The Relationship between Voluntary Disclosure in Internet-based and Information Asymmetry of Companies Listed on the Tehran Stock Exchange

Yaser Akrami Abarghoei¹, Abbas Taleb Bidokhti ²*, Hamid Khajeh Mahmoudabadi ³

¹Department of financial Management, Yazd science and research branch, Islamic Azad university, Yazd, Iran.
²Department of financial Management, Yazd branch, Islamic Azad university, Yazd, Iran.
³Department of financial Management, Islamic Azad University, Yazd, Iran.

ABSTRACT

Capital market as one of the most important target markets to attract the savings of individuals has long attracted the attention of various groups in the economy and stock investment. So a considerable volume of buying and selling shares in the market, indicating the importance of this type of investment is for people. In the meantime people according to criteria as well as information that buy and sell stocks. If this information for buyers and sellers of information asymmetry occurs not at a level that eventually led to the valuation of wrong companies. One of the ways that can affect the asymmetry of information, the disclosure voluntary Internet-based information that is very necessary recognition. The main objective of this study was to investigate the relationship between disclosure and information asymmetry is online. In order to achieve the objectives of the study were three hypotheses. In order to test this hypothesis on a sample of listed companies in Tehran Stock Exchange during the years 2009 to 2013 have been selected. In this study benchmarks to measure information asymmetry bid and sell used. Internet information disclosure variables, volatility of stock price, turnover ratio, the variables are treated as control variables. For hypothesis testing, multivariate regression was used to panel data. Data analysis and hypothesis testing results of the study show that between voluntary disclosure (Internet-based) and information asymmetry there is a significant relationship. Also, the turnover ratio and information asymmetry on the other hand there is a significant relationship.

KEYWORDS

voluntary disclosure, information asymmetry, stock exchange, multivariate regression

INTRODUCTION

The capital market as one of the world’s most important financial markets could play an important role in the economic development of different countries so that this reflects the impact of capital markets on the economy of countries. Stock Exchange and Capital Market under the influence of this field is engaged so that the performance and efficiency of the market segmentation based on the amount and type of information available to people drawn. Companies with a very important role in informing the disclosure of their information and notification to shareholders, based on information available to their stock selection. Because different people have the same information to a topic and This has led to the formation of voluntary disclosure of information asymmetry that companies are trying to reduce the information asymmetry. This study aims to evaluate the impact of Internet-based voluntary disclosure on information asymmetry company is listed on the Tehran Stock Exchange.

One of the negative phenomena that typically occurs in the securities markets, lack of information asymmetry that poor economic decisions by investors leads. There symmetric information necessary to bring the economy does not create information. Because in reality to the people in a particular market to have the same information so people with information asymmetry faced and The area may deviate from the optimal portfolio is as easy as possible(Jalili et al., 2013).

In the present study to determine whether your enterprise is exposed over the internet or not, Czech Internet
Information set list as disclosure standards where the use of HTML and Word and PDF formats online in order to provide corporate information on their websites as well as online disclosure of the criteria. Each of the criteria outlined in Czech list if the Web site we found one, otherwise zero, then the total of the Two divided by zero or a gain its disclosures if the number was a As the company that owns the online disclosure of information; and Conversely (and Debreceny et al., 2001, Mousavi Shiri, 2011). On the other hand, information asymmetry is also a criterion to assess the bid and selling used By Peterson and Plenborg (2006) and Yoon et al., 2011 is used for the same purpose.

According to the above cases the relationship between Internet-based and voluntary disclosure of information asymmetry can be important for many investors to According to information disclosed by the company to choose their investment opportunities. Online disclosure of information can provide instant access to information at the lowest possible cost and This can be done in a space and electronic platform that sellers and buyers alike have access to them and As a result, the transaction has been formed between them based on the same information that ultimately leads to reducing the information asymmetry.

