The Relationship Between Non-Transparent Financial Reporting and Risk Stock Futures Fall Due to the Size and Performance

Saeid Khalajestani⁎, Alireza Farshidpour

⁎Department of Management, South Tehran Branch, Islamic Azad University, Tehran, Iran

1 Introduction

One of the healthy competitions is the access of all market participating to clear information. One type of the important markets (beside the market of goods, money and work) is capital market which clear information is too effective on its performance. The lack of information in this market causes to increase the cost of exchanges and also it causes to weaken the market in assigning of optimum sources. Information is inseparable part in the process of decision making, clearer and more available is, it can cause to make accurate decisions in assigning of optimum sources. And at decision last it causes to have assignment efficiency and make the clear market which the last purpose is capital market. If one part of a contract or trade is aware of more information and when it establishes relations has used this information effectively, in this non-transparent reporting environment, investors are not able to recognize and find out the harmful projects for the company. Disability of investors in distinguishing between the useful and harmful projects in their primary stages causes to continue harmful projects and by passing the time, their harmfulness will increase. The negative return of these projects piles up inside the company during the time and when the information that relates them reveals, the price of stock will effectively decrease. Informational asymmetry directly effects on performance of stock exchanges markets' so that the increase if that makes the market efficiency decrease.

Most of the researchers like Chen and Hong [3] believe that the changes in the cost of the stock of a company arise from the management of interior information. In conditions that information enters the market accidentally and accomplishes spreading information the process systematically without
the attention to be good or bad, we can say that spread information possesses the symmetric distribution [3].

In other words, if the managers reveal whole information rapidly, this action causes that return of stock possesses the symmetric distribution; and it means that the mean of positive return capacity about the good news must equal with the mean of the negative return capacity about the bad news [5].

But the managers motivate constantly to hide the negative news and information from the investors and pile up them inside the company. For example, it might be considered by the costs of one period as assets, cause to decrease the costs and report the more profit in the financial forms. The result of this action is leading to this which the image of commercial units looks better than its' real situation and the persons' motivation that are out of the organization increase for the investiture in commercial units [2]. This tendency of different management motivations includes the arrangements of reward based on accounting numbers and arises the problems linked to term of office and managers credit [12]. If the managers can refrain the revealing bad news for a long time, the negative news will pile up inside the company. On the other hand, the capacity of bad news that managers can pile up, is limited. The reason of this issue is that when the piled capacity of bad news reach to certain proximity, keeping and non-revealing it for a long time will be impossible and expensive. So the mass of undesirable news enter to the market suddenly after reaching to the high point and this issue leads to severe downfall of stock return or leads to fall the stock cost [9].

2 Literature Review

Ng et al. [9] said that the non-transparencies financial reporting, the risk of falling stock cost and he non-transparency of financial information is related with the less revealing information. Furthermore, the companies that possess to non-transparency financial forms, are exposed to more risk of falling stock cost. Rajgopal and Mohan [10] said that the quality of financial reporting and accidently fluctuation of stock return (has been increased) with the decrease of the quality financial reporting, has been increased the accidently fluctuation of stock return.

They said that, is the conservativeness of accounting decrease the risk of falling of the stock coast? The conservativeness has limited the managers' motivation for growing the performance and non-reveal of bad news and so, it decreases the risk of falling the stock return and if there will be an informational asymmetric, the ability of conservativeness is more for decreasing the risk of future fall of stock cost. Watts and Zimmerman [11] presented an evaluation and estimation features of a year criterion and showed there is a direct and meaningful relation in the company from conservativeness between the conservativeness and special features of company, like life cycle, lack of special confidence of company, and length of the invested cycle.

Kothari et al. [5] said that, are the managers are delaying to revealing the bad news for different reasons like the issues related to term of office and reward and are hasting in revealing the good news. Also the results show that the scale of negative reaction of stock cost in the ratio of revealing bad news is more than the positive reaction of stock cost in the ratio of revealing good news.

