

Behavioral Finance: Investors Psychology

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Abstract: Investing in stocks is beyond picking well performing stocks; it is more on how to decide which asset to acquire, hold or sell and when to do so. Investors tends not to be logical when making decisions; they respond to numerous psychological biorhythms, which is related to overconfidence, fear, excitement, experience and others. These psychological biases distort investors decisions, alters investment goal and cause market volatility. Behavioral finance field developed this hypothetical theory in response to this argument which could not be clarified by traditional finance theory. It is on this note that the need to investigate these biases arose. The paper generated its data through 26 dispatched items on the questionnaire then employed reliability test and correlation analysis as estimation technique on a sample of 121 respondents in Lagos Nigeria. The results revealed that individual investor decisions were significantly correlated to representative bias, cognitive bias and herd instinct bias. The statistically significant correlations indicate that these dimensions of Behavioural biases influence investor's decision even though it is weak. Nevertheless, motive on investment return wasn't significantly related to loss aversion bias, self-attribution bias, regret aversion bias, over optimism bias, Illusion of control bias, hindsight bias. The paper suggests that investors should seek the services of professional investors in the managing their portfolios to lessen the influence of behavioral biases.

Keywords: Herd Intuitive, Investors, Behavioral finance, Cognitive factor.

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I. Introduction

Behavioral finance is a subset of financial system, which has been viewed as a key factor in investment decision. It was described according to Shefrin (2002), as how psychology influences judgment in relation to financial decision. Singh (2010) opined that behavioral finance concept is developed on limited arbitrage and systematized psychology. However, arbitrage implies the action of profit making from price fluctuations between markets, which involves negative or positive cashflows in an occurrence that are mostly not risky. Belsky and Gilovich (2010) opined that behavioral finance is an economic behavior that mix the field of psychology on how and why investors make logical and illogical decisions when investing, spending, saving, and lending. Several finance and economic concepts posited that investors act logical and consider every accessible information when making investment decision. Pompian (2012) found that, in financial economics, there exists behavioral biases which thwarts decision making processes, and further stated that it is the propensity to make decision that amounts to unreasonable investment choices caused by flawed reasoning such as faulty cognitive, emotional errors and some social influences, that are detected in several human reasonings when faced with decision making in behavioral finance. Reilly and Brown (2011) remarked that behavioral finance studies numerous psychological biases and how it affects investment judgments of individual and organizations especially when analyzing financial books regarding decision making. There is attitudinal literature, which implicates systematic errors in the way people think when considering investment options which is what this paper seeks to explore; hypothetically, investors are too confident most times they rely on experience when making decision, this inclination may create distorted wrong judgment. This study tries to investigate these psychosocial factors that alters investment decisions.

This paper explored attitudinal literature detailing errors in the way people make financial decisions. It is statistically proven to be faulty and distorted. According to Subrahmanyam and Tomas Gomez-Arias (2008) people are too confident and relies heavily on experiences when making investment decision. Over the years, the Nigerian stock market had observed increasing number of public firms applying to be listed on its securities exchange. Over subscription of shares and other financial instruments confirmed probable statistical increase of individual investors over the time. Nonetheless, numerous shareholders had suffered shortfalls recorded this year owing to post election bearish run, herd instinct and overconfident since January this year. Abiola and

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Adetiloye (2012) investigated the impact of behavioral finance on investment decisions making in the Nigerian securities market, utilizing a sample number of 300 shareholders and revealed how behavioral biases such as representative bias, overconfident bias, anchoring, gambler fallacy, availability bias, loss aversion, regret aversion and mental accounting influenced judgments of corporate investors.

In this, one would wonder how heuristics (overconfident, representativeness and herd) influence investors, in the researcher's consciousness, Indigenous study haven't tackled the effects of cognitive aspects of this bias hence this paper attempts to fill the research gap by analyzing behavioral biases (cognitive or emotional biases) and its effect on individual investment decisions.

The Influence of representative bias: investors tend to categorize new information based on their past experiences. They believe that lessons learnt from past occurrence can be used to predict inherent investment challenge and market movement. Below hypothesis was structured to test the significance of this bias within Nigerian investors.

H_{A,0}: There is a positive significant impact of representative factor on investor's decisions

H_{A,1}: There is a negative significant impact of representative factor on investor's decisions

The Influence of Herd Intuitive bias: when faced with uncertainty, investors rely on heuristics, knowledge, experience or rule of thumb in processing perceived risk. Below hypothesis was designed to test significance of this bias on Nigerian investors.

H_{B,0}: Herd intuitive factor does not have significant impact on investor's decision

H_{B,1}: Herd intuitive factor has significant impact on investor's decision

The influence of Cognitive dissonance: investors experience mental torture when they realized that they have made wrong investments. They regret their standpoints and seek remedy. Below hypothesis was designed to ascertain the significance of this bias among Nigerian investors.

