

## **Effect of Prospect Factor and Herding Effect on Individual Investment Performance in Nigeria: Moderating Role of Financial Literacy**

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doi: <https://doi.org/10.37745/ejaaf.2013/vol11n7115>

Published June 17 2023

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**Citation:** Apochi G.J., Ahmed N.M., Okpanachi J., Agbi S.E. (2023) Effect of Prospect Factor and Herding Effect on Individual Investment Performance in Nigeria: Moderating Role of Financial Literacy, *European Journal of Accounting, Auditing and Finance Research*, Vol.11, No. 7, pp.1-15

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**ABSTRACT:** *Investors exhibit irrational behavior when making an investment decision. The decision-making process itself is considered to be a cognitive process, as the investors have to make a decision based on various alternatives available to them. Prior studies had shown that the investors' decision-making was adversely affected by the various behavioral factors. This study was carried forward to identify the moderating role of financial literacy (FL) on the effect of prospect factor (PF) and herding effect (HE) on investment performance. The population of study was 3,706 and the sample size was the active investors resident in Kaduna metropolitan within the first quarter of 2023. Thus, 460 structured questionnaires were administered and 349 were returned valid. A convenient sampling technique was adopted in this study, and a primary data was collected from the respondents using both the online Google form and self-administered questionnaire with the help of research assistants. A 7-point Likert-type scale ranging from '1' "Extremely Agree" to '7' "Extremely Disagree" was employed. Smart-PLS 4 and SPSS 20 version was used to analyse the data and explained the demographic characteristics of the individual respectively. Findings from this study revealed that prospect factor and financial literacy have positive and significant influence on individual investment performance, while the herding effect is found to have a negative and insignificant influence on individual investment performance. Furthermore, the moderating role of financial literacy revealed that prospect factor and herding effect have an insignificant negative effect on individual investment performance. The study recommends that individual investors should have high levels of financial literacy. It has been empirically proven that FL help investors make better investment decision, in addition to satisfaction in their investment performance. Also, the investors should maintain the use of prospect behavioral biases when making investment decision as it has improved investment performance.*

**KEYWORD:** prospect factor, herding effect, financial literacy, investment performance, Nigeria

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## INTRODUCTION

The financial crisis of 2007 – 2008 spurred the relevance of understanding the human behavior. Experimental researchers found out that the root cause of the financial crisis is not a fundamental phenomenon. It was due to psychological distortion in judgement by the operators of financial institutions. The excessive optimism and the confirmation bias acted as the driving force behind the crisis. Individual's behavior is different from what modern financial theories draw for rational human behaviors.

Individual Investment performance (IIP) is seen as a self-analysis of return on stock investment (ROSI) by individual investors (Hassan et al., 2017). Investment performance (IP) is determined by the rate of stock returns (RSR) in terms of volume and price and satisfaction of investment decisions by the individual investor. In addition, performance is assessed by the level of satisfaction of individual investor. Hamidon and Kehelwalatenna (2020) argued that high investor satisfaction leads to more interest and trading in the stock market and also stabilizes the market. It is assumed that the market consists of two types of investors; the rational investors that thinks in line with the expected utility framework, and the irrational investors who evaluate risk as described by prospect theory (Hassan, Bagh & Sadaf, 2017).

Therefore, the irrational behavior is a reflection of prospect theory (Hala et al., 2020). Kahneman and Tversky (1979) documented that prospect theory is a situation whereby an individual's investor values gains and losses rather than expected value of the final assets. That is, investors make decision based on potential value of gains and losses rather than the outcomes of investment. According to Kunwar (2021) prospect factor is a decision-making process of an investor under the condition of risk and uncertainty. Prospect factor theories explains that investors are more stressed about losses, as compared to the level of happiness derived from a gain of an equal amount (Awuor, 2017).

Herding effect means following other investor's action with no due diligence (Qasim et al., 2019). Herding is the behavior of investors in the capital market in which a large number of people act in the same way at the same time based on the action or decisions of a few individuals (Mahmood et al. 2016). Investors tending to show herd behavior generally have low self-confidence and low self-assurance, the investors consider the signals in the market and benefit from the decisions of professional investors in their investment decisions (Naomi et al., 2018).

