UNDERSTANDING HEURISTICS, PROSPECTING AND HERDING IN INVESTMENT DECISIONS OF SHARE MARKET INVESTORS: A THEORETICAL APPROACH

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Abstract

Although finance has been studied for thousands of years, however the Behavioral Finance which considers the human behaviors in finance is a quite new area. Traditionally, it was believed that the investors of stock market are rational and they efficiently respond to the new information regarding the stock market products. There are no chances of abnormal returns in the market in the long run, even if the asset prices are not properly valued, they will come to reasonable price level through arbitrage. However, traditional finance theories and neo-classical finance models ignore the importance of investors' psychology and behavior in the decision-making process. In views of their ignorance, the investors' behavior is not covered within the frame work of traditional finance theories. Sometimes, the investors make irrational decisions and do not behave rationally because of their incompetence and capacity limitations to process the information. In this direction the present study is an attempt to evaluate the influence of various psychological and behavioural factors on the investment behaviour of investors.

The findings of the study point out that Behavioural Finance theories, which are based on the psychological traits to understand that how the Psychological Variables like (Heuristics, Prospects, and Herding), influence the investment behaviour of investors. According to these socio-psychologists, human investment decision processes are subject to several cognitive illusions i.e. illusions caused by heuristic decision process, illusions rooted from the adoption of mental frames grouped in the prospect theory and illusions due to herding variables.

Key words: *Behavioral Finance, Psychological Variables, Heuristic, Prospect, and Herding variables, Investment decision, Investment performance and Satisfaction.*

1. Introduction and Statement of the Problem

Traditionally, it was believed that the investors of stock market are rational and they efficiently respond to the new information regarding the stock market products. There are no chances of abnormal returns in the market in the long run, even if the asset prices are not properly valued, they will come to reasonable price level through arbitrage (Shefrin,2000). However, various empirical investigations conducted during 1980's and 1990's, revealed that market is not as efficient as explained by the efficient market hypothesis (EMH) of traditional finance theories, because of certain psychological anomalies while investment decisions are made by investors. Thus, traditional finance theories and neo-classical finance models ignore the importance of investors' psychology and behavior in the decision-making process. In views of their ignorance, the investors' behavior is not covered within the frame work of traditional finance theories. Sometimes, the investors make irrational decisions and do not behave rationally because of their incompetence and capacity limitationsto process the information (Shefrin,2000). Thus, the decisionsof investors in the stock market play an important role in defining the market trend, which theninfluences the economy of the state. In order to understand and give some suitable explanation for the investors' decisionbehaviour, theresearcherhas adopted the use of behavioral approach to overcome the lack of the traditional and the neo-classical finance approach.Behavioural finance shows the impact of psychology on the behaviour of individuals and is importantto study as it depicts the major factors behind market inefficiency (Fama,1998). Further, it is important to explore all those factors that have their influence on the investment decisions of the investors and to investigate that how these factorsimpact their investment performance and satisfaction in the security market. It will be useful for investors to understand common investment behavior, from which they can justify their reactions for better returns in the future. Security investment organizations may also use this information for better understanding of the investors, to forecast more accurately investor behaviour and to give better suggestions to the investors to their selection of better investment portfolio. Thus, if we are able to understand all those factors that have influence on the stock price we will be able to reflect the true value of securities in the market and the stock market shall become the yardstick of the economy's wealth and development. Further, by understanding the human behaviour and psychological mechanism involved in financial decision-making, standard finance models may be improved to better reflect and explain the reality in today's evolving markets.

2. Theoretical Framework

There is a vast body of literature by eminent scholars, psychologists, behavioral scientists and financial experts on different aspects of the behavioral finance (Welch,2000). Over the past four decades, investment decisions of the investors have been studied in detail to identify the role of various factors that influence the investment decision of investors. The evolution of behavioral finance led researchers to examine the psychological traits of investors and how they influence their investment decision making. Although the

investor behaviour was originally assumed to be rational, in the process it has been identified that investor's investment decisions are affected by the series of psychological and behavioral biases (Nunnally, 1978). Further it was observed that the market factors likeprice changes, market information, past trends of stocks, customer preferences, over-reaction to price changes and fundamentals of underlying stocks also have their influence on the investment behaviour of investors (Miles and McCue, 1984). Further, different people perceive risk differently, some of them take personal loans and credits, trade risky equities in the stock market, purchase inefficient or risky products, and accept insecure jobs, as they perceive these risks an opportunity for promised high returns (Hanoch*et al.,*2006). While others sell the promising securities with the threat that they may burn their hands with the decrease in the value of their securities in the market. It is important to note that risk taking is domain-specific. At an individual level risk taking in one domain has little or no relationship with risk taking in another domain(Sharpe*et al*.,2008). Further, risk taking is mediated by risk perception, risk attitude and risk propensity, to the extent of one's risk perceptionwhether it is judged to be an opportunity to gain or a threat of losing, and the extent to which one intends to take the risk.This chapter presents an overview of some of the relevant studies on different aspects of behaviour finance followed by the operationalization of understudy variables and identifying the research gaps in the field.

