



Investigating the Relationship between Audit Opinion and Earnings Persistence of Listed Firms in Tehran Stock Exchange

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Abstract: In some cases, after numerous investigations, auditors come to this conclusion to state qualified audit opinions relative to the financial statements of the unit under investigation. The main purpose of this study is to test the amount of the relationship between qualified audit opinion with important information about firms' audit quality, and we can say that this study examined the role of audit opinion in signaling firms' earnings. Thus, following prior studies, a new role for auditing was tested empirically which is based on the defined roles in previous studies. For this purpose, the data from 123 firms listed in Tehran Stock Exchange during 2009 to 2013, multivariate regression, Panel data model, and Estimated Generalized Least Squares method (EGLS) were used. The results showed a significant relationship between audit opinion and earnings persistence of firms listed in Tehran Stock Exchange.

Key words: auditing, audit opinion, earnings quality, earnings persistence

Introduction:

Information content of the reported earnings about future financial performance will be very useful in making economic decisions (Dechow et al, 2010). Previous studies attempted to obtain evidence on the relationship between audit opinion and manipulating earnings through discretionary accruals, which led to different results. Francis and Krishnan (1999) found out that firms with higher discretionary accruals are more likely to encounter adjusted audit reports. Bartov et al (2001) reported a direct significant relationship between discretionary accruals and qualified audit opinions in terms of limitations in review scope and the lack of agreement on the application of accounting standards. However, Butler et al (2004) and Herbohn and Ragunathan (2008) did not find a relationship between the type of audit opinion and earnings management.

Persistence is another feature of earnings. This criteria indicates current earnings for forecasting future earnings (Barth and Hutton, 2004; Jonas and Blanchet, 2000). Higher earnings persistence means that current earnings is a concise and useful criteria for firm's future performance, and subsequently, firm can be valuated with few errors (Dechow et al, 2010). The role of earnings is to help investors to forecast future cash flows. Firms with more stable earnings and cash flows will have more earnings persistence and subsequently, their valuation will be affected. On the other hand, firms with problematic issues are more likely to have lower earnings quality and their earnings will be unstable, and as a result, earnings persistence will be reduced.

Auditors adjust their opinions when encountering problematic issues such as ambiguities, lack of agreements on accounting standards applications, limitations in reviewing, and doubts about the continuity of activities. Frost (1997) showed that firms receiving adjusted audit have a weaker financial situation and a significant reduction in profitability as compared to firms receiving unadjusted (acceptable) audit opinions. Thus, audit adjustments reflect some problematic accounting issues, which have the potential to increase the amount of ambiguities in the firm's current and future earnings and

consequently cause lower earnings quality. Choi and Jeter (1992) found that qualified audit reports have a significant relationship with lower earnings response coefficients, in accordance with the argument that along with audit qualifications, market's understanding of earnings persistence is also reduced. Hence, audit qualifications signal the market that it will be subjected to economic financial changes, which in turn, will result in less earnings persistence (Vichitsarawong and Pornupatham, 2015).

Background of the study

1. Foreign studies

In a study entitled "Audit Opinion and Earnings Management: Evidence from Greece", Tsipouridou and Spathis (2013) investigated the relationship between audit opinions and accrual-based earnings management. Eventually, they did not find a significant relationship between audit opinion and earnings management.

In America, Brian et al (2011) studied auditor's changes in the units under investigation during 2003 to 2005 and realized that units which have changed their auditors at one level, that is, from big to big or from small to small, have not seen significant changes in abnormal accruals; on the contrary, units which have not changed their auditors at one level, that is, from big to small, have had a significant increase in their accruals.

In Greece, Tsipouridou et al (2010) investigated abnormal accruals and audit reporting. They found out that the type of audit firms are not associated with abnormal accruals. They also found out that big audit firms issue accepted audit opinions, regardless of whether the unit has performed earnings management (abnormal accruals).

Herbohn and Ragunathan (2008) investigated that whether there is an inverse relationship between abnormal accruals and the possibility of receiving adjusted audit opinions in Australian firms or not. Using the data from a sample of firms listed in Australia's Stock Exchange, they realized that there is a reverse relationship in this case.

