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Review article

Attitude of Pakistan's individual investor towards risk during bull and bear markets

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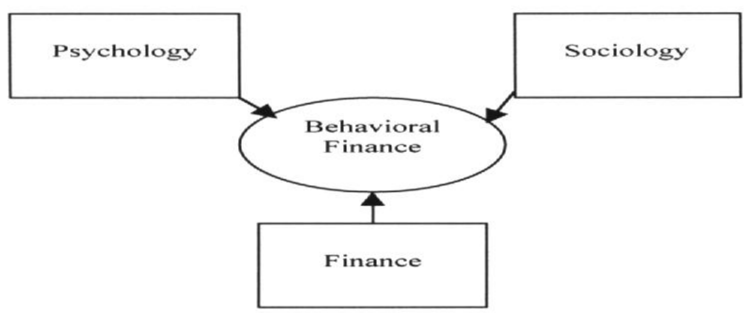
ABSTRACT

The prime objectives of this study is to analysis the individual behavior in both bull and bear markets of paksitan. In this paper, we have examined the preferences, attitude towards risk and varying market condition. We have taken the data of 100 companies from various sectors. For this purpose the data of four years have been collected. Empirical evidences have shown that we have used the abnormal returns, volatility and systematic risk for the purpose of measure of risk. Due to various behavior biases, the overall individual behaviors are the different. This study is showing that bull and bear behaviors are associated with the Book to market valuation. We are also trying to show that overconfidence has impact on the investment decision. The objectives of this study are 1) to analyze the individuals behavior in the different market condition.2) In the Bull and Bear market individuals towards risk.3) impact of overconfidence on the different market situation. This study is the related to bull and bear market of Pakistan. It is limited till four years. In 2007 Karachi stock exchange was high growth it was reached till 14075.84 and with annual return of 33.54%. There have observed the significant effect of overconfidence on the risk attitudes. Our studies have taken the stock market of Karachi. Our study is showing very clearly that investor's behaviors are different in both markets. In this study level of the ownership is taken dependent variable and independent are the no of outstanding shares, EPS, abnormal returns; we have measured the volatility through sigma.

1. Introduction

Behavior finance is such a theory in which explains that how people make irrational financial decisions. Behaviour finance has main role in the investment decision of stock exchange. Shefrin (2001) says that behavior finance is such a field of finance in which explains that how psychology factors influence the financial decision. According to Verma (2004) behavior finance has explained that how people are forget basic rules when they are making the investment. One of the basic types of finance is known as the behavioral finance, in which we use psychology based theories to explain the individual's investment decision and stock market anomalies. Behaviour fiancé is based on the some logical theories, most crucial part of behavior fiancé are the capital asset pricing model and efficient market hypothesis. According to these theories some people are behaving rationally and some are behaving irrationally. For a while, empirical evidences have shown that CAPM and EHM both theories did respectable job for exploring the certain events. With the passage of time academics started to work on the anomalies and behavior. According to behavior fiancé assumptions that some of the individuals are rational and they are wealth maximize. But this assumption is not explained that how investors are behave in the real world. The basic purpose of behavior finance to explain the various factors which has influence on the investment decision of the investors. Essentially, the prime attempt of the behavior finance is to explain the questions of such quires like when, and where invest money.



The behavior finance has also role in the studying of financial markets, stock markets anomalies and financial crisis of the stock market. Lastly, the behavior fiancé has also important to analyze the various psychological factors on the investment decision. Different researchers have given the different studies related to behavior fiancé but according to different researchers behavior fiancé is integral catalysts in the field of finance. Different scholars give the different interpretation related to finance but most of the studies say that behavior fiancé means combination of psycholory, finance and sociology. During the last century the concept of finance is in the way of rapid development. In the mid of 1950s the modern portfolio theory has achieved the development. The financial models have the crucial role in the development of the modern portfolio investment theory. The aims of these theories are to bring finance in the sense of traditional. The most important assumption of modern portfolio investment is that individuals are the rational. The assumption that all the investors are rational has been crititsized from first day. As we know, that human beings are the social creatures so their decision can change with the passage of the time. Since in recent years the discussion of behavior finance has been very popular. The crucial principles of behavior finance are the psychology and sociology.

