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Auditor's Opinion and Earnings Persistence

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Abstract: This research aims to investigate the association between auditor's opinion and firms' earnings persistence. In order to achieve the goal, 90 firms are selected among the listed firms in Tehran Stock Exchange (TSE) during 2011 to 2015 via systematic elimination sampling method. Using panel data model and multiple regression method the results show that there is no statistical relationship between the current earnings and the future earnings of the firms. The results also reveal that there is a positive and significant relationship between modified opinions (unqualified) and the future earnings. Moreover, the results do not confirm that the firms receiving modified audit opinions have lower earning persistence than the firms receiving unqualified opinions. Furthermore, the research findings represent that the firms receiving qualified opinions do not have lower earnings persistence than the firms receiving unqualified opinions with an emphasis of matter.

Keywords: Earning Persistence, Auditor's Opinion, Tehran Stock Exchange (TSE).

Introduction

The auditor's report is the end result of the auditing process (Chen et al., 2016). There are two types of audit reports: the standard unqualified report and the modified report for audited financial statements. The latter is the best for judging properly the accuracy of economic unit preparing and for presentation of financial reports. The auditor needs to mention items mentioned in financial statements according to auditing standards (Vichitsarawong & Pornupatham, 2015). Through the report, the auditor accredits the claims prepared by another person through the form of financial statements. Proper audit reports help investors in the process of evaluating the firms' future earnings and cash flows, emphasizing earnings stability (Francis, 2004).

Auditors play a substitute role when legal environments are not effective (Fan & Wong, 2005). In the audit report can be mentioned important changes that appeared after the financial crisis in 1997, such as the adoption of international financial reporting standards (IFRS), more strict regulation of listed companies and an improvement in corporate governance (Herrmann et al., 2008). The Security and Exchange Commission (SEC) monitors auditors of listed companies and punish them if they breach the rules and standards of auditing. These actions lead to the issue of appropriate audit modifications. This study focuses on earnings persistence, which measures the ability of current earnings to predict and explain future earnings. By focusing on earning persistence, (Jonas & Blanchet, 2000) observed that firms with more persistence have more sustainable earnings and cash flow streams. This is favorable for equity evaluation. The findings based on our study provide useful information to legislators of auditing standards and capital markets, to users of financial statements and audit reports and also can help in future research in the field of auditing.

Review of Literature and Hypotheses Development

According to DeAngelo (1981), audit quality is determined by the probability of detecting and reporting any breaches in clients' firms. Vichitsarawong and Pornupatham (2015) point out that people may observe only the auditor report as the last product of the auditing process which cannot be observed by the people. The modified audit is useful for the underlying incentives for companies to employ auditors. According to Wallace (1980) employing auditors leads to:

- Reducing agency costs;
- Recovering investment losses or for insurance reasons
- Presenting private information to the public

It is said that the audit types by auditors develop such a role. A first stream of literature focuses on the extent to which auditors can play a governance mechanism role to decrease agency problems. Fan and Wong (2005) have the opinion that agency conflicts are taken into consideration by auditors when they decide audit fees and for the issue of modified audit reports to clients with agency problems. Carcello and Palmrose (1994) believe auditors act as insurers, by issuing certain opinions that can mitigate the likelihood that some investors will recover losses from the auditors. O'Reilly et al (2006) discuss that the concern opinion negative impact on analysts' stock price estimates is lowered by the situation which treats the auditor as an insurer. Other streams of literature focus on the possibility that audit opinions can convey adverse information to the market, with mixed results, while others fail to identify any significant market reaction after the audit qualifications issuance (Ball et al., 1979; Dodd et al., 1984). However, many studies mention that qualified audit ideas convey helpful data to the investors (Chow & Rice, 1982; Dopuch et al., 1986; Loudder et al., 1992). In some cases, according to certain studies, audit opinions convey useful information to the investors, by reducing the earnings reponse coefficient (ERC) of the firm subsequent to the period of qualification (Choi & Jeter, 1992). Chen et al (2000) present a significant and also negative relation between modified audit opinions and cumulative abnormal returns, although when focusing on the type of audit modifications, they found no difference between market reactions to qualified opinions and the reactions to unqualified audit opinions with explanatory notes.