H_{C,0}: Cognitive factors have no significant influence on behavioral factors and psychology decisions

H_{C,1}: Cognitive factors have significant influence on behavioral factors and psychology decisions

II. Literature Review

Mojtaba and Abolfazl (2016) indicated the effect of behavioral factors on individual investors in Iran. The Finding showed that herd instinct, market prospect, overconfidence and heuristics biases impacts investment decision in Iran. Dhankar (2018) believed that decision making in capital market had become difficult. He expressed that investors face difficulties making judgment for lack of financial literacy. Gavard et al (2011) As result of this, investors employ team of professionals to make decisions and manage their investment portfolios on behalf of them. Scholars have proven that due to the inefficiencies in the market, the traditional finance theories have flopped to check market anomalies. Instinctively one would assume that fund managers are logical therefore stringently monitor and adhere to the traditional finance models when making decision. It had been proven over times that private and organizational investors have mortified heuristics or rule of thumb on financial ruling. One would ponder in what way heuristic (herding, overconfidence, and anchoring) influence investors judgment, in researcher's consciousness, this study tends to fill the research gap by examining behavioral biases (cognitive and emotional) and ascertain its effect on investment decision.

The study conducted by Ogunlusi and Obademi, (2019) revealed how Overconfidence bias and Representative bias influence investors the most alongside herd instinct, regret aversion and cognitive dissonance. The influence of these factors varies on demographic study and investment experience.

Brahmana, et al (2012) outlined nine biases that influences investment decision such as overconfidence bias, representativeness, self-serving bias, over-optimism bias, cognitive dissonance bias, herd intuitive bias, loss aversion bias, availability bias and Regret aversion. Their findings revealed that behavioral factors such as overconfidence bias, self-serving bias and herd intuitive bias significantly alters investor's decision-making process. Aregbeyen and Ogochukwu(2011) investigated the effect of five independent variables such as financial literacy, investment knowledge, utilization of accounting data, knowledge of evaluating and using financial statements and age on investor's judgment. It was found that financial literacy and usage of accounting information lessens data ambiguity thereby offers confidence to invest in risky portfolios.

Asab, (2014) detected that price fluctuation of company's stock, perception, market volatility, expected company income and company's previous performance are the most motivating traits affecting individual investment choice. Michelle (2010) concluded that social, economic, psychological, and cultural influences alters investment decision in Nigeria, the study revealed that social factors are the most prevailing factor ensued by psychological and economic factors. Whereas cultural factor affects the least.

Abiola and Adetiloye, (2012) used correlation Coefficient to analyze a sample of 300 investors in the Nigerian security market. The study evidenced the existence of behavioral biases in the Nigerian security market although the study reveals a weak negative relationship between behavioral biases and stock market performance. The reviewed literature helped formed the bases to explore the nine biases such as: overconfidence

bias, representativeness, self-serving bias, over-optimism bias, Illusion of control bias, hindsight bias, cognitive dissonance bias, herd intuitive bias, loss aversion bias and availability bias living in Nigeria’s commercial capital city.

Ricciardi (2008) implicated risk tolerances and information analyses and revealed so many ways Spanish investors process information pertaining risks, the study shows that people are very careful with risks hence they shift the task to professionals or they follow general market information, the study further revealed that investors use rule of thumb to make decision if the task of processing information that bears risk is much. The study by Decourt et al., (2007): revealed how Brazilian investors are influenced by Cognitive dissonance, availability bias, regret aversion and disposition effect.

Marotta (2008) revealed how investors anchor on too many information and end up using none, the researcher presented evidence that 76% market information are noise to long term investors as they are more interested in month end market performance. His findings segments users of markets information. to day traders, value appreciation and divined yield. The study of Goetzmann and Kumar, (2008) shows that younger investors in U.S who are less affluent holds more under-diversified portfolios, indicating that they may exhibit firmer behavioral biases as there is strong correlation between investment choices and under-diversification of assets.

Rekik and Boujelbene (2013) study reveal that Tunisian investors do not always act logically while taking investment decisions. The study established that herding attitude, representativeness, anchoring, loss aversion and mental accounting all influence the Tunisian investor's perception of their decision-making processes however there is an absence of overconfidence bias on Tunis Market. In fact, Tunisian investors appear to be underconfident hesitant and very sensitive to other's reactions and opinions. The other findings are related to the interaction between demographic variables and financial behavioral biases particularly provided that the variables like age, gender socio-career group and experience seems to have influence on the behavior of investors operating on the Tunis stock Market. The study provides that people at certain age range, are less subject to psychological factors as they become more experienced while older investors who’re less informed about the market and have lower incomes are subject to influence of behavioral biases.

III. Methodology

The framework of this study sample defines the list of all population units from which the sample is being selected. According to Fox and Bayat, (2008) sample size is measured by four parameters: the accuracy of data, the precision of requested data as basis for sample estimation, data analysis type which supposed to use statistical technique as a threshold for data validity and finally size of population under study. Based on this, this study steered a convenient sample of 121 respondents. Respondents were targeted by dispatched google form questionnaire to the targeted audience through online investors groups and dispatched questionnaire to the emails of institutional investors who then sent to their clients. In achieving the objectives of this study, several techniques were used ranging from reliability test and correlation analysis. The reliability test was conducted through Cronbach Alpha which subjected questionnaire to test then certify the efficiency of the questionnaire. More so, the correlation was used to measure the direction of connection among the variables.