Dianaty et al. [1] the anticipated news of management, however the bigness of this unusual return is looking for the anticipated managements for the companies which own of too high of positive news are bigger than the companies which own of bad news.
Moradzadeh et al. [7] the influence of fundamental investors on decreasing risk of the falling of stock's value, the existence of investors effectively decreases the falling of stock cost. Dianaty et al. [1] the influence of capital management in the spin based on the cycle of cash changing "Gitman", the decreasing risk of the falling of management stock cost.

Foroughi et al. [4] the influence of conditional conservativeness of accounting on the risk of future falling of stock cost when there is an information asymmetry between the managers and investors, the ability of conditional conservativeness in order to decrease the risk of future stock cost is more than the others. Mirzaie et al. [6] the influence of non-transparency of financial information on the risk of future falling of the stock cost is increasing the risk of future falling of the stock in cast by the increase of being non-transparency financial reporting. Also in conditions which there is an informational asymmetry between the managers and the investors. And the influence of non-transparency of financial information is more than the increase of the risk of future falling of stock cost.

3 Proposed Methodology

3.1 Hypothesis of research

The hypothesis of the present research has given on the following in 6 hypotheses:

There is a meaningful relation between the risk of future falling stock and non-transparency financial reporting in the big companies.

There is a meaningful relation between the risk of future falling stock and non-transparency financial reporting in the small companies.

There is a meaningful relation between the risk of future falling stock and non-transparency financial reporting in the companies with high return assets.

There is a meaningful relation between the risk of future falling stock and non-transparency financial reporting in the companies with low return assets.

There is a meaningful relation between the risk of future falling stock and non-transparency financial reporting in the companies with high return of holders' equity.

There is a meaningful relation between the risk of future falling stock and non-transparency financial reporting in the companies with low return of holders' equity.

3.2 The method of research

The present research is a type of practical research based on the categorized purpose. This research is a type of correlation research based on the research is the inductive form that theoretic bases and background of research has been collected essay and internet, and it has been used the inductive reasons in generalizing results by using proper statistical methods to reject or prove the hypothesizes' research. The purpose of the research is recognition of relation between the unusual audit pays and coinciding’s cost. The population of the study is all accepted companies in Tehran Stock Exchange which 110 companies is selected as a systematic sample of research. Time period of this research is from the early 2009 to the last 2013. It has used the analysed data from the excel of Eviews7, and at last the calculated possibility paid to judgment and assessment about each one of the research's statis-
The Relationship Between Non-Transparent Financial Reporting and Risk Stock Futures Fall Due to…

Theorical hypotheses by the help of statistical Tests t. the regression model of present research is in following form:

\[ \text{IDIOSYN} = \alpha + \beta_1 \text{OPAQUEit} + \epsilon_{it} \]

IDIOSYN: Risk stock future fall

OPAQUEit: Non-transparency financial reporting

The variables of research

- Independent variable: Non-transparency financial Reporting: first we calculate the guaranteed goods of companies by using the following formula:

\[ TA_{i,t} = (\Delta CA_{i,t} - CL_{i,t} - \Delta Cash_{i,t} + \Delta Std_{i,t} + Dep_{i,t}/Ai_{i,t-1}) \]

TA: Total \( i \) company's guaranteed goods in \( t \) years

\( \Delta CA_{i,t} \): Alternation of present assets of \( i \) company between \( t \) and \( t-1 \) year

\( \Delta CL_{i,t} \): Alternation of present debts of \( i \) company between \( t \) and \( t-1 \) year

\( \Delta Cash_{i,t} \): Alternation of cash found of \( i \) company between \( t \) and \( t-1 \) year

\( \Delta Std_{i,t} \): Alternation of long time debts of \( i \) company between \( t \) and \( t-1 \) year

\( DEp_{i,t} \): Cost of \( i \) company's amortization in \( t \) year

\( Ai_{i,t-1} \): Whole value of assets' clerical of \( i \) company in \( t-1 \) year

