EFFECTS OF FINANCIAL INFORMATION TRANSPARENCY ON INVESTOR BEHAVIOR IN THE TEHRAN STOCK EXCHANGE

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ABSTRACT

Within the two past decades, transparency of financial market has been regarded as one of the variables that affect investment strategies in financial markets. This research investigates the relationship of transparency of financial information with the Investors' behavior in Tehran Stock Exchange. The statistical population of the research is composed of Investors in the Tehran Stock Exchange. The research employs the questionnaire tool during the period between 1, January, 2013 and 21 May 2014. To test the hypothesis, correlation test, paired different test and one-way factor analysis were used. The three hypotheses of the research were tested at the level of 95 percent. The results show that the all three aspects of transparency, i.e. the disclosure of financial information, transparency within the board structure and the transparency of ownership structure influence the behavior of investors in the Tehran Stock Exchange. The investors' perception of the aspects of transparency depends on demographic variables are different. This research tries to offer helpful recommendations to the investor to adjust their behavior according to the stock exchange conditions.

Keywords: Financial Disclosure, Investors, Tehran Stock Exchange, Transparency, Investment Behavior

INTRODUCTION

Economic decisions require information that help them can be allocated with the resources available as desired. One of the most important factors in correct making-decide is appropriate information and relevant to the decision that if not properly processed and provided, has negative effects on the individual decision maker. Using of information disclosure and in the other word making correct decisions on the securities

market is possible that this information is timely, relevant, complete and understandable. If disclosed information has not these features or some of them, no doubt is that the market price discovery mechanism will not function correctly and priced securities will not be made in a manner satisfactory. The sufficient information in market and quick and timely reflection of the information about stock prices are closely associated to market performance. Disclosure of information enhances the price discovery mechanism and thus optimizes pricing and raises the reasonable forecasts for price trends. Transparency is the index of management potency to provide the necessary information as properly, clearly, timely and available. In other words, transparency implies that that whether investors have true picture of what really going on inside the company or not **(Vatan Parast, 1387)**. Over the past decade, the transparency of financial information has a major effect on the strategies of investment of investors. Growing number of studies suggest that the availability and quality of financial information are two keys factors influencing the investment decisions of investors **(Wenland, 2003). Admati & Pfleiderer, (2000)** So far many researches have been conducted in many areas related to capital markets, but what there is less considered is

to pay attention to the serious research on the taking shape of behavior of investors in the stock market. In most countries, understanding the decision-making process of participants in the exchange market always was an important issue for market participants and investors. In these countries, researchers have considerable efforts to study and understand the factors that influence the behavior of investors and followed by the effect of the factors on financial disclosure and transparency of financial information, because the behaviors that are influenced by the transparency of financial information are of particular importance **(Yousefi and Shahrabadi, 1388)**. And given that investment behavior is affected by various factors is also important. These factors causing behavioral uncertainties in the behavior of investors that is one of the main causes of behavioral uncertainty and exposed to uncertainty and lack of transparency of financial information that would make incorrect and misleading analysis.

Theoretical Foundations

One of the requirements of fair competition is the accessibility transparent data access for all market participants. One of the important types of markets is capital markets which the transparent information is highly effective on its performance. Lack of information on the market makes to

increasing of transaction costs and market failure in the optimal allocation of resources. Information which is an integral part of the decision making process, more transparent and more accessible, can be more accurate decisions on resource allocation and eventually lead to allocated efficiency and transparency of the market that it is the ultimate goal of the capital market. Behavior of investors in the stock exchange will be affected, how to make decisions, allocation of finance, pricing and evaluating of corporate performance. Ambiguous situations and cognitive errors that are rooted in human psychology make to the investors to have a mistake in forming of their expectations and therefore special care when investing in financial markets. Behavior of investors is affected by many factors, that one of the main causes of the behavioral ambiguities is the issue of uncertainty and lack of information transparency. If confidential and heterogeneous information is published, there are observed different responses in the financial markets that will bring the false and misleading analysis (**Sianii and Davoodi, 1388**). Considering the fact that people are not always rational, financial decisions may also be derived from the financial prejudice. Therefore, the study of financial behavior plays an important role in financial decisions, where cognitive

psychology applied to understand human behavior (**Kim & Nofsinger, 2008**). Over the past decade, national and international financial markets have experienced many crises. A major cause of this crisis is the lack of transparent and complete financial information and it will be affected the public confidence in capital markets negatively (**Sridharan et al., 2002**). Given the above, this study investigated the relationship between transparency of financial information and investment behavior in the Tehran Stock Exchange.

