

Evaluating the Effect of Financial Reporting Knowledge Level on Judgmental Behaviors of Non-Professional Investors

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ABSTRACT

The present study aimed to evaluate the effect of financial reporting knowledge level on the judgmental behaviors of non-professional investors in the Tehran Stock Exchange. In the present study, the relationship between judgment, decision-making and perception of non-professional investors based on the academic degree and relevance of academic degree and level of useful work experience was investigated. To achieve the above-mentioned goal, the present study was considered from the beginning of July 2015 to the end of December 2015. Finally, 223 real investors, who bought shares in the Tehran Stock Exchange, were selected in this study. The present study was applied in terms of aim. Mean comparison test and t-test were used as the statistical methods to test the hypotheses in the research. The results indicated that the academic degree, the relevance of academic degree and useful work experience had a significant effect on the judgment, perception and decision of non-professional investors.

Keywords: Non-professional investors, Financial reporting, Judgment, Perception, Decision-making

Introduction

The stock exchange and securities help to aggregate micro and macro capitals and are one of the institutions that have the largest audience of auditing reports. It is crucial to pay attention to the extent to which investors use auditing reports since it reflects whether the auditing report meets the needs of this group of stakeholders and provides them with useful and understandable information or not. An auditor's report is a useful tool for assessing the reliability of financial information provided by firms and usually includes more information about the provided financial statements. Using audit reports can help investors make better decisions, gain more profits by using more reliable information, make better choices, and guide capital from parallel markets to the stock market. One of the fundamental needs of all users (stakeholders) of financial statements is paying attention to the quality of information provided by suppliers of financial statements information in companies and economic units and the need to provide high-quality information by suppliers, as this information has a great impact on people economic decisions. Thus, providing high-quality information will lead to making the right economic decisions. In this regard, auditing financial

statements is one of the tools, which is very useful for examining the status of presentation and quality of information available in financial statements. The results of the audit are presented as a report to the users of financial statements.

Investors in stock exchanges and securities are one of these groups of users, using these reports according to their need to make investment decisions and earn returns from these reports (Gholami et al., 2013). The users of financial information tend to use accurate, clear and reliable information, since they intend to rely on this information to invest their capital in important economic sectors (Vakilifard and Aliakbari, 2009). Knowing how users perceive financial information about financial reporting concepts, as well as the ways of using these concepts in their financial judgments and decisions is crucial. Non-professional investors are major subset of these users, which are indirectly affected by financial reporting (Abbaszad et al., 2013). In other words, the more non-professional investors use accounting information, the more they are expected to make rational and appropriate decisions. Quick and easy access to information prevents the spread of false rumors and abuse of people who have primary access to information. It also prevents loss for actual and potential shareholders in trading stocks at unrealistic prices. In the absence of a proper system that provides reliable information to investors, public trust in the market is lost and the market loses its efficiency (Tehrani et al., 2006).

Finally, the behavior of non-professional investors based on their academic degree and work experience and the way of using financial information published by companies is not clear, so research in this area would be useful. Also, in today's world, access to information, including financial information, regardless of its quality is not considered a useful strategy. Financial statements as one of the most important types of information available to investors should have high quality. To improve the quality of financial reporting and thus improve its usefulness, the information needs of non-professional investors should be considered. Given the goal of financial reporting, it is to provide useful information to facilitate the judgments, perception and economic decisions of users of financial statements. Also, the needs of these users can be a criterion for the quality of financial statements. In this regard, factors that seem to be effective in facilitating the judgments, perceptions and decisions of non-professional investors are crucial. Useful work experience and academic degree are among these factors in the present study. In this study, the effect of useful work experience and the relevance of academic degree and the relevance of academic degree on the behavior of non-professional investors (judgments, perceptions and decisions) in the Tehran Stock Exchange were examined to provide the necessary guidelines for non-professional investors to make right decisions in the stock market.

