Vietnamese Individual Investors’ Behavior in the Stock Market: An Exploratory Study

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Abstract
Employing the theory of planned behavior, this study aims to explore factors influencing investment behavior made by individual investors in the Vietnamese stock market. A qualitative approach is thoroughly applied through in-depth interviewing individual investors who have experienced the Vietnamese stock market. The analysis and generalization of data collected from interviews with 20 informants show a supporting evidence for the existence of four psychological factors - overconfidence; excessive optimism; psychology of risk and herd behavior. The study, based on the theory of planned behavior, proposes a suitable conceptual framework to be applied in further research to explain investors’ behavior in the Vietnamese stock market.

Keywords: Theory of planned behavior, overconfidence, excessive optimism, psychology of risk, herd behavior, individual investor.

1. Introduction
In stock markets, investors may decide whether to buy or not to buy a certain stock because they are or are not interested in the name of its company - an instinctive but inefficient decision (Lucey and Dowling 2005). Consequently investors’ decision-making is not always based on rational factors but also influenced by the psychological ones (Murgea 2008, Sehgal and Singh 2012). Namely when people are in good mood, they make more optimistic judgments; meanwhile, when they are not in good mood, more pessimistic judgments are made. The realistic stock market in Vietnam has shown that when individual investors have high expectation of the increase in certain stock prices based on what they feel from the market, they would promptly buy more. However, when realizing that things are not as expected, they would be overcome by fear, which leads them to sell stock they have at any price. Whenever the market fluctuates, stock prices would be adjusted similarly without any difference between good and bad stocks. Such behaviors performed by Vietnamese investors cannot be explained by the standard finance theory, which is based on efficient market assumption. In order to interpret the unusualness in stock market in particular and in financial market in general, many researchers have used behavior finance as a new approach for explaining people’s behavior in the market. Behavior finance is a new financial paradigm. It applies psychological rules in finance and at the same time supplements the standard finance theory by introducing behavioral aspect in the decision-making process. Behavior finance recognizes people practically and acknowledges individuals in stock market as human who are partly or completely influenced by psychological factors (Thaler 2005).

Nowadays many studies on investment behavior have been conducted using various approaches. The theory of reasoned action (TRA) proves to be quite useful in predicting people’s different behaviors (Sheppard, Hartwick et al. 1988). Based on TRA, the theory of planned behavior (TPB) was developed 20 years ago and has proved to be a powerful approach to explain human behavior. It is considered as one of the theories having a wide range of impact and often used in human behavior studies (Hung, Lai et al. 2010). TPB, however, has not yet been applied widely in studying investors’ behavior in stock market where individual’ investment behavior is usually influenced by such investors’ inner factors as awareness, gender, emotions, etc.

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Put in this context, this study aims at using TPB to identify psychological factors which influence behavioral decisions made by individual investors in the Vietnamese stock market. A suitable conceptual framework is thereby recommended for explaining individual investors’ behavior in the stock market.

2. Theory of Planned Behavior – A Brief Overview

The theory of planned behavior (TPB) is one of the best social – psychological theories helping to predict human behavior. TPB is employed to interpret behavior in order to better understand which individuals behave in which ways. This theory assumes that behavior can be predicted or explained by the intention to do that behavior and it has been widely used in a variety of research fields (Ryu, Ho et al. 2003).

The major premise is that behavioral decision is the result of a rational process in which behavior is influenced by attitude, norms and perceived behavioral control (Smith, Terry et al. 2007). Such constructs influence behavior mainly through their impacts on behavioral intention. The relation between intention and behavior can be described as "People do what they intend to do and do not do what they do not intend" (Sheeran 2002). TPB is an extension of Theory of Reasoned Action (TRA) (Ajzen 1991). Developed by Ajzen and Fishbein, TRA is almost the starting point for attitude theories and contributes to studying behavior and attitude. According to TRA, a person’s behavior is defined by his/her behavioral intention. Intention is defined by his/her attitude towards behavior, subjective norms and the relative importance of attitude and subjective norms (Figure 1). The development of TRA was supported by the fact that attitude theories could not predict behavior (Ajzen and Fishbein 1980).

