

UNDERWRITING RISK AND PERFORMANCE IN THE NON-LIFE INSURANCE SECTOR IN NIGERIA

***Akeem Bamidele AGBOOLA^a, Musa Adebayo OBALOLA^b**

Sunday Adekunle ADULOJU^b

^{a,b,c} Department of Actuarial Science & Insurance, University of Lagos, Akoka, Lagos

***Corresponding Author:** aagboola@unilag.edu.ng

ABSTRACT

Insurers face underwriting risk in their basic operations, which, if inadequately managed, may threaten their profitability. This study aimed to examine the impact of underwriting risk on the performance of publicly traded non-life insurers in Nigeria. This research employed an ex post facto design, utilising data spanning 13 years (2012-2024) from the audited annual reports of 11 insurance companies. The random-effects regression model indicated that underwriting risk has a significant negative impact on underwriting profit and a significant positive impact on the expense ratio. Insurance businesses are advised to enhance their risk assessment frameworks, implement actuarially robust pricing models, and further develop their data analytics capabilities. They must institutionalise rigorous underwriting criteria and enhance internal monitoring systems to mitigate risk buildup, while focusing on cost-containment techniques such as process automation, efficient claims administration, and the elimination of administrative overheads. By using these measures, they can improve underwriting profitability, minimise cost inefficiencies, and secure long-term financial sustainability in a progressively competitive and uncertain insurance market.

Keywords: Insurance, non-life insurers, performance, underwriting profit, underwriting risk

1. INTRODUCTION

The importance of insurance is paramount, since it fulfils a crucial role for individuals, businesses, and governments. In executing these essential role, insurers frequently encounter a range of financial, operational, strategic, and regulatory risks that may impact their solvency, profitability, and long-term viability (Siopi & Poufinas, 2023). An insurer may encounter various risks while performing its fundamental operations, including pricing, underwriting, claims processing, and reinsurance management. If these risks are inadequately managed, they could threaten the institution's capacity to attain and maintain profitability (Fali, Nyor & Mustapha, 2020). The OECD (2020) identifies underwriting risk as a significant threat to insurance businesses.

Underwriting risk may primarily stem from insufficient premiums, such as underestimating them or failing to diversify the insurance portfolio sufficiently (Fadun, Oyerinde & Aduloju, 2025; Horvey & Odei-Mensah, 2025; Usman, Fadun & Aduloju, 2024). It could also be the consequence of occurrences that are entirely out of the underwriter's control, or it could be the outcome of an abnormal rise in the frequency and intensity of losses (Agboola & Obalola, 2024). According to Kamau (2023), underwriting risk is a symptom of operational and underwriting inefficiencies by insurance companies, which could impair insurers' performance, cause operational losses, and ultimately jeopardise their solvency.

Performance, according to Jaber (2020), is the accomplishment of organisational objectives, which include delivering goods and services and ensuring that end users accept them in order to ensure the company's existence, growth, expansion, and profitability. Although there are a number of metrics that can be used to assess an insurance company's performance, including returns on equity, returns on assets, and returns on investment (Fadun, Ochonogor & Aduloju, 2025; Olaiya, 2025; Fadun, Oyerinde & Isimoya, 2024). Total profit which is the net result of both investment and underwriting activities is one of the most important indicators of the company's overall financial performance (Oyerinde, Fadun & Isimoya, 2025; Fadun & Silwimba, 2023).

Chen, Liang and Pang (2024) assert that the effectiveness of an insurer's underwriting business may be misrepresented by using total profit and other metrics that incorporate investment income. This is because, as long as its investment income is substantial, an insurance company can still turn a profit even if its underwriting profit is negative. The underwriting profit and expense ratio is one of the appropriate metrics that prior research has recommended and employed to assess the effectiveness of insurance underwriting operations (McKinsey & Company, 2025).

Underwriting profit is a crucial performance metric in the insurance industry, reflecting the surplus (or deficit) from underwriting activities after accounting for incurred expenses and losses, excluding investment income. The expense ratio denotes the fraction of the premium allocated to cover expenses related to the acquisition, draughting, and maintenance of insurance and reinsurance, including agent fees, commissions, administrative costs, and company taxes or surcharges (Wang, Fang & Cheng, 2020).

Ineffective underwriting risk management has led to the failure of several insurance companies, which have either halted operations or faced regulatory sanctions. The licenses of Niger Insurance Plc and Standard Alliance Insurance Plc were revoked in June 2022 due to persistent inability to settle policyholder claims. Moreover, various insurers, including Goldlink Insurance Plc and Staco Insurance Plc, have periodically encountered regulatory actions due to persistent underwriting

losses and unpaid claims, which generally indicate underpricing, under-reserving, or insufficient risk selection which are fundamental indicators of underwriting risk mismanagement. In other words, the underwriting performance of numerous organisations continues to be erratic and uncertain, notwithstanding the multiple regulatory frameworks established by NAICOM to mitigate underwriting risk.

Some empirical studies have examined the correlation between underwriting risk and performance (Duniya, Hambali & Abdulmaleek, 2024; Horvey & Odei-Mensah, 2025; Morara & Sibindi, 2021). Nevertheless, these investigations have been performed on the entirety of the insurance sector, encompassing life, non-life, and composite insurance firms. This is despite the varying susceptibility to underwriting risk among different categories of insurers, as underwriting risk is more pronounced and volatile in non-life insurance due to the unpredictability and short-term nature of the underwritten risks.

Prior research has utilised metrics that incorporate investment income as a surrogate for performance. The use of metrics such as return on assets and return on equity to assess the effectiveness of insurers' underwriting operations may yield deceptive results compared to metrics like underwriting profit and expense ratio, which more accurately evaluate underwriting efficiency. This research investigated the impact of underwriting risk on the performance of non-life insurance firms in Nigeria.

2. REVIEW OF LITERATURE

Conceptual Review

Underwriting Risk

Underwriting risk is the possibility of incurring a loss during a risk assessment process when insurance premium revenues are insufficient to cover claims. Kamau (2023) posits that underwriting risk denotes the operational efficacy or inefficacy of insurance entities, since it reflects the losses suffered from claims relative to the premium income generated by these corporations. Horvey and Odei-Mensah (2025) assert that underwriting risk is predominantly attributable to the underestimation of premiums or insufficient diversification of the insurance portfolio. However, it may also arise from an atypical escalation in the frequency and severity of losses, or from other occurrences entirely outside the underwriter's control (Agboola & Obalola, 2024).

Finger, Albrecher and Wilhelmy (2024) identified several elements that contribute to underwriting risk, including fraud, moral hazard, price risk, selection risk, claim risk, and regulatory risk. Morara and Sibindi (2021) discovered that underwriting risk positively influenced the financial performance of insurance companies. Underwriting risk is fundamental to insurance operations and must be actively managed to ensure long-term profitability; hence, insurers utilise risk-based pricing, actuarial modelling, and reinsurance to mitigate underwriting risk. The loss ratio, combined ratio, claim frequency, and claim severity are metrics employed to assess underwriting risk.

Underwriting Profit

According to Wahyono, Nurochim and Palupi (2021), underwriting profit is the profit generated by an insurance company from its underwriting operations. The calculation is performed by subtracting the total premiums collected from the aggregate of losses disbursed and expenses incurred. Underwriting profit is a crucial performance metric in the insurance industry, reflecting the surplus (or deficit) from underwriting activities after accounting for incurred expenses and losses, excluding investment income.

The operational landscape for insurance businesses is defined by constraints on their policies (Kamau, 2023) and competitive marketplaces that hinder the attainment of a favourable underwriting profit (Finger et al, 2024) 2014). Consequently, numerous insurers depend on investment income to sustain overall profitability in the absence of underwriting profit. Prior research on underwriting profit has revealed various elements that may influence an insurer's underwriting profit, many of which have been empirically examined.

Expense Ratio

The expense ratio denotes the fraction of the premium allocated to cover expenses related to the acquisition, drafting, and maintenance of insurance and reinsurance, including agent fees and commissions, administrative costs, and company taxes or surcharges (Wang, Fang & Cheng, 2020). It is a crucial determinant of profitability and financial performance, as it assesses the expenditures incurred by an insurer on administrative and related operational costs (Mwangi, 2019).

Elaigwu, Wula and Okwa (2024) assert that the expense ratio influences the funds available for claim settlements, rendering it crucial for policyholders. A high expense ratio results in less funds for claim payments, whilst a low expense ratio allows for increased funds. It serves as a vital metric for investors to assess an insurer's financial condition. An insurance firm with a high expenditure ratio is less profitable and efficient, thus hindering its ability to attract cash and investors. It is advised that insurance businesses maintain an expenditure ratio below 40% to ensure sustainable operations.

Theoretical Review

Asymmetric Information Theory

The theory of asymmetric information was initially presented by Akerlof in his renowned 1970 publication, *The Market for "Lemons": Quality Uncertainty and the Market Mechanism*. He asserted that purchasers in numerous marketplaces utilise market statistics to ascertain the value of things. Consequently, the seller possesses a more comprehensive understanding of a particular item, but the buyer acquires the market average. Typically, this situation arises when the seller of an item or service possesses greater experience than the consumer, although the reverse may also occur.

Asymmetric information is present in nearly all markets, even those for tangible goods and services, but it is most pronounced in the insurance sector. Laird (2016) posits that asymmetric

knowledge might lead to two primary challenges for the insurance industry: moral hazard and adverse selection. Adverse selection occurs when insurers cannot distinguish between high-risk and low-risk clients due to insufficient information, resulting in their aggregation. Moral hazard arises post-policy implementation, as insured individuals, aware of their coverage, may partake in more hazardous activities, hence increasing the total cost of claims.

The theory of asymmetric information is relevant to this study since the insured possess greater knowledge of their own characteristics or behaviours than the insurer. According to Chaitra (2023), this results in a power imbalance between the parties involved in an insurance contract, sometimes granting the buyer an inequitable advantage compared to other contracts. Consequently, this theory posits that insurers may struggle to accurately assess risk due to asymmetric information, potentially leading to market inefficiencies such as under-insurance or over-insurance. Hence, insurers face underwriting risk, which may affect their operations and performance.

Empirical Review

Mohammed (2019) examined the influence of the major factors determining underwriting risks on insurance businesses in Bangladesh. A sample of insurance businesses incorporated under the Bangladeshi Insurance Act between 2013 and 2017 was used for the study, and multiple linear regression analysis and other SPSS statistical tools was used for the analysis. Several factors, including business size, capital level, GDP, liquid assets, and return on assets was found to have a considerable impact on underwriting risk, according to the empirical results.

Mwangangi (2020) sought to determine the connection between Kenyan short-term insurance companies' profits and underwriting performance. Descriptive design was used in conjunction with quantitative research design to determine the link between variables. Data analysis was done using EViews statistical software (version 10). Correlational analysis was done to find connections between variables and Regression analysis was used to evaluate the impact of underwriting outcomes on profitability. The results showed that underwriting components and profitability had a negative relationship, according to correlation analysis. Additionally, regression analysis revealed that underwriting outcomes had a 30.52% impact on profitability, indicating that other factors may potentially have an impact.

Morara and Sibindi (2021) evaluated the Kenyan insurance industry's financial performance, underwriting risk, and solvency. The study fills a vacuum in the literature about the elements impacting financial performance and stability, given the industry's significance in promoting economic growth. Using descriptive statistics and correlational analysis, the study examined secondary data from the 2009–2018 insurance regulating authority annual reports. According to the findings, underwriting risk as measured by the combined ratio has also been rising and is positively correlated with financial performance, and the solvency position of Kenyan insurance companies has been continuously improving.

Duniya et al (2024) focused on underwriting risk and liquidity risk as important factors influencing financial performance in their analysis of the underwriting risk and financial performance of listed insurance companies in Nigeria during the 2011–2020 timeframe. The study applied secondary data obtained from the population of 22 insurance companies listed on the Nigerian stock exchange as of December 31, 2020. The data was analysed using a regression model to assess the effects of

risk on financial performance, The findings demonstrated a significant correlation between underwriting risk and the financial performance of insurance companies over the study period.

Horvey and Odei-Mensah (2025) looked into how underwriting performance and risk affected the life and non-life insurance markets in South Africa from 2013 to 2019. Analysis of the data using the generalised method of moments and bootstrap quantile regression approaches reveals that underwriting performance is considerably and favorably impacted by insurer size, market share, and investment income. Additionally, it showed that life insurer risk was negative in higher quantiles, whereas underwriting risk had a negative effect on non-life performance throughout quantiles.

Hypothesis Formulation

The study formulate the following hypotheses based on the reviewed literature and the connection between underwriting risk and performance measured with underwriting profit and expense ratio: H₀₁: Underwriting risk have no significant effect on underwriting profit of non-life insurance companies in Nigeria.

H₀₂: Underwriting risk have no significant effect on expense ratio of non-life insurance companies in Nigeria.

3 METHODOLOGY

Research Design

This study employed an ex-post facto research design, which provides an empirical and systematic solution to the research problem by employing pre-existing data. It also enables researchers to predict the potential sources of an existing effect.

Population and Sampling Selection

The study population comprises all non-life insurance businesses listed on the Nigeria Exchange Group. This comprises all thirteen (13) non-life insurance companies listed on the Nigerian Exchange Group (NGX) as of June 27, 2025. The study intentionally selected a sample of 11 non-life insurance companies from the study population based on the availability of annual reports for the relevant years.

Source and Nature of Data

This study utilised secondary panel data obtained from the audited annual reports of eleven (11) chosen non-life insurance companies acquired via the Nigeria Exchange Group (NGX) website. The data pertain to the period from 2014 to 2024, as the audited annual reports of the selected insurance companies for prior years were unavailable on the Nigeria Stock Exchange (NSE) website, and 2024 is the final year due to the unavailability of the audited annual report for 2025. The data obtained from the yearly reports include underwriting profit, net premium, underwriting expenses, and net claims.

Description of the Study Variables

Variables		Measurements		Notation	Sources
Underwriting risk	Independent variable	Net claim/ premium	Net	UDR	Mazviona et al. (2017); Samina (2024).
Underwriting profit	Dependent variable	Underwriting profit/ Net premium	profit/	UP	Afzal & Amjad (2020); Wahyuddin & Mauliyana (2021).
Expense Ratio	Dependent variable	Underwriting Expenses/ Premium	Net	ER	Mawardana et al (2024); Oluwaleye et al (2020); Sejuwal& Koirala(2023).

Model Specification

This study adapted the model used by Duniya et al. (2024). The understated models were formulated for this study:

$$UP = \beta_0 + \beta_1 UDR_1 + \varepsilon \dots\dots\dots 3.1$$

$$ER = \beta_2 + \beta_3 UDR_3 + \varepsilon \dots\dots\dots 3.2$$

Where:

UDR = Underwriting Risk;

UP = Underwriting Profit;

ER = Expense Ratio;

β = Gradient or slope of the regression;

ε = Error Term

Method of Data Analysis

The analysis of data for this study was performed with the Eviews application program. This encompasses the descriptive analysis aimed at examining the characteristics of the extracted data, preliminary tests to assess the suitability of the data for the study, and the identification of the most appropriate regression model. Inferential analysis was performed via regression analysis to ascertain the impact of the independent variable on the dependent variables.

4. RESULTS**Data Presentation**

The data utilised for this study were obtained from the annual reports of eleven (11) selected non-life insurance businesses accessed through the Nigeria Exchange Group (NXG) website, covering a thirteen (13) year period from 2014 to 2024.

Descriptive Statistic

Table 1: Descriptive Statistics

	Underwriting Risk	Underwriting Profit	Expense Ratio
Mean	0.410997	0.349023	0.474947
Maximum	1.956817	1.103911	1.869019
Minimum	0.054809	-0.522558	-1.082292
Std. Dev.	0.284425	0.258530	0.386367
Skewness	2.645749	-0.728282	0.550381
Kurtosis	11.85875	5.366782	7.790822

Source: Researcher's Computation using Eviews (2025)

The mean value of the insurance companies underwriting risk was 0.411 percent with a standard deviation of 0.284, maximum value of 1.957 and minimum value of 0.055. It also indicates a skewness value of 2.646 and kurtosis value of 11.859. The average underwriting risk of 0.411 percent reflect a moderate level of exposure relative to their premium and claims obligations.

As presented in Table 1 the mean value of the insurance companies underwriting profit was 0.349 percent with a standard deviation of 0.259, maximum value of 1.10 and minimum value of -0.522 . It also indicates a skewness value of -0.728 and kurtosis value of 5.367. The positive average underwriting profit value of 0.349 percent show that, on average, insurance companies underwriting operations were generally profitable during the study period.

The mean value of the insurance companies expense ratio was 0.475 percent with a standard deviation of 0.386, maximum value of 1.869 and minimum value of -1.082. It also indicates a skewness value of 0.550 and a kurtosis value of 7.791. The average expense ratio of 0.475 per cent indicates that underwriting expenses accounted for nearly half of premium income on average during the study period.

Preliminary Test

This study conducted various preliminary tests on the extracted data to determine the appropriateness of the data used. The test includes the cross-section dependence test, autocorrelation test, Chow test and Hausman test. The results of the tests are as follows:

Table 2: Cross-Section Dependence Test

Test	Underwriting Profit			Expense Ratio		
	Statistic	d.f.	Prob.	Statistic	d.f.	Prob.
Pesaran scaled LM	1.356801	55	0.1748	2.687622	55	0.0772
Pesaran CD	-1.128544		0.2591	0.256260		0.7977

Source: Researcher's Computation using Eviews (2025)

Table 2 shows that results of the cross-section dependence test, with prob- value of more than 5% for both of the Pesaran's tests, the test suggest no strong cross-sectional dependence for

underwriting profit and expense ratio, hence, the null hypothesis of no cross-sectional dependency is accepted.

Table 3: Test for Autocorrelation

Dependent Variable	Durbin-Watson Statistic	Interpretation
Underwriting Profit	1.560063	No evidence of serious serial correlation (value close to 2).
Expense Ratio	1.510216	No evidence of serious serial correlation (value close to 2).

Source: Researcher's Computation using Eviews (2025)

Table 3 shows that results of the auto-correlation test. It shows that the Durbin-Watson test for both dependent variables (underwriting profit and expense ratio) is 1.56 and 1.51 respectively. With both values close to 2, the test shows that there is no evidence of serious serial correlation.

Table 4: Chow and Hausman Test

		Underwriting Profit			Expense Ratio		
Test		Statistic	d.f.	Prob.	Statistic	d.f.	Prob.
Chow Test	Cross-section Chi-square	22.357214	10	0.0134	18.439839	10	0.0480
Hausman Test	Cross-section random	11.896214	7	0.1040	3.352838	7	0.8508

Source: Researcher's Computation using Eviews (2025)

The Chow Test results indicate a Chi-square statistic of 22.3572 and 18.4398, with probabilities of 0.0134 and 0.0480 for the underwriting profit model and expense ratio model, respectively. Both probabilities are below the significance level of 5%, leading to the rejection of H_0 and acceptance of H_1 . Consequently, the Fixed Effect Model (FEM) is deemed the most suitable model for use. The subsequent stage involved using the Hausman test to determine the superior model between the Fixed Effect Model (FEM) and the Random Effect Model (REM).

The Hausman test results indicate a Cross-section random statistic of 11.8962 and 3.3528, with probabilities of 0.1040 and 0.8508 for the underwriting profit model and expenditure ratio model, respectively. Since these probabilities exceed the significance level of 5%, the null hypothesis (H_0) is accepted. Therefore, the best suitable model to employ is the Random Effects Model (REM).

Research Hypotheses Testing**Decision Rule:**

If ($p > 0.05$): Accept H_0 (null hypothesis),

If ($p < 0.05$): Reject H_0 (null hypothesis) and adopt H_1 (alternative hypothesis).

Table 5: Random Effect Model for Underwriting Risk and Underwriting Profit

Variable	Coefficient	Std. Error	t-Statistic	Prob.
UDR	-0.0431256	0.063788	6.760753	0.0000
LVR	0.009335	0.029723	0.325015	0.7457
LGR	0.028108	0.030906	0.909474	0.3647
C	0.499166	0.067575	7.396885	0.0000
Effects Specification				
			S.D.	Rho
Cross-section random			0.032573	0.0242
Idiosyncratic random			0.206928	0.9758
Weighted Statistics				
R-squared	0.246388	Mean dependent var		0.303542
Adjusted R-squared	0.230123	S.D. dependent var		0.249548
S.E. of regression	0.218958	Sum squared resid		6.664023
F-statistic	15.14832	Durbin-Watson stat		1.560063
Prob(F-statistic)	0.000000			
Unweighted Statistics				
R-squared	0.267335	Mean dependent var		0.349023
Sum squared resid	6.953706	Durbin-Watson stat		1.332536

Source: Researcher's Computation using Eviews (2025)

Table 5 indicates that the constant coefficient value is 0.499166, signifying that the dependent variable (underwriting profit) will be 49.92% when the independent variable is set at zero. The R-squared value is 0.246388, indicating that the independent variable (underwriting risk) accounts for 24.64% of the variations in the underwriting profit of non-life insurance companies, while the remaining percentage is attributed to other factors not included in the model. Finally, with a probability (F-statistic) value of 0.000000, which is below the significance threshold of 5%, this suggests that the model is a good fit and is statistically significant in forecasting the impact of underwriting risk on the underwriting profit of non-life insurance businesses in Nigeria.

The coefficient value for underwriting risk is -0.0431256, indicating a negative correlation between underwriting risk and underwriting profit. Additionally, the p-value of 0.000, which is below the significance threshold of 5%, leads to the rejection of the null hypothesis in favour of

the alternative hypothesis. Consequently, the results of the random effects model estimation indicate that underwriting risk significantly impacts the underwriting profit of non-life insurance businesses in Nigeria.

Table 6: Random Effect Model for Underwriting Risk and Expense Ratio

Variable	Coefficient	Std. Error	t-Statistic	Prob.
UDR	0.319506	0.107021	2.985447	0.0033
LVR	0.030007	0.052113	0.575813	0.5657
LGR	0.069520	0.054963	1.264861	0.2090
C	0.404372	0.119385	3.387138	0.0009
Effects Specification			S.D.	Rho
Cross-section random			0.104413	0.0899
Idiosyncratic random			0.332281	0.9101
Weighted Statistics				
R-squared	0.082856	Mean dependent var		0.314291
Adjusted R-squared	0.063061	S.D. dependent var		0.356077
S.E. of regression	0.344667	Sum squared resid		16.51256
F-statistic	4.185797	Durbin-Watson stat		1.510216
Prob(F-statistic)	0.007164			
Unweighted Statistics				
R-squared	0.106125	Mean dependent var		0.474947
Sum squared resid	18.94804	Durbin-Watson stat		0.857967

Source: Researcher's Computation using Eviews (2025)

Table 6 indicates that the R-squared value is 0.246388, signifying that the independent variable (underwriting risk) accounts for 24.64% of the variance in the expense ratio of non-life insurance companies, while the remaining percentage is attributed to other factors not included in the model. Finally, with a probability (F-statistic) value of 0.007164, which is below the significance threshold of 5%, this suggests that the model is well-fitted and statistically significant in forecasting the impact of underwriting risk on the expenditure ratio of non-life insurance businesses in Nigeria.

The coefficient value of underwriting risk is 0.319506, indicating a positive correlation with the expense ratio. The p-value of 0.0033, which is below the significance threshold of 5%, leads to the rejection of the null hypothesis in favour of the alternative hypothesis. Consequently, the results of the random effects model estimation indicate that underwriting risk significantly influences the expense ratio of non-life insurance businesses in Nigeria.

5. DISCUSSION OF FINDINGS

This study's findings offer empirical evidence about the impact of underwriting risk on the performance of non-life insurance firms in Nigeria. Performance was assessed by underwriting profit and expenditure ratio as primary metrics of underwriting efficiency and operational effectiveness. The findings indicated that underwriting risk significantly influences both underwriting profit and expense ratio, highlighting its pivotal role in shaping the financial performance of insurance companies.

The first hypothesis indicates that underwriting risk significantly affects underwriting profit, suggesting that higher exposure to underwriting risk reduces the profitability of non-life insurers. This implies that inaccurate risk assessment, poor pricing strategies, and weak underwriting standards can lead to higher claims costs and ultimately erode profit margins. This finding is consistent with the results of Kamau (2023) and Duniya et al (2024), who observed that increased underwriting risk negatively influences insurers' profitability in Nigeria. The study's finding also align with the asymmetric information theory which stated that insurer's performance can be negatively impacted when policyholders or intermediaries have more knowledge about the risks (adverse selection) or when insureds change behaviour after been provided coverage for risk (moral hazards).

The second hypothesis reveals that underwriting risk significantly affects the expense ratio of non-life insurance companies, implying that as underwriting risk increases, operational costs associated with underwriting activities also rise. This outcome may be attributed to increased administrative expenses, reinsurance costs, and claims management expenses that accompany higher risk exposure. The result aligns with the observations of Al-Zuhairi (2024) and Eling and Schaper (2017) who found that risk exposure increases operating costs due to greater monitoring, reinsurance, and policy servicing requirements. It is also consistent with the asymmetric information theory which postulate that the presence of adverse selection and moral hazard might give rise to increased monitoring cost for insurers.

6. CONCLUSION, RECOMMENDATION AND IMPLICATION OF FINDINGS

Conclusion

This study analysed the impact of underwriting risk on the performance of non-life insurance firms in Nigeria, utilising underwriting profit and expense ratio as principal performance metrics. The investigation indicated that underwriting risk significantly influences both underwriting profit and expense ratio, highlighting its pivotal role in shaping the financial and operational performance of insurance companies.

The significant negative effect of underwriting risk on underwriting profit suggests that improper risk assessment, inadequate pricing, and weak underwriting controls reduce the profitability of insurers. Similarly, the positive relationship between underwriting risk and expense ratio indicates that greater exposure to risk increases operating and claims-related costs, thereby weakening underwriting efficiency. These findings collectively demonstrate that the financial stability and profitability of non-life insurers depend largely on the quality of their risk assessment, pricing

accuracy, and underwriting discipline. Hence, effective management of underwriting risk is vital for sustaining the performance and solvency of insurance companies in Nigeria.

Recommendations

Based on the findings of the study, this study recommend that insurers enhance their risk assessment frameworks, implement actuarial robust pricing models, and advance their data analytics proficiency. Insurers should also institutionalise rigorous underwriting criteria and enhance internal monitoring systems to mitigate risk buildup, while concentrating on cost containment techniques such as process automation, efficient claims administration, and the elimination of administrative overheads. By using these measures, they can improve underwriting profitability, minimise cost inefficiencies, and secure long-term financial sustainability in a progressively competitive and uncertain insurance market.

Implication of Findings

The findings of this study provide empirical support for the asymmetric information theory, which posits that information imbalance between insurers and policyholders leads to adverse selection and moral hazard, both of which heighten underwriting risk and negatively impact insurers. The study also contributes to existing literature by demonstrating that underwriting risk has a dual impact as it erodes underwriting profit and also increases underwriting-related expenses. Thus, the findings underscore the need for Nigerian insurers to strengthen underwriting governance and risk assessment frameworks.

REFERENCES

- Agboola, A. B., & Obalola, M. A. (2024). Financial Risks and Financial Performance of Insurance Companies in Nigeria. *Lagos Journal of Banking, Finance & Economic Issues*, 5(1), 58-66.
- Akerlof, G. A. (1970). The market for "lemons": Quality uncertainty and the market mechanism. *Quarterly Journal of Economics*, 84(3), 488–500.
- Al-Zuhairi, A. K. H. (2024). Analysis of Underwriting Activity and its Impact on the Profitability Ratios of the Insurance Companies Listed in the Iraq Stock Exchange. *Studia Universitatis Economics Series*, 34(2), 1-31
- Chaitra, V. (2023). Information Asymmetry in Insurance Contracts and “the Weaker Party”: Duty of Good Faith Disclosures in India. *The Journal of Risk Management and Insurance*, 27(1), 49-63.
- Chen, Z., Liang, Y., & Pang, T. (2024). *Dynamic investment-driven insurance pricing: Equilibrium analysis and welfare implication*. arXiv
- Duniya, M., Hambali, G. U., & Abdulmalik, M. (2024). Impact of risk on the financial performance of listed insurance firms in Nigeria. *Journal of Economics and Allied Research*, 9(2), 102-112.
- Elaigwu, B. E., Wula, T. J., & Okwa, E. I. (2024). Asset Quality and Financial Performance of Insurance Companies Listed in Nigeria. *International Journal of Business Systems & Economics*, 14(6), 119-143.

- Eling, M., & Schaper, P. (2017). *Get the Balance Right: Growth, Profitability, and Safety in the Insurance Industry*. SSRN. Available at SSRN: <https://ssrn.com/abstract=3078470>
- Fadun, O. S., Oyerinde, M. T., & Aduloju, S. A. (2025). Capital Adequacy and the Financial Performance of Insurance Companies: The Nigerian Experience. *International Journal of Insurance, Risk and Management Sciences*, 2(1), 17-38.
- Fadun, O. S., Ochonogor, A. C., & Aduloju, S. A. (2025). Determinants of Financial Performance of Non-Life Insurance Companies in Nigeria. *International Journal of Insurance, Risk and Management Sciences*, 2(1), 1-16.
- Fadun, O. S., Oyerinde, M. T., & Isimoya, A. O. (2024). The Analysis of Net Asset Value and the Performance of Pension Funds in Nigeria. *Fuoye Journal of Management, Innovation and Entrepreneurship*, 3(2), 286-298.
- Fadun, O. S., & Silwimba, P. (2023). Does credit risk management impact the financial performance of commercial banks? *International Journal of Business Ecosystem & Strategy*, 5(2), 55-66.
- Fali, I. M., Nyor, T., & Mustapha, L. O. (2020). Insurance specific risk and profitability: Evidence from Nigerian insurance firms. *International Journal of Accounting, Finance and Risk Management*, 5(3), 141-148.
- Finger, D. Albrecher, H., & Wilhelmy, L (2024). On the cost of risk misspecification in insurance pricing. *Japanese Journal of Statistics and Data Science*, 7(1), 1111–1153.
- Horvey, S. S., & Odei-Mensah, J. (2025). Factors Influencing Underwriting Performance of the Life and Non-Life Insurance Markets in South Africa: *Exploring for Complementarities, Nonlinearities, and Thresholds*. *Journal of African Business*, 26(1), 164-192.
- Jaber, A. S. (2020). *The Impact of Risk Management Practices on the Organizational Performance: Field Study at Jordanian Insurance Companies*. M.Sc. Thesis, Middle East, Jordan.
- Kamau, A. M. (2023). Underwriting risk, firm size and financial performance of insurance firms in Kenya. *Eastern Journal of Economics and Finance*, 8(1), 1–14.
- Laird, J. (2016). *Information Asymmetry in the Insurance Market*. M.Sc. Thesis, Aberystwyth University.
- Mawardana, A., & Fanny, F. S. (2024). The Effect of Financial Ratios on Financial Distress in Insurance Companies. *Dinasti Accounting Review*, 2(1), c7-16.
- Mazviona, B. W., Dube, M., & Sakahuhwa, T. (2017). An Analysis of Factors Affecting the Performance of Insurance Companies in Zimbabwe. *Journal of Finance and Investment Analysis*, 6(1), 11-30.
- McKinsey & Company. (2025). *Global Insurance Report 2025: The Pursuit of Growth*.
- Mohammed, I. A. (2019). An Empirical Study on Underwriting Risk of Insurance Companies in Bangladesh. *International Journal of Trend in Scientific Research and Development*, 3(5), 552-557.
- Morara, K., & Sibindi, A. B. (2021). Assessing the Solvency, Underwriting Risk and Profitability of the Kenyan Insurance Sector. *Acta Universitatis Danubius*, 17(5), 226-240.
- Mwangangi, J. M. (2020). *Effect of underwriting results of profitability of general insurance in Kenya*. MBA Thesis, University of Nairobi, Kenya.
- Mwangi, P. W. (2019). *Factors affecting financial performance in the kenyan non-life insurance sector*. M.Sc. Thesis in Social Statistic, University of Nairobi, Kenya.
- OECD. (2020). *Insurance Indicators and Statistics*. Organisation for Economic Co-operation and Development.

- Olaiya, K. I. (2025). Impact of underwriting and financial ratios on profitability: An empirical analysis of insurance firms. *Modern Management Review*, 30(2), 113-127.
- Oluwaleye, O. T., Shoyemi, O. S., & Edewusi, D. G. (2020). Effects of Claims Management On Profitability of Insurance Companies in Nigeria. *British Journal of Management and Marketing Studies*, 3(4), 106-114.
- Oyerinde, M. T., Fadun, O. S., & Isimoya, O. A. (2025). Returns on Investment and Performance of Pension Fund in Nigeria. *Fuoye Journal of Finance and Contemporary Issues*, 8(1), 150-164.
- Samina, Q. S. (2024). Factors affecting profitability of insurance companies in Bangladesh, *Global Business & Finance Review (GBFR)*, *People & Global Business Association (P&GBA) Seoul*, 29(4), 98-108.
- Sejuwal, N., & Koirala, K. B. (2023). Determinants of Profitability of Insurance Companies in Nepal. *Patan Prospective Journal*, 3(2), 88-96.
- Siopi, E., & Poufinas, T. (2023). Impact of internal and external factors on the profitability and financial strength of insurance groups. *International Advances in Economic Research*, 29(1), 129-149.
- Usman, A. O., Fadun, O. S., & Aduloju, S. A. (2024). Risk Retention Strategy and Financial Performance of Selected Insurance Companies in Nigeria. *Nigeria Journal of Risk and Insurance*, 14(1), 41-62.
- Wahyono, W., Nurochim, N., & Palupi, I. D. (2021). The Effect of Premium Income, Claim Payment, Risk-Based Capital, Investment Return, and Underwriting Result on the Profits of Insurance Companies Listed on the Indonesia Stock Exchange for the 2015–2018 Period. *Riset Akuntansi dan Keuangan Indonesia*, 6(2), 142-153.
- Wang, K., Fang, L., & Cheng, J. (2020). Management of Commissions to Meet the Regulatory Requirements: Evidence from Property-Casualty Insurance in China. *Geneva Papers on Risk and Insurance - Issues and Practice*, 45(3), 508-534.