2.1 Antecedents of Behavioral Finance, Investment Performance and Investment Satisfaction

According to Saint-Paul(1992), behavioral finance is based on the psychology that suggests the human decision processes are subject to several cognitive illusions. These illusions are divided into two groups such as illusions caused by heuristic decision process and illusions rooted from the adoption of mental frames grouped in the Prospect Theory (Waweru *et al.,* 2008). However, Thaler (1999); Barber and Odean (2001) have studied the influence of Herding Variables on the investment behaviour, all these variables have been studied in the present study under the domain name of psychological variables. Besides(Erich et al., 2010)have studied the influence of risk perception, risk attitude and risk propensity under the domain name of Perceived Risk Behaviour. They have concludedthat these variables have their influence on investment risk behavior of investors. Further according to DeBondt and Thaler (1995) the investors make their investment decisions in the market that is always available with new challenges and opportunities, and therefore the market influences the investment behavior of investors and the market is also affected by the investors' decisions in the long run. (Waweru*et al*., 2008) identify the factors of market that have a strong impact on investors' decision making. The research model also derives the criteria through which we can evaluate the investor's decisions regarding the investment performance and satisfaction. In more details, the return rate of stock investment is evaluated by asking investors to compare their currently real return rates to both their own expected return rates and the average return rate of the security market. Besides, the satisfaction level of investment decisions is alsoproposed in this research as a criterion to measure the investment performance. These categories as the psychological and perceived risk behavior along with

market variables are the major three dimensions that are studied in this conceptual model to determine investors' Investment Performance and Satisfaction. Therefore, theantecedents of Behavioural Finance that have been identified as a comprehensive group of all the dimensions of investment behaviour, which are responsible for the selection of an investment portfolio, have been discussed in detail in succeeding section.

2.2 Heuristic Theory

Heuristics are defined as the rules of thumb, which makes decision making easier, especially in complex and uncertain environments (Ritter, 2003) by reducing the complexity of assessing probabilities and predicting values to simpler judgments (Kahneman and Tversky, 1974). They are the first writers studying the factors belonging to heuristics while introducing three factors namely representativeness, availability bias and anchoring. Representativeness refers to the degree of similarity that an event has with its parent population (DeBondt and Thaler, 1995) or the degree to which an event resembles its population. Representativeness may result some biases such as, investors put too much weight on recent experiences and ignore the average long-term return rates (Ritter, 2003). In financial market, anchoring arises when a value scale is fixed by recent observations. Anchoring has some connection with representativeness as it also reflects that people often focus on recent experience and tend to be more optimistic when the market rises and more pessimistic when the market falls (Waweru *et al*., 2008). However, when people over-estimate the reliability of their knowledge and skills, it is the manifestation of overconfidence (DeBondt and Thaler, 1995). Overconfidence is believed to improve the persistence and determination, mental facility and risk tolerance. In other words, overconfidence can help to promote professional performance. It is also noted that overconfidence can enhance other's perception of one's abilities, which may help to achieve faster promotion and greater investment duration (Oberlechner and Osler, 2004).

2.3 Prospect Theory

Prospect Theory is considered as an appropriate approach to investment decision-making from different perspectives. Prospect Theory describes the different states of mind affecting an individual's decision-making processes including regret aversion, loss aversion and mental accounting (Waweru*et al*., 2003). Regret is an emotionaloccurrence after investors make investment decision mistakes. Investors avoid regret by refusing to sell decreasing value shares and are willing to sell the shares that have increased in value (Holdmstrom *et al*., 1993). Moreover, investors tend to be more regretful about holding losing stocks too long than selling winning ones too soon (Forgel and Berry, 2006;Lehenkari and Perttunen, 2004). Loss aversion refers to the difference level of mental penalty people have from a similar size of loss or gain (Bencivenga *et al*., 1996). There isevidence showing that people are more distressed at the prospect of losses than they are pleased by equivalent gains (Barberis and Thaler, 2003). Moreover, a loss coming after a prior gain is proved less painful than usual, while as a loss arriving after a loss seems to be more painful than usual (Bencivenga *et al*., 1996). Mental accounting is a term referring to "the process by which people think about and evaluate their financial transactions" (Brian*et al*., 2005). Mental accounting allows investors

to organize their portfolio into separate accounts (Barberis and Thaler, 2003; Ritter, 2003).In this research, three elements of prospect dimension i.e. Loss aversion, Regret aversion, and mental accounting are used to measure their impact levels on the investment decision making as well as the investment performance of individual investors.