Recent studies like those done by Menon and Williams (2010) have found that stock market reactions were more negative if the audit report mentioned difficulty in obtaining financing and debt covenants related to an ongoing concerning issue. Geiger et al (2013) indicate the fact that auditors are prone to issue a going concern prior to bankruptcy following the onset of the global financial crisis, thus making the audit modification a communication tool of firms' financial distress to the public.

Profit continuity can be translated through earning persistence, so firms with more persistent earnings are more able to maintain current earnings, and have more earnings quality, this being considered as an index helpful for investors in the process of evaluating firms' current earnings and cash flows. They focus more on the persistent part of earnings than on non-persistent ones in estimating future earnings and their expected cash flows. Related changes which origin from the firm's main activity make it possible to compare the performance of the firm in comparison with other firms and to reveal the efficiency of better management (Barth & Hutton, 2004; Jones, 1996; Joos & Plesko, 2005).

Auditors modify their reports when encountering certain issues such as the ability to continue as a going concern, scope limitation, uncertainties and disagreements on accounting application. These issues reduce earning quality, leading to a decrease in the earnings persistence (Vichitsarawong & Pornupatham, 2015). According to Frost (1997) the firms receiving modified audit reports and financially weaker and display significant reductions in profitability compared to some firms which have unmodified audit reports. Therefore, audit modifications can lead to certain degrees of uncertainty in the firms' current and future earnings, leading to a lower earnings quality. Positive relationships with bankruptcy level probability are included in different types of audit modifications. In conclusion, we expect to see a difference between the audit opinion type and earnings persistence.

According to the above mentioned issues, the following hypotheses are proposed:

H1. The firms receiving modified audit opinions have lower earnings persistence than the firms receiving unqualified audit opinions.

H2. The firms receiving qualified opinions have less earning persistence than the firms receiving unqualified opinions with an emphasis of matter (UEM).

Materials and Methods

Statistical Population and Sampling Method

The statistical population of the present study includes the listed firms in Tehran Stock Exchange (TSE). The reason of selecting listed firms in Tehran Stock Exchange (TSE) is that the capability of access to the firms' financial information is more, also due to Tehran Stock Exchange regulations and standards, the information of the firms' financial reports is more homogenous. In this research, all available data have been used so as to select the sample. First, all firms which could participate in the sampling are selected, then among the available firms, the firms which lack the below qualifications, are removed and finally, all the remained firms have been selected for implementing the test. The research limitations include considering information near the time of doing the research and its availability, a period of 5 years since early 2011 to 2015. Sample firms have been selected considering the research time and location territory based on the following qualification:

- The firms should be listed until early 2011 in Tehran Stock Exchange (TSE).
- Their financial statements should be available for each year from 2011 to 2015.
- The firm fiscal year should be ending 12/31 in each year.
- It should not be an investment firm and financial intermediary firms and banks and financial and credit institutions.
- The considered firm should have continuous activity during the research period and its stock should also be transacted (should not have transaction interval over 3 months).

Having applied the above mentioned criteria, 90 firms are specified as the available statistical population, and all of them are considered as the sample.

Research models and variables

In order to test the first and the second hypotheses, model (1) and model (2) are used respectively.

Model (1)

$$Earn_{it}+1=\beta_0+\beta_1Earn_{it}+\beta_2Opinion_{it}+\beta_3Earn_{it}\times Opinion_{it}+B_4Leverage_{it}+\beta_5Size_{it}+\beta_6Loss+\beta_7Big_{it}+\beta_8Abs_acc_{it}+\beta_9Div_{it}+\mathcal{E}_{it}$$

Model (2)

$$Earn_{it+1} = \beta_0 + \beta_1 Earn_{it} + \beta_2 UEM_{it} + \beta_3 Qualify_{it} + \beta_4 Earn_{it} \times UEM_{it} + \beta_5 Earn_{it} \times Qualify_{it} + \beta_6 Leverage_{it} + \beta_7 Size_{it} + \beta_8 Loss_{it} + \beta_9 Big_{it} + \beta_{10} Abs_acc_{it} + \beta_{11} Div_{it} + \mathcal{E}_{it}$$

Where:

Earn: operational income divided by average total assets.