After calculating the guaranteed goods, we pay to estimate of non-optional guaranteed goods:

\[ \frac{TA_{it}}{Assets_{it-1}} = \beta_0 + \beta_1 \frac{1}{Assets_{it-1}} + \beta_2 \frac{\Delta Sales_{it}}{Assets_{it-1}} + \beta_3 \frac{PPE_{it}}{Assets_{it-1}} + \epsilon_{it} \]

1: Alternations of company's sale

2: Impure of \( i \) company's assets, machines and equipment in \( t \) year

3: The whole company's assets

4: The whole guaranteed goods of \( i \) company in \( t \) year

After that guaranteed goods estimated from the top models, before we measure the non-transparency financial reporting. In order to measuring non-optional guaranteed goods, we'll do as following

\[ \text{DiskAcc}_{it} = \frac{TA_{it}}{Assets_{it-1}} - (\beta_0 + \frac{1}{Assets_{it-1}} + \beta_1 \frac{\Delta Sales_{it} - \Delta Receivables_{it}}{Assets_{it-1}} + \beta_2 \frac{PPE_{it}}{Assets_{it-1}}) \]

DiskAcc: Non-optional guaranteed goods which it has been estimated by using formulas Receivables: Altternation of received counts

After that you measured amount of non-optional guaranteed goods, we will pay to measure the non-transparency financial reporting by using the following formula:

\[ \text{OPAQUE} = \text{AbsV}(\text{DiscAcc}_{it-1}) + \text{AbsV}(\text{DiscAcc}_{it-2}) + \text{AbsV}(\text{DiscAcc}_{it-3}) \]

-Dependent variable: The risk of fall

\[ \text{IDIOSYN} = \ln\left(\frac{1-R^2}{R^2}\right) \]
IDIOSYN = The risk of company's stock fall

R2 = Remaining return of i company's stock in t time, it means that it is remained of following regression model:

\[ r_{i,t} = \beta_{1}r_{m,t-1} + \beta_{2}r_{t-1} + \beta_{3}r_{m,t} + \beta_{4}r_{m,t+1} + \beta_{5}r_{i,t+1} + \varepsilon_{i,t} \]  \hspace{1cm} (5)

ri,t: i company's stock return in t time

rm,t: markets' return in t time. For calculating the markets' return, the coefficient of periods' beginning is deducted from the coefficient of periods' end, and the result is dividing to coefficient of periods' beginning.

The above relation is estimated by the numbers variables of Regression method and its' remaining is using for measuring special return of R2 company. Special return of company, is using based on the above definition in order to measure the risk of future fall of stock cost.

-Moderators variables

1) Size of company (SIZE)

We will use the following model for measuring the size of companies [8]

\[ \text{SIZE} = \ln (\text{TA}) \]

TA: Total assets

2) Return On Assets (ROA): We will use the following formula for measuring the assets' return [8]

\[ \text{ROA} = \frac{\text{NI}}{\text{TA}} \]  \hspace{1cm} (6)

NI: Net Income

TA: Total Assets

3) Return On Equity of holders' stock (ROE):

\[ \text{ROE} = \frac{\text{NI}}{\text{SHE}} \]

NI: Net Income

SHE: Stock Holder Equity

4 Results of the Research

1) The first Hypothesis's test

It is expecting from this Hypothesis that there is a meaningful relation between the risk of future falling stock and non-transparency financial reporting in big companies.

The results of estimation show that t variable's statistics of non-transparency financial reporting in big companies and the risk of future falling stock in less than 5%: Also the above relation based on the statistics in meaningful. Also, He estimated coefficient of above variables based on the statistics is meaningful.
The Relationship Between Non-Transparent Financial Reporting and Risk Stock Futures Fall Due to…

