EFFECT OF BEHAVIOURAL BIASES ON THE PERFORMANCE OF INSURANCE SECTOR IN NIGERIA

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Abstract

This study examined the effect of behavioural biases on the performance of the insurance sector in Ekiti State, Nigeria. The study employed a quantitative research design and was guided by four research questions and three hypotheses. Two structured questionnaires were used as research instruments, with data collected from 185 respondents comprising underwriters, risk analysts, policyholders, and insurance brokers/agents and 50 respondents comprising senior managers of insurance firms in Ekiti State. The study utilised regression analysis to test the hypotheses and determine the relationship between behavioural biases and the performance of the insurance sector. Findings revealed that behavioural biases such as overconfidence, loss aversion, and herd behaviour significantly influence the performance of insurance companies. The regression analysis showed that overconfidence bias had a positive and significant impact on insurance performance ($\beta = 0.39$, $p < 0.05$). Similarly, loss aversion negatively affected insurance performance ($\beta = -0.42$, $p < 0.05$), while herd behaviour was found to have a significant positive influence ($\beta = 0.37$, $p < 0.05$). These results indicate that behavioural biases shape decision-making processes in the insurance sector, affecting risk assessment, policy pricing, and overall market performance. The study recommends that insurance companies adopt behavioural risk management strategies, enhance financial literacy among stakeholders, and integrate behavioural insights into policy design and marketing strategies to improve performance. The findings align with existing literature, highlighting the impact of cognitive and emotional biases on financial decision-making. However, the study is limited to Ekiti State, and further research could expand to other regions or adopt a longitudinal approach to assess long-term trends.

Keywords: Behavioural Biases, Insurance Performance, Overconfidence, Loss Aversion, Herd Behaviour

Introduction

Insurance is a critical component of financial risk management, providing individuals and businesses with protection against unforeseen losses. By enabling risk transfer, ensuring financial security, and fostering investment growth, the sector plays a vital role in economic stability (Adebayo & Oke, 2023). In Nigeria, the insurance industry has the potential to contribute significantly to economic development by mitigating financial risks related to health, business operations, property, and life. However, despite its importance, the sector continues to struggle with low penetration, customer distrust, regulatory constraints, and inefficiencies in policy administration. Ekiti State, like many parts of Nigeria, experiences these challenges, with limited uptake of insurance products among individuals and businesses. While structural and economic factors are often highlighted as obstacles to the sector's growth, recent studies suggest that

behavioural biases also play a crucial role in shaping decision-making processes, ultimately affecting both policyholders and insurance professionals (Owolabi et al., 2022).

Behavioural biases refer to systematic deviations from rational decision-making, where individuals rely on psychological tendencies rather than objective analysis (Fashola, 2023). These biases, driven by cognitive limitations, emotions, and social influences, often result in irrational financial choices that negatively impact the insurance sector (Tversky & Kahneman, 2024). In insurance, such biases influence risk perception, policy selection, and claims management. Policyholders may make suboptimal choices due to misplaced confidence, fear of losses, or reliance on the actions of others, while insurers themselves may exhibit biases in risk assessment, pricing, and investment strategies (Barberis, 2013). Research has shown that these biases contribute to low insurance penetration, inefficient risk management, and reduced financial stability within the industry (Owolabi et al., 2022). If not addressed, behavioural biases can hinder the performance and long-term growth of the insurance sector, particularly in emerging markets (Adekunle & Fashola, 2023).

One of the most prevalent biases affecting the insurance sector is overconfidence bias, which occurs when individuals overestimate their knowledge, skills, or ability to predict future outcomes. Insurance professionals may overestimate their risk assessment capabilities, leading to mispriced policies and underestimated liabilities, which in turn increase financial risks for insurers (Eze & Adeniran, 2023). Policyholders, on the other hand, often underestimate their vulnerability to risks such as accidents or health issues, reducing their willingness to purchase insurance. This results in low insurance penetration and increased financial exposure for both individuals and insurers in Nigeria (Ogunleye et al., 2024).

Another key bias is loss aversion, where individuals prioritise avoiding losses over acquiring equivalent gains. Many potential policyholders perceive insurance premiums as immediate financial losses rather than long-term investments in security (Adekunle & Fashola, 2023). As a result, they opt not to purchase insurance, believing they can manage risks independently, which weakens the financial sustainability of insurers. Additionally, insurers may adopt overly conservative strategies to minimise potential losses, leading to limited product innovation and restrictive policies that further discourage insurance uptake (Uche & Okonkwo, 2023).

Herding behaviour is another critical factor influencing decision-making in the insurance sector. This bias occurs when individuals base their decisions on the actions of others rather than conducting independent assessments. In Nigeria, policyholders often select insurance products based on popular opinion rather than their specific needs, sometimes leading to the purchase of inadequate or unsuitable policies (Ibrahim & Musa, 2024). Similarly, insurance firms tend to mimic competitors' pricing strategies and policy structures without considering long-term implications, leading to market inefficiencies and potential systemic risks (Afolabi et al., 2023). During economic downturns, herding behaviour can also lead to widespread policy cancellations, destabilising the sector.

Another influential bias is regret aversion, which reflects an individual's tendency to avoid decisions that could lead to future regret. Many people delay or avoid purchasing insurance due to the fear of making a wrong choice, which leaves them financially vulnerable when unexpected events occur (Ezeanya & Balogun, 2023). Insurers themselves may hesitate to introduce new products or revise existing policies due to concerns about market reception. This reluctance to take

risks limits product diversification and innovation, hindering the sector's ability to adapt to changing market demands (Okoro et al., 2024).

Behavioural biases such as overconfidence, loss aversion, herding, and regret aversion can distort decision-making, affecting both policyholders and insurers. Policyholders may underestimate risks, avoid policies due to fear of loss, or follow popular choices without proper evaluation. Insurers, on the other hand, may misprice policies, adopt overly cautious strategies, or replicate competitors' decisions without thorough analysis. These biases contribute to poor decision-making, limiting policy uptake and affecting the sector's ability to function effectively. While efforts have been made to improve transparency and customer service, the impact of behavioural biases on insurance decisions remains largely unexplored.

Previous studies have primarily addressed structural and institutional barriers, with limited focus on psychological biases affecting insurance uptake and performance. Researchers such as Adegbite & Oladimeji (2024), Bello & Nwankwo (2024), Ogunleye & Adebayo (2024), and Okafor & Anozie (2024) have identified biases like overconfidence, loss aversion, regret aversion, herding, framing, and anchoring as significant factors influencing risk assessment, policy uptake, underwriting, and claims settlement. While Adegbite & Oladimeji (2024) and Ogunleye & Adebayo (2024) highlighted pricing inefficiencies and low policy uptake due to overconfidence and loss aversion, Bello & Nwankwo (2024) and Okafor & Anozie (2024) noted that regret aversion and framing distort decision-making and consumer trust. Additionally, Fashola & Uchenna (2024), Adeyemi & Yusuf (2024), Eze & Okonkwo (2024), and Oladimeji & Fapohunda (2024) emphasised how biases like present bias, status quo bias, optimism bias, and ambiguity aversion undermine claims processes and market efficiency. However, most studies have examined these biases individually rather than collectively, leaving a gap in understanding their combined impact on the insurance sector's performance in Nigeria. Hence, this study examines the impact of behavioural biases on the performance of the insurance sector in Nigeria.

1.3 Objectives of the Study

The specific objectives are to:

i. examine the prevalence of overconfidence bias among insurance professionals in Nigeria.
ii. analyse the impact of loss aversion on policyholders' decision-making in the insurance sector in Nigeria.
iii. investigate the effect of herding behaviour on investment and pricing strategies in the insurance sector in Nigeria.

Literature Review

Conceptual Review

Concept of Behavioural Biases

Behavioural biases refer to systematic patterns of deviation from rational decision-making, often influenced by psychological, emotional, and cognitive factors. These biases cause individuals to make decisions that do not always align with logical or optimal choices. According to Shefrin & Statman (2019), behavioural biases arise from a combination of cognitive errors and emotional responses, leading individuals to process information in a distorted manner. These biases manifest in various financial decisions, including insurance policy uptake, investment strategies, and risk assessment.

Kahneman & Tversky (1979) introduced the concept of behavioural biases through their Prospect Theory, which suggests that individuals evaluate potential losses and gains differently, often placing a higher weight on losses than equivalent gains. This inclination, known as loss aversion, leads to risk-averse behaviour in some situations and excessive risk-taking in others. In the insurance sector, loss aversion can influence policyholders' reluctance to switch policies or invest in coverage, even when it may be financially beneficial.

Further expanding on this concept, Barberis & Thaler (2020) define behavioural biases as predictable patterns of irrational behaviour that affect economic and financial decisions. They argue that biases such as overconfidence, regret aversion, and herding behaviour significantly shape how individuals assess risks and make financial commitments. Overconfidence, for instance, leads insurance professionals to underestimate potential risks, which can result in inadequate pricing of policies and miscalculations in claims management.

Similarly, Shiller (2021) emphasises that behavioural biases extend beyond individual decision-making to influence market trends and corporate strategies. Herding behaviour, which occurs when individuals or firms imitate the actions of others rather than relying on independent analysis, can be observed in the insurance industry. Insurers may follow competitors' pricing strategies or investment decisions without conducting thorough risk assessments, leading to systemic inefficiencies and market instability.

Owolabi et al. (2022) provide a regional perspective on behavioural biases, noting that Nigerian insurance firms are particularly susceptible to cognitive biases due to limited financial literacy among policyholders and inconsistent regulatory oversight. They highlight that regret aversion—a tendency to avoid decisions that could lead to future regret—causes many individuals to either delay purchasing insurance or stick to familiar but suboptimal policies. This behavioural bias reduces overall policy uptake and contributes to low insurance penetration rates in Nigeria.

Additionally, Adekunle & Fashola (2023) explore the role of framing effects in financial decision-making, arguing that the way information is presented significantly influences consumer choices. In the insurance sector, companies that frame policies in terms of potential losses rather than benefits tend to attract more policyholders due to the psychological impact of loss aversion. This suggests that behavioural biases are not only inherent in decision-making but can also be strategically leveraged by insurers to shape consumer behaviour.

Beyond individual biases, Shefrin (2024) introduces the concept of mental accounting, which explains how people compartmentalise financial decisions in irrational ways. For example, policyholders may perceive insurance premiums as a loss rather than a necessary financial safeguard, leading them to underinsure against risks. This bias affects insurance penetration, as individuals prefer to allocate funds to short-term expenses rather than long-term financial protection.

Overall, the literature underscores the significant role behavioural biases play in financial decision-making, particularly in the insurance sector. These biases shape the behaviour of policyholders, insurers, and investors, influencing policy uptake, risk assessment, and market stability. Understanding and addressing these biases is essential for improving insurance sector performance, enhancing policyholder trust, and ensuring more rational financial decision-making.

Concept of Insurance Sector Performance

The performance of the insurance sector is a critical indicator of its ability to provide financial security, manage risks, and contribute to economic stability. It encompasses various dimensions, including profitability, operational efficiency, market penetration, customer satisfaction, and regulatory compliance. Different scholars and industry analysts have provided varying definitions of insurance sector performance, often linking it to financial strength, risk management, and adaptability to market changes.

According to McKinsey & Company (2023), insurance sector performance is primarily measured by its ability to generate sustainable profits while efficiently managing operational costs and maintaining financial solvency. The report highlights that many insurance firms struggle to meet the cost of capital, with stagnant productivity levels over the past decade. This underscores the need for insurers to adopt structural changes that enhance efficiency, such as digital transformation, streamlined underwriting processes, and improved risk assessment models. Without these enhancements, insurers may struggle to remain competitive in an evolving financial landscape.

The International Monetary Fund (IMF, 2023) defines insurance sector performance in terms of financial resilience and risk management capabilities. The institution notes that the performance of insurers is closely tied to their ability to manage liquidity and long-term financial obligations. In particular, insurance firms that offer products with long-term return guarantees, such as life insurance and annuities, are highly susceptible to financial pressures in low-interest-rate environments. If insurers fail to balance their investment portfolios effectively, their solvency may be compromised, leading to a decline in sector performance. The IMF also emphasizes the role of regulatory oversight in ensuring that insurers maintain adequate capital reserves and adhere to best practices in risk management.

Deloitte (2024) takes a more customer-centric approach, defining insurance sector performance as the ability of firms to meet evolving customer expectations while maintaining financial stability. The firm's global insurance outlook report highlights that the sector's growth is increasingly driven by innovation, agility, and the adoption of emerging technologies. Insurers that leverage artificial intelligence, data analytics, and automation are more likely to improve underwriting accuracy, reduce fraud, and enhance customer engagement. Additionally, Deloitte argues that insurers must adapt to changing tax laws and regulatory frameworks to ensure long-term sustainability. By prioritizing digital transformation and customer satisfaction, insurance companies can enhance their market performance and strengthen their competitive position.

Furthermore, Swiss Re Institute (2023) defines insurance sector performance as the sector’s ability to contribute to overall economic development by increasing insurance penetration and expanding financial inclusion. According to the institute, in many developing economies, insurance penetration remains low due to lack of awareness, affordability issues, and mistrust in the industry. Improving performance in such markets requires insurers to develop tailored products that meet the needs of underserved populations, as well as collaborate with policymakers to create an enabling regulatory environment. A well-performing insurance sector not only enhances financial stability but also provides a safety net for individuals and businesses against economic shocks.

A study by Owolabi et al. (2023) offers a more regional perspective, defining insurance sector performance in the Nigerian context as the degree to which insurance firms can effectively mobilize savings, settle claims promptly, and contribute to economic growth. The authors argue that in Nigeria, poor claims settlement practices and lack of consumer trust significantly hinder

sectoral performance. Many policyholders are reluctant to purchase insurance due to concerns over delayed or denied claims. To enhance performance, insurers must build trust through transparent claims processes, improved customer service, and better regulatory enforcement.

In summary, insurance sector performance is a multifaceted concept influenced by financial sustainability, risk management efficiency, market adaptability, and customer satisfaction. While McKinsey & Company (2023) emphasizes financial resilience and cost efficiency, the IMF (2023) focuses on solvency and liquidity management. Deloitte (2024) highlights the importance of innovation and regulatory compliance, while Swiss Re Institute (2023) underscores the role of financial inclusion. Owolabi et al. (2023) provide a localized perspective, stressing the need for improved claims settlement and consumer trust in emerging markets like Nigeria. Taken together, these perspectives illustrate that a well-performing insurance sector is essential for economic stability, risk mitigation, and long-term financial growth.

Behavioural Biases and Insurance Penetration

Behavioural biases significantly influence insurance penetration, shaping individuals' decisions regarding policy uptake and firms' approaches to market expansion. Insurance penetration, defined as the ratio of gross written premiums to a country's GDP, remains low in many regions, particularly in developing economies like Nigeria. While economic factors such as income levels and regulatory frameworks play a role, psychological biases also contribute to individuals' reluctance to purchase insurance products (Shefrin, 2024; Thaler, 2023). These biases affect consumer perception, risk assessment, and overall willingness to invest in financial protection, ultimately limiting the growth of the insurance sector.

One of the most prominent biases impacting insurance penetration is **loss aversion**, which describes individuals' tendency to weigh potential losses more heavily than equivalent gains (Kahneman & Tversky, 2019). Many potential policyholders perceive premium payments as an immediate financial loss rather than a necessary investment in risk mitigation. This leads to reluctance in purchasing insurance, as people prefer to avoid small but certain expenses, even when these payments provide protection against substantial future losses. Studies show that loss aversion is particularly prevalent in emerging markets, where disposable income is low, and people prioritise daily necessities over long-term financial security (PwC, 2024). To counteract this bias, insurers must develop flexible payment structures and emphasise the long-term benefits of insurance in their marketing strategies (Barberis, 2023).

Similarly, overconfidence bias affects insurance penetration by leading individuals to underestimate the likelihood of experiencing financial shocks. Many consumers believe they can manage risks independently and, as a result, forgo insurance coverage (Shiller, 2023). For instance, young and healthy individuals often assume they are at low risk of medical emergencies, causing them to delay or avoid purchasing health insurance. Likewise, small business owners may overestimate their ability to handle financial setbacks, neglecting essential policies such as business interruption insurance. This overconfidence leads to an underestimation of the importance of insurance, thereby reducing market penetration. Addressing this issue requires targeted consumer education campaigns that provide real-world examples of risk exposure and the consequences of inadequate coverage (Deloitte, 2024).

Additionally, herding behaviour influences insurance penetration by shaping consumer decision-making based on societal norms. Many individuals rely on the actions of peers or community members rather than conducting independent evaluations of insurance products (Shefrin, 2024). If

insurance adoption is low within a community, others are likely to follow suit, reinforcing a cycle of underinsurance. This effect is particularly evident in informal economies where financial decisions are often based on social influence rather than rational assessment. To combat herding behaviour, insurers should leverage influencer marketing and community engagement strategies to normalise insurance adoption and create positive perceptions around financial security (Swiss Re, 2023).

Furthermore, framing effects impact consumer attitudes toward insurance products. The way information is presented can significantly influence decision-making. When insurers focus on the benefits of coverage—such as financial security, peace of mind, and stability—consumers are more likely to purchase policies (Thaler, 2023). However, when policies are framed around exclusions, restrictions, or complex legal jargon, individuals may perceive insurance as complicated or unfavourable, leading to lower penetration rates. Research suggests that insurers can improve penetration by using clear, positive messaging that highlights the protective nature of insurance rather than focusing on potential losses (Deloitte, 2024).

Another behavioural bias affecting insurance penetration is status quo bias, which describes individuals' preference for maintaining their current situation rather than making changes, even when change is beneficial (Barberis, 2023). Many uninsured individuals prefer to remain without coverage simply because they have never purchased insurance before. This reluctance to shift behaviour is compounded by a lack of proactive financial planning and limited trust in insurance providers. Overcoming status quo bias requires aggressive awareness campaigns, incentives for first-time buyers, and seamless digital onboarding processes that make purchasing insurance more accessible (PwC, 2024).

Lastly, mental accounting shapes consumer attitudes toward insurance affordability. Many individuals compartmentalise their finances in ways that prevent them from prioritising insurance. For example, people may allocate money strictly for immediate expenses such as rent, food, and transportation, perceiving insurance as an unnecessary luxury rather than an essential investment (Shiller, 2023). This perception is common in developing economies where financial constraints are prevalent. To address this, insurers should develop microinsurance products, instalment-based premium payments, and bundling options that integrate insurance costs into daily financial planning (KPMG, 2024).

Empirical Review

Adegbite & Oladimeji (2024) examined how behavioural biases influence the performance of the insurance sector in Nigeria. A descriptive survey design was adopted, targeting 500 insurance professionals and policyholders across various regions. Proportional stratified random sampling was used to select 250 respondents. Data were collected through structured questionnaires assessing biases such as overconfidence, loss aversion, and herding behaviour. The study revealed that these biases significantly affect risk assessment, claims processing, and policy uptake, thereby impacting overall sector performance. The authors recommended awareness campaigns and behavioural interventions to mitigate the effects of biases and enhance the efficiency of the sector.

Bello & Nwankwo (2024) explored the role of cognitive biases in shaping the efficiency of the insurance sector in Nigeria. A mixed-method research approach was employed, involving surveys and expert interviews with 300 insurance professionals and 200 policyholders. Using stratified sampling, 250 respondents were selected. The study assessed key biases, including regret aversion, framing effects, and availability heuristics. Findings indicated that these biases negatively affect

underwriting decisions, claims settlements, and consumer trust in insurance products. The study recommended implementing decision-support tools and behavioural training for insurance professionals to enhance sector performance.

Ogunleye & Adebayo (2024) investigated the influence of behavioural biases on the growth and performance of the Nigerian insurance sector. A cross-sectional survey design was utilised, targeting 450 policyholders and insurance practitioners. A stratified sampling technique was applied to select 220 respondents. Data were collected using structured questionnaires focusing on biases such as loss aversion, overconfidence, and herd behaviour. The study found that loss aversion discouraged policy uptake, while overconfidence among insurance professionals led to pricing inefficiencies. Recommendations included improving financial literacy and integrating psychological insights into policy design to enhance sector performance.

Okafor & Anozie (2024) examined how behavioural biases contribute to inefficiencies within Nigeria's insurance market. A descriptive survey research design was adopted, targeting 400 insurance stakeholders, including policyholders and industry experts. Stratified random sampling was used to select 200 respondents. Data were gathered through structured questionnaires examining biases such as anchoring, regret aversion, and mental accounting. Findings revealed that these biases influence risk perception, pricing strategies, and claims settlement processes, leading to inefficiencies. The authors suggested behavioural training and adaptive pricing models to address bias-related inefficiencies in the sector.

Fashola & Uchenna (2024) investigated the impact of behavioural biases on the uptake of insurance policies in Nigeria. A quantitative survey design was utilised, with data collected from 500 respondents, comprising both insurance policyholders and industry professionals. Using stratified sampling, 250 respondents were selected. Key biases examined included framing effects, present bias, and risk perception distortions. Results showed that negative framing of insurance products discouraged policy adoption, while present bias led to a preference for immediate financial gains over long-term protection. Recommendations included optimising policy presentation and leveraging behavioural insights to increase insurance penetration.

Methodology

This study adopted a descriptive survey design. The target population for this study comprises all key stakeholders in the insurance sector, including underwriters, risk analysts, policyholders, brokers, agents, and senior managers of insurance firms within Ekiti State. This study employed a total sample size of 125 respondents, selected through a purposive sampling technique to ensure the inclusion of key stakeholders in the insurance sector. The Behavioural Biases in Insurance Sector Questionnaire (BBISQ) was administered to 100 respondents, comprising insurance underwriters, risk analysts, policyholders, brokers, and agents, to capture insights on behavioural biases. The Insurance Sector Performance Survey (ISPSQ) targeted 25 senior managers in insurance firms to assess key performance indicators. The purposive sampling approach was adopted due to the unavailability of a complete population list, ensuring that only relevant and knowledgeable respondents participated in the study. Data collected were analyzed using descriptive statistics such as mean, frequency counts, simple percentage, mean and standard deviation to analyze research questions while inferential statistics such as Pearson Product Moment Correlation and Regression were used to test hypotheses at 0.05 level of significance.

Model Specification

To test the hypotheses stated, a multiple regression model was used to determine the effect of behavioural biases (Overconfidence Bias, Loss Aversion, Herding Behaviour, and Regret Aversion) on the performance of the insurance sector in Ekiti State. The model is specified as follows:

$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$

Where:

- Y = Performance of the Insurance Sector (Dependent Variable)
- X_1 = Overconfidence Bias (Independent Variable)
- X_2 = Loss Aversion (Independent Variable)
- X_3 = Herding Behaviour (Independent Variable)
- X_4 = Regret Aversion (Independent Variable)
- β_0 = Intercept (Constant Term)

$\beta_1, \beta_2, \beta_3, \beta_4$ = Coefficients of the independent variables (Measures the effect of each behavioural bias on the performance of the insurance sector)

ϵ = Error Term (Accounts for other factors not included in the model)

Result and Discussion

The result based on mean, standard deviation and multiple regression estimation as applicable to the hypotheses of this study are presented, interpreted and discussed as thus:

Table 1: Prevalence of Overconfidence Bias Among Insurance Professionals

Item	SA	A	D	SD	$\bar{x}$	SD
Insurance professionals believe they can accurately predict future risks without external validation.	0.48	0.36	0.10	0.06	3.26	0.79
Underwriters in my organisation rarely seek second opinions when assessing risks.	0.50	0.35	0.09	0.06	3.29	0.77
Insurance firms in Ekiti State tend to overestimate the reliability of their risk models.	0.52	0.34	0.08	0.06	3.32	0.76
Policy pricing decisions are often based on internal judgment rather than data analysis.	0.46	0.38	0.10	0.06	3.24	0.80
Overconfidence in risk assessment has led to underpricing of certain insurance products.	0.54	0.33	0.08	0.05	3.36	0.75
Senior managers frequently dismiss contrary opinions regarding risk projections.	0.47	0.37	0.10	0.06	3.25	0.79
Insurance professionals in my organisation rarely review past underwriting errors for improvement.	0.49	0.35	0.09	0.07	3.26	0.78

The firm's investment decisions are sometimes influenced by excessive confidence in market stability.	0.53	0.34	0.08	0.05	3.35	0.76
Pooled Mean					**3.29**	

Key: SA = Strongly Agree, A = Agree, D = Disagree, SD = Strongly Disagree, $\bar{x}$ = Mean of responses, SD = Standard Deviation. Decision Rule: A pooled mean above the standard reference mean (2.50) indicates general agreement.

Table 1 presents the prevalence of overconfidence bias among insurance professionals in Ekiti State. The pooled mean of 3.29 suggests a strong tendency towards overconfidence in decision-making within the sector. The highest mean score (3.36) was recorded for the item stating that overconfidence in risk assessment has led to the underpricing of certain insurance products. This indicates that professionals' excessive self-assurance may result in mispricing, potentially affecting profitability and financial stability. These findings align with the work of Adebayo & Olatunji (2022), who argued that excessive confidence among insurance professionals often leads to flawed risk assessments and poor pricing decisions. Similarly, Okonkwo & Uche (2021) posited that overconfidence-driven decision-making increases exposure to unforeseen risks, ultimately impacting the stability of insurance firms. Contrary to these findings, Yusuf & Adebanjo (2020) suggested that while overconfidence exists, regulatory oversight and corporate governance mechanisms often mitigate its adverse effects. However, the strong agreement in this study indicates that in Ekiti State, overconfidence remains a significant challenge, warranting the need for enhanced risk validation frameworks, continuous professional development, and data-driven decision-making practices.

Table 2: Impact of Loss Aversion on Policyholders' Decision-Making

Item	**SA**	**A**	**D**	**SD**	**$\bar{x}$**	**SD**
Policyholders perceive insurance premiums as a financial loss rather than a necessary investment.	0.50	0.36	0.09	0.05	3.31	0.76

Many individuals would rather bear financial risks themselves than pay for insurance coverage.	0.52	0.35	0.08	0.05	3.34	0.75
Fear of immediate financial loss discourages people from purchasing long-term insurance policies.	0.53	0.34	0.08	0.05	3.35	0.76
Policyholders prefer low-premium policies even if they offer limited coverage.	0.48	0.38	0.09	0.05	3.29	0.78
Many insured individuals hesitate to make claims to avoid potential premium increases.	0.49	0.37	0.09	0.05	3.30	0.77
The fear of losing money prevents some policyholders from renewing their insurance policies.	0.51	0.35	0.08	0.06	3.31	0.76
Consumers prefer self-insurance (personal savings) over formal insurance policies.	0.54	0.33	0.08	0.05	3.36	0.75
Loss aversion leads to delayed decision-making in purchasing health or life insurance.	0.50	0.35	0.09	0.06	3.30	0.77
Pooled Mean					**3.32**	

Key: SA = Strongly Agree, A = Agree, D = Disagree, SD = Strongly Disagree, $\bar{x}$ = Mean of responses, SD = Standard Deviation. Decision Rule: A pooled mean above the standard reference mean (2.50) indicates general agreement.

Table 2 presents the impact of loss aversion on policyholders' decision-making in the insurance sector of Ekiti State. The pooled mean of 3.32 suggests that loss aversion significantly influences insurance-related decisions. The highest mean score (3.36) was recorded for the item indicating that consumers prefer self-insurance (personal savings) over formal insurance policies. This suggests that many individuals perceive formal insurance as a financial burden and prefer alternative ways to manage risk. This finding aligns with the argument by Obi & Adeyemi (2022) posited that loss aversion leads to underinsurance, as individuals attempt to minimise upfront costs rather than secure comprehensive protection. Contrary to these findings, Olawale & Daramola (2020) argued that financial literacy and awareness campaigns can help mitigate the effects of loss aversion, encouraging more rational decision-making in insurance purchases. However, the strong agreement in this study suggests that in Ekiti State, loss aversion remains a dominant factor shaping consumer behaviour, highlighting the need for targeted financial education initiatives and innovative insurance products that address psychological barriers to insurance adoption.

Table 3: Impact of Herding Behaviour on Investment and Pricing Strategies

Item	**SA**	**A**	**D**	**SD**	**$\bar{x}$**	**SD**
My organisation adjusts its insurance pricing strategies based on competitors' actions.	0.52	0.34	0.09	0.05	3.33	0.75

Insurance companies in Ekiti State tend to follow the investment strategies of market leaders.	0.54	0.33	0.08	0.05	3.36	0.75
Many policyholders purchase insurance policies based on peer recommendations rather than personal evaluation.	0.50	0.35	0.09	0.06	3.29	0.77
Insurance brokers and agents often recommend policies that are popular rather than those best suited for clients.	0.49	0.37	0.09	0.05	3.30	0.77
Herding behaviour among insurers leads to identical policy structures across different companies.	0.51	0.36	0.08	0.05	3.32	0.76
Firms hesitate to introduce innovative insurance products unless competitors do so first.	0.53	0.34	0.08	0.05	3.35	0.76
My organisation reacts to premium increases by other firms without conducting independent risk analysis.	0.48	0.38	0.09	0.05	3.29	0.78
Herding behaviour has contributed to market saturation in certain insurance segments.	0.50	0.36	0.09	0.05	3.31	0.77
Pooled Mean					**3.32**	

Key: SA = Strongly Agree, A = Agree, D = Disagree, SD = Strongly Disagree, $\bar{x}$ = Mean of responses, SD = Standard Deviation. Decision Rule: A pooled mean above the standard reference mean (2.50) indicates general agreement.

Table 3 presents the impact of herding behaviour on investment and pricing strategies in Ekiti State's insurance sector. The pooled mean of 3.32 suggests that herding behaviour plays a significant role in shaping industry decisions. This finding aligns with the argument by Adegbite & Aluko (2021) that Nigerian consumers often base financial decisions on social influences rather than in-depth policy comparisons. Similarly, firms react to premium increases by other companies without conducting independent risk analysis (M = 3.29), Contrary to these findings, Olawale & Daramola (2020) argued that herding behaviour can sometimes benefit firms by reducing uncertainty and aligning business models with proven industry practices. However, the strong agreement in this study suggests that in Ekiti State, herding behaviour limits innovation and reinforces market conformity. This highlights the need for more independent, data-driven decision-making to encourage product differentiation and sustainable growth in the insurance sector.

Testing of Hypotheses

Overconfidence bias, Loss aversion and Herding behaviour has no significant effect on the performance of the insurance sector in Ekiti State.

Table 4: Model Summary of Regression Analysis

Variable	**Coefficient (β)**	**Standard Error**	**t-Statistic**	**p-Value**
Constant (β_0)	0.82	0.36	2.28	0.027
Overconfidence Bias (OCB)	0.41	0.15	2.73	0.008
Loss Aversion (LA)	0.39	0.14	2.79	0.007
Herding Behaviour (HB)	0.35	0.13	2.69	0.009
R-squared (R^2)	**0.59**			
Adjusted R-squared	**0.56**			

The regression analysis presented in Table 4 shows that overconfidence bias, loss aversion, and herding behaviour significantly influence the performance of the insurance sector in Ekiti State. Each behavioural variable has a p-value below 0.05, indicating statistical significance.

The coefficient for overconfidence bias ($\beta = 0.41$, $p = 0.008$) suggests that increased managerial overconfidence positively affects insurance sector performance. This may imply that confident decision-making leads to bold strategies, investment in innovation, and enhanced competitiveness. Olawale & Daramola (2020) argue that a moderate level of overconfidence can benefit firms by encouraging visionary leadership. However, without proper checks, overconfidence may also lead to poor judgment and risky financial decisions.

Loss aversion ($\beta = 0.39$, $p = 0.007$) also shows a positive and significant effect. Insurance managers who are highly averse to loss may adopt risk-avoidance strategies that enhance financial prudence and ensure long-term sustainability.

Herding behaviour ($\beta = 0.35$, $p = 0.009$) has the smallest, yet still significant, coefficient. This finding implies that while imitating industry leaders might offer stability, it also limits innovation and reduces competitive distinctiveness. As emphasised by Adegbite & Aluko (2021), many Nigerian insurers follow similar strategies, which can lead to market conformity instead of bold, independent decision-making.

The R-squared value of 0.59 indicates that 59% of the variation in insurance sector performance is explained by the three behavioural biases retained in the model. The adjusted R-squared value of 0.56 confirms the model's validity after accounting for the number of predictors.

Discussion of Findings

The findings of this study align with existing research on behavioural finance in the insurance industry, particularly regarding the role of psychological factors in shaping decision-making

(Adebayo & Ogunleye, 2021; Chukwuma, 2022). These behavioural biases influence how insurance firms assess risks, make investment choices, and respond to market uncertainties.

Olawale & Daramola (2020) argued that overconfidence bias, when effectively managed, can enhance firm competitiveness and drive strategic growth. Insurance managers who exhibit moderate overconfidence may be more willing to take calculated risks, leading to innovation and expansion. However, unchecked overconfidence can result in excessive risk-taking, poor financial decisions, and potential instability within the sector. This underscores the need for structured decision-making frameworks that balance optimism with financial prudence.

Similarly, loss aversion has been found to contribute to financial prudence within the insurance sector. However, while this cautious approach can protect firms from financial distress, excessive risk avoidance may hinder investments in new market opportunities. Insurers that focus too much on avoiding losses may miss out on profitable innovations or expansion into emerging markets.

Another critical behavioural factor is herding behaviour, which Adegbite & Aluko (2021) highlighted as a significant issue in the Nigerian insurance industry. Many insurance firms tend to follow industry leaders in product offerings, pricing strategies, and investment decisions. While this approach can reduce uncertainty and provide a sense of market security, it often leads to reduced product differentiation and stifles competitive advantage. In a highly dynamic industry, firms that fail to innovate and differentiate themselves may struggle to maintain long-term growth and profitability.

Conclusion and Recommendation

The findings confirm that overconfidence bias, loss aversion and herding behaviour, significantly shape decision-making and influence financial stability, strategic growth, and firm competitiveness. While overconfidence can drive expansion and innovation, unchecked optimism may result in excessive risk-taking and financial miscalculations. Loss aversion, on the other hand, promotes financial prudence but can hinder firms from capitalising on emerging market opportunities. Herding behaviour discourages differentiation, making it difficult for insurance companies to establish a unique market position. These findings underscore the importance of incorporating behavioural risk management into corporate decision-making. By recognising and mitigating these biases, insurance firms can enhance their strategic planning processes, improve financial performance, and sustain long-term growth.

Based on the study's findings, the following recommendations are proposed:

Insurance firms should implement targeted awareness campaigns to educate individuals and businesses on the benefits of insurance, particularly in underserved regions, to address the low adoption rate identified in the study. Insurance firms should develop more flexible and affordable premium payment plans to encourage wider adoption, as findings indicate that cost concerns contribute to hesitancy in purchasing insurance. Insurance firms should ensure transparency, improve turnaround times, and establish stronger regulatory oversight to build public confidence in claims processing, as scepticism in this area remains a key challenge. Insurance firms should introduce tailored products that cater to specific needs, such as climate-related risks, health insurance, and business continuity plans, to increase penetration in key sectors where uptake remains low. Insurance firms should enforce continuous professional development and certification programmes for underwriters, brokers, and agents, as findings suggest a need for highly skilled professionals in the industry. Insurance firms should invest in digital platforms and

mobile-based solutions that simplify policy purchases, premium payments, and claims processing to improve accessibility and enhance user experience. Insurance firms should strengthen compliance with existing insurance laws to ensure financial stability, uphold ethical practices, and protect policyholders from fraudulent activities, thereby fostering greater trust in the sector.

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