International Journal of Innovative Finance and Economics Research 14(3):40-55, July-Sept, 2026
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DOI:10.5281/zenodo.21303678

Impact of Behavioral Finance on Customers Investment Decision: A Case Study of Selected Deposit Money Bank Customers in Wukari, Taraba State

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ABSTRACT
This research examined the impact of Behavioral Finance on bank customers' investment decisions, focusing on 60 customers from United Bank for Africa, Zenith Bank, and Unity Bank in Wukari, Taraba State. It specifically explored the influence of Heuristic Theory, Emotion, and Prospect Theory on investment decisions. Primary data was gathered through structured questionnaires, and a descriptive survey design was employed. Ordinary Least Square (OLS) regression analysis revealed that heuristic-based decisions negatively impact investment returns (-66.53, p = 0.0012), emotions have a similar negative effect (-0.618, p = 0.0083), while Prospect Theory significantly improves investment outcomes (4.14, p = 0.0001). The study concludes that heuristic and emotional biases hinder investment success, whereas Prospect Theory enhances it, recommending investors adopt more analytical decision-making approaches.
Keywords*:* Behavioral Finance, heuristic, Emotion Prospect Theory, Return on assets

INTRODUCTION

Nigeria's investment landscape offers both opportunities and challenges, with individual investor's key to economic growth. Traditional finance theories suggest investors act rationally, using complete information to maximize returns and minimize risks. However, this fails to consider the psychological factors that influence financial decisions. Behavioral finance, blending psychology and financial theory, shows how emotional and cognitive biases impact investment choices, diverging from rational models. Baker & Nofsinger (2010) argue that standard finance assumes rationality and market efficiency, while Riaz & Iqbal (2015) counter that behavioral finance reveals flaws in this view, highlighting human

imperfections and biases. Behavioral finance focuses on heuristics, framing, emotions, and market impact (Baker & Nofsinger, 2010). Early studies, like DeBondt & Thaler (1985), showed that investors overreact to information, a pattern confirmed by Tversky & Kahneman (1974) and Barber & Odean (2002).

The intersection of deposit money bank customers and behavioral finance underscores the importance of understanding psychological influences on financial decision-making. By recognizing these behavioral tendencies, banks can tailor their products and services to better align with customer needs, ultimately promoting more informed and effective banking behaviors.

In Nigeria, understanding these behavioral factors is crucial due to the volatile economy and the complexity introduced by tech-savvy, often financially illiterate, Millennials. Their investment decisions are vulnerable to biases like overconfidence and herd behavior. Despite this, few studies address behavioral finance in Nigeria, with most research rooted in Western contexts. This study fills that gap by examining the influence of heuristics, framing, emotions, and market impacts on Nigerian investors, aiming to improve financial decision-making. These insights can help investors, financial advisors, and policymakers develop better strategies and literacy programs, ultimately supporting Nigeria's economic growth. This study aimed at evaluating the impact of behavioral finance on deposit money bank customers' investment decision within the scope of the research.

1.2 Statement of the Problem

The investment landscape in Nigeria is characterized by a diverse mix of opportunities and challenges, with individual investors playing a critical role in driving economic growth. However, the traditional assumption that investors are rational agents who make decisions based solely on objective analysis is increasingly being challenged. Behavioral finance, which integrates insights from psychology into financial decision-making, suggests that investors' choices are often influenced by emotional and cognitive biases. In Nigeria, a country marked by economic volatility, political instability, and a rapidly growing population of young, tech-savvy individuals, understanding these behavioral factors is crucial. Despite the burgeoning interest in behavioral finance globally, there is a significant gap in research focused on the Nigerian context. Nigerian investors, particularly Millennials, are subject to unique socio-economic pressures and cultural influences that may exacerbate or mitigate common behavioral biases. These biases can lead to suboptimal investment decisions, affecting not only individual financial well-being but also the broader economic development of the country. For instance, reliance on heuristics, overconfidence, and emotional decision-making could result in poor investment outcomes, reducing the overall efficiency of the financial markets, (Agbolade 2011; Bogunjoko 2021; Grinblatt & Han 2001)

The problem is further compounded by a lack of financial literacy and awareness among Nigerian investors, which exacerbates the impact of these biases. This study seeks to address this gap by investigating the specific behavioral factors that influence investment decisions in Nigeria specifically customers of united bank for Africa, Zenith bank, and unity bank in Wukari local government area of Taraba State. By doing so, it aims to provide insights that can inform better investment strategies, enhance financial literacy, and ultimately contribute to more robust economic development. The findings will be valuable for investors, financial advisors, policymakers, and educators in developing targeted interventions to mitigate the negative effects of behavioral biases on customer's investment decisions making in Wukari local government, Taraba State and Nigeria in general, (Bogunjoko 2021).

