Investment opportunities and lack time report of the auditor

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ABSTRACT

Objective: The goal of the present study is to investigate investment opportunities and lack of in time auditor reporting. Methodology: This research is applied regarding the aim and is descriptive due to data collection method utilized and is correlation type. The statistical population of this research entails firms enlisted in Tehran Stock Exchange. Data analysis was done using SPSS18 and EVIEWS8 software. Results: Regarding the meaningfulness of the total regression and the meaningfulness of the effect of important variables under investigation to identify the relationship between investment opportunities and lack of in time auditor report in the regression equation the research hypotheses were approved. Conclusion: Finally, it is concluded that there has been a meaningful relationship between investment opportunities and lack of in time reporting by the auditor.

1. Introduction

If there is a comprehensive and appropriate reporting system, we would have transparent and reliable financial information which is considered as the basis for assessing the status and performance of a firm and decision making in a firm. In any economic event, the investors need reliable data for decision making. In time publish of financial reports is considered as a key factor to reduce information asymmetry and to improve capital market performance. The delays related with the issuance of financial statements increase lack of reliability of investment decisions (Owusu-Ansah, 2000).

Since rapid growth and change of economic relations lead to severe competitions in business, industry, and investment, firms need appropriate and in time investment to survive and develop their activities. Financial reports of firms should prepare some useful information for potential and current investors, creditors, and other users in logical investments, credit conferring, and similar decisions (Hassas-e-Yeghaneh et al., 2012). Auditor's report is a key element in qualified financial information proposed by independent auditors. Auditing presents independent assessment on correctness, faithfulness of financial data and adaptation of performance results, financial status, and cash flows using accepted accounting standards.

In fact growth opportunities are considered as rewards for investors. The investors always take risk into consideration in their investment decisions because the thing that leads to success is to use current investment opportunities optimally and to do so, financial policies affecting the creation of growth opportunities should be recognized in business units. Today auditing data systems present the required data for the uses during the least time to be used in decision makings (Tehrani and Nourbakhsh, 2003; Al-Ajmi, 2008).

1.1 Statements of the problem

Studying investment opportunities is considered as a superior method of information interpretation. In fact, investment opportunities show potential investment capabilities of a firm. This means that the higher capability of investment by a firm in the future leads to more investment opportunities. It can be suggested to the users of financial statements such as investors to analyze the firm's investment opportunities before making any decision about where to invest and choose those firms that have more investment opportunities.

Audited financial statements are considered as one of the most important and reliable resources of information for the information users of a firm. But such information is used by the users if it has a series of qualitative features. One of these features is lack of delay in information presentation or being in
time. Being in time is one of the requirements related to the information and it means that the information should be presented to the users when they have opportunity to decide, judge, and act in time regarding what they intend. The shorter time span between the end of fiscal year and the publication date of financial statements of business units will lead to increase the profitability of audited financial statements.

In other words, financial information should be delivered before the end of the opportunity that the users have to make decisions or judge about the issues. Therefore, the closer the presentation of the information to the date of the related events, the information would be more in time (Barzideh and Moayyeri, 2006; Darabi and Karimi, 2010).

Investment is required for firms that seek growth opportunities. Investment is a stimulus that encourages and is known as a reward for the investors (Tehrani and Nourbakhsh, 2003).

Investment opportunities do not occur incidentally. But they should be recognized or created. Different types of investment opportunities may arise from different levels of firm sections. In most cases the investors make decisions about their investments and search to maximize their return. Therefore, any information to be used to predict the growth amount of a firm is noticed by the shareholders. Growth opportunities are stimulants that encourage and are considered as a reward for the investors. The enhancement of professional awareness about new achievements regarding investment is integrated with development of communication technologies leading to increase earnings for the capital suppliers who invest their funds. Thus, cash flow has developed more than before and during some recent years investments have grown extremely and the greatest accounting changes have occurred during this time. The thing that leads to success is the optimal use of current investment opportunities and to do so we should recognize factors affecting growth opportunities in firms (Watts and Zimermand, 1986). Regarding the fact that the major goal of this research is to recognize the effect of investment opportunities of firms enlisted in Tehran Stock Exchange as an effective factor on the delay of auditing we have tried to compose the hypotheses below.