![Figure 1: Theory of reasoned action (Source: Fishbein/Ajzen, 1975)](image)

TPB is an extension of TRA, in which perceived behavioral control has been added to identify behavioral intention and behavior (Figure 2). Perceived behavioral control could help to solve the problem of TRA in terms of explaining behavior in which the actions do not have full control (Fen and Sabaruddin 2009).

![Figure 2: Theory of planned behavior (Source: Ajzen, 2005)](image)
Human behavior in life is guided by different subjective probabilities (Fishbein 1975). These mean beliefs about the consequences of the behavior, beliefs about the normative expectations of other people and beliefs about the presence of factors which may facilitate or impede performance of the behavior (Sommer 2011). Beliefs are based on a wide range of fundamental factors. Behavioral beliefs lead to attitude towards behavior, normative beliefs lead to subjective norms while control beliefs create perceived behavioral control. The combination of all these factors will form a behavioral intention (Ajzen 2002). Intention could be understood as instruction given to oneself in order to behave in a certain way (Triandis 1979). In other words, intention represents the motivation of a conscious plan of an individual to attempt a behavior performance. Intention can be seen as a premise having direct impact on behavior (Ajzen 2002).

TPB focuses on factors deciding the selection of individual’ actual behavior. Accordingly three factors that influence the behavioral intention are attitude towards the behavior, subjective norms and perceived behavioral control. Behavioral intention, in turn, has impact on individual’s behavioral model (Ajzen and Fishbein 1980, Ajzen 1991). Attitude towards a behavior is perceived as positive or negative judgment of a related behavior and includes one’s significant belief related to the cognition of behavior performance. Subjective norm deals with an individual's perception about a certain behavior whether or not he/she accepts its meaningful references. Perceived behavioral control describes the level of ease or difficulty of performing a particular behavior reflecting both past experiences and predictable barriers.

Tests of TPB have provided evidence for the predictive validity of intention (Chatzisarantis, Hagger et al. 2007). Numerous meta-analysis and review studies with regard to social behavior (Armitage and Conner 2001) or health behavior (Hagger, Chatzisarantis et al. 2002) have confirmed relationships in this framework.

A general review of TPB clearly illustrates that TPB is basically a good and suitable foundation theory which can be applied to significantly explain human intention and behavior. TPB’s main objective is to predict and to understand human behavior (Ajzen 1991). The relation among background constructs which are attitude, subjective norms, and perceived behavioral control have been strongly affirmed (Sommer 2011). Previous studies have illustrated that psychological factors have remarkable influence on investors’ decision-making process. Individuals’ emotion can be understood as their viewpoint and attitude towards investment. Individuals’ attitude towards investment is influenced by rumors, intuition, herd behavior among investors and media coverage (Sehgal and Singh 2012). Such factors as overconfidence, excessive optimism, psychology of risk and herd behavior have been proved through studies worldwide to have remarkable impact on individual investors’ behavior.

With reasons mentioned above, TPB will be used in this paper as the basis framework for a qualitative study to identify psychological factors influencing investment decision behavior performed by individuals in the Vietnamese stock market.

3. Methodology
This study is the preliminary phase of a research project investigating investors’ behavior using a qualitative approach in order to explore psychological factors which influence individual investors’ behavior in the Vietnamese stock market. Firstly, a careful literature review was conducted generalizing prior theories as well as previous relevant studies to find out factors influencing individuals’ decision-making process. In addition, in-depth interviewing technique was employed to collect data from 20 individual investors in the Vietnamese stock market. Interviewees were investors with at least two-year experience in the market. These key informants were selected based on the following set of criteria: (1) maximizing over-18-aged diversification (the youngest was 28 while the oldest was 52); (2) Gender: there were both male and female informants in each group; (3) Job: people work in stock, finance-banking, enterprises, governmental agencies, etc.

Relying on their sharing and knowledge in investment in stock market, we expect to gain a better understanding of psychological factors influencing individuals’ investment behavior in the market.
4. Data Collection and Analysis

20 in-depth interviews were conducted in three typical markets (where they have stock exchange trading floors) representing for the Vietnamese stock market – Ha Noi city, Ho Chi Minh city (HCMC) and Da Nang city – from May to August 2012. The number of interviews conducted in each market were chosen based on the working size and time of these trading floors – 9 interviews in HCMC, 7 in Ha Noi and 4 in Da Nang.