**HISTORY RESEARCH**

Khajavi and Alizadeh (2014) in a study to determine the influence level of voluntary disclosure on information asymmetry of listed companies in Tehran Stock Exchange began to investigate the effect of voluntary disclosure of information asymmetry. In this regard, the effect of firm size, leverage, stock price and trading volume is also controlled. To measure the level of voluntary disclosure, the Czech list Btvtsan (1997) by Kashanipoor et al (2009) is adjusted Was which contains 17 indicators in six broad background information, a summary of the most important historical results, key statistics nonfinancial sector data, forecast data and management's discussion and analysis. As well as variable information asymmetry by using Venkatesh and Chiang (1986) is measured. To test the hypothesis using panel data regression is used. 122 search results for the period 2003 to 2011 now indicate that lack of information asymmetry between the level of voluntary disclosure of listed companies in Tehran stock market, there is no significant relationship.

setayesh, Ghaffari and Rostamzadeh (2013) in a research study of the effect of information asymmetry on the cost of capital paid to the relationship between variables. Four different criteria, including cost of equity cost of capital, cost of capital, retained earnings, cost of debt and WACC was analyzed. The results of 94 companies during the period 2004-2011 using panel data suggests that between information asymmetry and The benchmark cost of capital, the cost of equity and cost of debt there is a significant relationship But between information asymmetry and two other criteria retained earnings and cost of capital, the cost of capital weighted average cost of capital there is no significant relationship.

Wasan and Boone (2010) in his study examines the relationship between accruals and information asymmetry began. The results indicate that the proposed price difference between the buy and sell stocks as a proxy for information asymmetry and accruals, no significant relationship.

Diamond and Vychya (1991) examined the relationship between disclosure, liquidity and capital cost of US corporations paid. results show that Public information disclosure to reduce information asymmetry, it may attract large investors demand to increase stock liquidity, reduce the cost of capital.

Petersen and Plenborg (2006) examines the impact of voluntary disclosure of information asymmetry industrial companies Copenhagen stock exchange's . Analysis and results reported in this study, based on an industry for a period of four years from 1997 to 2000 that includes 36 industrial companies in Denmark was the stock market. was The results showed that the negative relationship between voluntary disclosure and information asymmetry is measured by criteria Also, in this study it was shown that bid and sell shares and turnover ratio, measured criteria are for information asymmetry.

Haggard et al (2008) study examines the relationship between voluntary disclosure and improving the information content of their stock prices Research period from 1982 to 1995 and includes the 2084 year - the company. The result was that improving the level of voluntary disclosure to the stock price volatility is reduced. Corporate disclosure policy also makes a positive impact on stock prices and stock returns of companies’ content.

Fu et al (2012) examined the impact of financial reporting often focused on information asymmetry and cost of capital. The sample consisted of 7654 year during 1951 to 1973. The findings of this study showed that an increase in the frequency of financial reporting by reducing the information asymmetry and cost of capital is mobile. It also forced changes in the frequency of financial reports also showed similar results.

**RESEARCH METHODOLOGY**

Methods This study is correlational in nature and content , that uses secondary data extracted from the financial statements of companies listed in Tehran Stock Exchange devoted to analyzing the relationship of solidarity. Because the method discovered correlations between variables correlation . One type of research is descriptive correlational research . On the other hand ex post facto study (experimental), which is based on the analysis of the past and historical information (financial statements) is performed . The research and analytical study library - Ali and based on panel data analysis (panel data) as well.

The aim of this study is the applied research. Applied research, research that Using the results of fundamental research to improve and integrity in the behavior, methods, tools, equipment, products, structures and patterns of human societies is used. Applied research also studies the theories, laws, principles and techniques that are developed in basic research to solve performance problems is to work.
RESEARCH HYPOTHESIS

1. between voluntary disclosure (Internet-based) and information asymmetry in companies listed on the Tehran Stock Exchange there is a significant relationship.
2. Turnover ratio of trading volume and asymmetry of information between companies listed on Tehran Stock Exchange there is a significant relationship.
3. Stock price fluctuations and asymmetry of information between companies listed on Tehran Stock Exchange there is a significant relationship.

SAMPLING AND SAMPLE SIZE

In this study, the systematic elimination method is used to determine the sample. Therefore, the selected sample includes companies listed on Tehran Stock Exchange which meet the following conditions:

1. They fiscal year ending March 29 of each year during the period under review have not changed their fiscal year.
2. All the data for this study, for those companies within the scope of the aforementioned time periods, are available.
3. They are not negative equity book value of any item.
4. These companies should be adopted before the year 2009 and the beginning of 2009 in Tehran Stock Exchange, whose shares are traded on the stock exchange.
5. These companies should during the years 2009 to 2013 transactions in the stock exchange is interrupted. On the other hand, shares of these companies must be active in recent years in stock and must not be interrupted during more than three months.
6. Investment firms, insurance and financial intermediaries was not investigated in this study.
7. Maximum one month after the Annual General Assembly, whose shares have been traded.

