

***THE IMPACT OF OVERCONFIDENCE AND ILLUSION OF CONTROL
ON INVESTOR'S DECISION-MAKING***

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Abstrak

Tujuan utama dari penelitian ini adalah untuk menguji pengaruh dua bias, yaitu kepercayaan diri yang berlebihan dan illusion of control, terhadap keputusan investor di Indeks Karachi Stock Exchange (KSE) 100 dengan menggunakan ammo. Sampel penelitian terdiri dari 400 responden dan data diolah menggunakan Structural Equation Modeling (SEM). Penelitian ini menunjukkan bahwa informasi masa lalu menyebabkan investor menjadi terlalu percaya diri, dimana investor pria lebih percaya diri daripada wanita. Investor tidak terlalu fokus pada analisis fundamental atau teknis dalam keputusan mereka. Hasil penelitian menunjukkan bahwa terlalu percaya diri berdampak signifikan terhadap proses pengambilan keputusan investor di Indeks KSE 100. Demikian pula, ilusi kontrol juga merupakan bias yang diakui oleh perilaku keuangan, yang secara terbuka atau tidak langsung berdampak pada perilaku perdagangan di pasar saham. Bias ilusi kendali berdampak negatif dan signifikan terhadap proses pengambilan keputusan investor di Indeks KSE 100.

Kata Kunci: illusion of control, investor, kepercayaan diri berlebihan, saham

Abstract

The primary purpose of this research is to examine the impact of two biases, i.e., overconfidence and illusion of control, on the investor's decisions on the Karachi Stock Exchange (KSE) 100 Index by using ammo. Data were analyzed using SEM from the sample consisting of 400 respondents. This research shows that past information leads investors to be overconfident. Males are more overconfident than females. Investors do not focus much on fundamental or technical analysis in their decisions. So, that is why results show that overconfidence significantly impacts investor decision-making process in KSE 100 Index. Similarly, the illusion of control is also a bias recognized by behavior finance, which openly or not directly impacts trading behavior in the stock market. The bias of illusion of control significantly and negatively impacts the investor decision-making process in KSE 100 Index.

Keywords: illusion of control, investor, overconfidence, stock

Introduction

In standard financial theory, investors are considered ordinary people in the meaning to identify and use relevant information and be efficient to make the best decision. In the rational decision-making process, investors want to maximize their desires. Before taking the specific decision, investors will often apply a series of reasonable steps to critically review related facts, objective, and fair to potential outcomes. In both situations, human beings are sometimes biased, intentionally, and unintentionally in their routine matters life decisions. Psychology and behavior are the art when we study the psychology of human behavior, attitude, and how humans deviate from rational decisional decisions.

My research is related to behavioral finance considers that investors are ordinary people, because it involves investors' psychological effects in the decision-making process. They have specific values and make decisions according to their idea and behavior. In the decision-making process, both these ideas and behavior are considered dynamic factors to make their investment decisions. These also play an active role in the investment decision. It is found in behavioral finance that the findings of cognitive and emotional elements investors make decisions and the result of this decision in the shape of market price and return.

Behavioral finance unfairness is very obvious as the model of difference in the decision that occurs in the actual state of affairs, which may sometimes be similar to perceptual variations, that is judged incorrectly illogical kind or what is mostly termed illogicality. Decision making the intrinsic process that is affected by the course of action among many unconventional situations. When the final alternative case is selected, the decision ends. People focus on behavioral finance while making findings & the final results judge the significance of the selection. These biases avert the people and prevent them from making balanced decisions. Some behavioral economists think that many investors make choices and decisions unintentionally and deliberately by appraising all the concentration and transformations. By allowing the behavior to affect their decision-

making, investors can badly damage their wealth and property.

Behavioral finance focuses on psychological and economic principles to endorse the financial conclusion level. Usually, a difference from the accurate and optimal decision in pricing stock exchange is one of the essential and most essential evils, and it often leads to deprived returns for the investor. Thus, identifying factors that lead to incorrect decisions and mentioned deviations can lead to better decisions.