To gain a profound insight into individuals’ investment attitude and intention, the informants were asked to evaluate and make comments on the following main issues:

- Description of their stock investment process;
- Their foundation for selecting stock types to invest;
- Impact of the environment on their investment decision;
- Self-evaluation of their stock investment efficiency within the last 2 years and the ability to control individual investment;
- Their issues and interests in stock investment in the market;
- Their faith in the development of the Vietnamese stock market.

5. Results and Discussion

Information collected from the interviews with Vietnamese investors was gathered and processed. Based on the result we found out four remarkable psychological factors from individual investors as follows: (1) overconfidence, (2) excessive optimism, (3) psychology of risk, and (4) herd behavior.

(1) Overconfidence

Overconfidence is an evident finding when investors were asked to do self-evaluation. Many psychological studies in financial market also show that investors seem to be overconfident (Barberis and Thaler 2003).

12 out of 20 investors, or 60% of the informants, comment that it is not necessary to take part in training courses on stock investment before making any investment in the market. They believe that they are capable of self-learning about stock investment knowledge. 45% of the informants think that they are better than others at selecting the right stock and 16/20 investors are confident that they are of full control of their investment. A significant aspect of overconfidence is the better-than-average effect in which people rate themselves better than median or have unrealistic judgments about themselves (Taylor and Brown 1988). There are 13 investors affirm that their successful investment is the result of their own knowledge. Specially all of the 20 informants believe that they are aware of the Vietnamese stock market. This implies the existence of overconfidence in the interviewed investors, which can be seen through their confidence in having full control of their investment in the market. This is also recognized by (Odean 1998) when he finds out that overconfident investors tend to believe that they are better than others at selecting best stocks as well as choosing right time to sign in or out of the market. Individuals’ overconfidence is an important factor motivating them to take part in stock market, a quite new market in Vietnam. It helps them to gain more efficient transactions than in other financial markets. Relevant comments made by informants are quoted as follows:

- Before deciding to invest in a certain stock, I can and actually usually analyze and assess value and potential of that stock;
- Based on my own stock analysis, I am confident with success for any stock investment I have made;
- When setting price for stock, I can easily set the real price for the stock of my interest;
- Stocks that I decide to invest in are usually more productive than the average of the market;
- Recently I have not made any stock transactions in my own impulsive stock market;
- Compared with other investors, I feel really confident in my ability to select the right stock to invest;
- I can master information about stocks on my investment list;
In the stock market, I think that successful investment does not necessarily require participation in professional training courses. Self-learning of documents about stock and stock market is enough. However, many investors also believe that the Vietnamese stock market at this stage is the ‘market of faith’ and that investors with good luck can easily gain successful investment. They are not really interested in contradictory information. As their judgment and awareness are more intuitional, they go overconfident about their choices. Individuals’ investment list in the Vietnamese stock market is not diversified and does not correctly evaluate risks that investors might face with. They often make stock transactions at high frequency level to make use of information that they think they are the only one aware of.

(2) Excessive Optimism

Interviews were made in the middle of 2012. At that time the Vietnamese stock market, together with the whole economic system, were in the declining phase. But results from the interviews show that individuals in the market are quite optimistic.

Among the 20 informants, 14 or 70% of them state that they would keep investing in the market even when it declines, which implies their faith in the high productivity of stock market. 11 individuals say that within the next one year they would increase investment capital for this market; 85% believe that within in the next one-two years, the Vietnamese stock market would get back on track and VN-Index (Ho Chi Minh stock index) would quickly improve after a declining period. Such findings imply excessive optimism which can also be seen in judgments made by individuals about the development potential for the Vietnamese stock market as well as their expectation of profits gained in this market. Excessive optimism originates from overconfidence and individual’ faith that things in the future will be better and more positive than they are now. Individuals hence make over-optimistic judgments about the market and investment opportunities. A typical theoretical study by (Gervais, Heaton et al. 2002) proves that excessive optimism usually brings about positive impact as it encourages administrators to make investment. Excessive optimism, on the other hand, causes negative impact since it leads companies or investors to investment in cases with minus NPV or of high risk. Relevant comments made by informants are quoted as follows:

- I believe in the market’s professionalism hence whenever having free capital I often invest in the market for profits even though I am just a governmental officer;
- Though the Vietnamese stock market is now in its difficult phase, I believe that it will get back on track in the next 1 – 2 years. That is the reason why I am not much bothered by the current declining stock market;
- In my opinion, stock market is an attractive investment field compared with other markets in the country. Therefore, I will keep investing in the stocks I trust despite the current fluctuating market;
- Currently profit gained from the stock market is not as good as I expected but I still want to increase my investment capital for the market in the near future;
- I believe that my knowledge together with good luck will bring me successful investment; therefore, I decide to invest in stock market;
- Stock price is going much lower than before but from my point of view good stocks’ price will increase in the near future.

These previous statements show that owing to excessive optimism individual investors still have faith in the productivity of stock market even though they are facing with inflation, taxes and fees. Excessive optimism, at the same time, is the reason why individuals pay too much attention to companies they have invested in because they see other companies in market weaker than theirs in the race. In addition, excessive optimism can make individuals dignify reports on companies’ development potential made by analysts or the companies themselves. Excessive optimism also makes individuals become less aware of negative information about their investment.
(3) Psychology of Risk

Risk is a debatable concept in finance. There are many definitions of risk, which leads to various methods of measuring risk. Most of the arguments, however, agree that risk is an unexpected outcome and risk is linked to uncertainty. In the study of Tversky and Kahneman, they suggested that people tend to be risk averse in the gain zone or when things go well and turn to be risk seeking in the loss zone. They also argue that people prefer risk seeking when facing losses (Tversky and Kahneman 1974).

The interviews show that 9 out of 20 informants prefer times when stocks fluctuate dramatically as such times are their chances to gain profits. It illustrates the attitude of finding profits in risk. In cases when stock price declines heavily, 12 informants state that they tend to hold the stocks longer till their price goes up. Namely they do not want to sell at that time to minimize loss caused by price difference.

70% of the informants invest in companies that they are familiar with or have much information about. This statement reveals their cautiousness and fear of risk or preference of familiarity.

6/20 (80%) individuals invest in companies paying steady dividend. Their common choices are stocks of powerful companies in Vietnam (Bluechip stocks). This statement presents the investors’ attitude towards risk in stock market. Relevant comments made by informants are quoted as follows:

- That the stock market fluctuates significantly is a great chance for me to gain better profits compared with other financial markets;
- I invest in companies with high prestige in the market such as the ones in natural resources exploitation, electricity or telecommunication since they very often have a stable business;
- Even when stock price goes down, I do not hasten to sell my stock immediately;
- I do not want to sell my stock at loss but keep it for a while for better future chance;
- When joining the stock market, I am aware that it is a risky market but I still want to try because “High risk goes with big profit”;
- As for me, stocks with steady dividend are the priority for my investment in stock market.

According to behavioral finance’s perspective, subjective (quantitative) factors are added in risk; accordingly, risk is perceived from both emotion and cognition (Olsen 2007) and the two main psychological moods which are risk aversion and risk seeking can exist in individuals under different conditions and contexts (Olsen 2008). Therefore, comments made by the investors show that when they are risk-adverse and the losses increase, they would not exert themselves to gain profits from short-term stock investment. A group of researchers studying Factors Influencing Retail Investors’ Attitude Towards Investing in Equity Stocks also find out that investors’ tolerance for risk is one of the factors having great impact upon individuals’ investment attitude (Bennet, Selvam et al. 2011).

