Evaluating the Effective Factors on the Individual Behavior of Investors in the Present Banks at Tehran Stock Exchange

Mohammad Reza Radfar¹, Marjan Abdolmaleki²

¹Department of Financial Management, Central Tehran Branch, Islamic Azad University, Tehran, Iran, ²Department of Business Management, Central Tehran Branch, Islamic Azad University, Tehran, Iran

Abstract

Behavioral Finance as classic finance has been built on basis of the fundamental assumptions with the difference that classic finance has built their own assumptions in the ideal substrate while behavioral finance builds these assumptions in the realistic substrate. This study aimed to determine the effective factors on the individual behavior of investors in the present banks that was conducted at Tehran Stock Exchange. In this study, income, investor's behavior, information tracking, banking and payment behavior, the effect of religion and society and traditional investment behavior were chosen as effective factors on individual behavior of investors. The statistical population of this research, employees of the stock brokerage banks in Tehran as number of 850 people have formed. The sample size was obtained 265 people according to the Cochran formula. In order to collect the required data, a standard questionnaire was used after re-examining its validity and reliability, distributed and collected among the sample participants. This research has 16 hypotheses that regression test was used to evaluate them, due to being normal of data distribution. The results of the research suggest that behavioral factors have effect in investors' decision making in the present banks in the Tehran Stock Exchange.

Key words: Behavioral finance, Classical finance, Investor's behavior, Information tracking, Traditional investment behavior

INTRODUCTION

Hypothesis of efficient market states that the market is efficient because stock prices reflect as investors know about the stock at a given time. Many studies have proved how people's irrational operation in investment and monetary discussion. More economic theories have been founded on the basis of that people act rationally in the face of economic events and consider all available information in the investment process. This hypothesis is the main basis of the efficient market hypothesis, but researchers of this hypothesis have questioned this fundamental hypothesis and have discovered evidences that reflect the

lack of rational behavior in terms of investment discussion (Rockenback, 2004). After the global financial markets had accustomed to efficient market paradigm for two decades and the belief in market efficiency and random walk and the lack of predicting possibility of prices were strengthened every day, phenomena and dynamics in global financial markets discovered and confirmed that was challenged the paradigm of market efficiency and inspire a new bustle to financial thinkers. Rationalist gradually acknowledged their weaknesses and this causes the formation of a new thinking school of behavioral finance knowledge against of the new financial management (Badri and Sadeghi, 2007).

Behavioral finance is a new issue that was raised during the past two decades by some financial researches and quickly attracted the attention of professors and students of this major around the world. Behavioral finance is defined as the application of psychology in financial sciences. Behavioral finance is how the people's interpretation of the information to make informed

Access this article online



Month of Submission: 05-2017
Month of Peer Review: 06-2017
Month of Acceptance: 07-2017
Month of Publishing: 08-2017

Corresponding Author: Mohammad Reza Radfar, Department of Financial Management, Central Tehran Branch, Islamic Azad University, Tehran, Iran. E-mail: Mohamadr.radfar@gmail.com

investment decisions and in other words behavioral finance seeks the effect of the psychological process in decision-making. Behavioral finance consists of a wide range of psychological and social sciences aspects that have much contradiction with efficient market hypothesis. (Khajoy and Ghasemi, 2005)

Financial behavioral is a branch of finance science that evaluates the behavior of financial markets with a psychological approach. Successful activity in the stock market as other economic fields requires investor's providing to necessary knowledge and expertise. The field of behavioral finance as a sub-category of behavioral economics states the psychology findings, sociology and anthropology in the form of financial theories. Behavioral finance field beside behavioral economics has created a new approach and investigators of these fields are investigating based on this new approach. In Behavioral finance fields and economics, the role of human behavior as effective variable on other economic and financial variables that are not considered in the past, will study with more emphasis. behavioral finance proponents believe firmly that consciousness of the psychological tendencies of in the field of investment, is absolutely necessary and requires serious development of studies scope and for those who know the role of psychology obvious in financial knowledge as an effective factor on the stock exchange markets and investors' decisions, accepting the existence of doubt about the validity of behavioral finance is difficult (Roodposhti and Zandieh, 2012).