Behavioral finance is segregated into two types. The first type is "Micro Behavioral Finance," this type looks closely at the attitude or unfairness of individual investors that differentiate them ordinary traders, which are used in the classical economic theory. While the second type is "Macro Behavioral Finance," which perceives and informs about the anomalies used in the efficient market hypothesis that the behavioral model may use.

My focus in this research is on macro behavioral finance. It is the learning of individual investor performance, especially desire to understand connected emotional biases and examine their force on asset allotment decisions to compel attention to the effects of those biases on the investment course of action.

Cognitive psychology is the organized study of conceiving or mental levels that push human behavior. Research in inherent psychology mentions various topics, including recollection, consideration, power of perception, knowledge demonstration, justification, creativity, and difficulty solving. Cognitive thinking psychology commonly describes human thought in input, symbol, computation or dispensation, and output. In particular, the behavioral finance literature shows that psychological biases, particularly in an uncertain and noisy environment, control investors' in sequence dispensation behavior (Kahneman and Riepe, 1998).

The cognitive process may be divided into two groups: intuitions and reasoning. Investors who want to get early and fast results use

institutions because Intuition is the procedure that is ordinary, easy, and fast.

Investors may have various behavioral biases, leading them to make cognitive errors. Because of heuristic simplification, people may make conventional non-favorable choices when facing complex and uncertain decisions. We will discuss the following points of individual investors who perform different activities in different situations.

We imagine that investors make fewer mistakes that have held their accounts longer. These investors have very much investing knowledge about the stock exchange. So, that's why they may have known to become fairer. Investors may lose their money and go away to the market that fails to learn and not improve their abilities over a more extended period. Therefore, experience may also stand for a survivorship bias (still, a small number of researchers think irrational investors can stay alive). It is studied that the swap among the benefits of investing skill with the troubles of cognitive aging. More experienced investors take less unsure investment choices, are improved diversified, and trade less commonly, and some new evidence supports the theory that traders can study to become rational.

In China, young people tend to be supplementary educated and ready to involve themselves in capital market proceedings. However, older communities have more life experience. Therefore, the most sophisticated investors are likely to be young enough to be market-oriented but elderly sufficient to have accumulated and educated from "life's lessons".

The more commonly an investor trades, the more quickly they gain trading abilities. While past tells, knowledgeable/experienced traders might be less responsible towards behavioral biases in their trading decisions. Conversely, Barber and Odean (2000) explain that those investors who trade extra bear form overconfidence. They explain that those investors who sell extra obtain worse performance. Therefore, energetic trading can symbolize an investor who is well-read to be extra rational or overconfident.

Wealthier individuals are an individual that has very much information about their finances as compared to other individual investors, because they have high quantity of finance so that's why it is possible to say that wealthier individuals may be more confident about their decision. However, there is also a possibility that these investors have faced many psychological biases like representativeness bias. These biases somehow have the higher height of wealth nominating. Our research uses the two cognitive biases, overconfidence and illusion of control, to check these cognitive biases on the investor's decision process, which is considered the critical factor in trading problems in financial markets.

According to Camerer and Lovallo (1999), overconfidence and confidence lead to excellent business entry. Daniel, et al. (1998) tested the relation between overconfidence and wrong self-credit of investors. People consider themselves underestimated for their success for which they are liable, where the security market below and overreactions follow in that deal of public and private signals. Overconfident investors assess too highly, and the researchers evaluate abilities regarding accuracy because their private transactions overestimate their level of accuracy. Overconfidence can explain the high trading levels and the resulting poor explanation of individual investors. However, that study was partial to only one form of trading environment, stock investment. Psychology and behavioral science writing make distinguish public that performs as compared to actual they have more competent skills and abilities as being overconfident. Investors are sometimes expected to be overconfident and have both past success characteristics to their skills and skills which they perform previously and past failures to misfortunate.

The overconfidence effect is a well-established bias in which someone's one-sided confidence in their judgments is dependably greater than their objective accuracy, especially when confidence is comparatively high. Many researchers have discussed investors' overconfidence has been discussed for many years by many researchers in their security

assessment and trading skills. Overconfidence and illusion of control play an essential role in the decision-making process of investors. Overconfidence is a concern to how well an Investor understands the abilities and boundaries of its knowledge. The overconfidence may lead to investors' unreasonable decision-making and suffer a loss. Overconfidence was blown up with the investor's investments experience.