Due to the above conditions set the 346 companies listed on the exchange, the number of 78 companies sampled in this study are important characteristics of the company.

THE DATA COLLECTION TOOL

The phenomenon of quantitative and qualitative features that knowledge of these characteristics is dependent on the nature and how to achieve them. These phenomena are variable over time transformation Grnd. hdf any descriptive or explanatory research, including access to information about these changes. Through which they are required to obtain data that can be temporary hypotheses as possible answers to the problem have been proposed to test the research. Various tools to obtain data such as observation, interviews, questionnaires and documents there. In this study is to collect data mining and data required documents from the audited financial statements of listed companies in Tehran Stock Exchange and databases, software in this area Such as cash management and organizational information systems exchange is obtained.

METHODS AND TOOLS OF DATA ANALYSIS

Data analysis is a multi-step process in which data are collected in different ways, summarized, sorted and finally processed to establish context and analysis of the relationships between data to be provided to test the hypotheses. In this process, both conceptually and in terms of empirical data filtering and various techniques of statistical inference and generalization play an important role (khaki, 2005, p. 305). In this study, using data collected from a sample which contains a number of companies are in the period 2009-2013, the research hypotheses are tested. In the current study is hypothesis testing mixed data that utilizes software and Eviews is done Spss. That data using Excel classified and variables are calculated and then analyzed using the software mentioned are final.

DESCRIPTIVE ANALYSIS OF DATA

In order to better understand the nature of the sample that was investigated in this study and learn more about the variables, the analysis of statistical data, it is necessary to describe the data. As well as data describing a step in the direction of the pattern recognition and the basis for explaining the relationship between the variables used in the study. Descriptive statistics overview of the condition variables, including average, minimum, maximum and number of observations provide to users an overview of the variables and obtain research data. Descriptive analysis of data obtained from this study are presented in Table 1.

<table>
<thead>
<tr>
<th>Variable name</th>
<th>Variable type</th>
<th>Variable symbol</th>
<th>The mean</th>
<th>The maximum</th>
<th>At least</th>
<th>Num ber of views</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet-based information disclosure</td>
<td>Indepedent</td>
<td>IBID</td>
<td>/6230</td>
<td>1</td>
<td>0</td>
<td>390</td>
</tr>
<tr>
<td>Volatility of turnover stock price</td>
<td>Indepedent</td>
<td>vsp</td>
<td>/19971</td>
<td>16/220</td>
<td>564 /6</td>
<td>390</td>
</tr>
<tr>
<td>Turnover ratio of turnover</td>
<td>Indepedent</td>
<td>TR</td>
<td>/7145</td>
<td>2/0614</td>
<td>027 /6</td>
<td>390</td>
</tr>
<tr>
<td>Information asymmetry</td>
<td>Dependent</td>
<td>BA</td>
<td>/01811</td>
<td>/9382</td>
<td>0</td>
<td>390</td>
</tr>
<tr>
<td>Size</td>
<td>Control</td>
<td>SIZ E</td>
<td>48124</td>
<td>7</td>
<td>56</td>
<td>390</td>
</tr>
<tr>
<td>Financial Leverage</td>
<td>Control</td>
<td>LE V</td>
<td>/5883</td>
<td>/9067</td>
<td>096 /4</td>
<td>390</td>
</tr>
</tbody>
</table>

INFERENCEAL STATISTICS

After descriptive statistics of the research variables, inferential statistics research to more detailed analysis as well as confirm or refute the hypotheses offered. In
The results of the test show that reject the hypothesis H0 and H1-based hypotheses using panel data is confirmed by the fact that the probability of the test statistic is less than 0.05.