In a study entitled "Discretionary Accruals Models and Audit Qualifications", Bartov et al (2001) found out that auditors' qualified opinions are directly related with discretionary accruals. That is, increasing earnings management increases the likelihood of receiving qualified opinions.

2. Domestic studies

In a study entitled "Earnings Management and Auditor's Opinion: Evidence from the Private Sector of Auditing", concluded that earnings management, firm size, profitability, debt ratio, audit fees, and governmental ownership have a significant relationship with the number of auditing Paragraphs prior to the Paragraph of opinion. Also, their findings indicated that firm's complexity, changing auditor, and changing management are not significantly associated with the number of auditing Paragraphs prior to the Paragraph of opinion. The research evidence emphasizes that the direct relationship between earnings management and audit paragraphs could arise from an increase in audit quality in the private sector.

Karami et al (2011) studied the relationship between auditor tenure and earnings management. In this study, the relationship between auditor tenure and the absolute value of discretionary accruals as the flexibility in managing earnings were initially tested. The results indicated that by increasing auditor's tenure, management flexibility in using discretionary accruals increases. Then, when examining the relationship between tenure and discretionary accruals level, the results came to a negative significant association, indicating this claim that management uses this flexibility in a negative direction.

Using discretionary accruals and discretionary accruals of working capital, Modarres and Aflatooni (2009) studied earnings management incentives of managers of firms listed in Tehran Stock Exchange. The incentives included firm size, the ratio of debt to total assets, the ratio of profitability, deviation in operating activities, and earnings variability. The results showed that discretionary accruals model only introduces the ratio of profitability as earnings management incentive, while, in addition to the ratio of profitability, discretionary accruals of working capital model introduces the variables of firm size and earnings variability as earnings management incentive in Iran.

Ebrahimi Kordlar and Seyyedi (2008) investigated the relationship between independent auditors and the type of auditor's opinion with earnings management. Earnings management was measured with discretionary accruals. Regarding independent auditors and the type of auditor's opinion, the effect of the type of audit firm, the type of auditor's opinion in audit reports, and the number of condition Paragraphs

in the audit report on discretionary accruals were measured. Johnes's model was used to estimate discretionary accruals. The results showed that only the type of audit firm is associated with discretionary accruals.

Khosravi Charmi (2006) studied factors affecting audit opinion in Iran. The results showed that there is no relationship between audit opinion and firm's management but the relationship of audit firm with audit opinion and the size of the unit under investigation is significant. Also, the results showed that there is a relationship between the type of the condition Paragraph and the type of audit firm.

Hypotheses

The main purpose of this study is to test the amount of relationship of qualified audit opinions with important information about firms' earnings quality, and it can be said that this study investigates the role of audit opinion in signaling firms' earnings. Thus, the following hypothesis is proposed in this study:

- Firms receiving qualified audit opinion (unaccepted) have less earnings persistence as compared to firms receiving accepted audit opinion.

Methodology

Since the results of this study can be used in managers, investors, analysts, and capital market participants' decisions, this study is considered an applied study in terms of purpose. Also, in terms of deducing the hypothesis, this research can be grouped with correlation studies because regression and correlation techniques will be used to explore the relationships between variables. Thus, in terms of arguments it is inductive. Also, this study is within positive theories since conclusions will be arrived at through testing existing data.

Population and sample

The population of the study is firms listed in Tehran Stock Exchange during 2009 to 2013. The sample will be selected through systematic elimination from the population. The sample consists of all firms included in the population that meet the following criteria:

1. Their financial year ends 12/29 each year so that the data can be put together and used in Panel and Pool forms (according to the results of default tests).
2. Do not have changes in financial period during the study so that the results of financial performance be comparable.
3. The required data for the variables be available during 2009 to 2013 so that the calculations can be made without any flows.
4. Be not among investment firms, financial and credit institutions, banks, insurance, and holdings.

Taking into account the above mentioned criteria leads to selecting 123 firms as the sample of this study. It is worth mentioning that each firm, over the period of 2009 to 2013, has 5 sets of financial information which can be extracted from financial statements and other related information sources.