The illusion of control is a cognitive bias. This bias tells a person that he tends to control or cover the results, but he cannot do so. This illusionary bias can be observed in Las Vegas, where casinos play host too many forms of this tricky psychological concept. Illusion's preference is very similar to the overconfidence bias. In this bias, people believe they can control everything. They handle the situation very smoothly. They are very confident about their abilities and skills, while in reality, they cannot hold the events that are the best fit on the proverb perhaps comes earlier the fall (Mackay, 1996).

Further study on the illusion of control explained that the illusion of control is "the tendency of people to believe that they can control and affect outcomes that in reality they have no influence over" of control prevail in Pakistan society due to that it is main reason behind it that generate the market inefficiency differences exist in Pakistan economy. There is a lot of research concentrating on the overconfidence of individual investors from developed markets through experimental and questionnaire studies. However, this field is less concentrated in emergent markets.

Illusion can lead the investors to more and more trade in wise manners. Research scholars mostly found that the traders, especially those who trade online, believe that they have more control & grip on the customers. In the end, the result of excess trade decreases the return. Power of illusion provides a leading line to the investors for keep on portfolios of under diversified. Research scholars discover that investors always want to keep the determined status or place because they decrease the companies' positions until they feel control over it. This situation leads to the imaginary, so a

diversification shortage discourages investors' overall portfolio.

Illusion's control primarily causes the arrangement to utilize the limit orders and other techniques to practice a false control logic above their investment. Utilization of these mechanisms mainly often leads to an ignored chance or inferior, a detrimental, needless purchase based on a causal price.

Hypothesis

H₁: There exists a significant positive relationship between overconfidence and investor decision making.

H₂: There exists a significant negative relationship between illusion of control and investor decision making.

Method

Confirmatory Factor Analysis (CFA), on the other hand, provides a precise method to test the validity of the measurements (Hair, et al., 2010). These only confirmatory factor analyses are employed in the current study as the questionnaire in this study is being adopted.

CFA usually tests the factor loadings of each observed variable on the latent variable (Byrne, 2010). It permits convergent validity and discriminant validity (Kline, 2011). Convergent soundness measures the degree of an optimistic relationship among scale items urbanized to measure the same concept/construct. In other words, convergent validity confirms that measures that should be hypothetically related are in reality related (Nachmias and Nachmias, 2007).

Structural Equation Modeling (SEM)

SEM is a statistical procedure to discover the causal links among variables in a structural model. Advantages of structural equation models are, "This analysis technique allows the researcher to concurrently estimate a measurement model, specifying relations between measured variables and underlying latent variables and to specify structural relations among the latent variables." To

check how well the composed sample data fit to the hypothetically developed model a statistical procedure is using SEM in data analysis has the power to take out the measurement error from estimates of observed variables, which provides more accuracy in estimating the strength and degree of relationship, unlike other statistical analysis.

Results and Discussions

My research will be helpful for the literature. It is helpful in theory acceptance. There are many types of research on the standard finance that men are rational. Still, in actuality, people have their behavior (emotions and cognitive), and behavioral biases affect investment decisions. Undoubtedly, many researchers have conducted and identified behavior biases in their research. In my research, I have used the two significant biases of behavior overconfidence and illusion of control, which have a lot of impact on investors' decisions. It will be helpful for academic researchers to find the different biases on investors' decisions in other markets. My research has a significant value for practically oriented people.

Gender

245 are the male respondents in this research, and 155 are females, which shows that the females are also participating actively in the stock exchange trading, making, and taking investment decisions.

Table 1. Demographic Analysis Based on Gender

		Freq.	Percent	Cumulative Percent
Valid	Male	245	61.3	61.3
	Female	155	38.8	100.0
	Total	400	100.0	

Age

The table above shows the age of the respondents, and there are some young investors doing business in the stock

exchange, which are 43.3% of the total respondents and have the age less than 30.