In a very simple words, it can be summarized that researchers found that people at different times and under different conditions, have different states and because of that, changes are done in their inside which leads to a particular decision or action (Bidgoli and Kurdlouyi, 2010). Profitable investment is considered as critical pulse of company and fundamental factor in determining its value. Based on the available theoretical basics, it is expected that value of the company is a function of the present value of its future cash flows that strongly are influenced by its investments. The importance of investing for growth and economic and social development is to the extent that it is mentioned as one of the most powerful levers for reaching to development. Many studies have been proved how people's irrational operation in investment and monetary discussions. Financing based on behavioral approach (behavioral finance) identifies the perceptual errors and excitement that has often effect on financial decision makers and cause that they make inappropriate decisions. This approach is on positive describing of human behavior and evaluates and studies how people are treated objectively in a financial field (rahnamaRoodposhti and Salehi, 2010).

With the daily increasing of various companies' presence in the stock market, investors encounter with different options for investment that make the work difficult and complex for making right investment decisions. For this reason, the necessity of evaluating this behavioral bias among investors in the stock market will be felt. This study aimed to determine the effective factors on individual behavior of investors in the present banks in Tehran Stock Exchange. Considering the presented contents, the main question of this research is that what factors have effect on the individual behavior of investors in the present banks in Tehran Stock Exchange?

THEORETICAL DISCUSSION AND RESEARCH BACKGROUND

Theoretical Discussion

In investment discussion, kind of investment decision making and the effective factors on their decision making is very important. Each risk aversion investor with entering to the capital market are looking for more productivity with less risk or in other words, investors are looking for ways to increase their productivity without increasing risk or reduce their risk without reducing efficiency. This approach in investors, leads them to achieve arbitrage profits and discovering the available trends in the market becomes a major issue for investors (Shayganmehr, 2015).

There are different strategies for investing in financial markets. In the present decade, investment strategies have been taken distances from strategies that were based on the capital assets pricing model and the efficient market hypothesis over the past 50 years, because there are a lot of evidence that shows investments based on these models rarely meets expectations. These models suggest investment strategies in condition that assumes that rational investors in efficient markets (or semi-efficient) proceed to invest, while the history of financial markets shows that this efficiency as theory reflects, does not exist. Recently the behavioral finance approach is finding alternative models for classic finance and investors' feelings has involved in the models (Nikoomaram et al., 2016).

Behavioral Sciences discussion in financial field and investment is new topic that has been presented recently in the financial investment sciences. Behavioral finance is defined as the application of psychology in financial sciences. Behavioral finance is a paradigm in which decision-making in financial markets using complex pattern of social sciences, psychology, finance and other fields are studied. Behavioral finance evaluates to study of that how

investors getting mental errors in their judgments (Jafari and Doulati, 2007).

Research Background

Many know the beginning of behavioral finance the famous paper of Dybont and Thaler (1985), in which the cross-reaction hypothesis presented. They concluded that people show a greater response systematically to the news that it would not have expected beforehand. After challenging the rational theories, knowledge of behavioral finance emerged to explain some of the behaviors of individuals and investors. Behavioral finance knowledge not only evaluates the rational justification of events and behaviors, but also evaluates the behavior of investors in terms of emotions approach and explains it (Fama, 1998).

Researches have been conducted in the field of behavioral finance that point out in this section to several cases:

SeifAllahi, Kurdloyi and Dashti (2015) in a study evaluated comparatively the behavioral factors in investment of financial assets. The aim of the research was to evaluate the effects of behavioral factors away from regret and remorse, disposition effect, mental accounting, overconfidence, witnesses of representation, herding and conservatism behavior and the effect of ownership on financial assets investment and finally the comparative evaluation of these factors. For this purpose, 593 people of Tehran stock exchange investors were selected randomly as sample and required data was collected using questionnaire. The obtained data and hypotheses were analyzed and tested. The obtained results showed that all factors except the factor of "overconfidence" are effective on the investments and the amount of this effect is different for each one.