2. Behavior

Before exploring the behavior finance researcher want to explain about the behavior means. According to Skinner, it is very difficult task to understand the human nature. According to different researchers both international and external factors stimulants' the different actions. These interactions are known as the behavior. The basic focus in the behavior fiancé is that how investors take their investment decision. As we know, that one factor emotion has impact on the investor's decision. Behaviour finance approaches has helpful to explain that how much emotion has impact on the investment decision. The behavior fiancé model explains that how individuals should act in the financial market. There is a lot of theories which are related to investors rational decisions for example how can reduce risk and maximimize profit. Now scholar has come across a significant portion of these theories with the help of effective market hypothesis. However, most of the studies reflect that investors do not behave rational in some investment decision. At this time, behavior finance has filled this gap and explained that how comprehensive errors affect on the investors s decision. Most of the researchers say, that behavior fiancé is based on the investor behavior in all types of the market. Behaviour finance theories said that market are not effective, there is biggest evidence in the shape of the lack of reaction. In the field of finance behavior finance means application of psychology. Behaviour finance can be divided into two main types 1) Micro behavior finance 2) Macro behavior finance. Marcobehaviour finance explain the investment decision in the anomalies Microbehaviour finance explains about the individuals investment decision.

Behavior finance is the known as paradigm, in which various financial markets are studied with the help of using models. Behaviour finance have two crucial elements 1) cognitive psychology 2) arbitrage .cognitive refers that what is the thinking of people for example there is a lot of systematic errors in the process of taking decision. For example overconfidence etc. Behavior finance uses the such types of the body of knowledge. Limits to arbitrage explains that in which condition arbitrage forces will be effective in which condition they will not effective. According to different scholars that limits to arbitrage is utilized for the prediction. According to scholars in the stock market investors are think and behave. Most of the investors depend upon the information for the investment. So, economists have concluded the results that financial markets are stable while stock prices follow a random walks and all the economy are moving towards equilibrium. Hence, the most difficult part in the field of investment is to select area of investment. There is need of significant consideration for taking the best investment decision. Behaviour fiancé is helpful to explain that how much information useful for the investors. Behaviour finance is the crucial part to take better decision making is considered such a part in which investors have taken decision in the complex situation. It is a also known as the cognitive process in which investors have taken decision among the different alternatives. For successful decision there is need of proper planning .Decision making is process in which evaluated the best option. For competitive the business issues there is need to update the market information. Behaviour finance has main role to update the information of the business. Hence it is very difficult task to take decision in the field of investment .there is need of significant consideration in the decision making process. When the investors are investing in the market there is need to consider three main things 1)risk tolerance 2)market information 3)required rate of return. There behavior finance is important because it's give assessment about the market information. Different researcher have provided that behavior finance is the crucial part for taking the decision. Behaviour finance is helpful for successful decision making process and avoid from errors in fucture. Now a days, behavior fiancé has significant impact on the performance of the investors. Mostly, in the securities market there is upward and down ward movements. These are represented as the risk. Prospect theory explains that an experience person can take better decision. According to Kahneman and tversky (1979) in the condition of profits most of the investors avoid from risk but in case of stock losing they should take risk at that time. In this thesis scholars want to explain that in the situation of psychological biases how can take the investment decision correctly.

3. Principles of behavior finance

According to traditional financial theory that decisions are made by the investors and they are usually rational. Whereas the modern theories have explained that there is no such a condition in the investment process. In simple words we can say that in the human decision making cognitive illusion has the main role.

4. Heuristic decision process

In this approach the investor s are determined the errors which are done by themselves. These errors are helping them to take fair decision in fucture. Different studies have proved that investors are not rational so, it is very difficult task to remove emotional factors from the decision making process.1) representativeness. According to kehneman and Tversky (1972) making judgments in the unsure situation. Some investors take decision on the previous experience such types of investors are known as the sterotype. Over confidence: Dittrich, Guth and Macie jpovsky (2001) observed that confidence is curial element for taking any type of investment .modern studied have proved that investors who lose their money in the, gain more confidence related to their business. Confidenace has different types and helpful in gaining the achievements and self confidence is always known as the positive part in any business. In certain cases, investor overestimates their knowledge that will harmful for their business. According to Tversky and Kahneman (1974) it is human nature that at the start taking final results this process is known as anchoring. This stating value may be reason of the problem in any investment decision. Any wrong assumption is known as the gambles fallacy .this problem has created when investors predicted any assumption. This anticipation may be good and may be bad. This is the result of overreaction of biases Availability biases is known as the cognitive investment. It occurs due to overweight of our minds. Prospect theory: Kahneman and Tversky (1979) has introduced this theory. This theory is based on the evidence that people have different value in the gain and losses .this theory is also famous from the name of loss aversion theory. Prospect theory has also explained the idea that all the investors do not act always rationally. In the case of uncertainty different factors have motivated them in the investment process. This is the first part of this theory which explains the outcomes related to particular problem. It is ways that present the nature on the investor. According to this theory loss of 1 $ is much painful for the investor as compared to pleasure of 1 $ gain. Loss aversion this is the basic concept of psychology theory in which explains the concept of risk seeker and risk aversion. In the condition of loss investors become risk seeker and in the condition of gains investors have become risk seeker. Regret aversion: This is kind of aversion in which investors trying to avoid from bad investment decision. Mental accounting: According to Thaler (1980) it the way for investors through that they can purchasing decision and estimate the profit and loss. It is also helpful to separator the accounts and divided them at the subjective criteria. Self control: It is that process in which investors try to shield their investment. Psychologically it is called as the self regulation. According to thaler and Shefrin (1981) investors always looking for the improving their self control.