Conceptual model of research

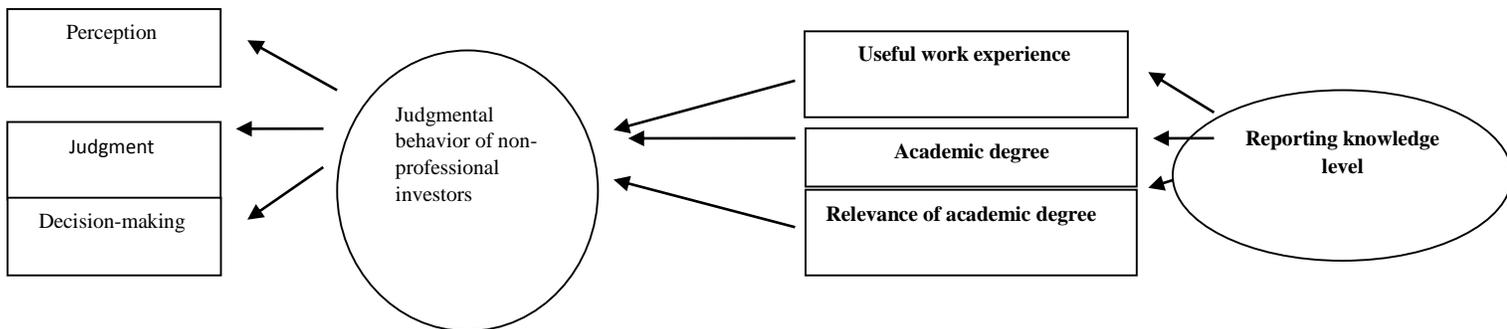


Diagram 1 - Conceptual model of research

Theoretical foundations of research

The importance of financial reporting

Since financial reporting is a reliable tool for disclosing financial information that is made available to public people, it can reduce the likelihood of making improper decision by investors through reducing private information and keeping it confidential. Therefore, it can be assumed that providing timely information will reduce information asymmetry among investors. Also, there is a logical relationship between the quality of financial reporting and the efficiency of investment. Accordingly, companies with higher reporting quality are less sensitive to macroeconomic consequences. This suggests that there is a relationship between reporting mechanism and investment efficiency, and high-quality reporting will reduce ethical risk and making the incorrect decision.

Relationship between financial reporting knowledge level and judgmental behaviors of non-professional investors

Investment for economic and social growth and development is so important that it is mentioned as one of the strong leverages for achieving development. At current, with the formation of a new type of economic and financial developments, it is necessary for individuals to have special knowledge and abilities to face the complexities. In such a situation, due to diversity, complexity of financial markets and rapid developments, it is essential to have skills and methods of financial management to collect, analyze and use financial information and financial literacy. Financial literacy is a set of knowledge of perceiving the financial issues that includes examining of financial phenomena, their nature, laws and relationships governing it. Lack of perceiving economics and financial phenomena is a barrier for stock ownership. Loss of welfare due to lack of participation in capital markets resulting from lack of financial literacy is very significant.

Literature review

In a study entitled "Financial literacy and participation in stock market", VanRooij and Lusardi (2011) presented two specific models for measuring financial literacy and examining its relationship with participation in stock market through survey from households. They found that most respondents understood basic financial information and concepts such as interest rate, inflation, and the time value of money. However, little number of them was aware of the basic concepts. Also, many respondents do not aware of the difference between bonds and stocks, the relationship between bond prices and interest rates, and did not know the principles of risk diversification. More importantly, they found that financial literacy affects the financial investment decisions and lack of perceiving of economics and financial issues is a barrier to stock ownership. Moreover, people with low financial literacy are less likely to invest in stock. Investors with low education or wealth are more likely to keep poor diverse portfolios, and the general demographic profile of unaware investors is very similar to that of individuals with low literacy in the sample. In the first section of their research entitled "Investment risk", Sachse et al. (2012) examined the level of financial literacy and its relationship with the perception of investment risk in Germany and concluded that financial literacy in relation to risk analysis and perceiving is directly associated with investment decision-making. Also, based on regression analysis, they found a very small difference between the investors in the composition of risk perception models. In the second section of their research, they also investigated the effect of gender, age, investment experience on the relationship between financial literacy and perception of investment risk. They concluded that there is a significant difference based on these factors in relation to financial literacy and risk perception.