The motivation for this study is drawn from the importance of the individual decisions towards investment and the desire to explore how prospect factor influence investment performance in the Nigerian capital market. Awan et al. (2017) argued that the essential reason to study prospect factor is due to traditional finance limitations in explaining various antecedents of investors' financial decisions. Therefore, as a response to this traditional approach, Cetin and Kalaycı (2012) documented that prospect factor has grown during the 20<sup>th</sup> century and placed more emphasis on investor psychology and financial market anomalies. This study is to analyze the importance of prospect factor and herding effect on individual investment performance. Financial literacy is defined by the Organization for Economic Cooperation and Development (OECD) as a combination of awareness, knowledge, skill, attitude, and behavior required to make sound financial decisions and ultimately achieve individual financial well-being.

Several prior empirical literatures on prospect behavioral finance and investment performance in the financial market were conducted. However, the majority of these studies focused largely on the developed world with not so many researches in developing countries like Nigeria. For instance, the study of Alrabadi et al. (2018) in Jordan, Nayak and Kumar, (2021) in India, Mahapatra and Mishra (2020) in Indian, Polat and Polat (2019) in Turkey, Mohammad et al., (2021) in Saudi Arabia, Momen et al. (2016) in Iran, Road et al., (2013) in Iran, Rockenbach, (2004) in Germany, Angelina and Batam (2020) in Indonesia, Babikir (2017) in Saudi Arabian, Cao et al. (2021) in Vietnam, Sabir, Mohammad and Shahar (2019) in Pakistan, Tin and Hii, (2020) in Malaysia. These existing empirical studies documented that individuals' behavior varies from continent to continent with few studies on western countries. Therefore, individuals cannot generalize the behavior of western countries on developing nations and this has necessitated this study in Nigeria.

The review of prior empirical studies shows divergent results on the effect of prospect factor on individual investors' performance and this necessitates a further study on prospect behaviour of investors. For instance, the study of Rajeshwaran (2020), Ranjbar et al. (2014), and Hidayati et al. (2014) revealed that prospect factor has a negative and significant effect on investment performance. On the contrary, Kengatharan and Kengatharan, (2014) revealed an insignificant impact on investment. Though the study of Ahmad, Mehboob, and Zain ul Abdin (2021), Rehan et al. (2021), Hamidon and Kehelwalatenna (2020) revealed a significant positive impact on investment performance. While the study of Anum and Ameer (2017) revealed that prospect factor has a negative and insignificant influence on investment performance. Therefore, these mixed findings by prior empirical studies necessitated the introduction of moderating variable, financial literacy, in order to fill the literature gap. Zain ul Abdin et al. (2022) alluded that financial literacy is indicated as a fundamental and crucial factor of stock market participation such as the investors' propensity to take investment decisions and this can influence individual investment performance.

Based on the foregoing on extensive review of relevant empirical studies, it is evident to note that not much research has been done in the area of prospect factor effect on individual investment performance in Nigeria. Therefore, this study assesses how moderating role of financial literacy affect prospect factor and herding effect on investment performance. From the foregoing, the following questions were answered in this study; Does prospect factor affect individual investment performance in Nigeria? Also, how does financial literacy as a moderator affect prospect factor and herding effect on individual investment performance in Nigeria? Thus, objective of the study is to examine the effect of prospect factor, herding effect on individual investment performance in Nigeria. In addition to assess the moderating role of financial literacy on the effect of prospect factor and herding effect on individual investment performance in Nigeria.

The hypotheses of the study were formulated in null form and tested;

H<sub>01</sub>: Prospect factor has no significant effect on the individual investment performance in Nigeria

H<sub>02</sub>: Herding effect has no significant effect on the individual investment performance in Nigeria

H<sub>03</sub>: Financial literacy has no significant moderating role on the effect of prospect factor and herding effect on individual investment performance in Nigeria

H<sub>04</sub>: Financial literacy has no significant effect on individual investment performance in Nigeria

## LITERATURE REVIEW

Investment performance is the extent to which individual investors derive satisfaction with the rate of return of their stock investment compared to their expected returns. Investment performance is the self-analysis of the return on stock investment by individual investors (Hassan et al., 2017). Therefore, investment performance is influenced by the rate of stock returns in terms of volume and price and satisfaction of investment decision by the individual investor. Investment performance depends on several factors that indicate the outcome of investment activities and measures the success of an investment. Rajeshwaran (2020) documented that investment performance measurement can be evaluated from a viewpoint of objective or subjective perspectives by assessing the rate of return.