5. Strategies for overcoming behavior finance

Since last few decades, behavior fiancé has become an integral part of decision making process because it influences heavily on the investor s performance. Behaviour finance is such a tool which helpful to avoid the future errors. Investores can improve decision making by recognizing their errors. After studying the lot of studies has proved that it is best application for investment decision. There is need of various safeguard to control the emotion and mental errors. There is introduced the disciplined trading strategy to overcome such types of errors.

6. Objectives of the study

1) To analyze the individuals behavior in the different market condition.
2) In the Bull and Bear market individuals towards risk.
3) impact of overconfidence on the different market situation.

7. Bull and bear market states of Pakistan

The prime objective of this study is to alayze the Pakistani investor's behavior in bull and bear market. For this purpose we are analyzing the investors during (2008-2009) and bull market (2007 -2010). Results have shown that situation and stock markets both have impact on the investor's behavior. Karachi stock exchange was decline in 2008-2009 till 25.05%.in this period the annual return was -40.25 .bull period means increasing the Karachi stock exchange .in 2010 it was increase till 15%.at the end this study has shown that investors behavior are different in both bull and bear market.

KSE hits back at bears, up 255pts, 0.13% toward 32,000pts

8. Significant of the study

Most of the studies has been done on the investors behavior in the bull and bear markets .through this study we are trying to expose that overconfidence has impact in both conditions. All the Pakistan market has weak equity market. There is need to understand the psychological biases on the different investment decisions. Understanding of such types of biases will helpful to take wise investment decision.

9. Literature review

According to a, Kjelldroff and M, Keskitalo, Overconfidence is known as the widely documented phenomenon. In this paper, they have studied the consumer overconfidence cycle. In this field they have taken individuals behavior in Indian stock exchange. For this purpose they have collected the data from year 1990 to 2010.they have applied the ECM model for this purpose they concluded that overconfidence has impacted on the stock exchange of Bumbia. They have suggested that investors should stay away from such type of biases factors.

According to Ahmad, Z., Khan, A. A., & Tariq, A. In this paper we have analyzed the Japanese individual behavior in long bull and long bear market .for this purpose they have collected the data from 1985 to 1999.for this purpose they have applied unit root and VECM and analyzed that there is chances of risk in both markets. Overall, it has analyzed that there are striking difference.

According to Ali, F., Shafeeq, N., & Ali, M. In this paper we have analyzed the in the different securities the different level of trading volume. overcofidence has influenced on the investment decision. The aim of this paper to study overconfidence impact on the Indian stock exchange. For this purpose they have taken data from 1999 to 2009. They have applied the VAR models and impulse response fuctions. They have suggested that investors should focus that investors decision are bias away from their decision.

According to Fares, A. R. F., & Khamis, F. G. In this paper, they have investigated the individual overconfidence on the UK stock exchange .for this purpose they have collected questionnaire and by collecting the evidence about the UK investors. The survey was exploratory nature. The results have shown that UK investors are facing the overconfidence bias. This study have also shown that different sources of information.

According to Barber, B. M., & Odean, T. In this paper they examined the investors decision in bull and bear market of Pakistan. For this purpose they have Multivariate time series analysis. They analyzed the impact of different biases on Karachi stock exchange. They have analyzed that there is link between investor's decision and these biases .However; they had found that overconfidence is the main factor which had impact on all the investors' decision.

Baschieri, G., Carosi, A., & Mengoli, S. In this paper, they have analyzed the biases factor on the investment decision of Jordan stock exchange. They had taken Jordan stock exchange as the dependent variables and overconfidence and some other factors as the independent variables. They have concluded the result that these factors have influenced on the investment decision. They suggested that investors should take relational decision.