Opinion: dummy variable equal 1 if an auditor issues a modified opinion (adverse, qualified, disclaim) in year *t*, and 0 otherwise.

UEM: dummy variable equal 1 if an auditor issues an unqualified opinion with an emphasis of matter in year t, and 0 otherwise.

Qualify: dummy variable equal I if an auditor issues a qualified opinion in year t, and 0 otherwise.

Control variables:

Leverage: total debts divided by total assets.

Size: natural logarithm of total assets.

Loss: dummy variable equal 1 if the firm has a current year loss, and 0 otherwise.

Big: dummy variable equal 1 if the firm is audited by audit organization, and 0 otherwise.

Abs_Acc: the absolute value of accruals, which is measured by net income minus operational cash flows divided by assets.

Div: dummy variable equal 1 if the firm pays a dividend, and 0 otherwise.

In order to test the first hypothesis, we expect to observe a negative coefficient of the interaction term (β 3) in model (1). Because modified audit opinions most likely signals a negative effect of the firms' earnings persistence. In addition, In order to test the second hypothesis, we expect to β 3 be smaller than β 4 in model (2).

Results

Descriptive Statistics

In order to study the variables' general specifications and estimating these models and analyzing them exactly, it is necessary to be familiar with descriptive statistics related to variables. The descriptive statistics deal with computing the parameters of the population and includes measures of central tendency and indexes of dispersion and so on. In table (1), the descriptive statistics of the research variables include average, mean, maximum, minimum, standard deviation and so on are presented. Table (2) also shows the results of variables' correlation matrix.

Table 1. Descriptive Statistics of the Research Variables.

| | EARN | DIV | LEV | LOSS | SIZE | UEM | UNQUALIFIED | DISCLAIM | BIG | QUALIFY | MODIFIED | ABSACC |
|---------|--------|--------|--------|--------|--------|--------|-------------|----------|--------|---------|----------|--------|
| Average | 0.1744 | 0.9622 | 0.6798 | 0.1355 | 6.0522 | 0.2266 | 0.1977 | 0.0022 | 0.2377 | 0.5733 | 0.8022 | 0.0978 |
| Mean | 0.1505 | 1.0000 | 0.6670 | 0.0000 | 5.9830 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 1.0000 | 1.0000 | 0.0765 |
| Max | 0.8600 | 1.0000 | 2.0780 | 1.0000 | 7.4470 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 0.5110 |
| Min | 0.3050 | 0.0000 | 0.0400 | 0.0000 | 5.0550 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| No. | 450 | 450 | 450 | 450 | 450 | 450 | 450 | 450 | 450 | 450 | 450 | 450 |

Table 2. Correlation Matrix of the Research Variables.

| | EARN | MODIFIED | UEM | UNQUALIFIED | QUALIFY | LEV | LOSS | DIV | BIG | ABSACC | SIZE |
|-------------|---------|----------|---------|-------------|---------|---------|---------|--------|-------|--------|--------|
| EARN | 1.0000 | | | | | | | | | | |
| MODIFIED | -0.2159 | 1.0000 | | | | | | | | | |
| UEM | 0.1698 | 0.2688 | 1.0000 | | | | | | | | |
| UNQUALIFIED | 0.2159 | -1.0000 | -0.2688 | 1.0000 | | | | | | | |
| QUALIFY | -0.3143 | 0.5755 | -0.6275 | -0.5755 | 1.0000 | | | | | | |
| LEV | -0.5529 | 0.1496 | -0.1257 | -0.1496 | 0.2197 | 1.0000 | | | | | |
| LOSS | -0.4805 | 0.1477 | -0.1368 | -0.1477 | 0.2234 | 0.5482 | 1.0000 | | | | |
| DIV | 0.1646 | -0.0983 | -0.0040 | 0.0983 | -0.0766 | -0.2526 | -0.1598 | 1.000 | | | |
| BIG | 0.1345 | 0.0414 | 0.0841 | -0.0414 | -0.0353 | -0.1194 | -0.0076 | 0.083 | 1.000 | | |
| ABSACC | -0.1085 | 0.0705 | -0.0409 | -0.0705 | 0.0814 | 0.3022 | 0.3475 | -0.069 | 0.060 | 1.000 | |
| SIZE | 0.1102 | 0.1276 | 0.0423 | -0.1276 | 0.0636 | 0.0740 | 0.0328 | 0.061 | 0.266 | 0.019 | 1.0000 |

Specifying the Best Method for Data Analysis

We must make a decision about selecting the best data analysis method before testing the research hypotheses. Various diagnostic tests are used, the results of which are reported in the following table.

Table 3. The Results of Diagnostic Tests before Testing the Research Hypotheses.

| | | | | 5 · |
|-------|---------------|------------|-------------|---------------------------------|
| Model | Test | Statistics | Probability | Result |
| 1 | F-Limer | 2.6393 | 0.0000 | Panel data are suitable |
| 2 | F-Limer | 2.6506 | 0.0000 | Panel data are suitable |
| 1 | Hosman | 206.925 | 0.0000 | Fixed effects model is suitable |
| 2 | Hosman | 209.708 | 0.0000 | Fixed effects model is suitable |
| 1 | Breusch-Pagan | 2.9225 | 0.0034 | There's variance inconsistency |
| 2 | Breusch-Pagan | 1.9508 | 0.0371 | There's variance inconsistency |

As F-Limer test results are shown in Table (3), the panel data method should be used in order to test the hypotheses. In addition, the results of Hausman's test represent that the fixed effects model should be used in the both research models. Moreover, the results reveal that the problem of variance inconsistency existed in the research models. In order to solve the problem, the final model estimation is accomplished using GLS estimator to maintain the variance consistency hypothesis in regression analysis; hence the problem of variance inconsistency is solved.

Test Results of the research Hypotheses

The results of the first research model estimation are presented in table 4.

Table 4. The Results of the First Research Hypothesis Test.

| | Tuble in the results of the first research Hypothesis fest. | | | | | | | | |
|-------------------------|---|---------------|---------|--------|--|--|--|--|--|
| Variable | Coefficient | SD | Sign. | VIF | | | | | |
| C | 0.2108 | 0.1459 | 0.1498 | | | | | | |
| EARN | 0.0645 | 0.0854 | 0.4509 | 4.3253 | | | | | |
| MODIFIED | 0.0367 | 0.0158 | 0.0213 | 4.8342 | | | | | |
| EARN*MODIFIED | 0.0188 | 0.0164 | 0.2522 | 3.6530 | | | | | |
| SIZE | 0.0288 | 0.0764 | 0.7067 | 4.1690 | | | | | |
| LOSS | 0.0385 | 0.0751 | 0.6086 | 3.7208 | | | | | |
| DIV | -0.0214 | 0.0249 | 0.3904 | 1.1578 | | | | | |
| BIG | 0.0484 | 0.0350 | 0.1683 | 1.9703 | | | | | |
| ABSACC | -0.0064 | 0.0114 | 0.5732 | 1.6955 | | | | | |
| R^2 | 0.9365 | Durbin-Watson | | 2.4194 | | | | | |
| Adjusted R ² | 0.9130 | E | 39.8748 | | | | | | |
| Aujusted R | 0.9130 | Γ- | F- test | | | | | | |

The current earnings variable estimation coefficient (EARN) in the above table represents a positive relationship with the firms' future earnings, but the relationship is not statistically significant. Therefore, it can be said that there is not a relationship between the firms' current earnings and the future earnings. Also, the modified opinion variable estimation results in the above table represent a positive and significant relationship with the firms' future earnings in %5 error level, because calculated P-value for the research independent variable coefficient has been obtained less than %5. Thus, it can be mentioned that there is a significant relationship between the modified opinions and the firms' future earnings.

Earn*Modified interactional variable coefficient includes positive coefficient and is not statistically significant with the future earnings. That is because the calculated P-value for the variable coefficient has been obtained more than %10.In order to confirm the first hypothesis, there must be a negative and significant relationship between this variable and independent variable, but the results represent a positive and non-significant relationship. As a result, it can be concluded that the firms receiving modified audit opinions do not have lower earnings persistence than the firms receiving unqualified audit opinion and the first research hypothesis is rejected. This result is not consistent with the result of Vichitsarawong and Pornupatham (2015). Table 5 shows the result of the second regression model.

Table 5. The Results of Testing the Second Hypothesis of the Research

| Table 5. The Results of Testing the Second Hypothesis of the Research. | | | | | | | | |
|--|-------------|---------------|------------------|--|--|--|--|--|
| Variable | Coefficient | SD | Sig | | | | | |
| С | 0.2108 | 0.1459 | 0.1498 | | | | | |
| EARN | 0.0645 | 0.0854 | 0.4509 | | | | | |
| UEM | 0.0367 | 0.0158 | 0.0213 | | | | | |
| QUALIFY | 0.0188 | 0.0164 | 0.2522 | | | | | |
| EARN*UEM | 0.0288 | 0.0764 | 0.7067 | | | | | |
| EARN*QUALIFY | 0.0385 | 0.0751 | 0.6086 | | | | | |
| SIZE | -0.0214 | 0.0249 | 0.3904 | | | | | |
| LEV | 0.0484 | 0.0350 | 0.1683 | | | | | |
| LOSS | -0.0064 | 0.0114 | 0.5732 | | | | | |
| DIV | 0.0261 | 0.0134 | 0.0531 | | | | | |
| BIG | 0.0477 | 0.0168 | 0.0050 | | | | | |
| ABSACC | -0.0319 | 0.0316 | 0.3137 | | | | | |
| \mathbb{R}^2 | 0.8999 | Durbin-Watson | 2.4058 | | | | | |
| Adjusted R ² | 0.8613 | F-test | 23.3076 (0.0000) | | | | | |

The results of Table 5 represent that there is a positive and significant relationship between unqualified opinion variable and the firm future earnings by emphasizing on matters. That is because the calculated probability amount for the variable coefficient has been less than %5. On the other side, the results represent that qualified opinion variable does not have a significant relationship with the future earnings, because calculated P-value for the variable coefficient has been obtained more than %10. In order to confirm the second research hypothesis, Earn-Qualify variable must include a coefficient less than EARN*UEM variable coefficient. The findings represent that none of EARN*UEM and EARN*QUALIFY variables are significant with the independent variable. Thus, it cannot be said that the firms receiving qualified opinions have lower earnings persistence than the firms receiving unqualified

opinions with emphasize on matters. Moreover, we use Wald test to compare variables' coefficient that the results are presented in Table 6.

Table 6. The Results of Comparing Tests of the Main Variables Coefficients.

| Variable | T-statistics | Sign. |
|-----------|--------------|--------|
| $B_4=B_5$ | -0.128831 | 0.8976 |

The results of the above table show that there is not a significant difference between EARN*UEM and EARN*QUALIFY variables coefficient. Finally, it can be said that the second research hypothesis is rejected, too. This result is not consistent with the result of Vichitsarawong and Pornupatham (2015).

Discussion and Conclusion

This paper aims to study the relationship between audit opinion and the firms' earning persistence. Earnings persistence represents constancy and continuity of accounting profit. Earnings persistency can lead to improve the investors' decision-making. According to investors, earnings persistency has stable and lasting features and it can help them (especially in valuating). Audited financial statements by independent auditors are proper means in transferring reliable information. An independent auditor is the most qualified person for commenting on the accuracy in preparing and presenting the financial reports of economic unit. The auditor qualification is due to the fact that he audits according to the audit standards, so as to ensure that the items mentioned in the financial statements have been prepared according to the audit standards. The research results represent that there is not a relationship between the auditor's opinion and earnings persistence among the research sample firms. In other words, the firms' earning persistence level does not have any relationship with the audit modification intensity in Iran. The findings can represent that the auditors' report and their report type do not include enough informational content for economic actors and investors, and do not lead to a change in profit quality and the firms' earnings persistence. According to the research results, it is recommended that the asset market decision-makers and legislators must value more for the independent auditors' report. They must legislate rules which not only increases the investors' reliance and the firms' managers on the auditors' report, but also increase their quality of reports by more supervision on auditors' works and forcing them to obey the accounting standards.

Conflict of interest

The authors declare no conflict of interest

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