(4) Herd Behavior

The study conducted by Bikhchandani and Sharma proves that herd behavior in financial market is an investor’s behavior imitating that of others or the market movement in stead of following his/her source of information and strategy (Bikhchandani and Sharma 2000). Investors do not always make lucid and reasonable decisions as expected. Their behaviors, in stead, are also led by emotions as well as psychological mood of other investors. Results from the interviews so that:

12 out of 20 investors claim that they usually refer to others’ opinion before making any investment decisions. 17 among the informants say that they would consider referring to movements on the digital stock board to make their own investment decision. This shows a tendency among individuals to observing others’ behavior when making investment decision. In other words, it is the act of mutual imitation among investors (Hwang and Salmon 2004). In the study conducted in 1992, Banerjee explained that herd behavior as acting following what other people are doing, even when their private source of information proves that they should act differently (Banerjee 1992).

When questioned “Given the case that with the private information you have, what would you do if most of the market make opposite transaction compared to yours?”, 11 out of 20 informants, however, state that they would not change their decision. This result proves that investors do not entirely base on market movements to decide; in fact, it can been seen as an illustration of overconfidence when individuals consider their information of great value. On the other hand, 13 or 65%
of the 20 informants claim that they will decide to sell or buy certain stocks following the crowd if they do not have any information about such stocks. This is also the time when they often listen to market analysts and researchers. A study by Barber et al argues that individual investors tend to make similar deviation at or around a certain point of time. Such investors do not necessarily reject each other’s actions; in fact, their actions share overall potential (Barber, Odean et al. 2009). Particularly, information on stock transactions made by foreign investors in the Vietnamese stock market also leaves remarkable impact on Vietnamese individual investors. This is an evidence for the existence of herd behavior in Vietnamese individual investors.

Comments revealing herd behavior made by the informants are quoted as below:

- Relevant information from friends and informal sources of information in stock market have a rather high impact on my investment decision;
- It is the fact that information in the Vietnamese stock market is still neither clear nor timely, hence I mainly rely on informal sources of information to make decision;
- There is a lack of formal information in the Vietnamese stock market, which is actually a barrier to people’s investment decision. I myself often consult analysts, market researchers or foreign investors’ decision;
- When coming to the ‘stock trading floor’, my decision is often influenced by other investors in stock market. But when sitting in my office observing the stock via ‘online index board’ and doing online transactions, I become less influenced.
- As a governmental officer, I do not often come directly to the ‘stock trading floor’. That is why I often follow advices given by my friends and relatives to invest in suggested stocks;
- I often refer to other people’s information before making an investment;
- My knowledge on stock and stock market is still limited hence I usually rely on advices given by stock brokers or stocks of popular choices to do my own investment.

It is evident that herd behavior has a great impact on investment decision made by individuals in the Vietnamese stock market. Herd behavior is human’s inherent psychology which turns stronger when people have to made decision in an environment where information is inefficient, information accuracy is not reliable and information transparency is limited. When individual investors do not have faith in the quality and transparency of information in combination with limited information analysis ability, they tend to imitate others in the market (Chiang and Zheng 2010). It results in the inefficiency of stock market.

Findings from interviews with individual investors in the Vietnamese stock market help to determine four main psychological factors influencing their stock investment decision-making process. Based on the theory of planned behavior, it is suggested that these psychological factors have direct impact on attitude towards investment behavior performed by these individuals (Sehgal and Singh 2012). In a study conducted by Johnsson et al aims to investigate factors influencing decisions made by investors. These are behavioral biases such as excessive optimism, overconfidence, anchoring bias, etc… Johnsson et al get the results that behavioral biases of individual investor with high percentage appearing in the research sample such as optimism, overconfidence. Moreover, they determine relationships between overconfidence and excessive optimism (Johnsson, Lindblom et al. 2002). As a result, the framework for studying factors influencing investment decision made by individual in the Vietnamese stock market is developed as shown in Figure 3.
6. Conclusions

Psychological factors may exist naturally without people’s awareness but they have great impact on individuals’ behavioral intention and decision in stock market. Based on the theory of planned behavior, we conducted in-depth interviews with individual investors in the Vietnamese stock market. Findings from the interviews identify four psychological factors influencing investors’ decision-making process. They are (1) overconfidence, (2) excessive optimism, (3) psychology of risk, and (4) herd behavior. Result of this study is an initial finding which can be used as foundation for further quantitative studies in order to measure impact of such factors on the decision-making process of individual investors in the Vietnamese stock market.

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