence and audit fees is the dependent variable and the first research hypothesis can be confirmed with a confidence level of 99%.

The t-statistic values for the independent variable means the size of the company and its significance level (p-value) and 13.8997, 0.0000/0 respectively. Therefore, it is concluded that company size (the total volume of activities and assets of the Company) with the auditor's fees as the dependent variable has a significant positive relationship and second research hypothesis can be confirmed with 99% certainty.

11 - Conclusion

The first hypothesis stated that increasing the quality of the audit, the audit fee rate increases. This result also justifies that institutional quality audits have been carried out in the period and leading to a reduction in discretionary accruals were making profits, in the year of his deal had greater independence and improve audit quality and independence, leading to more satisfied owners (members' equity). This matter will also pay higher audit fees in companies. Because of the importance of the issue, to test the hypothesis the firm size was used as a control variable in the second model. The results showed that increasing the size of the company also has a significant positive relationship between audit fees. It means, the larger companies and more complex changes have more increased the audit fees. Because, in these cases because of the increased number of staff involved in the audit process and more time spent on the audit plan that will lead to the implementation of a quality audit. Research findings related to this hypothesis is consistent with the results of name of Hoai Nam (2011) and Brown and Brown, Falaschetti and Orlando (2008). They also concluded in their study that there is a significant positive relationship between the independent auditor and the auditor's fee.

In the second hypothesis, the result was much higher in companies with more volume, more fees paid to the independent auditor. Thus, this result can be inferred due to the workload of audit firms and audit risk audited organization planning to do an audit. High volume of client activity requires further documentation, in such cases; the auditor also audited more people to take longer to run. Research findings related to this hypothesis is consistent with the name of Hoai Nam (2011) and Frankel, Johnson and Nelson (2002). They also stated in their study that there is a significant positive relationship between firm size and auditor fees.

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