Bashir, T., Ilyas, M., & Furrukh, A. The purpose of this paper is to study the individual's investor decision in bull and bear market in Nigeria. The prime objective of this paper is to examine the attitude, towards risk. We have taken 100 companies data for four years. They have applied init root and VECM for this purpose. They had taken the result that risk is same in both conditions.

Caliendo, F., & Huang, K. X. In this paper they have examined that investor's behavior of IQRA and their strategies before taking investment decision. For this purpose they have taken the data from 1998 to 2008 and applied the VAR model. Their results have shown that there is relationship between strategies and investment decision.

Chuang, W. I., & Susmel, R. In this paper they examined the impact of experience on the investment decision. For this purpose they have used the panel data from 1982 to 2011of Japan and obtained the evidence that increase in the experiences there is also effect on the investment decision. For this purpose they utilized the vicariate model and proved that there is relationship between investment decision and experience.

Cunado, J., Gil-Alana, L. A., & Perez de Gracia, F. In this paper they have examined that investor's behavior of Paris and their strategies before taking investment decision. For this purpose they have taken the data from 1999 to 2009 and applied the VAR model. Their results have shown that there is relationship between strategies and investment decision.

Deaves, R., Lüders, E., & Schröder, M. In this paper they examined the impact of experience on the investment decision. For this purpose they have used the panel data from 1981 to 2010 and obtained the evidence that increase in the experiences there is also effect on the investment decision. For this purpose they utilized the bivariate model and proved that there is relationship between investment decision and experience.

Dobrić, J., Frahm, G., & Schmid, F. In this paper we have analyzed the in the different securities the different level of trading volume. overcofidence has influenced on the investment decision.The aim of this paper to study overconfidence impact on the Indian stock exchange. For this purpose they have taken data from 1999 to 2009.they have applied the VAR models and impulse response fuctions. They have suggested that investors should focus that investors decision are bias away from their decision.

Forbes, J., & Kara, S. M. In this paper, they have investigated the individual overconfidence on the US stock exchange .for this purpose they have collected questionnaire and by collecting the evidence about the UK investors. The survey was exploratory nature. The results have shown that US investors are facing the overconfidence bias. This study have also shown that different sources of information.

Gwilym, O. A., Clare, A., Seaton, J., & Thomas, S. In this paper they examined the investors decision in bull and bear market of china. For this purpose they have Multivariate time series analysis. They analyzed the impact of different biases on Shangri stock exchange. They have analyzed that there is link between investors' decision and these biases .However; they had found that overconfidence is the main factors which had impact on all the investors' decision.

Al-Timimi, H. AH. In this paper, they have analyzed the biases factor on the investment decision of Jordan stock exchange. They had taken Germany stock exchange as the dependent variables and overconfidence and some other factors as the independent variables. They have concluded the result that these factors have influenced on the investment decision. They suggested that investors should take rational decision.

Rana, M. H., Murtaza, S., Noor, F., & Rehman, K. The purpose of this paper is to study the individuals investore decision in bull and bear market in Malayia. the prime objective of this paper is to examine the attitude, towars risk. We have taken 50 companies data for four years .they have applied init root and VECM for this purpose. They had taken the result that risk is same in both condition.

Mahmood, I., Ahmad, H., Khan, A. Z., & Anjum, M. In this paper we have analyzed the south Asia individual behavior in long bull and long bear market .for this purpose they have collected the data from 19856to 1998.for this purpose they have applied unit root and VECM and analyzed that there is chances of risk in both markets. overall, it has analyzed that there are striking difference.

K, Farrukh."Investment Outlook Overconfidence is known as the widely documented phenomenon. In this paper, they have studied the consumer overconfidence cycle. In this field they have taken individuals behavior in Indian stock exchange. For this purpose they have collected the data from year 1991 to 2011.they have applied the ECM model for this purpose they concluded that overconfidence has impacted on the stock exchange of Germany. They have suggested that investors should stay away from such type of biases factors.

10. Econometric model

The purpose of this study is to examine the level of individual's ownership and independent variables. In this research individual level of ownership is the dependent variable and beta, volatility, price to earning ratio/m and abnormal returns. We have applied the seven models with the help of using regression models. Bear is representing dummy variable.a1 and b1 are the coefficient and intercepts during the change in the market .They have used to check that to check that in which condition individual's behavior are the significant.