Transparency of Financial Information

Anonymous (1999) defined transparency as timely and reliable increase of economic, social and political information which is accessible for all related stakeholders. Also they defined lack of transparency as intentional prevention of access to information, misrepresentation of information or market failure to ensure efficiency and quality of the information provided. Florin defined transparency as "disclosure of information by companies which is related to their evaluation". In fact, transparency is closely related to accountability and the reason for demand for transparency is that the market sees companies responsible for the adopted policies and their performance. The common point in all above definitions is "ability to access information" and "the

ability to communicate and presence of receive and send information process", each of which are explained in the following. Concept of transparency in markets has some important features. Presence of transparency ensures that there are these indices in information. Vishmanth provided a model for measurement of financial information disclosure.

Disclosure of Financial Information

Economic thinkers argue that the disclosure is a complex phenomenon that cannot be described by a theory **(Vishwanath, 2006)**. **Broberg et al, (2010)** develop a model to measure the financial disclosure. They present three criteria for transparency of information:

1- Accessibility or availability of information;
2- Be relevance, and
3- The quality and reliability.

Accessibility focuses on the communications equipment of company to providing financial information. This concept is evaluable through the internet, radio, TV, newspapers and other public advertising for firm.

A limitation in measuring of the first criteria is: the lack of education or knowledge of users about how to use and analysis of data. The second criterion (be relevance) implies to determination and defining of select the appropriate data is difficult. The third

criterion is to study the quality and reliability and refers to the issue that the disseminated financial information should be effective, clear and simple. This information must also conform to generally accepted accounting principles.

Corporate Governance

System of corporate governance, as linking system for the several branches of science such as accounting, economics, finance and law and aims to maintain a balance between social, economic and ensemble will be induce to efficient use of resources and the requirements of the accountability of corporate towards others shareholders. On the other hand, the implementation of corporate governance will be caused to optimal allocation of resources and improve the transparency of information and eventually the growth of economic development **(John et al., 1998)**. The corporate governance originated from Greek word "Kyberman" is meant to "guide" or "govern" and transferred from the Greek word to the Latin word "Gubernare" and old France "Governer". But the word has been defined to different ways by organizations or committees according to their ideological preferences **(Abu-Tapanjeh, 2009)**. The definitions of corporate governance are very extensive. In one state, one can be classified the definition of it to limited views that limit the definition to the relationship between

shareholders and company and to the broad views that proceed to the note of relationships of other shareholders **(Hassas yeganeh, 1384)**. Corporate governance includes formal and informal contractual agreements among the shareholders **(North, 1994)**. Corporate governance ensure to the minority shareholders that it give the transparent and reliable information about the financial position, performance and value of the company to them and protects from their wealth against abuse from executives and majority shareholders **(Hsiu, 2006)**. From a narrow perspective, corporate governance can be defined only in relationship of shareholders and in a wider range this is defined as a network of relationships and includes all employees, costumers, people, society, etc. **(Hassas Yeganeh, 1385)**. **Freeman (1994)** raises the corporate accountability to a broad group of stakeholders. Hill & **Jones (1992)** using of this this theory and argue that the company is not owned to shareholders, but it is owned by all nominees and they have interested and responsibility to company and are aligned and contribute by their enthusiasm and the desire to improve the performance of board members.

Efficiency of the Securities market

The theory of efficiency of market comes back to 1970 and hypothesis of market by Fama. In this hypothesis, Fama develop three degrees of efficiency that can be applicable in market. First is a strong efficiency that puts all private and public information have effect on the current stock price of company and in the degree of efficiency cannot be achieved more profitability. Second is semi-strong efficiency that puts all public information has an effect on the current stock price of company. Therefore, fundamental analysis involves the analysis of economic, industrial and private companies cannot be used to gain more profit. Third efficiency is poor efficiency and argues that all information about past price of stock is reflected in current stock prices. Consequently, technical analysis cannot to help investors to obtain more profits. **Sarno & Thornton, (2004)** according to the effective markets hypothesis, although all of the investors are not rational, the markets are assumed to be rational. In addition, instead of forecasting, markets provide unbiased forecasts and from the perspective of financial behavior, financial markets have not efficient information **(Ritter 2003)**. **Jackson (2003)** developed the theory of capital market efficiency and the divided the theory for two different groups of people. The first group includes experts of capital market such as market analyzers. This group can often have a benefit which provided by the financial information based on educational

background. The second group includes market model or the middle-investors. This group often has less knowledge about financial information or has not sufficient time to read or understand financial information that has been published. The group will use the theory of technical market analysts.