Table 2. Demographic Analysis Based on Age

		Freq.	Percent	Cumulative Percent
Valid	< 30	173	43.3	43.3
	31-40	150	37.5	80.8
	41-50	69	17.3	98.0
	> 50	8	2.0	100.0
	Total	400	100.0	

Level of Education

64.3% of the respondents are well educated and have the masters' qualification.

Table 3. Demographic Analysis Based on Level of Education

		Freq.	Percent	Cumulative Percent
Valid	Intermediate	27	6.8	6.8
	Bachelor	116	29.0	35.8
	Master	257	64.3	100.0
	Total	400	100.0	

The results of my research provide valuable new information on behavioral biases and investment decision-making. The individual investor can take help from the findings of this study and can come to know which preference interrupted their decision making. By overcoming these biases, they can make sound investment decisions. It will also be helpful for the investors to forecast the different tendencies in their behavior. It will also benefit people to guess how people typically react in the market. It may help the investors understand their behavior, control their emotions, and reduce their loss.

Conclusion

The primary purpose of this research is that we want to check the impact of two biases, overconfidence and illusion of control on the investor's decisions on the Karachi Stock Exchange 100 Index by using ammo. We confirm that explanations provided by behavioral finance hold to the truth, and

investors in Karachi Stock Exchange don't conform to the principles of rationality while investing-related decisions. Moreover, the realities put forward by prospect theory, there are many biases found in the individual investors, but we use two biases, overconfidence and the illusion of control. These two biases have impacted a lot on the investors' decision in the matter of investment. People believe that their knowledge, experience, and wealth significantly impact investment decisions. Overconfidence investors in KSE 100 Index trade more rapidly due to their skill, knowledge, and expertise. Overconfidence goes up with the investors' investments experience. This research shows that past information leads an investor to become overconfident. These studies also show that male is more overconfident than female. One suggestion of overconfidence theory says that overconfident investors trade more aggressively. Assuming investors don't rely much on fundamental or technical analysis on their decisions. So, that's why results show that overconfidence significantly impacts the investor decision-making process in KSE 100 Index. Similarly, overconfidence illusion of control is also a bias recognized by behavior finance which openly or not directly affects trading behavior in the stock market. Research shows that individual investors also assume much control over their investment's return, but they have not. The illusion of control bias significantly negatively impacts the investor decision-making process in KSE 100 Index.

This study has been finished in a given limited period and resource. In Pakistan, there are three stock exchanges: Karachi, Lahore, and Islamabad. During my study, I have focused on Karachi Stock Exchange investor decision-making. So, this analysis covers only the investment decisions of the investors of the KSE 100 Index. As there are many behavioral finance biases, my focus was mainly on two issues: investor's overconfidence and the investors' illusion of control biases. Considerably, these two biases were discussed and analyzed in this study, so my findings are limited to the outcomes and behavioral results of these two and do not cover the other biases in behavioral finance, like representative bias. As behavioral finance is not a material thing,

but thinking or behavior of individuals based on their education, tradition, social and cultural backgrounds, it may vary from person to person as per their background and factors affecting their behaviors. So, this study will not cover 100% as per its results. Incidentally change in different social, geographical, political, and other factors, there may be a future shift in financial investment behavior, so this study is limited to the environment matching with the current era.

Future research for more consistent psychological biases impact on investor decision-making will include the other behavioral preferences like the loss aversion biases. Future research would be attractive to check the overconfidence and illusion of control biases with a trading volume of KSE 100. In the future, some comparative studies can be conducted where more than one class of investors can be studied to investigate better their behavioral differences and decision-making styles and how they affect the marketplace at large. Moreover, future research on the issue can drive moving findings using primary and secondary data on trade activity to investigate what investors say and do.

Behavioral findings of the investment process of individual investors propose several practical implications. Firstly, the individual investors can be trained from their mistakes and may keep away from repeating them and thus, by doing so, can reach the most favorable investment decisions. Professional investors may also use information about these behavioral biases. They can earn profits by getting on the other side of the trade and thus eventually bringing the market into balance. Moreover, financial services firms can recover their product expansion and marketing functions using knowledge of the behavior of individual investors. Lastly, regulating authorities may use such information to formulate rules for individual investors' education and welfare to keep markets less unstable.

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