Equation:

Level=a1+b1 (Independent Variable) +a2*Dbear+b2*Dbear*Independent Variable

In model i, independent variable is Volatility
Level=ai+bi (Volatility)+a2*Dbear+b2*Dbear*Volatility

In model 2, independent variable is Beta Level=ai+bi (Beta)+a2*Dbear+b2*Dbear*Beta
In model 3, Independent variables are both measures of risk (Volatility and Beta)
Level=ai+bi (Volatility and Beta) +a2*Dbear+b2*Dbear*(Volatility and Beta)

In model 4, independent variable is Book to Market Ratio Level=ai+bi (B/M) +a2*Dbear+b2*Dbear*B/M

In model 5, independent variable is Abnormal Returns Level=ai+bi (Abnormal returns) +a2*Dbear+b2*Dbear* Abnormal returns

In model 6, independent variable is Price to Earning Ratio Level=ai+bi (P/E) +a2*Dbear+b2*Dbear* P/E
In model 7, all independent variables Volatility, Beta, Book to Market Ratio, Abnormal Returns and Price to Earning ratio

Level=ai+bi (independent variable) +a2*Dbear+b2*Dbear* independent variable.

11. Data

This study is the related to bull and bear market of Pakistan. It is limited till four years. In 2007 Karachi stock exchange was high growth it was reached till 14075.84 and with annual return of 33.54%. in 2008 and 2009 Karachi stock exchange was crash very badly. We have used 21 companies to examine the relationship individual's behavior in different market condition. Which companies we have selected all of them are listed in Karachi stock exchange. These companies belong to leading sector like banking, cement, chemicals, oil and Gas and food sector. Currently, in Pakistan there are three main stock exchanges.1) Islamabad stock exchange 2) Karachi stock exchange 3) Lahore stock exchange. According to different research Karachi stock exchange is known as the oldest and well reputed stock exchange of Pakistan. Karachi stock exchange starts its trade from 50 shares and now 660 companies are listed here. Karachi stock exchange is known as the bench markerked index for Pakistan stock exchange. We have taken data from different companies which have listed in Karachi stock exchange. SECP notification has shown that pattern of the shareholders. In this study we have examined the Pakistani individual's investor's not foreign investors. In this study level of the ownership is taken dependent variable and independent are the no of outstanding shares, EPS, abnormal returns; we have measured the volatility through sigma. Earnings per share are the price of the each share in the firm. To analysis the relationship between individual level of the ownership and another variables.

Level=a1+b1 (Independent Variable) +a2*Dbear+b2*Dbear*Independent Variable

A1 and a2 have shown that relationship between dependent and independent variables.a2b2 shows the coefficients between them. T statistics using a pooled approach.

12. Results

We have calculated T statistics by using pooled ordinary least square. In the table no 1, we have analyze the association between ownership and volatility. The coefficient in both variables are insignificant (2.79). In the second table beta is independent variable. Risk is also known as the beta. Results have shown that risks are same in both bull and bear markets. We have utilized the least square regression for the measurement of the risk. In the table no 3 the relationship between individuals and risk measures are analyzed. In the model 4, the relationship between individuals and market ratio has analyzed in both markets. The intercept dummy coefficient is positive which has showed that investor's behavior are different in both markets. While, slope dummy intercept also negative in both markets. Which have shown that mostly investors would like to invest in bear market? In model 5 associations between individual's level of ownership and abnormal returns. Abnormal returns are representation the stock performances .which has shown that investors hold the stock with abnormal return in bear market. Model 7, measures of risk during the bull market. All results have similar like last results.

Summary of the results:

Our finding has shown that individuals like prefer high stock which have at the top book to market ratios. This study has shown that there has not appeared significant change. Independent variables are similar in both markets. Justifications for Similar behavior of Pakistan's Individual Investor During bull and bear Market:

The regression result has shown that there is positive relationship in between impact of the book to market value and individual's level of ownership. Pakistan investors like the stock which has high book value. We have discussed the abnormal returns in both markets. There are various reasons of the reasons of risk in both markets. According to different researcher that Pakistani investors are risk averse.

Perception of Risk= f (Characteristics of stocks & characteristics of Investors):

Year	Average Individual level of ownership
2007	19.81%
2008	16.81%
2009	19.13%
2010	16.81%

13. Conclusion

There have observed the significant effect of overconfidence on the risk attitudes. Our studies have taken the stock market of Karchi. Our study is showing very clearly that investors behavior are different in both markets.

13.1. Limitations of study

1) There is limited companies have discussed in it
2) In this study we have discussed just four years individuals' behavior.

13.2. Future research

In this study we have based focus on the factor overconfidence in both bull and bear markets. In next research we shall disuse about the other factors which have impact on the investment discussion in both markets.

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