Research Background

Noubakht (1383) in his study titled "Assessment of information transparency for companies in the Stock Exchange." To prove the following hypothesis:
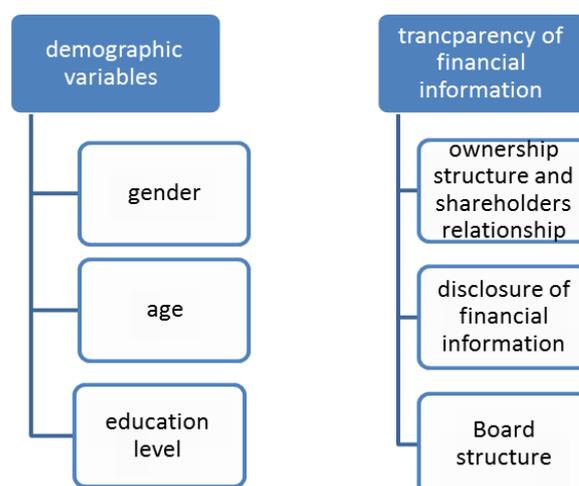
- The reporting of information by companies is desirable;
- Possibility of accessibility of public to information of companies;
- Dissemination of information of companies is desirable.
- The ingredients of transparency of information of companies (desired reporting, equal accessibility, desired dissemination) take equal desiring.

Researcher using theoretical foundation of the efficient capital market and the role of information, types of information contained in the stock market, types of common violations in stock exchange and using descriptive research method and questionnaire tools and using t-statistical test for the mentioned hypothesis make to

rejecting all hypotheses **(Noubakht , 1383)**. **Cai et al (2008)** study the effect of asymmetric information on the three main mechanisms of corporate governance (The intensity of supervisory of board, market discipline and sensitivity of payment for performance of top management).They found that companies with greater information asymmetry will be trend to use less of the supervisory of board, greater market discipline and having the higher performance of top management. **Born et, al. (2004)** conducted study for the insurance industry of USA according to signaling theory and transparency of financial information. According to the signaling theory and transparency of financial information to there be examined the recognition whether law, regulation and monitoring reduce the degree of asymmetric information between insurers and investors.Hsiu investigated role of financial information transparency in increased investment in stock exchange. Results showed that all three aspects of transparency including financial information disclosure, ownership structure transparency and transparency of the board structure, affect behavior of investors in stock exchange, and ownership structure had the highest influence. Of course, investors in stock exchange mostly care for financial information disclosure. Also understanding

of investors from transparency aspects with regard to their demographic variables is different and there is positive and significant relationship between experience of the stock investment and their behavior.

Research Conceptual Model

The conceptual model presented in this study is the model proposed by Hsiu includes all the variables studied in this research. Thus, the model in this research is as follows.

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demographic          trancparency of
variables            financial
                     information
   ┌─ gender           ┌─ ownership
   │                   │  structure and
   │                   │  shareholders
   ├─ age              │  relationship
   │                   ├─ disclosure of
   └─ education        │  financial
      level            │  information
                       └─ Board
                          structure
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According to the theoretical and conceptual model of the research, hypotheses of research are set as follows:

- There is significant relationship between understanding of aspects of the transparency of financial information of investors (ownership structure, financial disclosure, and board structure) and their behavior in Tehran Stock Exchange.

- There is not significant relationship between understanding of aspects of the transparency of financial information of investors (ownership structure, financial disclosure, and board structure) in Tehran Stock Exchange due to demographic variables.

- There is significant relationship in behaviors of investors in Tehran Stock Exchange due to their different experience of investment in stock exchange.

RESEARCH METHODOLOGY

Data library studies and field studies were included in this study. The library studies were used in the issues related to the research literature and research background and two-part questionnaire for data collection was provided by Hsui. The first part of the questionnaire consisted assessment tool for aspects of transparency of financial information consist 14 questions. In this study participants are asked to show their understanding of aspects of transparency of financial information and

their behaviors on the Tehran Stock Exchange based on seven-level Likert item from quite agree to quite disagree. The second part of the questionnaire included questions on demographic issues of investors such as gender, age, education and the level of experience investing in the stock market, which made up a total of 5 questions. Note that the same questionnaire used by Hsui and its reliability and validity was testing once- merely symbolic validities were reexamined. Thus the questionnaire was placed on faculties of Tehran University to make comments and express their opinions about levels of integrity and transparency in relation to the questions and finally verify the validity of the questionnaire. The reliability of the questionnaire was calculated using Cronbach's alpha that the method is used to calculating the internal consistency of the instrument measure such as questionnaire **(Bazargan and Sarmad 1377)**, therefore, the calculated values of Cronbach's alpha for each variable and total are presented in **Table 1**. The population of the study includes capital and shareholders of Tehran Stock Exchange; in this study did not consider people under 18 years in this community, because the investment for these people is done by third party and because the population is unlimited, the

following equation was used to obtain the sample size.