2.4 Herding variables

Herding effect in financial market is identified as the tendency of investors' behaviors to follow the others' actions. Practitioners usually consider carefully the existence of herding variables in the decision making. The investors rely on collective information more than the private information that result the price deviation of the securities from fundamental value. Therefore, there are fair chances for investors to attain above normal profits (Hvide,2002). Academic researchers also pay their attention to herding variables, because of its impacts on the stock price movements and its influence onthe attributes of risk and return a model which in turn impacts the asset pricing theories (Tan *et al*., 2008).In the security market, herding investors base their investment decisions on the masses' decisions of buying or selling stocks. In contrast, informed and rational investors usually ignore following the flow of masses, and this in turn makes the market more efficient (Jaswani, 2008). In general, herding investors act the same way as prehistoric mendo,which had a little knowledge and information of the surrounding environment and live together in groups to support each other and get safety (Caparrelli *et al*., 2004). Therefore, herding behavior helps investors to have a sense of regret aversion for their decisions. Herding variables are generally applicable to the individual investors as they are not well informed about the stock market, so they feel a sense of safety while following the masses and make investment decisions as the other investors do (Huy,2010). However, some investors are confident enough and well informed about the investment markets and therefore they do not find any reason to follow the herd behavior however, up to a limited extent (Kaminsky*et al*.,1999). This type of rational behaviour of investors act as corrections to the security prices movements in the long run at the stock market.

2.5 Discussion

The study is based on the approaches of behavioural finance, which is quite different from the prior studies that are based on the traditional and classical financial approaches. This research is one of the very few studies of identifying the factors that impactthe stock investment decisions using behavioural finance. The study analyses these behavioural factors with antecedents to assess their impacts on the individual investors, while as prior studies have considered only few factors and limited dimensions of behavioural factors. Behavioural finance theories, that are based on the psychological aspects, attempt to understand how the psychological variables (heuristics, prospect and herding) and Perceived risk behavior (risk perception, risk attitude and risk propensity) influence individual investors' behavior and in turn how these variables influence the investment performance and investment satisfaction. The various relationships between heuristics, prospect, and herding with risk perception, risk attitude and risk propensity including their respective items affecting the investment behavior of investors has also been studied. The stock market in

which all these decisions are made by the investors have its influence on the investment behaviour of investors and therefore have also been incorporated in the study. The outcome of these decisions will give us results in the form of investment performance and investment satisfaction. The investment performance is measured by the returns greater than expected and returns greater than market rate, while as the investment satisfaction is measured by the safety, security, reliability and profitability of their invested stock. After analysis and interpretation of the data collected through survey method wherein reliable survey instruments have been used, it is concluded as under:

- Basically there are only three behavioral factors as discussed that impact the investment decisions of individual investors, which are Psychological, Perceived Risk Behaviour and Market Factors
- Psychological variables includes only three factors such as heuristics, prospect, and herding variables while Perceived Risk Behavior includes Risk Perception, Risk Attitude and Risk Propensity and the market factors are influenced primarily by two factors, that are market information and market fluctuations.
- The outcome of investment decisions can be gauged by measuring the investment performance and investment satisfaction of the investors.
- The investment performance is particularly measured by the returns that are greater than themarket rate, while the investment satisfaction is measured by the safety, security, and profitability of these invested stocks.

3.1 Conclusion

The study has identified critical factors that can enhance or impede the effectiveness of investment decision making. Further the operationalization of variables has put a new orientation to the understudy variables and the model put forth is noble in combination, hence added a considerable information in the relevant field of study and to literature. The methodology of the present study is having implications in devising the research approach in general and particularly for studies related to investments and other behavioural aspects. Further the study is having its contribution in instrument purification through reliability and validity using second order confirmatory analysis. Finally the instrument prepared can be generalized and used to carry research in different geographical areas and can assist other type of studies.

3.2 Direction for future research

The present study is a humble attempt to identify the complete set of all the behavioral factors that influence the investment behaviour of investors in the stock market with reference to investment performance and investment satisfaction. However the present study has opened a new outlook for future research as well.

- In tune with the present study, need is to have further researches to confirm the designed model of this research with the larger sample size and the more diversity of respondents across the world.

- It is also suggested to conduct the further research to improve the measurements of behavioural finance as well as adjust them to fit the case of different security markets and products.

- Further researches are also suggested to apply behavioural finance to explore the behaviour that influence the decisions of institutional investors. These researches can support to test the suitability of applying behavioural finance for all kinds of security markets with all types of investors.

3.3 Limitations of the Study

The present study also suffers from certain limitations as follows:

- Though, all possible efforts were made to make the study objective and precise, yet certain limitation like time, finance and lack of other facilities normally have been faced by the researcher.
- Behavioral finance and its measurements are new to investors in the state of Jammu and Kashmir. Because of which there are limited number of references available for understanding and application of behavioral finance.
- Moreover, the investment performance and satisfaction which are explored with the subjective awareness of the investors, has its own limitations. As some of investors do not know their own expected return rates, as well as the average return rate in the stock market. Therefore, the measurements of investment performance and satisfaction need to be combined with the assessment of secondary data to enhance the accuracy of the measurements.

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