Models and variables

The following model was used to test the hypothesis (Vichitsarawong and Pornupatham, 2015):

$$\text{Earn}_{i,t+1} = \beta_0 + \beta_1 \text{Earn}_{i,t} + \beta_2 \text{QAO}_{i,t} + \beta_3 \text{Earn} * \text{QAO}_{i,t} + \beta_4 \text{Leverage}_{i,t} + \beta_5 \text{Size}_{i,t} + \beta_6 \text{Loss}_{i,t} + \beta_7 \text{BIG}_{i,t} + \beta_8 \text{Abs_Acc}_{i,t} + \beta_9 \text{Div}_{i,t} + \varepsilon_{i,t}$$

In which:

Dependent variable:

Earn_{i,t+1}: Operating earnings divided by total assets of the end of the period of firm i in year t+1.

Independent variables:

Earn_{i,t}: Operating earnings divided by total assets of the end of the priod of firm i in year t.

QAO_{i,t}: qualified audit opinion (unaccepted) of firm i in year t. If the firm's audit opinion is unaccepted (conditional, failed, and lack of opinion), it will be one and otherwise, zero.

Earn*QAO_{i,t}: the product of qualified audit opinion and operating earnings of firm i in year t.

Control variables:

Leverage_{i,t}: leverage: the ratio of total assets to the assets of the end of the firm’s period.

Size_{i,t}: firm size: natural logarithm of total assets of the end of firm’s period.

Loss_{i,t}: firm’s loss: If the firm has a net loss, it will be one, and otherwise zero.

BIG_{i,t}: Big audit firm: if it is a rank A trusted audit firm of Stock Exchange and Auditing Organization, it will be one and otherwise, zero.

Abs_Acc_{i,t}: The net worth of accruals that is net profit minus operating cash flow divided by total assets at the end of the period.

Div_{i,t}: dividends: if the firm pays dividends, it will be one and otherwise, zero.

Findings of the research

The data from 123 firms in the population of the study, during 2009 to 2013, were extracted from available data bases and transferred to Excel software. After necessary calculations for dependent and independent variables, the necessary information for the required statistical test were stored in appropriate files and processed in Eviews software.

Findings of the study

The sample being studied during time periods of 2009 to 2013 includes 123 firms. It should be noted that after removing outlier data and sorting the data, the number of firm-year of the variables faced a slight decrease.

In estimatinf the coefficients of the model, Chaw test and F statistics were initially used to determine Panel data method and identify whether they are homogeneous or heterogeneous. The results are presented in Table 1.

Table 1. The results of Chaw test

Null hypothesis	F statistics	Significance level	The result of Chaw test
Using pool data model	6.433	0.000	Null hypothesis is rejected

According to Table 1, the result of Chaw test shows that the possibility for F statistics is less than %5; thus, panel data is used to test the model. In Table 2, the necessity of using fixed or random effects models are examined through conducting Hauseman test.

Table 2. The results of Hauseman test

Null hypothesis	Chi square statistics	Significance level	The result of Chaw test
Using random effects model	188.882	0.000	Null hypothesis is rejected

According to Table 2, significance level of Hauseman test is less than 0.05. Therefore, fixed effects model must be used to estimate the coefficients of the model. Using fixed effects model and estimated generalized least squares method (EGLS), the results of testing the model are presented in Table 3.

Table 3. The results of estimating the coefficients of the model

variable	Coefficients	Standard error	t statistics	Significance level
Fixed value	-0.355	0.097	-5.335	0.000
Current year’s operating earnings	0.355	0.044	6.533	0.000
Qualified audit opinion	-0.009	0.0007	-1.853	0.064
Current year’s operating earnings* qualified audit	-0.44	0.055	-0.913	0.361

opinion				
leverage	-0.22	0.019	-0.529	0.596
Firm size	0.033	0.004	6.445	0.000
Firm loss	-0.021	0.014	-1.851	0.064
Big audit firm	0.011	0.004	1.025	0.305
Accruals net worth	-0.004	0.011	-0.278	0.781
dividends	-0.019	0.004	-8.445	0.000
F statistics	43.112	R-square		0.899
F statistics significance level	0.000	Adjusted R-square		0.866
EGLS method (removing possible effects of variance heterogeneity)		Dourbin-Watson value		2.004

Given the results of Table 3, since t statistics of the variable of current year's operating earnings * qualified audit opinion is smaller than ± 1.965 and its significance level is greater than 0.05, there is not a significant relationship between qualified audit opinion earnings persistence of firms listed in Tehran Stock Exchange. Hence, the hypothesis is rejected.