Success ratio was considered equal to 0.5 (p) that put in the above formula at 95% confidence level and the coefficient of error 0.06, a sample size of 267 was obtained. Given to probably that the number of questionnaires was not returned, then about 280 questionnaires were distributed that finally the 270 questionnaires were returned and analyzed. The sampling method used in this study was same available sampling and because the study sample was extensive, this method of sampling was possible. To analyze the data, the descriptive statistics (the results are given in **Table 2**) was used in order to examine the sample characteristics and then inferential statistics (Correlation analysis, coefficient of Pearson correlation, significance test for correlation coefficient, paired t-test, one-sided factor analysis test) were used for analysis of questionnaires.

Testing Hypotheses

H1. There is positive relationship between the perception of investors from aspects of transparency of financial information (ownership structure, board structure and financial transparency) and their behavior in relation to the Tehran Stock Exchange.

Results of test of this hypothesis using the Pearson correlation coefficient show in **Table 3**.

Given to first column in the **Table 3**, results showed that all three aspects of transparency including financial information disclosure, ownership structure transparency and transparency of the board structure, affect behavior of investors in Tehran Stock Exchange, and disclosure of information had the highest influence and board structure had the lowest influence. In similar study in the stock exchange, Sinaii (1388) concludes that there is relationship between all three aspects of transparency including financial information disclosure, ownership structure transparency and transparency of the board structure and behavior of investors.

H2.there is significant relationship between the perception of investors from aspects of transparency of financial information (ownership structure, board structure and financial transparency) and their demographic variables (gender, age, education).

Difference test between variable of the investor perception of transparency and gender:

In **Table 4**, the difference in investors' perception as an aspect of transparency of financial with regard to their gender is investigated by paired different test. In this table t-statistics were calculated for variables of the theory. With respect to the first column in the table, we can say that a significant difference in the perception of male and female investors in the Tehran Stock Exchange of disclosure of information. In addition, we can say that there is not a significant difference in the perception of male and female investors from aspect of transparency of board structure in the Tehran Stock Exchange. It shows that the perception of transparency in board structure between men and women is not different. In addition, there is a significant difference in the perception of male and female investors from aspect of disclosure of financial information in the Tehran Stock Exchange. The results of this study are different with similar studies by **Hsiu (2006)**. Also the results of this study have not consistent with study of **Sinaii (1388)** in the Tehran Stock Exchange.

Difference test between variable of the investor perception of transparency and age

In **Table 5**, the difference in investors' perception as an aspect of transparency of financial with regard to their age is investigated by one-way factor analysis. In this table F-statistics were calculated for variables of the theory. With respect to the first column in the table, we can say that a significant difference in the perception of investors with different age group in the Tehran Stock Exchange of disclosure of information. In addition, we can say that

there is not a significant difference in the perception of investors with different age group from aspect of transparency of board structure in the Tehran Stock Exchange. We can say that there is a significant difference in the perception of investors with different age group from aspect of disclosure of financial information in the Tehran Stock Exchange It shows that due to requirement of age of the people, the disclosure of financial information is very important.

Difference test between variable of the investor perception of transparency and education level:

In **Table 6**, the difference in investors' perception as an aspect of transparency of financial with regard to their education level is investigated by one-way factor analysis. With respect to the first column in the table, we can say that there is a significant difference in the perception of investors in different educational group from transparency of board structure in the Tehran Stock Exchange. In addition, we can say that there is a significant difference in the perception of investors in different educational group from disclosure of financial information in the Tehran Stock Exchange. The results of this study are the same with similar studies by **Hsiu (2006)** in the Taiwan Stock Exchange and also are consistent with study of **Sinaii (1388)** in the Tehran Stock Exchange.

H3. There is significant difference in behavior of investors in Tehran Stock Exchange due to their different experiences in stock investment.