Ali Shayganmehr and SimaShayganmehr (2015) evaluated the calendar effects in Tehran Stock Exchange with approach of stochastic dominance criterion in an article. The aim of the study was to evaluate the calendar effects and to identify the effects of days of the week and months of the year in Tehran Stock Exchange. To achieve this goal, daily efficiency of Tehran Stock Exchange in the period since 2007 until the end of 2013 were used and the stochastic dominance criterion was used for the analysis that due to the non-parametric orientation has particular attraction. The results indicate the existence of calendar effects in the Tehran Stock Exchange. In evaluation of the days of the week effects in Tehran Stock Exchange, Saturday is dominant on other working days of stock in terms of efficiency and Sunday is dominated by the other days. In evaluation of months of the year effects, April is also dominant over other months in terms of efficiency and November is dominated by the other months. Also due to identification the calendar effects in the Tehran Stock Exchange, the efficient market hypothesis is rejected in this stock even at low levels.

Islamoghlou, Apon and Ayvali (2015) evaluated the effective factors on individual behavior of investors in the bank's stock in Turkey. The statistical population of this research was employees of exchange banks brokerage that 211 people as sample were selected. The required data were collected using a questionnaire and the results showed that behavioral factors have effects in investors' decision making in stock banks in this country.

Ekholm 2007 evaluated the relationship between the behavior of investors and their investment capacity in a research as "excessive self-confidence and investment volume" in Finland. The method of study was that investors have been tested in response to positive and negative news and their responses in terms of positive and negative orientation from capacity attitude and investment threshold were analyzed. The findings of this study showed that more detailed investors with higher confidence see more damage of their investment behaviors. In the end, they achieved to this belief with collecting the obtained results that investor behavior has changed by size and volume of investments and is affected by it.

RESEARCH METHODOLOGY

Methodology

The research method is a set of rules, valid and integrated tools and ways to evaluate the facts, to discover the unknowns and to achieve problems' solutions (Khaki, 2008). The research method is one of the major factors that has effect on the research and obtained results and often depends on the purpose of research, the nature of the topic, research administrative facilities and composed hypotheses (Bazargan et al., 2013).

This research is applied in terms of purpose and is descriptive - survey in terms of the work method.

Hypotheses of Research

- 1. Income has positive effect on decisions making of banks' investors in the Tehran Stock Exchange.
- 2. Income has positive effect on behavior of banks' investors in the Tehran Stock Exchange.
- 3. Income has positive effect on information tracking of banks' investors in the Tehran Stock Exchange.
- 4. Income has positive effect on banking and payment behavior of banks' investors in the Tehran Stock Exchange.

- 5. Income has positive effect on religion and society effect on decision making of banks' investors in the Tehran Stock Exchange.
- Income has positive effect on behavior of traditional investment of banks' investors in the Tehran Stock Exchange.
- 7. Conscious investor behavior has positive effect on information tracking of banks' investment in the Tehran Stock Exchange.
- 8. Conscious investor behavior has positive effect on behavior of banking and payment of banks' investors in the Tehran Stock Exchange.
- 9. Conscious investor behavior has positive effect on religion and society effect on decision making of banks' investors in the Tehran Stock Exchange.
- 10. Conscious investor behavior has positive effect on behavior of traditional investment of banks' investors in the Tehran Stock Exchange.
- 11. Information tracking has positive effect on behavior of banking and payment of banks' investors in the Tehran Stock Exchange.
- 12. Information tracking has positive effect on religion and society effect on decision making of banks' investors in the Tehran Stock Exchange.
- 13. Information tracking has positive effect on behavior of traditional investment of banks' investors in the Tehran Stock Exchange.
- 14. Behavior of banking and payment has positive effect on religion and society effect on decision making of banks' investors in the Tehran Stock Exchange.
- 15. Behavior of banking and payment has positive effect on behavior of traditional investment of banks' investors in the Tehran Stock Exchange.
- 16. Effect of religion and society on investors' decision making has positive effect on behavior of traditional investment of banks' investors in the Tehran Stock Exchange.