1.2 Research hypotheses

The major research hypothesis: there is a meaningful relationship between investment opportunities and lack of auditors' in time reporting.

First minor hypothesis: there is a meaningful relationship between firm's market value and firm's book value (Q Tobin) and lack of auditors' in time reporting.

Second minor hypothesis: there is a meaningful relationship between fixed assets' growth and lack of auditors' in time reporting.

Third minor hypothesis: there is a meaningful relationship between fixed assets' ratio and lack of auditors' in time reporting.

1.3 Research literature

Lim et al., (2014) studied about the effect of ownership concentration on in time accounting information and showed that there has been a non-linear relationship between ownership concentration and in time information presentation. They found out that in firms where the major shareholders are the government or political institutions depended on the government, the time to present financial statements is reduced. They also found out that in firms having foreign shareholders, financial statements are present to stock exchange organization earlier.

Brown and Hillegeist, (2007) investigated on the relationship between disclosure quality and information asymmetry. The results showed that disclosure quality is reversely related with information asymmetry. Also, there has been a reversed relationship between disclosure quality and the amount of exchanges of the shareholders who have access to confidential information. Additionally, considering the previous findings showing that capital cost increases with increasing information asymmetry, the results showed that firms with higher disclosure quality have lower capital costs.

Verdi, (2006) published a paper entitled: "the relationship between financial reporting quality and investment efficiency". He stated that increasing financial reporting quality can have important economic outcomes such as investment efficiency and tested the relationship between financial reporting quality and investment efficiency among 49543 sample firms during the time period between 1980 and 2003. The results of his studies showed that the index of financial reporting quality called the accruals' quality has had a negative correlation with underinvestment and overinvestment. The relationship between the quality of financial reporting and underinvestment has been stronger in firms with financing constraints. This was due to the reasoning that financial accounting information can reduce information asymmetry between the firm and the investors and thus firm costs to increase cashes.

Saghafi and Motamedi Fazel, (2011) studied the relationship between audit quality and investment efficiency in firms with high investment capabilities. The results of their research showed that if firms with high investment capabilities utilize higher quality auditors, they would experience a higher level of investment efficiency. Meanwhile, higher audit quality would not have any effects on reducing the manipulation of discretionary accruals.

Etemadi et al., (2010) investigated about the relationship between auditor's specialization in the industry and real earning management and its effect on future operational performance of firms having specialized auditors in the industry and dealing with real earning management. In this research they used market share approach in order to identify specialized auditors in the industry and sales manipulation, reduction of discretionary costs and surplus production as the criteria of real earning management. Also to measure operational performance they used return on assets. Results of this research showed that firms whose auditors are specialized in the industry have had a higher real earning management levels compared to other firms but their future operating performance is not reduced.

2. Materials and methods

2.1 Methodology

The present research is a post- incidental and correlation type study and regarding the goal it is an applied research. The goal of applied research is to develop the application of knowledge within certain area. In this research we have used library study method to collect the data. Also the data extracted
were entered into Excel software and were made ready to enter other statistical software programs. Also to test the hypotheses and finally to analyze the data we used SPSS18 and EVIEWS8 software programs.

2.2 Research model

Regarding what was pointed out above, the research model was as follows:

\[ AbARL = \alpha_0 + \alpha_1 \times InvestOpp + \alpha_2 \times AbInvestOpp + \alpha_3 \times InvestOppHigh + \alpha_4 \times LOSS + \alpha_5 \times BIG + \alpha_6 \times SIZE + \alpha_7 \times YEAR + \alpha_8 \times INDUS + \alpha_9 \times ROA + \alpha_{10} \times LEV + \epsilon \]  

(1)