Table 1: Results of estimated Model 1 for the first Hypothesis

<table>
<thead>
<tr>
<th>variables</th>
<th>The estimated coefficient</th>
<th>Standard error</th>
<th>T Statistics test</th>
<th>T possibility's test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-27665/30</td>
<td>2/970442</td>
<td>19264/10</td>
<td>0000/0</td>
</tr>
<tr>
<td>Non-transparency financial reporting of big companies</td>
<td>734328/8</td>
<td>4/279274</td>
<td>041077/2</td>
<td>0422/0</td>
</tr>
<tr>
<td>The coefficient of determination</td>
<td>0/415031</td>
<td>F statistics</td>
<td>4/165995</td>
<td>Watson-camera</td>
</tr>
<tr>
<td>The coefficient of determination augmented</td>
<td>0/412857</td>
<td>F Possibility</td>
<td>0/042205</td>
<td>2/021877</td>
</tr>
</tbody>
</table>

Power determining coefficient shows the explanation of independent variables that it is able to explain the alterations' independent variables in amount of 42%.

F Statistics possibility demonstrate that total model based on the statistics is meaningful. According to the hypothesis, the variables of non-transparency financial reporting and the risk of future falling stock are remaining in the model. It means that there is a meaningful relation between the risk of future falling stock and non-transparency financial reporting. The Regression model is as a following:

\[ \text{IDIOSYN SIZEL} = 27665/30 + 734328/8 \, \text{OPAQUE SIZEL} \]

2) The second hypothesis 'test

According to this hypothesis that there is a meaningful relation between the risk of future falling stock and non-transparency financial reporting in small companies.

Table 2: Results of estimated Model 1 for the second Hypothesis

<table>
<thead>
<tr>
<th>IDIOSYN SIZEL = ( \beta_0 + \beta_1 ) OPAQUE</th>
<th>SIZEL + ( \epsilon_t )</th>
<th>The estimated coefficient</th>
<th>T possibility's test</th>
<th>T Statistics test</th>
<th>Standard error</th>
</tr>
</thead>
<tbody>
<tr>
<td>0000/0</td>
<td>-784282/7</td>
<td>986659/3</td>
<td>-03328/31</td>
<td>Intercept</td>
<td></td>
</tr>
<tr>
<td>6051/1</td>
<td>517699/0</td>
<td>558988/3</td>
<td>842485/1</td>
<td>Non-transparency financial reporting of small companies</td>
<td></td>
</tr>
<tr>
<td>Watson-camera</td>
<td>268012/0</td>
<td>F statistics</td>
<td>000981/0</td>
<td>The coefficient of determination</td>
<td></td>
</tr>
<tr>
<td>053151/2</td>
<td>605087/0</td>
<td>F Possibility</td>
<td>-002679/0</td>
<td>The coefficient of determination augmented</td>
<td></td>
</tr>
</tbody>
</table>

The results of estimation show that t variable's statistics of non-transparency financial reporting in
small companies and the risk of future falling stock is more than 5%; Also, the above relation based on the statistics is not a meaningful relation between the risk of future falling stock and non-transparency financial reporting.

3) The third hypothesis' test

It is expecting from this hypothesis that there is a meaningful relation between the risk of future falling stock and non-transparency financial reporting in the companies with high Return Assets:

**Table 3:** Results of estimated Model 1 for the third Hypothesis

<table>
<thead>
<tr>
<th>T possibility's test</th>
<th>T Statistics test</th>
<th>Standard error</th>
<th>The estimated coefficient</th>
<th>variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>0000/0</td>
<td>-28249/11</td>
<td>553107/4</td>
<td>-37040/51</td>
<td>Intercept</td>
</tr>
<tr>
<td>0252/0</td>
<td>251227/2</td>
<td>078483/5</td>
<td>43282/11</td>
<td>Non-transparency financial reporting of the high return on assets of companies</td>
</tr>
<tr>
<td>Watson-camera</td>
<td>068025/5</td>
<td>F statistics</td>
<td>418161/0</td>
<td>The coefficient of determination</td>
</tr>
<tr>
<td>115225/2</td>
<td>025164/0</td>
<td>F Possibility</td>
<td>0/415875</td>
<td>The coefficient of determination augmented</td>
</tr>
</tbody>
</table>

The results of estimation show that t variable's statistics of non-transparency financial reporting in the companies with high Return and the risk of future falling stock is less than 5%; Also, the above relation based on the statistics is meaningful. Also the estimated coefficient of above variables based on the statistics meaningful. Power determining coefficient shows the explanation of independent variables that it is able to explain the alternations' independent in amount of 42%.