The prospect theories have been developed to explain the association between behavioral finance and investment performance. Kahneman and Tversky (1979) developed prospect theory in 1992, which explains how people choose between risky and uncertain alternatives. It focuses on subjective decision-making that is influenced by one's value system that determines their performance (Mahina et al., 2017). Therefore, prospect Factor (PF) is a well-documented behavioral finance attribute. PF explains how investors make risky decisions and how investors risk profiles can be predicted. The prospect factor demonstrates that individuals have an irrational tendency to be more reluctant to risk profits than losses. PF explains further that an individual is more likely to bear the risk in a loss situation than in a successful situation (Pahlevi & Oktaviani, 2018). Prospect factor is seen most times as when an individual behaves irrationally due to the influence of psychological biases under uncertainty. This prospect factor is concerned with how investors assess and calculate the possibility of profit or loss. In this study, the prospect factor identified three attributes to determine individual investor performance; Aversion to loss, regret, and mental accounting. Loss aversion (LA) is the tendency to avoid loss at every situation.

Kahneman and Tversky (1979) discovered that people have a stronger desire to avoid losses than to acquire gains. Loss aversion describes how people feel great pain from losing than happiness from gaining (Deslatte et al., 2020). Regret aversion (RA) explains that there is a human tendency to feel the pain of regret for making wrong decision, including minor ones. Therefore, if an investor wishes to avoid the agony or pain of regret, the investor may change his behavior in some cases and in irrational ways. Mental accounting (MA) is referred to as psychological accounting. MA involves a set of cognitive processes used by individuals or groups to organize, evaluate, and track their financial activities (Abd El-Mohammed & Shaqfa, 2021).

### Empirical Literature

The empirical study of Oyaró and Nasution (2021) assessed the influence of prospect factor on the investment performance of individual investors in Nairobi Security Exchange. The study adopted a survey research design that targeted 1,196,995 individual investors in Nairobi Securities Exchange. The Slovin's formula was used to estimate the 400-sample size, whereas the researcher took the high limit of 500 individual investors. The study used a structured questionnaire with closed-ended questions that were used to collect primary data from the individual investors in the stock exchange. Convenient sampling technique was used in the study.

The study data were analyzed using simple linear regression, and hierarchical linear regression analysis with aid of SPSS statistics tools of analysis. Findings from the study established that prospect factor has a positive and insignificant effect on investment performance. Also, herding factor has a positive and significant effect on investment performance.

Ahmad et al. (2021) examined the influence of prospect factor on investors' investment performance from individual investors trading in Pakistan Stock Exchange. The study administered questionnaires to the respondents through primary sources of data collection. The data were analysed through the use of AMOS software and Hayes Process tool in two stages. The study administered questionnaires through the brokerage houses to collect the data and a total of 500 survey questionnaires were distributed among the individual investors in Pakistan Stock Exchange out of which 400 returned and 352 were used for the study. Convenience and purposeful sampling techniques were used in the study. The five-point Likert scale was used to answer all items in the questionnaire. The findings revealed that prospect and herding factors have a positive and significant influence on investment performance.

Rehan et al. (2021) examined the impact of behavioral factors on investment performance from the Pakistan stock exchange. The study adopted a self-administered questionnaire and the data were collected from local investors in Pakistan. 300 questionnaires were distributed and 155 were received from the respondents. The data collected was analyzed with the support of SPSS and Smart-PLS 3.0. Based on the sample data analysis, the study found that prospect factor has a positive and significant impact on investment performance. In addition, according to Kunwar (2021) the effect of behavioral factors on the investment performance of individual investors in the Nepali stock market was examined. The study used 26 items with a 6-point Likert. A total of 300 questionnaires were distributed and 203 completed questionnaires were collected during the three months survey period with sponse rate of 68 percent from Kathmandu and Pokhara. The results revealed prospects are positive and do not significantly influence investment performance. Also, herding factor has a positive and significant impact on investment performance Hamidon and Kehelwalatenna (2020) examined the effect of prospect behavior on investment performance of individual investors in the Colombo Stock Exchange, Sri Lanka during the first half of 2019. The population of the study represented the 300 questionnaires distributed among individual investors. Out of the distributed questionnaires, 221 completed questionnaires were returned ensuring a response rate of 74 percent. A convenient sampling technique was adopted in the study. The study data were analyzed using structural equation models to draw empirical evidence to test the hypothesis of the study. Results of the study revealed that prospect factor has a significant positive effect on investment performance.