IV. Findinds And Interpretation

Basically, there are 26 items in the questionnaire, but the most important variables were selected to test and retest analysis using Cronbach Alpha. The report of the Cronbach Alpha shows the value of 0.750 on the selected items which implies that the items in the questionnaire has 75% reliability. Accordingly, when the reliability value exceeds 70%, it is considered efficient and if otherwise, although, it is considered weak. However, the report of the test revealed that the questionnaire is considered efficient and reliable to achieve the objective of the study.

Table 1. Pearson Correlation Coefficients

		Investment Return	Past Influences	HistoryInvestment satisfaction	Thinking & Loss Investment	ofIncrease in Investment Prices
Investment Return	Pearson Correlation	1	-.049	-.065	-.072	.228*
	Sig. (2-tailed)		.593	.477	.432	.012
Past Influences	History Pearson Correlation		1	.040	.175	.167
	Sig. (2-tailed)			.663	.055	.067
Investment Thinking & satisfaction	Pearson Correlation			1	.228*	-.010
	Sig. (2-tailed)				.012	.909
Loss of Investment	Pearson Correlation				1	.033

	Sig. (2-tailed)	.719
Increase in Investment Prices	Pearson Correlation	1
	Sig. (2-tailed)	

*. Correlation is significant at the 0.05 level (2-tailed).

Source: Writer's computation (2019)

The report of the correlation test presented in table 2 with 5 (five) variables such as Investment Return, Representative factor, Herd Intuitive Bias, Loss of Investment, and Cognitive Factor. The results reported that investments return has negative correlation to representative factor, and representative factor also reveals a negative correlation to investment returns. Investment returns and herd intuitive bias have a negative correlation to one another. Investment returns and loss of investment exhibited a negative correlation to each other. While investment return and increase in investment prices portray a positive correlation to influence one another. More so, the relationship or correlation between representative factor and other variables reveals that representative factor has a negative correlation with investment returns, and it is positive to investment thinking & satisfaction, loss of investment, and cognitive factor. Also, herd intuitive bias exhibited a negative relationship with investment returns and cognitive factor but positively related to representative factor and loss of investment. Nonetheless, loss of investment reveals a positive correlation with representative factor, investment thinking and satisfaction, and cognitive factor but exhibited in negative correlation with investment returns. Additionally, cognitive factor exhibited a positive correlation with investment returns, representative factor and loss of investments but shows negative correlation with herd intuitive bias.

On representative Factor and Investment Return: the null hypothesis was accepted, and alternative hypothesis also rejected which means there is no significant impact between representative factor and investment return. Representative factor when tested on loss of Investment: the null hypothesis was rejected while the alternative is accepted this means that representative factor has significant impact on loss of investment. Representative Factor when tested on herd intuitive bias: the null hypothesis was accepted which means there is no significant impact of representative factor on herd intuitive bias while the alternative hypothesis failed to be accepted. Representative factor on cognitive bias: the null hypothesis failed to be rejected while the alternative hypothesis is rejected, that is, there is no significant impact between representative factor and cognitive factor.

Herd intuitive bias on investment return: the null hypothesis failed to be rejected that is, herd intuitive bias does not have a significant impact on investment return. Herd intuitive bias when tested on representative factor: the null hypothesis was positive while alternative hypothesis was rejected that there is no significant impact between herd intuitive bias and representative factor. Herd intuitive bias on loss of investment: the null hypothesis was rejected while the alternative hypothesis was accepted that there is significant impact between herd intuitive bias and loss of investment. Herd intuitive bias on cognitive factor: the null hypothesis is accepted while the alternative hypothesis is rejected this means that there is no significant impact between herd intuitive bias and cognitive factor.

Cognitive factor on investment return: there is significant relationship between cognitive factor and investment return. Cognitive Factor on Representative Factor: the null hypothesis was accepted; this means that cognitive factor does not have significant impact on representative bias. Cognitive factor on herd intuitive bias: the null hypothesis failed to be rejected while the alternative hypothesis is rejected that there is no significant impact between cognitive factor and herd intuitive bias. Between cognitive factor and Loss of investment: the null hypothesis failed to be rejected while the alternative hypothesis was rejected, this means there is no significant impact between cognitive factor and loss of investment.

V. Conclusion

Individual investment decisions were distorted by several behavioral biases. Investors thereby showed that their decisions are influenced by the behavioral biases as differed to being logical when considering investment option. The factors that were most prevalent among Nigerian investors manifested as representativeness bias, which implicates investors experiences negatively altering their present-day investment choices. This study concluded that representative factor has no significant connection with investment return, herd intuitive bias, and cognitive factor, meanwhile, a positive significant connection exists between representative factor and loss of investment. It was also concluded that herd intuitive bias has a positive connection with loss of investment but revealed no significant connection with cognitive factor and investment return. It was recommended that the investors should be mindful of the representative factor to avoid loss of investment and further suggested that investors should seek the services of professional investors in the managing their portfolios to lessen the influence of behavioral biases.

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