F statistics possibility demonstrates that total model based on the statistics is meaningful according to the hypothesis, the variables of non-transparency financial reporting in the model. It means that there is a meaningful relation between the risk of future falling stock and non-transparency financial reporting in the companies with high Return.

The regression equivalent is like the following:

**IDIOSYN ROAL = -51/37040 + 11/43282 OPAQUE ROAL**

4) The fourth hypothesis' test

It is expecting from this hypothesis that there is a meaningful relation between the risk of future falling stock and non-transparency financial reporting in the companies with Low Return on Assets.

The results of estimation show that t variables statistics of non-transparency financial reporting of non-transparency financial reporting in the companies with low return assets and the risk of future falling stock is more than 5%; Also, the above relation based on statistics is not meaningful. So the first hypothesis rejects with certainty of 95%.
Table 4: The results of estimated model 1 for the fourth Hypothesis

<table>
<thead>
<tr>
<th>IDIOSYN ROA = β0 + β1 OPAQUE + εit</th>
<th>T possibility's test</th>
<th>T Statistics test</th>
<th>Standard error</th>
<th>The estimated coefficient</th>
<th>variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>0000/0</td>
<td>-296778/7</td>
<td>712473/3</td>
<td>-08909/27</td>
<td>Intercept</td>
<td></td>
</tr>
<tr>
<td>4617/0</td>
<td>737020/0</td>
<td>846296/3</td>
<td>-934798/2</td>
<td>Non-transparent financial reporting with low return assets of companies</td>
<td></td>
</tr>
<tr>
<td>Watson-camera</td>
<td>543/199/0</td>
<td>F statistics</td>
<td>002000/0</td>
<td>The coefficient of determination</td>
<td></td>
</tr>
<tr>
<td>111549/2</td>
<td>461748/0</td>
<td>F Possibility</td>
<td>-001682/0</td>
<td>The coefficient of determination augmented</td>
<td></td>
</tr>
</tbody>
</table>

It means that there is not a meaning relation between the risk of future falling stock and non-transparent financial reporting in the companies with Low return on assets.

5) The fifth hypothesis' test

It is expecting from this hypothesis that there is a meaningful relation between the risk of future falling stock and non-transparent financial reporting in the companies with

High return in equity of holder's stock.

Table 5: The results of estimated model 1 for the fifth Hypothesis

<table>
<thead>
<tr>
<th>IDIOSYN ROEL = β0 + β1 OPAQUE + εit</th>
<th>T possibility's test</th>
<th>T Statistics test</th>
<th>Standard error</th>
<th>The estimated coefficient</th>
<th>variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>0000/0</td>
<td>84071/11</td>
<td>141202/4</td>
<td>-03477/49</td>
<td>Intercept</td>
<td></td>
</tr>
<tr>
<td>0041/0</td>
<td>891105/2</td>
<td>339361/4</td>
<td>54555/12</td>
<td>Non-transparent financial reporting of high return on assets of holders' stock</td>
<td></td>
</tr>
<tr>
<td>Watson-camera</td>
<td>358491/8</td>
<td>F statistics</td>
<td>429920/0</td>
<td>The coefficient of determination</td>
<td></td>
</tr>
<tr>
<td>110025/2</td>
<td>004150/0</td>
<td>F Possibility</td>
<td>426892/0</td>
<td>The coefficient of determination augmented</td>
<td></td>
</tr>
</tbody>
</table>

The results of estimation show that t variables statistics of non-transparent financial reporting of non-transparent financial reporting in the companies with high return in equity of holder's stock and
the risk of future falling stock is less than 5%; Also, the above relation based on the statistics is not meaningful. Also, the estimated coefficient of above variables based on the statistics is meaningful. Power determining coefficient shows the explanation of independent variables that is able to explain the alternations' independent variables in amount of 43%.