Baral and Pokharel (2020) examined the effect of investors' opinions or behavior on investment performance in Nepalese stock market. The study proxied prospect factor by (Loss aversion, Regret Aversion Mental Accounting) and dependent variable investment performance of the Nepal Stock Exchange. The study was based on primary data and was collected from 120 respondents that have made the investment in shares in listed companies in Nepalese stock market. The study analysis was based on the correlation model. Findings from the study suggested that prospect (loss aversion, regret aversion, and mental accounting) have a positive and insignificant relationship with investment performance. while the herding factor has a positive and significant effect on investment performance. Furthermore, Balagobei (2019)

explored the influence of investor's behaviour on investment decision-making proxy by (investment satisfaction) at the Colombo Stock Exchange. As there are limited studies about behavioral finance in Sri Lanka, this study is expected to contribute significantly to the development of this field in Sri Lanka. To achieve the objective, the questionnaires were distributed to a sample size of 100 individual investors who were involved in the Colombo Stock Exchange. The collected data were analyzed by using statistical techniques including factor Analysis. The result showed that there is prospect behavioral factor averagely influenced the investment satisfaction of individual investors at Colombo Stock Exchange.

Marwa and Meryem (2018) assessed the impact of psychological biases on the performance of Tunisian UCITS. The study used mixed methods; qualitative and quantitative methods. The sample of the study consisted of 22 mixed UCITS and 18 bond UCITS that have been operating from February 2005 until December 2015. This formed a total of 40 UCITS. The population of the study represented 40 UCITS surveyed, and the sample was 34 UCITS who agreed to answer the questionnaire, this represented an 85 percent acceptable answers rate. The study used the SPSS software 13.0 to analyze the data and the regression model was used for the study. The result showed that prospect bias has a negative and insignificant impact on investment performance.

Sharma and Prasad (2018) examined the impact of behavioural disposition on portfolio investment decisions (Expected rate of return) of individual investors in Rajasthan. The study focused on the list of investing clients from equity brokers in Rajasthan. A sample Size of 310 respondents was administered questionnaires and a non-Probability convenience sampling technique was adopted in the study. A survey with questions formed on Likert scale on a 5-point scale was created and responses were obtained from investors who made their own investment decisions with an expected rate of returns). Data analysis was done using SPSS statistics software. The study findings through the Multiple Regression Analysis revealed that mental Accounting has negative and significant effects on the investment decisions of individual investors (Expected rate of return), and revealed a positive and insignificant effect on loss aversion.

Khalid et al. (2018) examined the effect of behavioral biases on the investment performance of investors trading at the Pakistan Stock Exchange (PSX). The study adopted a cross-sectional research design. A structural questionnaire was adapted and developed for the study and a Five-point Likert scale was used in the study for the responses of the investors excluding the basic information part. A convenience sampling technique was adopted for the study. The SPSS and AMOS statistical instruments were used for data analysis comprising the Structural Equation Modeling (SEM). From the result of the study, the prospect factor (Loss Aversion) was found to have a positive and insignificant influence on investment performance. Lastly, Ranjbar et al. (2014) examined the effect of behavioral factors on the investors' performance in the Tehran Stock exchange. The study employed a descriptive-correlation research design. The data-collection instrument of the study was a questionnaire that consisted of two parts. The questionnaire had been developed on seven-point Likert scale. The statistical population of the study included the investors and shareholders in Tehran Stock Exchange. A sample of 155 investors and shareholders had been selected and 148 respondents completed the questionnaire. The study sampling method was a convenience sampling technique. Structural equation

modeling (SEM) was used for analyzing the research data. The results of the study revealed that the prospect factor has a negative and significant influence in the investors' performance.