**Hausman test:**

After it is determined that the technique used panel data, so using fixed or random effects model Hausman test status is determined so that the regression model to be estimated. For this purpose, fixed or random effects model Hausman test is used for diagnosis. Hausman test hypothesis is as follows:

- H0 : α = αs
- H1 : α ≠ αs

Null hypothesis means that communication between the intercept and disrupt the explanatory variables does not exist, then they are independent of each other. While in theory, this means that between the disturbing and the explanatory variable bias and inconsistency encountered a problem if accepted, so it is better to H1 (rejecting H0). Under the hypothesis H0 we use fixed effect both fixed and random effects are compatible, but the effect is not constant. This means that in case of rejection of the hypothesis H0 fixed effect and random effects incompatible compatible and should use the fixed effects approach. The results of Hausman test is provided in Table 4:

**Table 4. Hausman test**

<table>
<thead>
<tr>
<th>Model</th>
<th>Test</th>
<th>Degrees of freedom</th>
<th>Probability test</th>
</tr>
</thead>
<tbody>
<tr>
<td>hausman</td>
<td>21.204041</td>
<td>7</td>
<td>0.0035</td>
</tr>
</tbody>
</table>

Hausman test results indicate that the null hypothesis is rejected and the hypothesis H1 is based on the use of fixed effects approach is adopted. The research model using panel data and fixed effects estimates. The results of the regression model are presented in Table 5:

**Table 5. Estimated regression results**

<table>
<thead>
<tr>
<th>research model</th>
<th>Coefficients</th>
<th>T-statistic</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant factor</td>
<td>0.01278</td>
<td>3.30836</td>
<td>0.0011</td>
</tr>
</tbody>
</table>

Internet-based information disclosure:

<table>
<thead>
<tr>
<th>Test</th>
<th>Degrees of freedom</th>
<th>Probability test</th>
</tr>
</thead>
<tbody>
<tr>
<td>-0.00284</td>
<td>-200325</td>
<td>0.0314</td>
</tr>
</tbody>
</table>

Volatility of stock price:

<table>
<thead>
<tr>
<th>Test</th>
<th>Degrees of freedom</th>
<th>Probability test</th>
</tr>
</thead>
<tbody>
<tr>
<td>-3.45</td>
<td>-0.90515</td>
<td>0.9279</td>
</tr>
</tbody>
</table>

Turnover ratio of turnover:

<table>
<thead>
<tr>
<th>Test</th>
<th>Degrees of freedom</th>
<th>Probability test</th>
</tr>
</thead>
<tbody>
<tr>
<td>-0.003456</td>
<td>-1.3979</td>
<td>0.0232</td>
</tr>
</tbody>
</table>

stock price:

<table>
<thead>
<tr>
<th>Test</th>
<th>Degrees of freedom</th>
<th>Probability test</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.15</td>
<td>2.271</td>
<td>0.8204</td>
</tr>
</tbody>
</table>

Concentration of ownership:

<table>
<thead>
<tr>
<th>Test</th>
<th>Degrees of freedom</th>
<th>Probability test</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.44</td>
<td>1.3014</td>
<td>0.0141</td>
</tr>
</tbody>
</table>
The results presented in Table 5 can be more understanding in connection with the present investigation. F Fisher test, determination coefficient, camera -Watson statistic of cases that have been dealt with. Fisher F test is used to evaluate the significance of the model. In fact, the relationship between the variables in the form of a general relationship is examined. The null hypothesis in this test indicates a significant lack of the model we show the significance of the research. The significance level it can be concluded that the null hypothesis is rejected and the hypothesis H1 is accepted (because the significance level of less than 05 / is). As a result of the research is significant. This is the coefficient of determination indicates how much of the variation in the dependent variable can be explained by the independent variables. Given that the adjusted coefficient of determination provides a much more reliable, we can say that about 20% of changes in information asymmetry by the independent variables (disclosure of information, the stock price, trade volume and turnover ...) explained are. Because many variables can affect the information asymmetry companies and research as well as a range due to their special ability to examine all variables, so given the number of variables, 20% of the desired value appears. In addition to the above statistics, Watson camera statistic is widely used to evaluate the independence of error components. The amount of exposure in the range of 5/1 to 5/2 for this statistic whose According to the results presented can be said that the research model, there is independence between error components and your problem is not observed correlation between variables.

CONCLUSION

The main hypothesis of the first test:

The first hypothesis of this study is formulated as follows: Between voluntary disclosure (Internet-based) and information asymmetry in companies listed on the Tehran Stock Exchange there is a significant relationship.