Table 7 investigates the difference in the behavior of investors in the stock market given to their experience in investment in stock exchange using one-way factor analysis. According to the F-statistic for these two variables, it can be concluded that there is significant differences in investment behavior given to their experience in investment in stock exchange that is similar to studies of **Hsiu (2006)**.

Table 1-Results of the Cronbach's alpha coefficient

Factors of questionnaire	Transparency of ownership structure	Transparency of board structure	Disclosure of financial information	Investors behavior
Cronbach's alpha	0.79	0.82	0.86	0.80

Table 2: Results of Descriptive Statistics

Features		number	Percent
gender	Male	237	88
	Female	33	12
age	Less than 30	66	24
	Between 30 to 45	116	43
	Between 45 to 60	59	22
	More than 60	29	11
Education	Diploma and lower	27	10

	Technician	49	18
	bachelor	145	54
	master	49	18

Table 3: Pearson correlation coefficient between the transparency of financial information and investment behavior

Variables	correlation coefficient	Significance level	Error level	result
Perception of transparency of ownership structure and the behavior of investors	0.424	0.015	0.05	H0 rejected
Perception of transparency of board structure and the behavior of investors	0.211	0.034	0.05	H0 rejected
Perception of transparency of disclosure of information and the behavior of investors	0.566	0.003	0.05	H0 rejected

Table 4: t-statistic for the test of the difference between transparency and gender

Variables	t-test	Significant level	Error level	result
Transparency of ownership structure and gender	-3.14	0.018	0.05	H0 rejected
Transparency of board structure and gender	-0.243	0.502	0.05	H0 accepted
Disclosure of financial information and gender	-4.26	0.007	0.05	H0 rejected

Table 5: t-statistic for the test of the difference between transparency and age

Variables	t-test	Significant level	Error level	result
Transparency of ownership structure and age	2.14	0.11	0.05	H0 accepted
Transparency of board structure and age	3.07	0.07	0.05	H0 accepted
Disclosure of financial information and age	7.13	0.001	0.05	H0 rejected

Table 6- The F-statistic for the test of the difference between transparency and education variables

Variables	t-test	Significant level	Error level	result
Transparency of ownership structure and education level	2.33	0.004	0.05	H0 rejected
Transparency of board structure and education level	5.26	0.000	0.05	H0 rejected
Disclosure of financial information and education level	6.43	0.000	0.05	H0 rejected

Table 7- The F-statistic for the test of the difference between behavior of investors and their experience

Variables	t-test	Significant level	Error level	result
behavior of investors and their experience	4.68	0.015	0.05	H0 rejected

DISCUSSION AND CONCLUSIONS

Results showed that there is significant relationship between all three aspects of transparency including financial information disclosure, ownership structure transparency and transparency of the board structure with behavior of investors (dependent variable) and the relationship between financial information disclosures and behavior of investors had the highest correlation. This

means that investors have more reaction to timely and accurate information to anything else. In the next order, the transparency of ownership structure is concerned, this means that the company has a limited number of investors or scattered investors that is very important to investors. However, the information related to board structure that is resulting of ownership structure is important. In addition, it was found that there is difference between the investors' perception of aspect of the transparency of ownership structure, financial information disclosure and transparency of board structure according to demographic characteristic. According to **Table 4**, the investors' perception of aspect of the financial information disclosure and ownership structure is different due to their gender, and the transparency of board structure is equal due to their gender. According to **Table 5**, there is not relationship between the financial information disclosure and age of the investors, with respect to it, the financial information disclosure for investors by all ages is important. It also became clear that investors' perception of three aspects of transparency of information will vary according to their education and many educated people have different perceptions and analysis of financial data of company.

In addition, it was found that behavior of investors in the stock market vary according to their experience, because the experience helps them to obtain more accurate and better information that will help them in the analysis. The significance of this research is that the research most have been conducted in other industrialized countries as well as countries in East Asia, therefore, this study can also help to investors to modify their behavior consistent with the conditions of stock exchange in Iran as well as in the field of neighboring countries.

The adoption and implementation of corporate governance regulations that pays special attention to the corporate governance system and board particularly due to the privatization process, seems to be necessary.

Securities and Exchange Organization should be applying an integrated system to evaluate the distribution of ownership in case of listed companies.

The greater disclosure of information about the distribution of ownership should be made to ensure that the investors and users of statement will be achieve to sufficient information in this area.

Requirements of the disclosure of governing information on the listed companies in the Stock Exchange should be considered with aim to improve financial transparency in the country

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