## METHODOLOGY

This study employed descriptive research design and consequently, the population of the study was 460 active individual investors within Kaduna metropolitan as shown from the data base of Central Securities Clearing System Plc within the first quarter of 2023. A convenient sampling technique was used to select respondents. The data collection was done using both online google form and self-administered questionnaire sent to 460 respondents, 33 copies of questionnaires were discarded due to incomplete information, and 78 copies of questionnaires were not received so the final 349 were accurately completed. Therefore, the sample size is 349 for the analysis. The net response rate is 75%. Primary data were collected from the respondents using a self-administered questionnaire with the help of research assistants using online (Google form). Largely, a 7-point Likert-type scale ranging from '1' "Extremely Agree" to '7' "Extremely Disagree" was employed. The respondents were required to rate their prospect factor bias. Partial Least Square - Structural Equation Model (PLS-SEM) technique was used to analyse the data collected from the individual investors and SPSS 20 was used to explain the demographic characteristics of the respondents.

The models that were used in testing the hypotheses of the study are presented below

$$IP_{it} = \beta_0 + \beta_1 PF_{it} + \beta_2 HE_{it} + \beta_3 FL_{it} + \varepsilon \text{ -----i}$$

$$IP_{it} = \beta_0 + \beta_1 PF * FL_{it} + \beta_2 HE * FL_{it} + \varepsilon \text{ -----ii}$$

Where: IP = Investment Performance, PF= Prospect Factor, FL= Financial Literacy, i= number of active investors observation, 1- 4, t= the index of time periods,  $\varepsilon$  =is the error component for firms,  $\beta_0$ = Intercept of the model "Constant",  $\beta = 1, 2, 3$  are the estimate parameters

**Table 1**

*Variables, Definitions, Measurement and Sources*

Variables	Dimensions	Measurement	Sources
<b>Independent</b>			
Prospect Factor	i) Regret aversion ii) Loss Aversion, iii) Mental Accounting	7-point Likert Scale	(Kahneman & Tversky, 1979)
Herding Effect	i) Rely on information from friends ii) Depend on investment decision iii) You quickly change to other investors decision	7-point Likert Scale	
<b>Moderating</b>			
Financial Literacy	i) Financial knowledge iii) Financial planning	7-point Likert Scale	(Rasool & Ullah, 2020)
<b>Dependent</b>			
Investment Performance	i) Dividend yield ii) Stock appreciation iii) Investment satisfaction	7-point Likert Scale	

Source: Field Work (2023)

## RESULT AND DISCUSSION

Data Processing started when the data from respondents was completed. SPSS and Smart PLS data analysis tools were used to present the results. The SPSS is a statistical tool which shows in frequency statistics in table 2 to demonstrate the demographic profile of the respondents in Kaduna metropolitan. The Smart-PLS 4 analysis was also used to assess the moderating role of financial literacy on the effect of prospect factor on individual investment performance. The data collected shows that 58.5 percent were males, while 41.5 percent were females. In additions, the statistics showed that 4.9 percent of the respondents are within the ages of 18–30. Those within the ages of 31–40 are 36.7 percent. Those within range of 41 – 50 are 32.1 percent and the aged 51+ are only 26.4 percent. The age distribution shows that most of the managers fall within the age bracket of youth. Table 2 shows that respondents with pre-tertiary educational level (basic, secondary levels) are 1.7 percent. Those with tertiary level education (B.Sc/HND) constitute about 30.7 percent, while those with Postgraduate educational qualifications (Master/PhD) are 67.6 percent. The distribution of the managers indicates that people with higher levels of educational qualifications are engaged in this study.

**Table 2**  
*Demographic Characteristics of the Respondents*

Variables	Frequency	Percentage
<b>Total Respondents</b>	<b>349</b>	<b>100</b>
<b>Gender</b>		
Male	204	58.5
Female	145	41.5
<b>Educational Qualification</b>		
Secondary	6	1.7
BSc/HND	107	30.7
Master/PhD	236	67.6