In order to be able to confirm or refute the hypothesis, the researchers claim, you should statistical hypotheses H0 and H1 hypotheses formulated the hypothesis H1 is expressed in the research claims. Then, based on these results and the significant level of the variable coefficient of action to approve or reject the hypothesis. The first hypothesis states that the level of voluntary disclosure and information asymmetry there is a significant relationship. The results and the significant level of disclosure of information for the variable t test shows that there is a significant relationship between the variables, because the significance level of less than 05 / and thus claim the researcher's hypothesis is confirmed. Disclosure variable coefficient is negative, indicating the inverse relationship between the two variables is negative. In other words, by increasing the level of voluntary disclosure on the Internet, the information asymmetry is reduced.

The second major hypothesis testing:

The second hypothesis of this study is formulated as follows:

Turnover ratio of trading volume and asymmetry of information between companies listed on Tehran Stock Exchange there is a significant relationship.

The second hypothesis explores the relationship between the flow of information and information asymmetry is addressed. The null hypothesis reflects the lack of relationship between these two variables and alternative hypothesis suggests a significant relationship between independent and dependent variables of our study. The results presented in Table 4.5 represents a significant correlation between trading volume and turnover ratio information asymmetry, because the significance level of less than 05 / is. As a result of the alleged hypothesis researcher at 95% acceptance and H0 hypothesis is rejected. Obtained coefficient also shows a significant negative correlation between these two variables. In other words, increasing the proportion of turnover, the asymmetry of information using criteria to measure the difference between the bid and offer price has been reduced.

The third main hypothesis testing:

The third hypothesis is currently formulated as follows:

Stock price fluctuations and asymmetry of information between companies listed on Tehran Stock Exchange there is a significant relationship.

The third hypothesis to confirm or deny the significance level of t test is given. If the significance level of less than 05 / Hypothesis hypothesis is confirmed, otherwise the claim is rejected. The significance level for hypothesis testing more than 05 t / is, indicating no significant relationship between stock price volatility and asymmetry of information. In fact, during the period investigated for the samples and data are significant relationship has not been established, so the hypothesis researcher claims to be rejected. Significance level for this hypothesis 9279 / is.

Research limitations:

Limitations of the study are in the process of gathering information and analyzing the results, which are causing problems The use of research results and generalize it to other times and places should be considered. The main limitation of this study can be mentioned the following:
1. This study was conducted in the period of 2009 to 2013, the users in their analysis of the results should consider it.

2. This study was conducted among listed companies Tehran Stock Exchange and therefore companies out of stock may happen into account in the analysis of problems. Basically the capital structure, management style and the stock companies with foreign companies is different from the stock exchange.

3. The method of calculating variables such as the online disclosure of information, concentration of ownership, information asymmetry do not have a unique and distinct and thus may be different research different methods used to calculate the Users should consider these results.

Suggestions:

1. The results show a significant relationship between the level of voluntary disclosure (Internet-based) and there is information asymmetry. Accordingly, it is proposed to Tehran Stock Exchange by providing the necessary programs and consulting companies, They are encouraged to have a Web site and data base up to date and complete, so that the total market capitalization reduced information asymmetry. Company is also recommended, in order to gain the trust of shareholders and investors more useful information about the financial activities and Your operational as soon as possible on their online websites give.

2. The results between trading volume and turnover ratio information asymmetry there is a significant relationship. Accordingly, it is suggested to companies about their trading volume on a daily basis along with the information disclosed as shareholders who bought stock have done, on their official websites. It can not only inform visitors enjoy the high index of corporate disclosures.

3. The results show a significant relationship between volatility and stock price information asymmetry was not observed, and companies that have greater volatility, not necessarily more asymmetry. Accordingly, it is proposed that the shareholders in the stock selection given that companies with high price volatility, higher risk is able to act more carefully. Functional and reliable information because it could cause volatility to buy or sell stock (information asymmetry between buyer and seller) provide.

4. The results show a significant relationship between stock prices and information asymmetry exists. Accordingly, it is proposed to shareholders and investors (buyers and sellers of stock) rather than the stock prices, stock prices, according to information content and to carry out a fundamental analysis of the stock price to obtain the necessary information. Because only then that we can reduce information asymmetry.

5. The results indicate no significant relationship between ownership concentration and there is information asymmetry and with increasing concentration, reduced information asymmetry. For this reason it is recommended that shareholders buy shares in companies that split the ownership concentration is high in the upper act with caution and After obtaining the necessary information in relation to the shares owned company to buy their stock. Companies that focus on high is because the information that sellers with buyers are at the same level is not in stock.

REFERENCES