Where,

AbARL: auditor report delay in current year minus the mean of auditor report delay during research period
AbInvestOpp: investment opportunities in current year minus mean of investment opportunities during research period
ARL: the distance between the end of fiscal year and the audit report date based on daily status
InvestOpp: investment opportunities factor including market to book value of the firm, fixed assets' ratio, and fixed assets' growth.
LOSS: if the firm is losing it is represented with 1, and if not with 0
YEND: if the end of fiscal year is end of Esfand (21st of March) it is represented with 1, and if not with 0
BIG: if the auditor is from audit organization it is represented with 1, and if not with 0
SIZE: natural logarithm of total firm assets
YEAR: the variable represents annual period and it would be represented with 1 for the first year and for each year one unit will be added to it in consecutive years.
INDUS: the type of industry where the firm works in
ROA: earning before profit and tax divided into total assets
LEV: firm's leverage

3. Discussion and results

3.1 Data analysis

3.1.1 Descriptive statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Concentration criteria</th>
<th>Dispersion criterion</th>
<th>Distribution form criteria</th>
<th>Number of observations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Mode</td>
<td>Standard error</td>
<td>Skewness</td>
</tr>
<tr>
<td>ABARL</td>
<td>109.21</td>
<td>55.18</td>
<td>173.03</td>
<td>4.76</td>
</tr>
<tr>
<td>AbInvestOpp</td>
<td>30.11</td>
<td>26.66</td>
<td>21.51</td>
<td>0.89</td>
</tr>
<tr>
<td>InvestOpp</td>
<td>35.54</td>
<td>33.14</td>
<td>17.59</td>
<td>1.28</td>
</tr>
<tr>
<td>SIZE</td>
<td>8.10</td>
<td>8.00</td>
<td>0.84</td>
<td>0.32</td>
</tr>
<tr>
<td>ROA</td>
<td>5.68</td>
<td>6.31</td>
<td>18.54</td>
<td>-1.40</td>
</tr>
<tr>
<td>LEV</td>
<td>0.20</td>
<td>0.15</td>
<td>0.17</td>
<td>2.07</td>
</tr>
</tbody>
</table>

Standard error is one of dispersion indexes that show the distance between average data and the mode. If standard error is a set of data close to zero, it shows that the data are close to the mean and have little dispersion. But if standard error is higher there would be considerable dispersion between the data. Standard error is equal to the square root of the variance. The superiority of it over variance refers to the fact that it is within the same dimension as the data. In table 1, in all cases the standard error is small and this shows that there has been appropriate distribution of data.

In table 1 we can observe the amount of skewness of the variables. Pulling is equal to the normalized fourth moment. In other words, pulling is an index of sharpness of the curvature in maximum point. The amount of pulling for normal distribution is equal to 3. In table above, the amounts related to pulling of the variables can be seen. Only regarding the variable of delay in auditor report in current year minus the mode of delay in auditor report during the study period we have had very high pulling and this variable was far from normal distribution. But in other variables the amount of pulling has been close to normal or it was normal.

The descriptive statistics of virtual variables have not been investigated because virtual variables were composed on numbers 0 and 1.

3.1.2 Pearson correlation test

Pearson's correlation coefficient was used to identify the amount of relationship, type, and direction of the relationship between the two distance or relative variables or a distance variable and a relative variable. In fact, this coefficient has been parametrically parallel with Spearman's correlation coefficient.
Table 2. Correlation between model variables

<table>
<thead>
<tr>
<th>Correlation Probability</th>
<th>LEV</th>
<th>ROA</th>
<th>SIZE</th>
<th>INVESTOPP</th>
<th>ABINVESTO</th>
<th>ABARL</th>
</tr>
</thead>
<tbody>
<tr>
<td>LEV</td>
<td>1.00000</td>
<td>----</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROA</td>
<td>0.064273</td>
<td>1.00000</td>
<td>----</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SIZE</td>
<td>0.025859</td>
<td>-0.004379</td>
<td>1.00000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INVESTOPP</td>
<td>0.4958</td>
<td>0.9082</td>
<td>----</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ABINVESTO</td>
<td>0.004591</td>
<td>0.103700</td>
<td>0.016959</td>
<td>1.00000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ABARL</td>
<td>0.019443</td>
<td>0.062879</td>
<td>0.068364</td>
<td>0.110335</td>
<td>-0.002540</td>
<td>1.00000</td>
</tr>
</tbody>
</table>

In the table above, the amount of correlation has been represented in the first row and correlation meaningfulness was presented in the second row. If the meaningfulness is less than 0.05, the intended correlation has been meaningful statistically. As it can be observed in some cases the correlation is meaningful but the strength of correlation is lower than the case where there is a probability of the existence of co-linearity in the model.