Source: SPSS 20 Result Output

**Measurement Model**

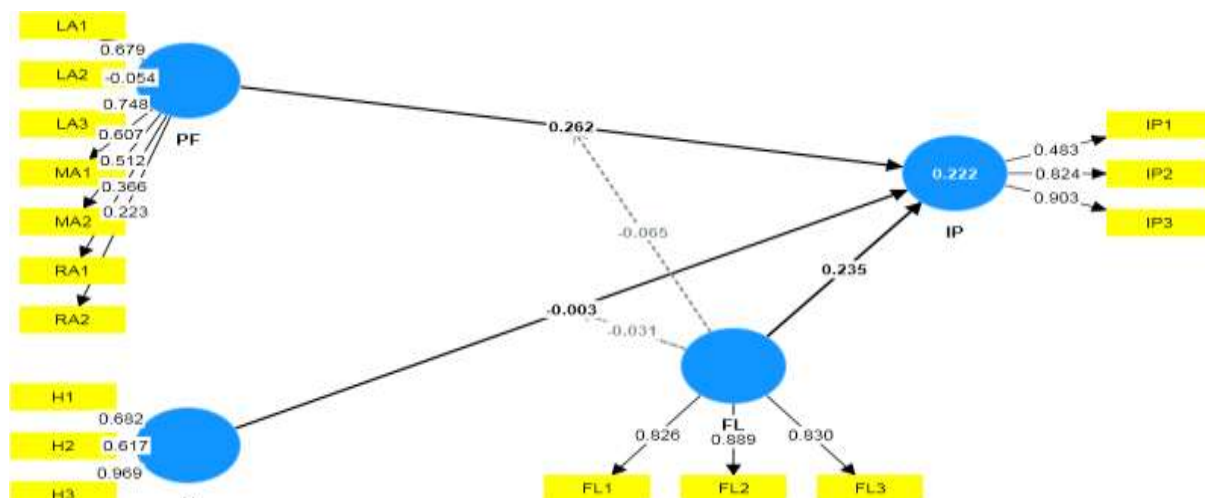


Figure I: Measurement Model

Source: Smart-PLS.4

**Reliability and Convergent Validity**



This study assessed the overall fitness of the study instruments by way of measuring the Reliability of research through Cronbach's Alpha (CA) and Composite reliability (CR), and the convergent validity is also measured through the Average Variance Explained (AVE). If the composite reliability and Cronbach's alpha measurements have coefficients of 0.5 and above, they show that variables have acknowledged reliability. For this study, all the values of CA and CR were higher than the minimum level, which satisfies the safety of the model. Table 3 shows that the constructs are all reliable. Validity test is measured using the Average Variance Extracted (AVE), where the AVE are 0.25 which is higher than the benchmark level, which supports the convergent validity of the outer model. Thus, the reliability and validity results made room for the analysis and discussion of the results.

**Table 4*****Assessment of Measurement Models***

<b>Construct</b>	<b>Cronbach's Alpha</b>	<b>Composite Reliability</b>	<b>(AVE)</b>
Financial Literacy	0.806	0.886	0.721
Herding Effect	0.834	0.809	0.595
Investors Performance	0.625	0.793	0.567
Prospect Factors	0.542	0.648	0.263

**Source:** Smart-PLS.4 Result Output

**Discriminant Validity**

Discriminant validity is established in SMART-PLS to influence the distinctiveness of the constructs in the study. The results show that the constructs in the study have their own individual identity and are not overly correlated with other constructs in this study. Discriminant validity in SMART-PLS is established using cross loadings. According to cross loadings, a particular item should have higher loadings on its own parent construct in comparison to other constructs in this study. However, if an item loads well onto another construct in comparison to its own parent construct, discriminant validity issue arises.

**Table 5*****Cross Loading***

<b>Variables</b>	<b>FL</b>	<b>H</b>	<b>IP</b>	<b>PF</b>	<b>FL x H</b>	<b>FL x PF</b>
<b>FL1</b>	0.826	0.145	0.324	0.606	-0.078	-0.098
<b>FL2</b>	0.889	0.030	0.386	0.463	-0.054	-0.150
<b>FL3</b>	0.830	0.086	0.325	0.487	-0.058	-0.150
<b>H1</b>	0.048	0.682	0.018	0.018	-0.089	-0.150
<b>H2</b>	0.031	0.617	-0.013	0.056	-0.083	-0.185
<b>H3</b>	0.094	0.969	0.052	0.093	-0.149	-0.156
<b>IP1</b>	0.099	0.018	0.483	0.219	-0.102	-0.090
<b>IP2</b>	0.304	0.086	0.824	0.287	-0.042	-0.065
<b>IP3</b>	0.430	0.031	0.903	0.415	-0.104	-0.172
<b>LA1</b>	0.643	0.067	0.281	0.679	-0.113	0.018
<b>LA2</b>	-0.061	0.001	-0.070	-0.054	0.018	0.009
<b>LA3</b>	0.271	-0.002	0.350	0.748	-0.141	-0.009
<b>MA1</b>	0.302	0.043	0.232	0.607	-0.069	-0.200

<b>MA2</b>	0.379	0.125	0.168	0.512	-0.134	-0.215
<b>RA1</b>	0.263	0.110	0.098	0.366	-0.085	-0.082
<b>RA2</b>	0.248	0.063	-0.032	0.223	-0.011	-0.029
<b>FL x H</b>	-0.074	-0.151	-0.104	-0.181	1.000	0.080
<b>FL x PF</b>	-0.157	-0.154	-0.151	-0.124	0.080	1.000

Source: Smart-PLS.4 Result Output

**Structural Model Results**

The quality criteria is ascertained by the value of  $R^2$  of dependent variable, which is based upon specific guidelines with an acceptable level of  $R^2$  as 0.25, 0.50 and 0.75, that is denoted as weak, moderate and significant respectively.  $R^2$  of dependent variables in table 5 denotes having weak predictive accuracy. Thus, results represent that there is 22.2% variance in investment performance and the rest of 77.8% is influenced by other variables outside the model under study. This weak predictive accuracy can be attributed to using two independent variable and this can be concluded that the model in the study is sufficient with predictive accuracy as the values exceed the threshold level that is 0.1 for two independent variables.

**Table 7**

*Predictive Accuracy of the Model*

Construct	$R^2$	Adjusted $R^2$
Investors Performance	0.222	0.210

Source: Smart-PLS.4 Result Output

**Structural Equation Model**

In order to find the relationship between the independent variable (prospect factor) and the dependent (investment performance), the structural equation model is made using Smart-PLS.4

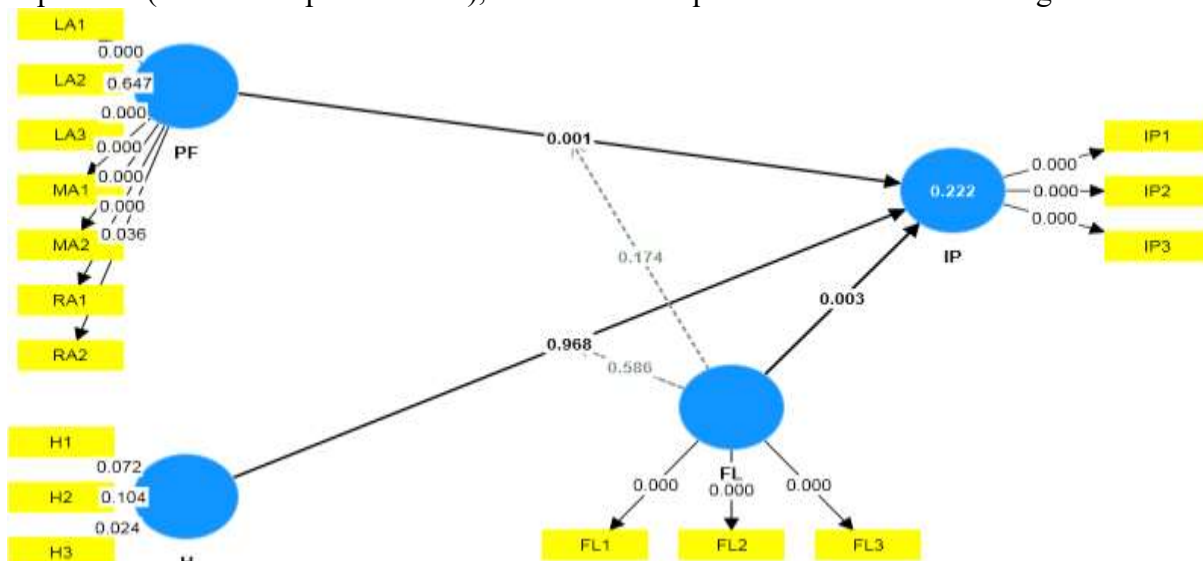


Figure 2: Structural Model

Source: Smart-PLS.4 Result Output

**Table 8**

**Results of Structural Equation Model**

Construct	Coefficients	Standard Deviation	t-Statistics	P-Values
P $\rightarrow$ IP	0.262	0.077	3.387	0.001
H $\rightarrow$ IP	-0.003	0.071	0.040	0.968
FL $\rightarrow$ IP	0.235	0.079	2.966	0.003
FL X PF $\rightarrow$ IP	-0.065	0.048	1.359	0.174
FL X H $\rightarrow$ IP	-0.031	0.058	0.544	0.586

**Source:** Smart-PLS.4 Result Output

Ho<sub>1</sub>: Prospect factor has no significant effects on investment performance

Prospect variable significantly affects the investment performance with a coefficient ( $\beta$ ) value of 0.262 and t-value of 3.387 with a corresponding p-value of 0.001, which reveals that prospect factor, has a positive and significant effect on investment performance. The value of  $\beta$  0.262 which reveals that if prospect variable changes by 1%, there would be 26% increase in investment performance, by holding the other predictors constant. The result shows that the prospect behaviors positively influence investment performance. This is because investors are more concerned with wealth appreciation and gain on their investment than the risk associated with it. The study is supported by work of Rehan et al., (2021) and contradict the study of Marwa and Meryem (2018) that revealed a insignificant negative effect on investment performance.

Ho<sub>2</sub>: Herding effects has no significant effects on investment performance

Herding effects significantly affects the investment performance with a coefficient ( $\beta$ ) value of -0.003 and t-value of 0.040 with a corresponding p-value of 0.968, which reveals that herding effect has negative and insignificant effect on investment performance. The value of  $\beta$  -0.003 which reveals that if herding effect changes by 1%, there would be 3% drop in investment performance, by holding the other predictors constant. The findings of the study is supported by research of Khalid et al. (2018). However, contradict the study of Baral and Pokharel (2020) revealed that herding factor has a positive and significant effect on investment performance.

Ho<sub>3</sub>: Financial literacy profoundly affects the investment performance with a coefficient ( $\beta$ ) value of 0.235 and t-value of 2.966 with a corresponding p-value of 0.003, which reveals that financial literacy level of an individual has a positive and significant influence on investment performance. The  $\beta$  value of 0.235 reveal that if financial literacy of an individual changes by 1%, there would be 23% increase in individual investment performance. The findings of the study revealed that the financial literacy level of individual's investor has an essential role in making effective decision and have good returns on investment. The findings of the study is supported by research of Ahmad et al. (2021). However, contradict the study of Tuffour et al. (2020).

Ho<sub>4</sub>: The moderating role of financial literacy has no significant effect of prospect factor and herding effect on individual investment performance

The moderating role of financial literacy on the effect of prospect factor and herding effect on individual investment performance shows a coefficient ( $\beta$ ) value of -0.065 and -0.031 and t-value of 1.359 and 0.544 with a corresponding p-value of 0.174 and 0.586 respectively, which revealed

that the interaction of financial literacy on prospect factor and herding effect is found to have a negative and insignificant influence on investment performance. The  $\beta$  value of -0.065 and -0.031 reveal that the level of financial literacy of individuals based on psychological behavior as well as prospect and herding effect by 1%, decrease the individual investment performance by 6% and 3% respectively. The study is supported by the work of Rajeshwaran (2020) but contradict the study of Ya'acob et al. (2019).

## CONCLUSION AND RECOMMENDATION

This study identified the effect of prospect factor and herding effect on individual investment performance within Kaduna metropolitan, Nigeria. The research concluded that the prospect behavioral factor and financial literacy have positive and significant influence on individual investment performance in Kaduna metropolitan, Nigeria. This shows that investors established that individual behavioral factors play fundamental role in determining investment performance. Therefore, this shows that individual investors strongly believe that their dividend yield, stock booms and investment satisfaction can be attributed to investment

decision based on fundamental statistics available to them. Furthermore, herding effect revealed a negative and insignificant effect on investment performance which shows that individual investors that follow other investors decision in determining their investment has reduced the investment performance. Therefore, investors are advised to have self-confidence is making investment decision.

From the empirical evidence of the study, the financial literacy has an insignificant and negative moderating role on prospect behavioral factor and herding effect on individual investment performance. This study established that financial literacy level of individual investor cannot determine prospect biases and herding attitude of individuals because it has been found to reduce individual investment performance. Therefore, the study recommends that individual investors should understand that the prospect factor is an emotional or behavioral factor of individual and investment decision is an essential cognitive factor that influence investment performance. Secondly, individual investors need to have financial literacy (financial knowledge and planning) for future investment decision because it has been established to influence investment performance.

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