Robert Bricker & Chandar (2012) investigated the effect of measuring the usefulness of financial information in terms of its relevance and reliability. The mentioned research was conducted on 363 listed companies. The results revealed that relevance and reliability of information were valued by the market. Abbaszadeh et al. (2013) investigated the views and ways of using the concepts of relevance and reliability

of financial information by non-professional investors and its impact on their investment decisions. The results indicated that feature of relevance was more important to investors than the feature of reliability in decisions and judgments. It suggests that more relevant information, regardless of their reliability, is more influential in judgment of users of financial information. Also, the perception of non-professional investors of the quality characteristics related to the content of information has a positive correlation with their tendency to investment risk and affects their judgment about the return on investment. Moradi and Izadi (2015) investigated the effect of investors' financial literacy on the decision to invest in securities. The results revealed that all four factors, including personal mindsets, accounting information, economic information and personal financial needs have an impact on investment decisions in Iran. Additionally, a significant positive relationship was reported between the level of financial literacy and the factors affecting the investment decision, but this relationship was very weak and less than 10% of the changes in the effect of the factors affecting the investment decision can be explained by the level of financial literacy.

Methods

The present study was an applied-descriptive research. The measurement tool of the study was a questionnaire. The study population included real investors who bought shares in the Tehran Stock Exchange. Also, stratified random sampling method was used in the study. Also, 535 questionnaires were developed and distributed to select the sample size and 223 questionnaires were received and the hypotheses were tested based on the received questionnaires. In the present study, an experimental method was used to examine the specialized characteristics of non-professional investors based on their academic degree and work experience on the judgmental behaviors of non-professional investors. For this purpose, a questionnaire containing 16 questions in the area of judgmental, perceptual and decision-making behaviors of investors was designed. Then, it was distributed among two groups. The first group included professional investors including financial analysts and stockbrokers. The second group included non-professional investors including accounting students, stock investors, accounting executives, professors in accounting and other relevant fields of study. Questionnaire is one of the most common tools for data collection in field studies. In such studies, questionnaires are one of the most important sources of data collection, and are used to design questions and answers based on the Likert scale. Likert scale is an interval scale consisting of a number of items and answer options. The Likert scale is a composite scale whose answer options usually indicate the degree of agreement or disagreement of the respondent to a topic or concept, whether positive or negative. In this method, 5 answers are usually considered for each question and each answer is scored. To evaluate the reliability of the questionnaire, an initial sample of the questionnaire was completed by 223 people. Then, using SPSS software and Cronbach's alpha method, the reliability of the relevant questions was obtained at 0.78, which indicates the appropriate reliability of the questionnaire.

Research Hypotheses

Main Hypothesis 1: Academic degree affects the judgmental behaviors of non-professional investors.

Sub-hypothesis 1-1: There is a significant difference between the judgments of non-professional investors based on their academic degree.

Sub-Hypothesis 1-2: There is a significant difference between the perceptions of non-professional investors based on their academic degree.

Sub-hypothesis 1-3: We have a significant difference between non-professional investors' decision making based on their degree level.

Main Hypothesis 2: Academic degree relevance affects the judgmental behaviors of non-professional investors.

Sub-hypothesis 2-1: There is a significant difference between judgments of non-professional investors based on academic degree relevance.

Sub-hypothesis 2-2: There is a significant difference between the perceptions of non-professional investors based on the relevance of the academic degree.

After examining the descriptive statistics of the studied criteria, using the Kolmogorov-Smirnov test, the normality of the data was tested and then the appropriate method was used to test the hypotheses. If the data distribution is normal, parametric methods (t-test method) will be used, and if it is not normal, non-parametric methods (binominal test method) will be used. The questionnaire was also used to evaluate the reliability of the questionnaire using SPSS software and Cronbach's alpha method.

Results

Table 1 presents the demographic characteristics of the respondents. A total of number of 223 questionnaires were completed by the statistical population, which will be analyzed in this chapter.

Table 1- Information of the respondents

Variable	Classification	Number of observations	Percentage
Gender	Male	185	82
	Female	38	18
Education	Associate	8	4
	Bachelor	84	38
	Master	117	52
	Phd	14	6
Work experience	Below 5 years	102	46
	5-10	46	21
	10-15	64	29
	15-20	11	4
Age	20-30	59	46
	30-40	139	63
	40-50	25	11

Hypothesis testing

Table 3 presents the research hypotheses using the comparison test and the results for the total number of respondents. In order that the studied hypotheses to be significant, the significance level of the test statistic should be less than the test error level (5%). Its results have been shown in Table 2.