F statistic possibility demonstrates that total model based on the statistics is meaningful. According to the hypothesis, the variables of non-transparency financial reporting in the companies with high return on equity of holders' stock and the risk of future falling stock are remaining in the model. It means that there is a meaningful relation between the risk of future falling stock and non-transparency financial reporting in the companies with High return in equity of holder's stock.

\[
\text{IDIOSYN ROEL} = -39/03477 + 12/54555 \text{ OPAQUE ROEL}
\]

6) The sixth hypothesis' test

It is expecting from this hypothesis that there is a meaningful relation between the risk of future falling stock and non-transparency financial reporting in the companies with Low return in equity of holder's stock:

\[
\text{Table 6: The results of estimated model 1 for the sixth Hypothesis}
\]

<table>
<thead>
<tr>
<th>IDIOSYN ROES</th>
<th>= β0+β1 OPAQUE</th>
<th>ROES + εit</th>
<th>T possibility's test</th>
<th>T Statistics test</th>
<th>Standard error</th>
<th>The estimated coefficient</th>
<th>variables</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Intercept</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0000/0</td>
<td>-210699/7</td>
<td>726424/3</td>
<td>-870012/26</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0405/0</td>
<td>-058103/2</td>
<td>093483/4</td>
<td>-424809/0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Watson-camera</td>
<td>235787/4</td>
<td>F statistics</td>
<td>415224/0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>059882/2</td>
<td>040526/0</td>
<td>F Possibility</td>
<td>412864/0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results of estimation show that t variables statistics of non-transparency financial reporting of non-transparency financial reporting in the companies with Low return in equity of holder's stock and the risk of future falling stock is less than 5%; Also, the above relation based on the statistics is not meaningful. Also, the estimated coefficient of above variables based on the statistics is meaningful. Power determining coefficient shows the explanation of independent variables that is able to explain the alternations' independent variables in amount of 42%. F statistic possibility demonstrates that total model based on the statistics is meaningful.

According to the hypothesis, the variables of non-transparency financial reporting in the companies with Low return on equity of holders' stock and the risk of future falling stock are remaining in the model. It means that there is a meaningful relation between the risk of future falling stock and non-transparency financial reporting in the companies with High return in equity of holder's stock.
IDIOSYN ROE3 = -26/87012 – 8/424809 OPAQUE ROE3

5 Conclusions

The purpose of this study was to investigate the relationship between the risk of future falling stock and non-transparent financial reporting at three levels of size, return, and return on equity of holders' stock Exchange. After designing and testing the hypotheses, we can conclude that there is a meaningful relationship between the risk of future falling stock and non-transparent financial reporting in the level of companies with low return on equity of holders' stock and in the level of big companies with high return on equity of holders' stock. However, the relationship between the risk of future falling stock and non-transparent financial reporting in the level of small companies and in the level of companies with low return didn't confirm. Foroughi and Mirzaie [4] said that. There is a direct relation between the non-transparent of financial information and the risk of future falling stock. So we can conclude that with increasing the non-transparent financial reporting, the risk of future falling stock is increasing. Which isn't suitable with the results of this research. Chen and Hong [3] paid to examine the effective factors of asymmetry in stock return. Researchers with emphasis on different ideas' model of Hung and Stin in their study conclude that stock return which its trade's capacity has increased impressively rather than six months ago and also the stock which has possessed positive return, that is facing with negative skewness. Which isn't suitable with the result of this research. The important reason of this contradiction can be difference in statistics population in two researches. According to the result of this research to assets and all active persons in capital market is suggested that paying attention to the decisions related to the risk of falling stock and paying attention to the reason of financial reporting as an effective reason in falling stock cost. The companies must give the information in addition to current information, for instance, a section as a management analysis's and sketching the future view in the companies reporting of the board of directors, so that that investors can assets the performance of company more comfortable and they can make logical decisions.

References