Meanwhile, the control variable of firm size has a direct significant relationship with next year's operating earnings and an inverse and significant relationship exists between dividends distribution and next year's operating earnings.

Dourbin-Watson statistics of the model is 2.004, which is between 1.5 and 2.5. Meanwhile, significance level of F statistics is 0.000, which is smaller than 0.05 and indicates that the model is significant. Another significant point in Table 3 is the adjusted R-square of the model. The value of the adjusted R-square of the model is about %86, indicating that about %86 of the changes of the dependent variable can be explained by independent and control variables, which is a considerable amount. It is worth mentioning that the use of EGSL method would result in eliminating heterogeneity effects of possible variance.

Conclusion

To test the hypothesis which indicates that "firms receiving qualified audit opinions (unaccepted) have less earnings persistence as compared to firms with accepted audit opinions", a model consists of three independent variables, "operating earnings", "qualified audit opinions (unaccepted)", and "operating earnings* qualified audit opinions (unaccepted)", six control variables, "leverage", "firm size", "firm loss", "big audit firm", "accruals net worth", "dividends", and estimated generalized least squares method were used. The results showed that "there is not a significant relationship between audit opinion and earnings persistence of firms listed in Tehran Stock Exchange". The summary of testing the hypothesis is presented in Table 4:

Table 4. Summary of the results

Earnings persistence		Dependent variable → Independent variable ↓
Effect	Direction	
×	×	Qualified audit opinion

To explain the lack of significant impact of audit opinion on earnings persistence, it is noteworthy that according to Vichitsarawong and Pornupatham (2015), auditors would adjust their opinions when facing problematic issues such as ambiguity, lack of agreement on applying accounting standards, limitations in reviewing, and doubts about the continuity of activities. Frost (1997) also suggested that firms receiving qualified audit opinions have a weaker financial situation and a significant reduction in profitability as compared to firms receiving unqualified audit opinions (accepted). Therefore, according to the arguments in Western literature, audit opinion has a great ability in expressing firm's transparent situation and financial constraints.

The role of auditing validation involves two separate stages. At the first stage, the independent auditor must perform a review or an audit. This review provides evidence so that auditors can state expert opinions about financial statements.

The second stage of validation role is to present an audit report that transfer auditor's opinion about presenting desirability and reliability of financial statements to users of financial statements (Asadi

Vasiye Sari, 2000). In free markets, there are diverse situations regarding granting facilities due to competition and institutions granting facilities being privatized. However, a similar situation also exists about the relations between the bank and the recipient of the facility, including applying agency theory in borrowing contracts, loan contracts restrictions, monitoring the correct implementation of contract, and the role of accounting numbers in loan contracts. In regulated markets, based on monitoring requirements, institutions granting facilities are required to follow certain rules. In these markets, the government's economic policies are often applied through notifications to the central bank and state-owned commercial banks and this prevents banking systems from the possibility of determining a reasonable interest rate, loan term, collateral and loan contract due to lack of competition. In these circumstances, the contract between the grantor and the recipient of the facilities emphasizes mainly on heavy collaterals due to the stability of the conditions, including repayment, duration, and rate. On the other hand, state management of banks whose wages follow uniform conditions will merely focus on meeting existing criteria to maintain themselves in banks' state bureaucracy systems or to set the maximum of collecting deposits and granting facilities in such a way to show the unit under their management as profitable during their administration (Madani, 2004). Thus, the domestic literature explains how ineffective qualified audit opinions are on creditors' decisions, and this study showed that qualified audit opinions cannot represent earnings persistence and its quality, and hence, to complete previous studies, this study illustrated the absence of the role of qualified audit opinions from another perspective.

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