Table 2 - Respondents' opinions

	Mean	Statistic t	Sig [*]	df	Confirming/rejecting the hypothesis
.Alpha shares are currently selling at 5.130 Rials. Please predict a point for the price of each share of this company at the end of the next (third) three months	5295	235.74	000.00	152	-

	Mean	Statistic t	Sig [*]	df	Confirming/rejecting the hypothesis
2-Please predict a range for the price of each share of Alpha Company at the end of the next (third) three months. This range should provide the highest and lowest limits with a 95% confidence interval.	-	-	-	-	-

	Mean	Statistic t	Sig [*]	df	Confirming/rejecting the hypothesis
3-How favorable do you think Alpha's financial results will be in the next (third) three months.	3.3	6.51	000.00	222	Confirmed
	Mean	Statistic t	Sig [*]	df	Confirming/rejecting the hypothesis

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4-How confident are you that Alpha Company will improve its financial results for the next three months?	3.31	3.30	000.00	222	confirmed
	Mean	Statistic t	S_{σ}^*	df	Confirming/rejecting the hypothesis
5-How likely is it that you will buy Alpha Company shares?	2.99	-00.06	0.9479	222	rejected
	Mean	Statistic t	S_{σ}^*	df	Confirming/rejecting the hypothesis
6-How likely is it that others will buy Alpha Company shares?	3.13	2.28	0.023	222	Confirmed
	Mean	Statistic t	S_{σ}^*	df	Confirming/rejecting the hypothesis
7- How risky do you consider investing in ordinary shares of Alpha Company?	2.99	-0.1345	0.8930	222	Rejected
	Mean	Statistic t	S_{σ}^*	df	Confirming/rejecting the hypothesis
8- How likely is it that the actions taken by the management of Alpha Company in the current period will lead to returns in future periods?	3.43	5.9251	000.00	222	Confirmed
	Mean	Statistic t	S_{σ}^*	df	Confirming/rejecting the hypothesis
9- How forward-thinking is Alpha Company management in these explanatory notes?	3.48	7.7426	000.00	222	Confirmed
	Mean	Statistic t	S_{σ}^*	df	Confirming/rejecting the hypothesis
10-How useful do you consider Alpha Company earnings report in making your judgments?	3.51	7.203	000.00	222	Confirmed
	Mean	Statistic t	S_{σ}^*	df	Confirming/rejecting the hypothesis
11. Will your judgments be different if Alpha's earnings report includes only financial statements (without explanatory notes)?	0.90	-73	000.00	222	Confirmed
	Mean	Statistic t	S_{σ}^*	df	Confirming/rejecting the hypothesis
12-How informative do you find the Alpha Company earnings statement notes?	3.21	3.03	0.002	222	Confirmed
	Mean	Statistic t	S_{σ}^*	df	Confirming/rejecting the hypothesis
13- How forward-thinking is the management of Alpha Company in the explanatory notes of the company earnings?	3.2	3.645	0.003	222	Confirmed
	Mean	Statistic t	S_{σ}^*	df	Confirming/rejecting the hypothesis
14-How reliable do you consider the explanatory note section of Alpha Company earnings report?	3.04	2.645	0.003	222	Confirmed

	Mean	Statistic t	Sg*	df	Confirming/rejecting the hypothesis
15- How reliable do you find the management of Alpha Company?	3.19	4.555	000.00	222	Confirmed
	Mean	Statistic t	Sg*	df	Confirming/rejecting the hypothesis
16-How appropriate do you think the increase in Alpha company research and development costs is?	3.70	14.9402	000.00	222	Confirmed

*Theoretical mean is considered at 3.

Conclusion

In the present study, the effect of financial reporting knowledge level on the judgmental behaviors of non-professional investors in the Tehran Stock Exchange was investigated and the results were obtained:

The first hypothesis examines the judgmental behaviors of non-professional investors. To test this hypothesis, questions 1-2-3-8-9-15 were used. Regarding the first question, the mean stock price prediction was 5295 Rials. This value indicates that all respondents believe that stock prices will rise in the next three months. Additional analysis also shows that 80% of the received answers expected a price of more than 5130 Rials for the shares of Alpha Company.