### 3.1.3 Studying research model

Testing research hypotheses was done through estimating regression models. Next we will deal with adjusted regression models and then the hypotheses will be analyzed.

First to recognize whether using panel data model is more efficient in model estimation or pooled data model is better, we use Chow's test.

Table 3. Results of Chow test for regression models

<table>
<thead>
<tr>
<th>Regression model (1)</th>
<th>Test statistic</th>
<th>Degree of freedom</th>
<th>Meaningfulness level</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3.07</td>
<td>(99, 586)</td>
<td>0.000</td>
<td>Using panel model</td>
</tr>
</tbody>
</table>

As it can be seen in table 3, the meaningfulness of Chow test in the equation above is less than 0.05 (α=0.05). Thus, panel data model is estimated with an assurance level of 95%.

Regarding the fact that the null hypothesis of Chow test considering the equality of the latitude from the base is rejected, in order to recognize the presence of fixed effects or random effects we will use Haussmann test.

Table 4. Results of Haussmann test of the regression model

<table>
<thead>
<tr>
<th>Regression model (1)</th>
<th>Test statistic</th>
<th>Degree of freedom</th>
<th>Meaningfulness level</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.000</td>
<td>7</td>
<td>1.000</td>
<td>Using fixed effects</td>
</tr>
</tbody>
</table>

As it can be observed in table 4, the meaningfulness level of Haussmann test is calculated to be prob=1.000 and this is higher than 0.05. Thus, Haussmann test led to use fixed effects for the equation in estimation. Results of regression model estimation using panel data and using fixed effects have been represented in table 5.

Table 5. Results of adjusting regression model (1)

<table>
<thead>
<tr>
<th>ABARL: response variable</th>
<th>ABARL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression coefficients</td>
<td></td>
</tr>
<tr>
<td>t statistic for test</td>
<td></td>
</tr>
<tr>
<td>Meaningfulness level</td>
<td></td>
</tr>
</tbody>
</table>
The residual of the disturbance model has been shown to be close to 0. This shows the model appropriateness and the small amount of residuals. Also the model residual should not have a certain format to approve the model. As it can be observed in figure 1, the regression model residual does not have a certain form and this approves the appropriateness of the adjusted model.

### 3.1.4 Studying the hypotheses of the regression model

To study the regression hypotheses, first we use Durbin-Watson statistic.

#### Table 6. Results of Durbin-Watson test for regression model under investigation

<table>
<thead>
<tr>
<th>The equation intended</th>
<th>Durbin-Watson statistic</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression model (1)</td>
<td>2.14</td>
<td>Lack of probability of serial self-correlation</td>
</tr>
</tbody>
</table>
Durbin-Watson statistics located between 0 and 4 and the closer to number 2 will lead to less serial self-correlation in the model. Regarding the Durbin-Watson statistic gained in this research and comparing it with Durbin-Watson table, there is not a probability of the existence of serial self-correlation in the regression model under investigations.

Next and to gain knowledge about the normality of the residuals of the adjusted model we use Jarque-Bera test and a histogram figure.

<table>
<thead>
<tr>
<th>Regression model residual (1)</th>
<th>Test statistic</th>
<th>Meaningfulness level</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>101.36</td>
<td>0.000</td>
<td>Lack of normality of residual distribution in model (1)</td>
</tr>
</tbody>
</table>

As it can be observed in table 7, the meaningfulness of Jarque-Bera test is less than 0.05 (α=0.05), we can say with an assurance level of 95% that the distribution of the residuals is not normal.