Statistical Population, Sample Size and Sampling Method

A statistical population is a collection of individuals or units with at least one common trait. A common trait is a trait that is common between all elements of the statistical population and is distinctive of population from other populations (Azar and Momeni, 2008). The statistical population of present research consists of all employees of the bank's stock brokerage in Tehran to 850 people. Based on Cochran's formula for determining the sample size for the population of 850-members of the bank's stock brokerage employees in Tehran, sample number will be at least 265 people.

Validity and Reliability of Questionnaire

Validity kinds of research was confirmed by experts and professors' opinion and reliability of research was calculated by using Cronbach's alpha and SPSS statistical software that the results will be presented in the following. The reliability is a tool that can also be interpreted as accuracy and validity (Hafeznia, 2009). Cronbach's alpha test shows that how much test questions have ability to measure a single character (Sarmad et al., 2004).

According to results of Table 1, since the Cronbachalpha is above 0.7 for all variables, reliability of questionnaire has been approved as in part or in whole.

RESEARCH RESULTS

Descriptive Statistics of Demographic Variables

The obtained results of the demographic statistic of respondents in the field of gender show that 54.7% of respondents were male and the rest were female. In the field of respondents' education, the majority of them were college-educated (5.7% Associate Degree, 60.8% BA, 33.2% mA and 4% Ph.D.). In the field of respondents' age group, 42.6% in the age group of 20 to 40 years and the rest were over 40 years.

Inferential Statistics

To select the appropriate statistical test, first data distribution must be specified. For this purpose, we evaluate the normality of the data distribution by using Kolmogorov-Smirnov test. According to Table 2, the level of significance of all the variables is larger than 0.05, it can

Table 1: Cronbach alpha of questionnaire

Variable name	Cranach alpha
Entire of questionnaire	0.925
Income	0.953
Conscious investor behavior	0.948
Information tracking	0.910
Behavior of banking and payment	0.887
Religion and society effect on investment decision making	0.916
Behavior of traditional investment	0.893
Decision making of investor	0.825

Reference: research results

Table 2: Kolmogorov-Smirnov test

Variable name	Significance level
Income	0.235
Conscious investor behavior	0.410
Information tracking	0.369
Behavior of banking and payment	0.258
Religion and society effect on investment decision making	0.962
Behavior of traditional investment	0.713
Decision making of investor	0.226

Reference: research results

Table 3: Results of research

Hypothesis	Durbin – Watson statistic	Beta	Significance level	Result
First hypothesis	1.543	0.249	0.000	Accepted
Second hypothesis	1.615	0.595	0.000	Accepted
Third hypothesis	1.663	0.551	0.000	Accepted
Fourth hypothesis	1.701	0.387	0.000	Accepted
Fifth hypothesis	1.519	0.363	0.000	Accepted
Sixth hypothesis	1.892	0.040	0.518	Rejected
Seventh hypothesis	1.746	0.911	0.000	Accepted
Eighth hypothesis	1.831	0.721	0.000	Accepted
Ninth hypothesis	1.960	0.714	0.000	Accepted
Tenth hypothesis	1.513	0.057	0.355	Rejected
Eleventh hypothesis	1.510	0.723	0.000	Accepted
Twelth hypothesis	1.796	0.723	0.000	Accepted
Thirteenth hypothesis	1.512	0.059	0.337	Rejected
Fourteenth hypothesis	1.886	0.905	0.000	Accepted
Fifteenth hypothesis	1.519	0.069	0.264	Rejected
Sixteenth hypothesis	1.507	0.028	0.647	Rejected

Reference: research results

be concluded that all the variables have obeyed of normal distribution and are normal.

According to the normal distribution of data, we use of regression test to evaluate the research hypotheses. The test results of research hypotheses have been shown in Table 3.

CONCLUSIONS AND RESEARCH SUGGESTIONS

Conclusion

This research was conducted with aim of determining the effective factors on individual behavior of investors in the present banks in Tehran Stock Exchange. Employees of the bank's stock brokerage in Tehran have formed the statistical population of the research as number of 850 people. Sample size obtained 265 people according to the Cronbach alpha. This research has sixteen hypotheses. At first the normality of the data distribution was evaluated by Kolmogorov-Smirnov test and due to the normal distribution of data, research hypothesis was evaluated by using regression. According to the obtained results, 11 hypotheses were accepted and 5 hypotheses were rejected. According to the obtained results, it can be concluded that behavioral factors has effects in investors' decision making in the present banks in the Tehran Stock Exchange. Over the obtained results, the hypotheses that have behavior of traditional investment variable were rejected and this indicates that investors in their investments do not pay attention to traditional investment instruments.

Suggestions

According to the results of hypotheses and since the behavioral factors has effects in investors' decision making in the present banks in the Tehran Stock Exchange, then it is suggested:

- 1. Investors when making investment decisions, consider their own past investment experience.
- 2. Investors after obtaining sufficient information about the tools of investment, proceed to invest.
- 3. Investors reduce the amount of investment risks through diversification in portfolio.

REFERENCE

Persian Reference

- Azar, Adel and Momeni, Mansour. (2008), Statistics and Its Application in Management, Volume II, Tehran, publisher side.
- Bidgolilslami, Gholam Reza, Kurdloyi, Hamidreza (2010). Behavioral finance, financial stage of transition from standard to Nvrvfaynans Quarterly - scientific research and financial engineering, portfolio management, first, number one, Page 19.
- Bazargan, Abbas, Sarmad, zohreh. Hejazi, Elahe. (2013), Research Methods in Behavioral Sciences, Tehran: Cognizant.
- Badri Ahmad, Sadeghi, Mohsen. (2007) Effect of different days of the week on the return, volatility and turnover in the Tehran Stock Exchange, message management, Issue 17, Pages 55 to 83.
- Jafari, Abolfazl, Doulati, Nikoo (2007). Introduction to Behavioral Finance and Economics, Journal of the stock.10-, Number 68.
- HafezniaMohammadreza (2009), An introduction to research methods in the humanities, the publisher.
- Khaki, Golamreza (2008). Research methods in management, publishing reflection, First Edition.
- Khajavi, Shokrollah, Ghasemi, meysam. (2006). Efficient Market Hypothesis and Behavioral Finance. Journal of Financial Research, Issue 20, pp. 49.
- Rahnama Roodposhti, Fereydoon, Zandiyeh, Vahid. (2012). Behavioral finance new paradigm nervous financial and financial) from theory to practice, Islamic Azad University Press - The Press.
- Rahnama Roodposhti, Fereydoon. Salehi, Allahkaram (2010); Schools and theories of finance and accounting, Islamic Azad University of Tehran.
- SarmadZohreh, Bazargan Abbas, Hejazi, Elahe (2004) Methods of Research in Behavioral Sciences, aware Publications, Tehran.
- SaifollahiRazieh, KurdloyiHamidreza, Dashti, Nader (2015), Comparative study of behavioral factors in investment in financial assets, Journal of the fourth year of investment/number XV/Autumn 1394.

Radfar and Abdolmaleki: Effective Factors on the Individual Behavior of Investors in the Present Banks

- ShayganMehr Ali. ShayganMehr, Sima, (2015), Effects of the calendar in Tehran Stock Exchange benchmark stochastic dominance approach, Journal of investment, senior/Number XVI/Winter 1394.
- Nikoomaram, Hashem. Saeedi Ali. Mehrani, Kiyarash. (2016), Test investment strategies based on behavioral finance, Journal of the fifth year of investment/Twentieth Number/Winter 2016.
- 15. Fama, E. F,(1998), Market Efficiency, Long-term Returns, and Behavioral
- Finance, Journal of Financial Economics, Vol. 49, TAT-T.9.
- Islamoğlu, Mehmet. Apan, Mehmet. Ayvali, Adem (2015), Determination of Factors Affecting Individual Investor Behaviours: A Study on Bankers, International Journal of Economics and Financial Issues, ISSN: 2146-4138.
- Rockenback, B, (2004), The behavioral relevance of mental accounting for the pricing of economic behavior & organization.

How to cite this article: Radfar MR, Abdolmaleki M. Evaluating the Effective Factors on the Individual Behavior of Investors in the Present Banks at Tehran Stock Exchange. Int J Sci Stud 2017;5(3):244-249.

Source of Support: Nil, Conflict of Interest: None declared.