Regarding the second question, the highest stock price range was 5000-6000, which includes approximately 22% of the total respondents, and the lowest range was between 4500-5150, which included approximately 5% of the respondents.

Regarding the third hypothesis, the results show that the financial performance of Alpha Company will be favorable in the second three months, with a mean of 3.3 answers to this hypothesis, and is confirmed at a 99% confidence level.

Regarding the eighth hypothesis, which examines whether the actions taken by the management of the business unit in the current period lead to future returns, all respondents believe that such a situation may occur, which is confirmed with a mean of 3.43. In the ninth hypothesis, the mean of the answers was 3.48, which indicates that all respondents believe that the explanatory notes of Alpha Company are forward-looking.

Regarding the fifteenth hypothesis, they believe that management and explanatory notes along with the profit and loss statement have the desired objectivity and reliability. The mean of the given answers was 3.19, which is confirmed at 99% confidence level.

The results of the questions related to testing the investors' judgmental behaviors show that they are significant at the 95% confidence level. Based on these results, it is concluded that the judgmental behaviors of non-professional investors are effective in evaluating their judgment, perception and decision-making.

The second hypothesis examines the perceptual behaviors of non-professional investors. To test this hypothesis, questions 4 - 7-10-11-12-13-14-16 were used.

The fourth question examines how much Alpha Company can improve its next three-month results. The mean answer given to this question was 3.31, which is confirmed at 99% confidence level.

Regarding the seventh hypothesis, which examined the risk of buying shares of Alpha Company, the answers with a mean of 2.99 reject this hypothesis.

The mean of 3.51 for the answers to the tenth question, which examines whether the profit and loss statement is useful in making investors' judgments, shows that all respondents believe that one of the financial statements in their decision-making process is the profit and loss statement.

Regarding the eleventh question, all respondents believe that their judgments will be different if the profit and loss statement contains only explanatory notes.

Regarding the twelfth hypothesis, the results show that all respondents with a mean of 3.21 believe that the explanatory notes of the profit and loss statement have a good comprehensibility for their decision.

Regarding the thirteenth hypothesis, all respondents believe that the explanatory notes are forward-looking and help them in the decision-making process. This hypothesis is confirmed with a mean of 3.2.

Regarding the fourteenth hypotheses, all respondents believed that the management and explanatory notes along with the profit and loss statement have good objectivity and reliability. The mean of the given answers was 3.04, which was confirmed at the confidence level of 99%.

Finally, the results of the last hypothesis showed that all respondents considered it is useful to increase research and development costs to improve the performance of Alpha Company and the mean answer to this hypothesis was 3.70.

In general, the results of perceptual behaviors of non-professional investors showed that with the exception of question 7, which was related to risk assessment by them, all questions were significant at 95% confidence level. Hence, it can be concluded that perceptual behaviors also affect non-professional investors.

The third hypothesis examines the decision-making behaviors of non-professional investors. Questions 5 and 6 were used to test this hypothesis.

The fifth question was whether you are willing to buy the shares of Alpha Company. The mean answer for this question was 2.99, which indicates that all respondents were not willing to buy Alpha shares.

Regarding the sixth hypothesis, the mean answer was 3.13, which indicates that all respondents believe that others are more likely to buy Alpha Company shares. Based on the results of this hypothesis and the fifth hypothesis, it can be concluded that although all the respondents were not willing to buy Alpha Company shares, they considered the possibility of buying it by others very high. It may be due to the presence of inexperienced investors in the Tehran Stock Exchange.

Based on the results, it can be stated that auditing financial statements is one of the tools that is very useful for examining the status of presentation and quality of information in financial statements. The results of the auditing are presented as a report to the users of financial statements. Investors in stock exchanges and securities are one of these groups of users, who use these reports according to their needs to make investment decisions and earn returns (Gholami et al., 2013). Also, investment decisions are influenced by economic indicators and rationality. They are also influenced by issues such as investor trust in the investment process in the market, and such cases also have a significant impact on investors' behavior and shape the type of their investment behavior. Behavioral finance followers, unlike traditional finance, believe that the behavior of investors is not necessarily rational, so they try to explain the psychological effects of stock price changes. When the stock market is ascending or descending, investors think that others know better than them or have more information, and this causes them to unconsciously follow others, so investors attach great importance to judging based on limited information to one source (Khalili et al., 2003).

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