Here we will deal with co-linearity of the variables:

The variance inflation factor in linear regression models is one of the estimation methods of model parameters called the least square method. One of the issues and problems which can challenge this method is the presence of a phenomenon called multi-collinearity. One of the methods to recognize the presence of colinearity is using variance inflation factor. This factor shows that the variance of the estimated coefficients has been inflated regarding the estimated variables that do not have colinearity. In the table below we have represented the variance inflation coefficient of the regression model.

<table>
<thead>
<tr>
<th>The equation intended</th>
<th>Durbin-Watson statistic</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression model (1)</td>
<td>1.14</td>
<td>The approval of lack of colinearity in the regression model</td>
</tr>
</tbody>
</table>

In the table above it was identified that regarding the statistic gained for the variance inflation model there has not been any regression colinearity in the model.

3.1.5 **Studying research hypotheses**

Next we will investigate about the important equations to approve the hypotheses again:

<table>
<thead>
<tr>
<th>Intended effect</th>
<th>Amount</th>
<th>Meaningfulness (t statistic)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The relationship between firm’s market value to book value of the firm (QTobin) and lack of in time auditor report</td>
<td>0.08</td>
<td>Meaningful with an assurance of more than 95%</td>
</tr>
<tr>
<td>Studying the relationship between the growth of fixed assets and lack of in time auditor report</td>
<td>0.15</td>
<td>Meaningful with an assurance of more than 90%</td>
</tr>
<tr>
<td>Studying the relationship between the ratio of fixed assets and lack of in time auditor report</td>
<td>12.85</td>
<td>Meaningful with an assurance of more than 90%</td>
</tr>
</tbody>
</table>

Regarding the meaningfulness of the total regression and the meaningfulness of the effect of important variables under investigation to identify the relationship between investment opportunities and lack of in time auditor report in the regression equation the research hypotheses were approved.

4. **Conclusion**

In the table below the hypotheses were represented.
<table>
<thead>
<tr>
<th>Minor</th>
<th>Statement</th>
<th>Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minor 1</td>
<td>There is a meaningful relationship between firm's market value and firm's book value (Q Tobin) and lack of auditors' in time reporting.</td>
<td>Approved</td>
</tr>
<tr>
<td>Minor 2</td>
<td>There is a meaningful relationship between fixed assets' growth and lack of auditors' in time reporting.</td>
<td>Approved</td>
</tr>
<tr>
<td>Minor 3</td>
<td>There is a meaningful relationship between fixed assets' ratio and lack of auditors' in time reporting.</td>
<td>Approved</td>
</tr>
</tbody>
</table>

1- In descriptive statistics it was known that delay in auditor report in current year minus mode of the auditor report delay during the research period has had the highest average and virtual annual variable has had the least mean.

2- Pearson correlation coefficient was utilized to identify the correlation between model variables. Regarding the amounts gained it was identified that in all cases the correlation has been meaningful but the intensity of the correlations was lower than the amount which leads to consider a probability of the presence of collinearity in the model.

3- According to Jarque-Bera test it was recognized that all variables are normal.

4- To test the first hypothesis and regarding that the absolute amount of t is higher than 2 and the amount of relationship between firm's market value and book value (Q Tobin) and lack of in time auditor report the result was found to be equal to 0.08. Thus, the first hypothesis was approved and we found that there is a meaningful relationship between fixed assets' growth and lack of auditors' in time reporting.

5- To test the second hypothesis and regarding that the absolute amount of t is higher than 2 and the amount of relationship between fixed assets' growth and lack of in time auditor report the result was found to be equal to 0.15. Thus, the second hypothesis was approved and we found that there is a meaningful relationship between fixed assets' growth and lack of auditors' in time reporting.

6- To test the third hypothesis and regarding that the absolute amount of t is higher than 2 and the amount of relationship between fixed assets' ratio and lack of in time auditor report the result was found to be equal to 12.85. Thus, the third hypothesis was approved and we found that there is a meaningful relationship between fixed assets' ratio and lack of auditors' in time reporting.

REFERENCES


How to Cite this Article: