

STUDY OF PSYCHOLOGICAL FACTORS THAT INFLUENCE THE INDIVIDUAL'S INTENTION OF INVESTING IN TEHRAN STOCK EXCHANGE

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Abstract- The present research is an attempt to find the mental factors that influence the individuals' intention of investing in Tehran stock Exchange. The author believes considering the importance of capital markets in Iran and the word, analysis of influential mental factors is mainly required. This issue called behavioral finance has been inserted to the financial markets last decades. Behavioral finance studies the investors' behavior and tries to explain their responses. Many internal and external factors can influence the individuals purchasing process (investors' mental black box). Among external factors we can refer to social, political and cultural factors but in this paper we have emphasized internal (mental) factors to examine which of them influence investor's decision strongly. This study has been done using 131 practitioners of Tehran Stock Exchange randomly selected as our sample. Our survey is based on questionnaire.

The results of Structural model using SPSS and LISREL software confirm the entire conceptual model and research hypothesis. Research findings indicated that psychological factors including i) biorhythm, ii) investors' inherent power of analysis, iii) self confidence, ix) level risk aversion, x) Prestige of shareholding and xi) the consistency between individual's imagination of the firm with its reality affect the people's intention of investing in the Stock Exchange.

Keywords: Behavioral Finance, Mental Factors, Intention of investing, Biorhythm

psychological and behavioral was distinguished on individual's decisions.

Before being introduced the behavioral finance and financial and economical management, The Behavior of investors in capital market was interpreted based on desirability of economical theory, whereas, numerous reviews and scientific research in the field of behavioral finance, shows importance of psychological factors. Although theories of behavioral finance are quite new and experienced a decade ago, but subject of involving behavioral and psychological characteristics in individuals purchasing decision return to former periods. According to recent improvements in stock exchange all internal and external factors analyzed in details since we face to various thoughts and believes of wide range of people, and understanding their ideas and thoughts has an importance degree. People considering and analyzing various factors for investment of their funds, in other words, investors even before acquiring funds obtain different strategies in their mind to place their investment found (black box customers) and finally they will choose the option according to their mind, which will lead to their benefits. There are various factors, which affect intention and decision of people on investment of capital stock exchange, these factors can be divided to internal and

Introduction

Literature topic «the emersion of behavioral Sciences in the financial decisions» usually discusses a variety of factors and structures which form the behavior of investors. this topic is important because it shows that investment decisions is not only affected by indexes and rationality, but also categories such as investment horizon, risk tolerance level, self confidence and the reliability of the investor on the investment options and process in market has substantial impact on investors' behavior and their decisions they make and form their investment behavior. The emersion of the behavioral science influential is a new approach to studies of financial markets.(stock magazine, Number 26, December 1386)

In 1990's academic studies was focused on subjects such as, econometrics analysis of time series of stock price, dividable profit and profit per share but, gradually turned its focus to other topics under title of psychological models in financial markets. Therefore, Behavioral Science Areas was considered in financial and investments topics. Researchers noticed movements and turmoil in the financial markets were using the theories of efficient markets was no justified. Consequently the impotence and impacts of

realize their inherent potential, they would be willing to use their ability to gain profit, including Stock exchange. Another important factor that stimulates people to purchase shares and invest in the stock market is to obtaining the prestige of shareholding, it means that some people just for obtaining a good social prestige become shareholders of a certain company, In other words, these people satisfied themselves by purchasing shares of a specific companies (The companies which has a good reputation) and indeed obtaining this Prestige they will be motivated to purchase shares. This kind of prestige can be obtained by saying sentences such as "I'm one of x company stockholder ", "I attended the general meeting of the x company share holders yesterday" and ... to Friends. Such investors can be classified differently .One of these groups is people who buy stocks in low price are mostly students who are in majors (economics, accounting, management and..) which is related to stock exchange and wished to be in the position of people who have been their pattern.

Other types of internal stimulus which can form people's behavior are the consistency between the customers' imagination of the firm with its reality. Many investors regardless of the Company and the Financial Statements (Profit per share, dividend policy, profit and growth rate.) purchase company's shares, in fact, these investors with the ideal conceptual image of products and services become a stockholder. In fact they relate their favorite imagination to actual company's image and ultimately become shareholders of a company which products, services, management and ... Is in accordance with their concepts. Consider someone whose son survived using drug made by X company, and he is satisfied with this company's products, this company has great mental satisfaction, so this internal factor provides the situation which makes the individuals purchase the company's shares. Another important factor that can influence the behavior of people is the degree of risk tolerance which is the important factors in financial markets, especially stock market. All investors are divided into two groups depend on their risk attitude, risk seeker and risk avoider. Investors act logically in the stock market in return of accepting certain amount of risk. They want their expected return. However, if an individual doesn't accept risk and want to achieve the revenue with out undergoing any risk, usually can not move towards the stock market, because people invest in the Stock Exchange to accept the amount of risk with regard to the amount of revenue.

Finally self confidence can influence the people to invest in the stock market. People who have a low self-confidence prefer to invest on secured assets(buying land, and short-term savings..), which have more certainty and vice versa people with more self-confidence prefer to invest on risky assets for higher return and they will be able to use their potential power in an appropriate way and in a right place(the stock market securities). Please note that we can't say some one who has the high self confidence will be successful in the stock market, but the concept is that the amount of self

external factors. Among external factors, economic, political, cultural condition, amount of advertisement by the Stock exchange, and issues within the company can be declared. But since the impact of these factors discussed repeatedly by analysts and has been reviewed, influence of internal factors can be allocated to a special position.

Expression problem

In today's complex markets, in order to able analyzing the market properly, all influential factors should be distinguished. One of the important and effective factors in financial market is the behavioral reflection of investors. This subject is so effective that financial scientists in recent years set theories for financial investors' behavioral interactions and relatively expanded categories in the name of (Behavioral Finance). In this regards, psychological factors that influence on people's decision and intention considered as a high degree of importance and would be study as follow .

For years Biorhythm science has radically penetrated into various fields of science and stabilized its place in different fields, including Management, Now is that how Biorhythm and its different cycle (physical, mental and emotional) influence on individuals' intention and decision of investment. According to Biorhythm's discoveries with the people in different times they incidence different behavior, this internal change could be result of external behavior in different situations and generally accurate and scientific understanding of these behaviors, increase understanding the black box of people (investors) and their reaction and external behavior. Offering and example make the understanding of this subject more tangible. Consider a person that in certain time has earned amount of money and try to finding a way to invest his funds, he can purchase a piece of land or plan to put his found in a long term saving account... now if this person in terms of mental cycle be in the peak district (Max), in this point mentally he could be very competent and his mind allowed him to investigate everything in details towards investments which requires analyzing and highly subjective and mental power and since his brain's mental cells is ready and talented more than every other time, in that specific time has more tendency to stock exchange.

Another important factor which psychologically affects the investors' mentality and intention is the inherent power of analysis and innate ability to invest. In general if people feel that they have enough essential energy and talents to do something they are more successful than others in those activities. Throughout the history many people have been seen who could show much excellence in some scientific area whereas they have not passed any course in university or college. Researchers demonstrated that these people have had some inherent power in related field. For instance, you may have seen some people who had an inherent power for analysis of an event. In fact, these people would be able to offer exact analysis with least data. Eventually, if these people

gender and education. Barnewell found out the behavior of the investor in the market can be predicted based on the lifestyle characteristics, risk tolerance of investors and their job.

Epstein investigated the social effect of information on the real investors' behavior. His research findings indicate that the annual financial reports of companies are unvalued and don't have much affect investment decisions. Merilkas and his colleagues tried to identify the factors that influence the real investors' behavior in Greece capital market through the survey. Their results show that peoples' decision making criteria in purchasing a share are a combination of economic and psychological criteria. They found that the investors' decision making hasn't always been a coherent and rational approach. One of the latest researches with connection with identifying factors, which affected the investors' behavior was done by Hassan Al-tamimi in the UAE capital market. He classified variables which is influence the behavior of investors in the five groups of factors. These factors include: financial and accounting data, neutral information, biased advices, and conformity of personal image with reality and investor's personal needs. The research findings indicated that the variables, which related to the Theory of maximizing utility, such as: profitability growth, dividends and predicted profit per share will be the most important influential variables in the market to purchasing a share. In general, experimental evidence, which obtained from studies made in the capital markets indicate the fact that investors' rational decision-making process and their behavior are very complex and it is not easy to provide a single model for predicting their behavior in the market. In many cases the investors' behavior are not rational in the stock exchange and accurate identification of behavioral stimulus would not be possible.

Research questions

- A) Do biorhythmic factors affect investors' intention of investing in the Stock Exchange?
- B) Does investors' inherent power of analysis affect their intention of investing in the Stock Exchange?
- C) Does the investors' risk attitude affect their intention of investing in the Stock Exchange?
- D) Does the self-confidence during the purchase process affect their intention of investing in the Stock Exchange?
- E) Does the conformity of investors' imagination of the firm with its reality affect their tendency to invest in the Stock Exchange?
- F) If holding the Prestige of shareholding affect their tendency to invest in the Stock Exchange?

Research hypothesis

1. Biorhythmic factors directly affect the people to invest in the stock market securities.
2. The investors' inherent power of analysis directly affects the people to invest in the stock market securities.
3. Investors' risk attitudes directly affect the people to invest in the stock exchange.

confidence can be act as a stimulus to encourage people for investment.

Research necessity

Since the Tehran Stock Exchange is considered as a substantial component of the economy and the progress and development of the organization cause the growth and development of national economy, it is important to review all the factors that influence the organization. We believe probing factors which prompt investors to invest in stock Exchange is too important. In other words, the recognition and accurate and systematic analysis of behavioral and psychological problems in people, we can see an increase in the tendency of investors in Stock Exchange and It is obvious that rising popularity of stock exchange is accompanied by easier acquisition of capital resource in different industries, and ultimately it provides the growth and the development of national economy.

Research objectives

General purpose: understanding the role and importance of psychological factors, which influence people to invest in Tehran Stock Exchange.

Special objectives

1. Investigating the biorhythmic factors in investors' decision making
2. Investigating the importance of inherent power of analysis on investors' intention in investing in a stock exchange
3. Investigating the importance of investors' risk attitudes in the people's intention of investing
4. Review the role of confidence in the purchase, in the people's decision to investing
5. Investigating the importance of the consistency between buyer's conceptual imagination of the firm with its reality affect people's intention of investing
6. Investigating the role of Prestige of shareholding in intention of investing in stock market

Literature review

Understanding the decision making process of investors and designing its pattern in capital market has been considered as secondary subject in finance. The first studies in investors' behavior in capital market are in 70's. Cohn and his colleagues illustrated the empirical evidence implying that as investors' wealth rises their risk aversion reduces. Also Riley and Chow found out investors' risk aversion had a significant relationship with age, income, wealth and their education. If income, wealth and education rise, the risk aversion will be increased. But there is a inverse relation between age and risk aversion of investors. Le Baron, Farrelly and Gula demonstrated the risk aversion of investors depends on inherent factors of investors and is irrelevant to exogenous factor in market. The research findings of Lewellen, Lease and schklarbaum show that individuals investment preferences are significantly related to age,

Definition of research variables and operational definitions

Dependent variable

The amount of people's trend to the stock exchange: the dependent variable in this research indicates people's decision to invest in the Stock Exchange.

Independent variables

Biorhythm is a set of physical, mental and emotional cycles that effect people's behavior from birth until the time of death will affect. (Moradian, Pazhuheshyar magazine, No. 9, Spring 1998)

inherent Powers which is due to a individual differences between humans is the set of attributes, features and inner characteristics of human ,which is formed by two dimensions of inheritance and environment. (Ganji, 2003, 14)

Prestige of shareholding imply on the regards that a person feels obtain by an external stimulus (share) and getting its possession.(Monthly Exchange magazine , Number 37, July 2008)

Risk tolerance is the amount of risk which is accepted by people towards the proportionate return. (Tehrani, 2005, 57)

The conformity of the customer's imagination of the firm with its reality that how much the characteristics of the company which its shares are presented in stock exchange match with person's real ideal characteristics interested to purchase shares. (Journal of Financial Research, Fallah Shams, 2008)

Self confidence is the ability and interest in creating things that we need in life. Self confidence is a power within each person with different ratios. (Jeferz, 2003,3)

Behavioral finance is to study how to interpret and act on the basis of information, to make a structured investment decisions by anyone. (Linz, 1998:7)

financial behavior does not try to show rational behavior is wrong but it is trying to show the usage of psychological decision-making processes in cognition and prediction of financial markets (Olsen, 1997:11)

Statistical Population

Statistical population of the research is all the employees of Tehran Stock Exchange and agencies which is considered as a subsidiary of this organization in Tehran that have the following characteristics.

1. Buying and selling shares (shareholding)
2. Be involved in transactions actively

Total Statistical population in this research is approximately 250. As it is said in this study, some people who is firstly working in stock exchange and its subsidiary, secondly they are buying and selling shares is considered as a statistical society.

Sample size and method of sampling:

In this study, simple random sampling is used. Sample size with significant level of 0.05 and probability of 0/ 5 and according to the limited population formula

4. The amount of self confidence during the purchase process directly affects the people to invest in stock exchange.
5. The consistency between the customers' imagination of the firm with its reality affects the people's intention of investing in the stock exchange.
6. Attaining the prestige of shareholding directly affects the people to invest in the stock exchange.

Methodology

In the current research needed information has been collected in two stages. In the first stage the researcher referred to library resources, journals and articles from scientific valid site and collected the research literature. The second stage: questionnaire tool (both primary and secondary questionnaire) is used for data collection which is based on a Likert scale.

The questionnaires a combined one that the first four questions are considered to obtain demographic information of respondents (questions related to gender, field of study, level of education, experience in the Stock Exchange) and questions regarding to the psychological factors which effect the people's intention are presented in the form of 16 Questions that each one has five options.

Important point in designing a questionnaire of the above study is that because some variables of the research (Biorhythm science) for respondents are not conceptive and understandable, at first researcher prepare summarized pamphlet about Biorhythm science, and provide data for respondents to ensure that respondents have read the above text, or not. sentences (correct - incorrect) in the following pamphlet design and then after collecting the questionnaires, only the people who at least gain the minimum essential score from the test (who completely understand biorhythm science) have been offered the main questionnaire.

Data analysis

Data Analysis is based on two inferential statistics and descriptive statistics. Researcher through descriptive statistics and after extracting the information summarized and classified the statistical data through the statistical Spss and Lisrel software. In fact, after describing the data using non-parametric statistics, data will be analyzed. In this study, first correlation between independent and dependent variables were tested by Pearson and Spearman correlation coefficient and if there is any correlation, it's intensity values calculated through the obtained correlation and by path analysis of direct and indirect effects finally the total effect has been analyzed. (Direct effect + indirect effect= total effect). We also used data normality test (kolmogoroff Smirnov), and data random test (run test) and finally go through the research hypothesis and test them with regression analysis and compare mean test. Furthermore, using Friedman test we have ranked research variable.

intention of investing in the stock exchange. As the results show the highest effect is related to the self confidence variable which is indirectly influential through the effect of risk tolerance and the prestige of shareholding variables on the intend to invest in the Stock Exchange.

Using Spss statistical software we can analysis a variable in the levels of a discrete variable. According to the average obtained from the questionnaire, women more than men confirmed the Prestige of shareholding variables and those who have higher education not only allocated a higher score to these variables but also the inherent power of analysis and self confidence variables are assigned a higher score. The results of such a presumption shows that people with doctoral degree more than other people with lower educational levels give higher score to the prestige of shareholding variables, the inherent power of analysis and self confidence variables and this shows if people and shareholders have higher degrees the Psychological factors which influence people's intention is more considered by them.

As it said before all six parts of hypothesis in this study were confirmed; and the variables was analyzed by non parametric Friedman ranking test. The average ranks of inherent analysis, self confidence, prestige of shareholding ,risk tolerance and Conformity of investor's imagination with reality variables are 5 , 3.40, 3.25, 3.22,3.10 and 3.03 respectively have been ranking.

Practical suggestions (with respect to the research, accepted)

A) Addressed to the Tehran Stock Exchange

Holding training courses for brokers and analysts of the Stock Exchange which is related to psychological factors such as biorhythm knowledge.

Providing special services to specialized researchers in the specific field, and support them in the direction of a more effective research in behavioral Fields.

B) Addressed to brokers

Create a unit dedicated to research in field of behavioral factors influence the investors' decision in the unit stock exchange and therefore more precise understanding about behavior of investors: the Stock Exchange brokers should identify the potential investors by recognition of their inherent capabilities and indication subsidiary of importance and impacts of inner powers, such as the inherent power of analysis, in order to identify and encourage them to invest in the Stock Exchange.

C) Addressed to the accepted companies in the Stock Exchange

Companies with high quality products and services, social responsibilities and ethical principals can satisfy the consumer's internal and external needs to take effective steps, in order to be able to attract more shareholders and inject more capitals in the Stock Exchange and eventually the country's economy.

estimated 131 and the questionnaires have been distributed between them.

Results

In this section first the important demographic variables of samples such as: gender, education and experience is considered and then the hypothesis in the form of conceptual research model will be tested.

In this study, approximately 68% of the respondents are men and 32% of the rest are women. 65% of samples have bachelor degree and less other have higher education. Analysis of their experience showed that the majority of samples have between 5 and 9 years experience in stock exchange.

The result of normality test and random test data showed that the research data collected randomly and variables are abnormal.

Pearson and Spearman correlation test results showed a significant positive relationship between all independent variables with the dependent variable, and this deduced from a significant level (sig.) of achieved value which was smaller than the amount of considered error and Pearson t test values which was more than the quantities from the table. The intention of investment variable (dependent) has the most relation with the inherent power of analysis and after that with self- confidence. It means inherent power of analysis and self confidence affect people's intention and decision to investing in the stock exchange. In this research the effects of independent variables on dependent variables calculated and analyzed by path analysis method. In the method of path analysis we are dealing with two types of effects. Direct effect: this effect shows the amount of influence that independent variable has on dependent variable and the indirect effect which shows that the amount of influence an independent variable has on the independent variable or variables and ultimately its impact on the dependent variable or variables. In other words, in this method the accurate relationship between independent and dependent variables and the amount of effect they have on each other can be evaluated. This analysis in the following form is perceptible.

Analytical model with method of path analysis

Indirect effect + direct effect = Total effect (Fig. 1)

Biorhythm variable directly affect intention to purchase shares and indirectly affect the inherent analysis variable and at the end directly affect the intention of investing. Self confidence variable directly affect intention to purchase shares and indirectly affect risk tolerance and prestige variables and at the end directly affect the intention of investing.

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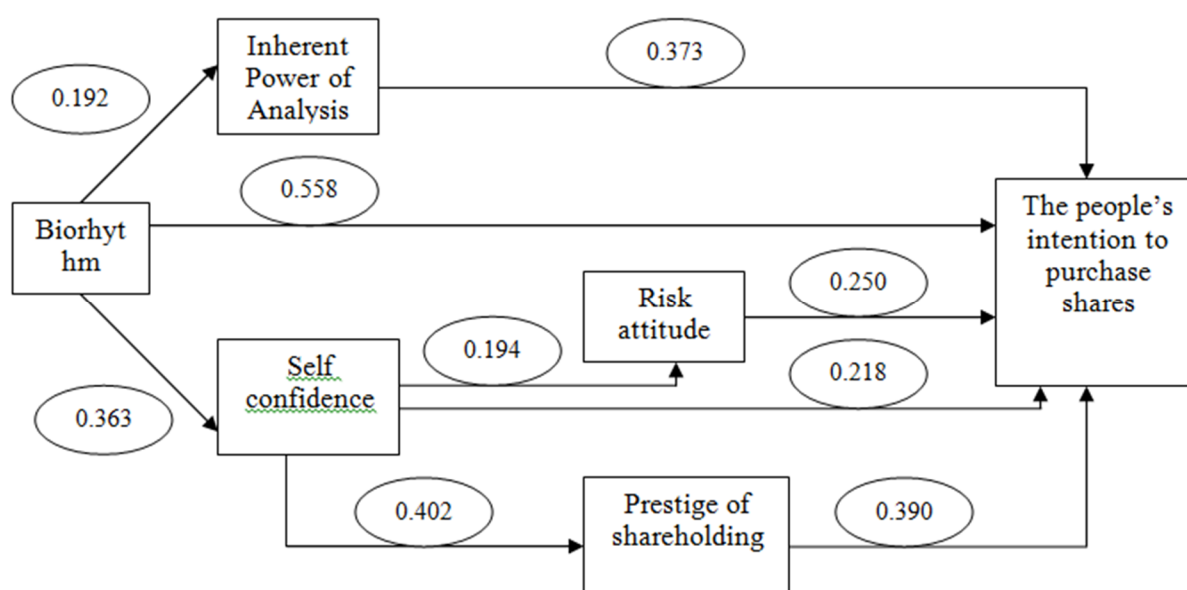


Fig. 1- Manuscript ID:IF-09-Aug-0040- Study of psychological Factors that influence the Individuals Intention of investing in Tehran Stock Exchange
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