1.3 Objective of the study

The general objective of the study is to assess the impact of Behavioral Finance on Customer's investment decision making, with main emphasis on impact of behavioral finance on banks customers of the selected deposit money banks in Wukari. While the specific objectives are to;

i Examine the Impact of Heuristic Theory on Bank Customer's Investment Decision Making

ii Examine the Impact of Emotion on Bank Customer's Investment Decision Making

iii Examine the Impact of Prospect Theory on Bank Customer's Investment Decision Making

1.4 Research question

i. To what extent does Heuristics Theory Impact Bank Customer's Investment Decision Making?
ii. What is the relationship between Emotions and Bank Customer's Investment Decision Making?
iii. What is the relationship between Prospect Theory and Customer's Investment Decision

1.5 Research Hypothesis

The following Null Hypothesis were put forward to test the impact of behavioral finance on customers invest decision making;

i. Ho1: Heuristic Theory does not have significant negative Impact Bank Customer's Investment Decision Making
ii. Ho2: Emotions has no significant negative Impact on Bank Customer's Investment Decision Making
iv. Ho3: Prospect Theory has no Significant negative Impact on Customer's Investment Decision Makings

2.0 REVIEW OF RELATED LITERATURE

2.1.1 Customers Investment Decision

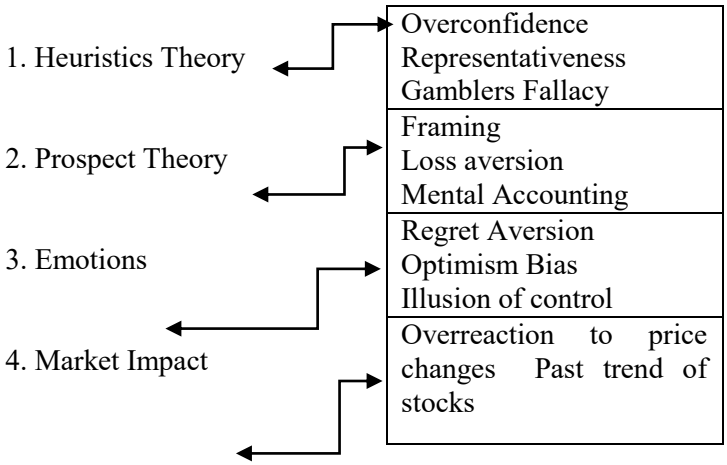
Customer Investment Decision Making (CIDM) is a multifaceted process influenced by a variety of factors, both rational and irrational. Traditional financial theories suggest that investors make decisions based on logical reasoning and complete information. However, behavioral finance challenges this notion by highlighting the significant role of psychological biases and emotions in investment decisions. Understanding CIDM requires an exploration of these behavioral influences and how they interact with market conditions, personal circumstances, and broader economic factors.

Statman (1995) notes that standard finance is based on Modigliani and Miller's theories, Markowitz's portfolio theory, and Fama's efficient market hypothesis. However, behavioral finance emerged to address the shortcomings of standard finance, particularly questioning why market bubbles occur if markets are truly efficient. Konstantinidis et al. (2012) highlighted the dotcom bubble as a major challenge to the Efficient Market Hypothesis. In the 1990s, tech companies saw stock prices surge by 400%, but many failed to deliver profits, leading to a market crash in the early 2000s.

Landberg (2003) attributes investor decisions to fear and greed, driven by the desire for gains and fear of losses. Shefrin (2002) links psychology to common investor mistakes, while Fromlet (2001) combines psychology and finance to explain investor behavior and market anomalies. Hooker (2017) notes that millennial investors often rely on instincts and trends without sufficient information, introducing bias. Tarjanne (2020) identifies three investor interests: utilitarian (financial gain), expressive (status), and emotional (feelings).

This section covers four key themes in behavioral finance: heuristics, framing, emotions, and market impact, along with herding bias, which help explain the psychological factors behind investor decisions.

2.1.3 Bank Customers Investment Behaviors



Source: Auditor's Conceptualization

2.1.4 Heuristics Theory

Heuristics theory refers to the cognitive shortcuts or simple rules of thumb that individuals use to make decisions and solve problems quickly and efficiently. These mental shortcuts are based on experience and allow people to function without having to engage in detailed analysis for every decision. Heuristics are especially useful in complex situations where quick judgments are required, or when there is a lack of complete information. However, while heuristics can be practical and time-saving, they can also lead to systematic errors or biases in decision-making.

There are several types of heuristics, including:

Availability Heuristic: This involves making decisions based on the information that is most readily available in memory. If something can be easily recalled, it is perceived to be more common or more likely than it actually is.

Representativeness Heuristic: This is the tendency to judge the probability of an event by how similar it is to a prototype or stereotype. People often ignore base rates and other relevant information in favor of what seems representative.

Anchoring and Adjustment Heuristic: This involves relying heavily on the first piece of information (the "anchor") when making decisions. Subsequent judgments are made by adjusting away from this anchor, often insufficiently.

Overconfidence: This occurs when individuals overestimate their knowledge, abilities, or the accuracy of their predictions. Overconfidence can lead to poor decision-making and an underestimation of risks.

Gambler's Fallacy: This is the mistaken belief that past random events affect the probabilities of future random events. For example, believing that a coin is "due" to land on heads after several tails in a row. Heuristics theory is a fundamental concept in behavioral economics and psychology, highlighting how people can deviate from rational decision-making models due to cognitive biases.

2.1.5 Overconfidence

Overconfidence is a bias where individuals are excessively confident in their abilities, knowledge, or predictions, affecting decision-making in high-stakes areas like investing. It manifests as:

- **Overestimation**: Overestimating one's abilities or control, like a novice investor overestimating their ability to predict markets.
- **Over placement**: Believing one is better than others, such as thinking they are in the top 10% of drivers.

- **Over precision**: Excessive certainty about one's knowledge, such as being overly sure of sales forecasts despite uncertainties.

2.1.6 Representativeness

Representativeness is a bias where individuals judge the likelihood of an event based on its similarity to a prototype or stereotype, rather than actual statistics, as proposed by Tversky and Kahneman in the 1970s.

2.1.7 Gambler's Fallacy

The Gambler's Fallacy is the mistaken belief that if an event happens more frequently in a period, it will occur less in the future, or vice versa. It arises from a misunderstanding of probability in sequential events like coin flips.

2.1.8 Framing

Framing is a bias where decisions are influenced by how information is presented. Kahneman (2011) noted that few people are "reality bound." Diacon & Hasseldine (2007) found that investors frame information visually rather than relying on the facts. Wahla et al. (2019) showed that framing negatively affects financial behavior, leading investors to make poor decisions based on how information is presented rather than the facts.

2.1.9 Loss Aversion

Tversky & Kahneman (1979) found that people value losses more than equivalent gains, making them risk-averse with gains and risk-takers with losses. Myopic loss aversion explains why daily investors adjust their wealth distribution. Investors often avoid equities after a loss, despite the market principle of buying low and selling high.

2.1.10 Mental Accounting

Mental accounting refers to how people categorize money for different purposes, which can harm investment and consumption decisions. Shefrin & Thaler (1988) noted that individuals divide their funds into current income, current wealth, and future income, often leading to risk segregation.

2.1.11 Emotions

Emotions like fear, greed, and regret significantly influence investment decisions. Ahmad (2019) emphasized that managing emotions is key to sound financial decisions. However, biases like optimism and lack of self-control often lead to poor financial planning, such as overspending on present needs instead of saving.

2.1.12 Optimism Bias

Optimism bias is the tendency for individuals to overestimate positive outcomes, based on inner perceptions rather than reality. Riaz & Iqbal (2015) linked optimism bias to risky investment decisions, particularly in volatile markets.

2.1.13 Illusion of Control

Illusion of control is the false belief that one can control events beyond their influence. This bias often leads to overtrading, increasing costs. Langer (1975) defined this as an "inappropriate personal success," where people overestimate their control in random events.

2.1.14 Deposit Money Banks (DMBs)

The deposit money banks are critical institutions in the financial sector, serving as intermediaries between savers and borrowers. They play a pivotal role in the economy by accepting deposits, providing loans, and facilitating payment systems. Here's an overview of their functions, importance, and challenges, supported by relevant references: Accepting Deposits: DMBs provide a safe place for individuals and businesses to deposit their money. These deposits can take various forms, including savings accounts, current accounts, and fixed deposits (Ojo, 2018). Providing Loans and Credit**:** Banks use the funds they gather from deposits to offer loans to individuals and businesses. This credit provision is essential for fostering economic growth, enabling investment, and facilitating consumption (Ajayi & Ojo, 2019**).** Facilitating Payments**:** DMBs play a vital role in payment systems, providing mechanisms for money transfers and payments. They facilitate local and international transactions through cheques, electronic transfers, and credit/debit cards (Khan, 2020). Risk Management**:** Banks offer various financial products

to help individuals and businesses manage risk, including insurance products and derivatives. They also assess the creditworthiness of borrowers, which helps mitigate risks associated with lending (Nnadi, 2018). Monetary Policy Implementation: DMBs are crucial in implementing monetary policy. Central banks often use them to influence money supply and interest rates through tools such as reserve requirements and open market operations (Central Bank of Nigeria, 2021).

2.1.15 mportance of Deposit Money Banks

Economic Growth**:** By providing credit, DMBs contribute significantly to economic development. They finance businesses, which can lead to job creation, increased productivity, and overall economic expansion (Suleiman & Abdu, 2020). Financial Inclusion**:** DMBs promote financial inclusion by offering banking services to underserved populations. This inclusion is vital for enhancing economic opportunities and reducing poverty (World Bank, 2022). Stability and Confidence**:** A well-functioning banking system fosters trust in the financial system. DMBs help stabilize the economy by providing a reliable source of credit and liquidity (International Monetary Fund, 2020).

2.1.16 Challenges Facing Deposit Money Banks

Regulatory Compliance**:** DMBs face stringent regulatory requirements that can be burdensome. Compliance with capital adequacy, liquidity, and reporting standards can strain their operational capacity (Adeyemi, 2019). Credit Risk**:** The risk of borrower default poses a significant challenge for banks. High levels of non-performing loans can adversely affect banks' profitability and stability (Adebayo & Uche, 2021). Technological Disruption**:** The rise of fintech companies has disrupted traditional banking models. DMBs must adapt to technological changes to remain competitive and meet customer expectations (Fadare, 2021). Economic Instability: Economic downturns can impact banks' operations. During recessions, loan defaults may increase, and deposit growth may slow, leading to potential liquidity issues (Olawale & Akinola, 2020).

2.1.14 Regret Aversion

Regret aversion is the tendency to avoid making decisions to prevent future regret. Investors often sell winning stocks too quickly and hold onto losing ones for too long, leading to reduced returns. This bias also causes investors to avoid risks that could lead to regret, making them overly conservative in their decisions.

2.2 Theoretical Review

This research work is anchored on Prospect Theory of Behavioral Finance

The Prospect Theory, was propended by Daniel Kahneman & Amos Tversky in 1979. The theory describes how individuals make choices under uncertainty. It challenges the traditional expected utility theory, which assumes that individuals are rational actors who always make decisions that maximize their utility. Prospect Theory, instead, suggests that people evaluate potential losses and gains differently, leading to systematic deviations from rational behavior. The theory emphasis on Reference Dependence: Outcomes are evaluated based on a reference point (often the status quo). Loss Aversion: Losses loom larger than gains. The pain of losing is psychologically more impactful than the pleasure of an equivalent gain. Diminishing Sensitivity: The value function is concave for gains and convex for losses, indicating diminishing sensitivity to changes in wealth. Probability Weighting**:** People tend to overestimate the likelihood of rare events and underestimate the likelihood of moderate to high probability events. This leads to a probability weighting function that is nonlinear, causing deviations from expected utility theory.

i. **Assumptions of Prospect Theory**

People use a reference point to judge outcomes. They exhibit loss aversion, meaning losses are perceived more intensely than gains. They distort probabilities in a systematic way, overweighing small probabilities and underweighting large ones.

2.2.3 Application of Prospect Theory in Banking and Finance

Risk Assessment and Management: Helps financial institutions understand client behavior under risk, leading to better risk management strategies and tailored financial advice. Assists in the design of financial products that align with the behavioral tendencies of customers.
Marketing and Product Design: Banks can design products that appeal to the loss aversion tendency of customers, such as structured savings plans that protect against losses. Insurance products can be marketed by emphasizing the avoidance of potential losses rather than the benefits. **Regulatory Policies:** Regulators can design policies that protect consumers from making poor financial decisions due to behavioral biases, such as mandatory disclosure requirements.

2.3 Empirical Review

Goud, Kumar & Chakradhar (2024), investigated the impact of human psychology on financial decision-making. This study delves into the foundational ideas of behavioural finance, illuminating the ways in which emotions, cognitive biases, and shortcuts influence the actions of investors. It draws attention to the substantial impacts of these irrationalities on monetary choices by examining them. The research delves into certain biases including herding, anchoring, overconfidence, and loss aversion that impact investing decisions. Market inefficiencies caused by these biases may impact asset values and cast doubt on the long-held assumption that markets are inherently efficient. This study delves at the ways in which fear and greed influence financial decisions. Investors' impulsive actions, fuelled by these emotions, have the potential to cause market fluctuations. Investors may improve their risk management and strategy development by understanding the psychological aspects that play a role in decision-making. The need of comp rehending behavioral finance for different parties is emphasized in the article. To counteract the detrimental impacts of cognitive and emotional biases in financial decisions, it emphasizes the need of raising awareness and providing education. These initiatives may aid lawmakers, financial advisers, and investors in making better decisions in the financial markets by encouraging educated and reasonable decision-making.
(2022)This paper seeks to find out the major influence of certain behavioral finance concepts such as overconfidence, perception, Representative, anchoring cognitive Dissonance, Regret Aversion, narrow framing and mental accounting on the decision-making process of individual investors in stock market. We conducted a primary research by framing a structured questionnaire and by collecting sample of 181 investors of Ahmedabad. Upadhyay (2019), the primary objective was to know effects of behavioral financing on investors and to study the impact and relevance of behavioral financing in investment decision of investors. Whereas secondary objective of our study was to know factors influencing the investors while investing and to study the concepts of behavioral financing and various theories related to it.
Bogunjoko (2021), The primary objective of this research is to investigate the impact of Behavioral Finance on millennial Investment decisions in Nigeria while the secondary objective is to know how correlated the behavioral factors is with the sociodemographic characteristics, focus is shifted to a particular generation who are called ‘The Millennials’. The research onion was used to serve as a guide to carry out appropriate strategies to solve the research problem. The researcher used the quantitative methods to answer the research problems. A survey was carried out using existing studies in the field of behavioral finance. The survey was distributed mainly to millennia’s investors as they are the purpose of this research via the’s up App platform to various social groups, the number of participants that were able to fill the survey was a 102. The use of Statistical Package for Social Sciences (SPSS) software was used to analyze the data collected using both the Descriptive and Inferential Statistics. The study showed that Market impact such as overreaction to price changes and past trend of stocks had the highest impact on millennial investors while Heuristics, Framing (Prospect theory), Emotions, and Herding have moderate and low impacts on millennial investors. Another key finding was that less experience millennial investors (retail) are more likely to be influenced by the behavioral factors while the behavioral factors tend to have less impact on older investors (Institutional). This research paper, proves that behavioral

factors have a significant impact on millennial investor's decisions, it was also observed that overconfidence (a factor under heuristic) is an underlying factor that heightens the presence of other behavioral factors in millennial investors. The study fills the intended gap by comparing and contrasting different behavioral factors that possibly impacts millennial investment decision in a developing country such as Nigeria. This research contributes to existing knowledge and bring insights to investors on psychological biases that could affect investment decision. It is also worthy to note that there are other factors which could also contribute to how investors make their decisions.

Ganesan (2012) who carried a research on the consumption, saving and spending habits of Millennials in Malaysia using the quantitative approach via questionnaires found out that investors regard investment as high risk and that mode of communication for investment purposes should be via social platforms. Karanam and Shenbagavalli (2019) also studied the investment patterns of millennials and found out that there are age preferences to investing and that all age types invest but the millennials are more inclined to other forms of investment particularly contemporary investment such as property, mutual funds. Income and profession are major determinants for Investing, the researcher in this study did not limit its investment purview to just the stock market. Waweru et al (2014) explains that behavioral factors are said to influence this type of investment rather than fundamental analysis.

2.4 Research gap

From the empirical reviews, it was noticeable that most studies, including those by Goud, Kumar & Chakradhar (2024) and Bogunjoko (2021), focus on broad behavioral biases without deeply contextualizing their effects within specific socio-economic environments, such as developing countries like Nigeria or specific regions like Malaysia. There is a need for more localized studies that account for cultural, economic, and regulatory factors influencing investor behavior in these contexts. Few studies systematically compare the prevalence and impact of various behavioral biases across different demographic groups, such as millennials versus older generations or retail investors versus institutional investors. Understanding these differences could offer nuanced insights into tailored investment strategies and policy recommendations. Many studies are cross-sectional, capturing a snapshot of investor behavior at a specific point in time. Longitudinal studies tracking behavioral biases over extended periods could reveal how these biases evolve and their long-term impact on investment performance and market stability. Therefore this seminar research work is suited to investigate the impact of behavioral finance on customer's investment decision making with emphasis on selected bank customers in Wuakri Taraba state Nigeria.

3.0 METHODOLOGY

3.1 Research Design

This seminar research work employed descriptive survey design using a self-structured interviews. The justification for descriptive survey design according to Agbolade (2011) is to collect detailed and factual information that describe an existing phenomenon. The study is anchored on effect of behavior finance on customer's investment decision making a case study of selected banks customers in Wuakri. The data was collected primarily using a self-structural and administered questionnaire

3.2 Population of the study

For the purpose of this seminar research work, the accessible population are 60 customers of deposit money banks in Wukari selected from three banks (Zenith Bank, United bank for African and Unity Bank)

3.4 Sample size Determination

Sampling is taking a part out of the Whole. Sample is therefore a group of units drawn from population or universe as a representative of that population (Osuala, 2001). The justification of this is that it serves the

practical purpose 0f making possible the study of the problem which otherwise could not be undertaken due to limitation of cost, time, personal or even scope (Osuala, 2001). For this reason sample size is determined for this study the researcher employed the Taro yamane formula, the sample size of the study is determined to be 60.

$$n=\frac{N}{1+N(e)2}$$

Where;
n = sample size
N = Population size
E = sampling error (0.5)
1 and square are constant

$$n=\frac{70}{1+70(0.05)2}$$

$$n=\frac{70}{1.175}$$

n=60

3.5 Sampling Technique

For the purpose of this study the researcher use stratified random sampling, this method is adopted because the sample include respondents from all stratum (selected Bank customers).

3.6 Sources of Data

The study solely rely on both primary and secondary data, the primary source of data was based on the use of Questionnaire distributed and collected from the selected bank customers, who are banks customers'. While, the secondary source of data were text books, journals, internet materials and so on, used to review literatures in the chapter two of this study.

3.7 Instruments of Data Collection

The instrument used for data collection is the research questionnaire which was developed by the researcher. The questionnaire contains close-ended questions relating to the objectives of the study. The questionnaires were administered to the respondents through personal contact. The questionnaire contains three (3) sections: A and B Section A contains questions relating to demographic data of the respondents, such as; Employment status, years of investment experience B contains questionnaire items relating to the impact of behavioral finance on banks customer's investment decision making in Wukari, using a Likert scale of five point; Strongly Agree (SA), Agree (A), Undecided (UD), Disagree (D) and Strongly Disagree (SD)

3.8 Model Specification

In this research, both the dependent and independent variables are fit to an equation called a regression equation in which the data would express the relationship between the variables.
In testing the relationship between Behavioral Finance and Bank Customer's Investment Decision Making
BCID= f [HE, EM, PT] ……(i)
However, the model was re-modified and stated in linear forms below:
$BCID = a_0 + a_1HE_t + a_2EM_t + a_3PT_t + e$ …….(ii)
Where;
BCID = Bank Customers Investment Decision g
HE = Heuristic
EM = Emotion
PT = Prospect Theory
a_0 = Intercept or constant term
$a_1 – a_3$ = Coefficients of independence variables
e = Error Term which is usually 5% (0.05) for social sciences.

3.9 Analytical Technique

The study used Ordinary Least Square (OLS) with aid of E-view 11.0 econometric software to analyse the data. The various tests carried out are descriptive statistics, Unit Root test as well as the Regression result. The Ordinary Least Square (OLS) was chosen because of its BLUE (Best Linear Unbiased Estimator) characteristics

4.0 DATA PRESENTATION AND ANALYSIS

4.1 Data Presentation

Questionnaire administered and the Return Rate

Table 4.1: Questionnaire Return Rate

Number of Questionnaire	Frequency	Percent
Issued	60	100.00
Returned	57	95.00

Source: *SPSS 21*

As shown in table 4.1, a total of 60 questionnaire were issued out to the bank customers of the selected deposit money banks in Wukari local government of Taraba State out of which 57(95.00%) of the total questionnaire were returned.

4.2 Data Analyses

4.3 Summary of the population

Table 4.2.1:

i. Banks Customers Employment Status

	Frequency	Percentage
Director	12	21.1
Executive Officers	36	63.2
General Staff	9	15.8
Total	57	100.0

ii. Years of Investment Experience

1-5	13	22.8
10-20	30	52.6
30 and above	14	24.6
Total	57	100.0

Source: *SPSS 21*

The results of the Bank customers employment and years of investment experience presented in Table 4.2.1 above shows the Employment status and years of investment of the bank customers this is to enable the researcher ascertain the appropriate bank customers fitted for this seminar research work. It can be observed that of the 57 respondents that responded, 21.1% were directors, 36(63.2%) was executive officers while 9(15.8%) was general staff who did not disclosed their employment status. Also, with regards to the years of investment experience, 13(22.8%) of the respondents have from one to five years of financial investment experience while 30(52.6%) of the respondents have 10 to 20 years of investment experience and 14(24.6%) have 30 and above years of investment experience, this categories of the bank customers are the fitted targeted customers for this research seminar work as they have years of financial investment experience given them the ability to give clear answers to the questions regarding the effect of behavioral Finance on the Bank customers investment decision.

4.2.1 Heuristics theory has no significant negative effect on Customer's Investment Decision Making

Table 4.1.2.1: Overconfidence does have not significant negative effect on Customer's Investment Decision making

	Frequency	Percentage
Strongly agree	4	7.0
Agree	4	7.0
Undecided	1	1.8
Disagree	47	84.2
Total	57	100.0
2. Gamblers Fallacy does not have significant effect on Customers Investment Decision making		
Strongly agree	5	8.8
Agree	1	1.8
Undecided	4	7.0
Disagree	47	84.2
Total	57	100.0
3. Representativeness does have significant effect on Customers Investment Decision making		
Strongly agree	1	1.8
Agree	25	43.9
Undecided	1	1.8
Disagree	30	52.6
Total	57	100.0

Source: *SPSS 21.*

In this section, the effect of behavioral finance on Bank customer's investment decision making was analyzed. With the H01: which said the use of heuristic theory have no significant negative effect on bank customer's investment decision making are presented. Table 4.1.2.1: On overconfidence: the outcome revealed that 47(84.2%) of the respondents disagreed, 4(7.0%) agreed, 4(7.0%) strongly agreed and 1(1.8%) of the respondents were uncertain. On gamblers fallacy, 47(82.5%) disagreed, 5(8.8%) strongly agreed, 4(7.0%) were not sure while only 1(1.8%) agreed. On Representativeness: 30(52.6%) of the respondents disagreed, 25(43.9%) agreed, 1(1.8%) strongly agreed and 1(1.8%) were undecided. Therefore it was concluded that the use of heuristic theory has significant negative effect on bank customers' investment decision.

Table 4.3.1: Prospect Theory has no significant negative effect on Bank Customers Investment decision

4. The use of framing does not have significant negative effect on Customers Investment Decision Making

	Frequency	Percent
Strongly agree	37	69.4
Agree	10	17.0
Undecided	1	1.8
Disagree	9	15.8
Total	57	100.0
5. Loss aversion does not have significant negative effect on Customers Investment Decision making		
Strongly agree	5	8.8
Agree	47	84.2
Undecided	4	7.0
Disagree	1	1.8
Total	57	100.0
6. Mental Accounting does not have significant negative effect on Customers Investment Decision making		
Strongly agree	30	52.6
Agree	25	43.9
Undecided	1	1.8
Disagree	1	1.8
Total	57	100.0

Source: *SPSS 21.*

Table 4.1.3 the use of Prospect Theory has no significant negative effect on Bank customer's Investment decision making (H02): Table 4.1.3.1: On the use of framing: the outcome shows that 37(69.4%) of the respondents strongly agreed, 10(17.0%) agreed, 1(1.8%) undecided and 9(15.8%) of the respondents disagreed. On loss aversion, 47(82.5%) agreed, 5(8.8%) strongly agreed, 4(7.0%) were not sure while only 1(1.8%) disagreed. On Mental Accounting: 30(52.6%) of the respondents strongly agreed, 25(43.9%) agreed, 1(1.8%) were undecided and 1(1.8%) disagreed. Therefore it was concluded that the use of the use of prospect theory in financial decision making has no significant negative effect on bank customer's investment decision.

Table 4.4.1: Emotions has no significant negative effect on Bank Customers Investment decision

7. Regret Aversion has no significant negative effect on customers investment decision making

	Frequency	Percentage
Strongly agree	9	15.8
Agree	1	1.8
Undecided	10	17.0
Disagree	37	69.4
Total	57	100.0
8. Optimism Bias does not have significant negative effect on Customers Investment Decision making		
Strongly agree	1	1.8
Agree	5	8.8
Undecided	4	7.0
Disagree	35	56.3
Total	57	100.0
9. Illusion of control does not have significant negative effect on Customers Investment Decision making		
Strongly agree	1	1.8
Agree	1	1.8
Undecided	25	43.9
Disagree	30	52.6
Total	57	100.0

Source: *SPSS 21*

With regards to HO3: Emotions has no significant negative effect on Bank Customers Investment decision making. Table 4.1.4.1: On Regret Aversion, it was revealed that 37(69.4%) of the respondents disagreed, 10(17.0%) were undecided, 9(15.8%) strongly agreed and 1(1.8%) of the respondents agreed. Optimism Bias; 35(56.3%) disagreed, 5(8.8%) agreed, 4(7.0%) were not sure while only 1(1.8%) strongly agreed. On Illusion of control: 30(52.6%) of the respondents disagreed, 25(43.9%) undecided, 1(1.8%) strongly agreed and 1(1.8%) agreed. It was therefore concluded that Emotions has significant negative effect on Bank Customers Investment decision.

Model Regression Analysis

Table 4.4: Regression Result

VARIABLE	COEFFICIENT	STD. ERROR	T-STATISTIC	PROB.
C	3394.568	2293.347	1.480181	0.1508
HE	-66.52598	202.8558	-3.387947	0.0012
EM	-0.617582	0.945306	-2.653315	0.0083
PT	4.142007	0.888343	4.672623	0.0001
AR(1)	0.538788	0.184935	2.913382	0.0073

Source: *SPSS 21.*

Interpretation

The regression analysis on the impact of behavioral finance on customer investment decision making revealed a coefficient of 3394.568 with a standard error of 2293.347. The associated t-statistic was 1.480181, yielding a probability (Prob.) of 0.1508. Notably, the constant term, though positive, was found to lack statistical significance ($p > 0.05$). This suggests that, under constant conditions of other variables, the baseline level of Customer Investment Decision Making (BCID) does not exhibit a significant deviation from zero

4.3 Test of Hypotheses

$H0_1$: The use of Heuristic Theory does not have Significant Negative Impact Bank Customer's Investment Decision Making: the negative coefficient (-66.52598) indicates that for every unit increase in the use of Heuristics Theory (HE) for investment decision making, there is an associated decrease of approximately 66.53 on customers return on investment. Holding all other variables constant. The t-statistic of -3.387947 corresponds to a probability (p-value) of 0.0012. This p-value is well below the conventional significance level of 0.05, indicating strong evidence against the null hypothesis. Therefore, we reject the null hypothesis that HE has no effect on CIDM in favor of the alternative hypothesis that HE does have negative effect on CIDM.

Given the statistically significant negative coefficient and low p-value, we conclude that Heuristics Theory (HE) has a significant negative impact on Customer Investment Decision Making (CIDM). This implies that reliance on heuristics-based decision making tends to decrease the likelihood or magnitude of customer investment decisions. Investors or financial advisors should be cautious of the biases introduced by heuristic approaches and consider more analytical and informed decision-making strategies to potentially enhance CIDM outcomes.

Ho2: Emotions has no Significant Negative Impact on Customer's Investment Decision Makings

With **Coefficient of value of** -0.617582, **Standard Error of** 0.945306, **t-Statistic of** -2.653315, and probability **(Prob.) value of** 0.0083; we therefore concluded that emotions (EM) also has a significant negative impact on customers investment decision making CIDM. The negative coefficient suggests that unfavorable investment decision as result of customers emotions decrease CIDM. This result is statistically significant at ($p < 0.05$) according to the decision rule.

Ho3: the use of prospect theory has no Significant Negative Impact on Customer's Investment Decision Makings

In analysis, **prospect theory (PT) attained a** coefficient value of 4.142007, standard Error 0.888343, t-Statistic 4.672623, Probability (Prob.): 0.0001; therefore, going by the decision rule, PT does not have a significant negative impact on CIDM. The positive coefficient implies that favorable the use of prospect theory is a greater factors that increases profitable return on customer's investment. This finding is highly statistically significant ($p < 0.001$).

AR (1): The significant positive autocorrelation identified by the AR (1) term underscores the persistence of trends in Customer Investment Decision Making (CIDM) over time. This supports the notion that historical performance and decisions play a role in shaping current investment behaviors. Understanding and leveraging this autocorrelation can enhance forecasting accuracy and decision-making processes in financial contexts

4.3.2 Model Measures of Adequacy

Table 4.3.2: Model Summary

Multiple R	R Square	Adjusted R Square
.501	.528	.406
Dependent Variable: CIDM Predictors: HE EM PT		

Source *SPSS 21.*

*T*he model summary indicates that the predictors (HE, EM, PT) collectively contribute to explaining customer investment decision making (CIDM), with a notable portion of variance accounted for. Understanding these variables and their impact can guide strategies to improve investment outcomes and decision-making processes in financial contexts. Continued refinement and validation of the model could further enhance its predictive accuracy and practical utility.

4.6 DISCUSSION OF THE FINDINGS

The negative coefficient and low p-value of the HE and EM indicate that both variable has a significant negative impact on CIDM therefore, Investors relying on heuristics and emotional based decision making tend to make less favorable investment decisions. Financial advisors should educate clients about biases in decision making to improve investment outcomes. In the same manner, Emotional decisions can lead to less favorable investment outcomes. Hence the need for Strategies to mitigate emotional biases in investment decisions are crucial. Lastly, prospect theory (PT) has no significant negative impact on CIDM, therefore, the Investors using prospect theory tend to achieve more profitable returns on customers investment. Encouraging the adoption of prospect theory can enhance investment strategies and overall profitability.

5.1 SUMMARY, CONLUSION AND RECOMMENDATIONS

SUMMARY

HE has a significant negative impact on CIDM. For every unit increase in the use of Heuristics Theory for investment decision making, CIDM decreases by approximately 66.53 units, holding all other variables constant. EM has a significant negative impact on CIDM. Unfavorable investment decisions influenced by emotions decrease CIDM. Investors should be aware of emotional biases in decision making to improve investment outcomes. **:** PT has a significant positive impact on CIDM. Favorable use of prospect theory leads to increased profitability in customer investment decisions. Implementing prospect theory strategies may enhance investment outcomes. AR (1) shows significant positive autocorrelation in CIDM. Past values of CIDM positively influence current values, indicating the persistence of trends over time. Utilizing historical data can improve forecasting accuracy and decision-making processes.

5.2 CONCLUSIONS

The significant negative coefficient indicates that reliance on heuristics-based decision making decreases CIDM. Investors should adopt more analytical approaches to mitigate the negative impact of heuristics on

investment decisions. Emotional biases adversely affect CIDM, leading to less favorable investment outcomes. Strategies to manage emotions and promote rational decision-making are crucial for improving. Prospect theory positively influences CIDM, suggesting that structured decision-making frameworks can enhance investment profitability. Encouraging the use of prospect theory may lead to more informed and profitable investment decisions. The significant positive autocorrelation **(AR(1)):** in CIDM underscores the importance of historical performance in shaping current investment behaviors. Incorporating historical data in forecasting models can enhance decision-making accuracy.

5.3 RECOMMENDATIONS:

iii. The Deposit Money Banks should Offer training programs to investors and financial advisors on recognizing and mitigating biases associated with heuristics and emotions in decision making.
iv. Promote the adoption of prospect theory among investors to capitalize on its positive impact on CIDM and improve overall investment outcomes.
v. Encourage the use of historical data and autocorrelation insights in forecasting models and strategic planning to enhance predictive accuracy and decision-making processes.
vi. Continuously monitor and analyze CIDM trends to adapt strategies and leverage opportunities identified through regression analysis and other statistical techniques. By implementing these recommendations based on the regression analysis findings, stakeholders can optimize decision-making processes and improve outcomes in customer investment decision making.

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