



UNDERWRITING PERFORMANCE AND INVESTMENT GROWTH OF INSURANCE INDUSTRY IN NIGERIA

Mfon N.U. Akpan (Ph.D.)

Department of Insurance & Risk Management, University of Uyo, Nigeria.

Email: mnuakpan@gmail.com or

mfonnuakpan@uniuyo.edu.ng

ABSTRACT

This study looks at the connection between investment growth and underwriting performance in the insurance sector in Nigeria. The investment growth of the insurance business in Nigeria is anticipated to be impacted by low gross premium written, underwriting profit, investment assets, investment in government bonds, loans given to associated companies, investment equity, and high underwriting expenditures. An ex post facto research design was used in the study. Regression tests using conventional least squares and descriptive statistics were performed. It was discovered that the rise of investments in Nigeria's insurance sector is significantly correlated with premium income. Another study revealed a strong correlation between the rise of investments in Nigeria's insurance sector and the settlement of claims. Additional findings showed that the insurance industry's investment growth in Nigeria is significantly impacted by both premium income and claims payments. It was determined that underwriting performance and the growth of investments in Nigeria's insurance sector are significantly correlated. In order to ensure that insurance companies maintain high standards in premium income generation and claims payment, Nigeria's insurance industry needs to strengthen its regulatory framework. This can be accomplished by implementing stricter guidelines and monitoring mechanisms to support industry growth and stability. In order to reduce claims payments and enhance investment growth, insurance companies should be encouraged to have strong risk management and underwriting procedures.

Keyword: Insurance -underwriting, Financial Performance, Investment-growth, Nigeria

1.0 INTRODUCTION

1.1 Study Background

Risk detection, assessment, evaluation, and control are important tasks for insurance companies. These positions assist individuals, businesses, and governments in transferring the risk to insurance companies in return for payments. This means that uncertainties (insured risks) are exchanged for certainties (premiums). Insurance companies offer financial support to a designated beneficiary in the event that the insured loss occurs in exchange for a regular payment known as premiums (Adeel, Habib & Mehboob, 2022). Insurance is an agreement between two parties whereby one agrees to take on the other's risk in return for a quantity of money called a premium and guarantees to reimburse the other in

the case of an unanticipated disaster (Sharma, 2024). But the insurance companies do not underwrite every risk they add to the pool. Such risks must be classified as pure risks with a likelihood of loss or no loss in order for them to be insurable. The insurance companies undergo a thorough underwriting procedure to ascertain whether or not such risks would be accepted in order to ascertain the existence of this chance. Insurance companies play a significant role in Nigeria because they help allocate resources effectively by managing risks in practically every economic area.

For the majority of entities, underwriting these risks reduces the load and establishes stability, allowing them to focus on their primary business operations and promoting economic growth. As stated by Akpan, Nnamseh, Etuk, Oedema, and Ekanem (2020). The process of researching and evaluating risks in order to decide whether or not to insure them for insurance or reinsurance companies is known as underwriting. In order to fulfil their responsibilities, insurers must mobilise premiums, pay claims quickly and effectively, recover underwriting costs, and use the excess money (underwriting profits) for investment projects like real estate investments, government bonds, loans to affiliated businesses, and equity investments, among other things.

One non-bank financial organisation that may be able to help is an insurance company. According to Matlhaku and Ferreira-Schenk (2025), a non-bank financial entity may be able to assume all risks to both individuals and corporate entities.

Underwriting, or evaluating and pricing client risk, is the main duty of insurance companies (Varadarajan & Kakumanu, 2024). As a result, many insurance companies' managers believe that their operating philosophy revolves around underwriting performance and discipline (Chubb, 2020). Insurance companies' investment functions are stimulated by strong underwriting performance. Additionally, an economy's general prosperity is influenced by the insurance sector's strong performance. Underwriting is measuring and evaluating risk in order to calculate the appropriate cost to cover that risk. Because general insurance accounts for the majority of gross premiums written by insurance companies in Nigeria, the success of these companies is crucial to the growth of the industry. Similar risks are grouped for rating in underwriting, and the resulting rates are modified to account for the group experience. This is then modified to account for underwriting earnings, expenses, inflation, and uncertainty. A significant amount of an insurer's expenditures are related to claims. This is due to the fact that claims reduce profits and have a significant impact on insurers' profitability. Therefore, improving the performance of insurance companies is largely dependent on accurately evaluated and equitable claims administration procedures that are consistent with the best underwriting guidelines.

Underestimated liabilities from unpaid (expired) past policies or underpriced current business, improper underwriting, incorrect or inaccurate assumptions on the frequency and severity of losses, or factors completely outside the underwriter's control can all have an impact on an insurer's total claims. Furthermore, a significant portion of the total gross written premiums may stay unpaid for extended periods of time and ultimately prove to be uncollectable.

A key measure of whether the firm's pricing strategy is sound is the ratio of claims to premiums (loss ratio), which partially reflects underwriting profits and indicates the calibre of business underwritten. The loss ratio is crucial to an insurer's long-term profitability because it is at the core of its major claims management initiatives. The amount of earned premium that is left over after commissions and administrative costs have been covered and claims have been resolved is referred to as underwriting profit. Profits from investments made in the company's premium are not included. It is the money that an insurance firm makes as part of its regular operations (Sharma, 2024). Insurance companies' investment operations are crucial both during and after the underwriting procedure. This is due to the fact that insurance companies are contractual financial organisations that focus on offering their clients insurance coverage or defence against risk that can be insured. The range of investment responsibilities performed by insurance companies has increased due to the numerous reforms implemented in Nigeria's insurance subsector. As a result, government securities, stock, shares, bonds, mortgages, loans, cash, bills receivable, and other assets are all held by insurance firms. Insurance firms' primary investment goals are growth, liquidity, and safety.

These goals, which serve as the foundation for the investment portfolio structure of these companies, are determined by the insurance companies' liabilities, their operational priorities, industry regulators' rules, which differ from nation to nation, and the various nations' stages of development. The underwriting profits of the insurance firm are significantly influenced by investment returns, such as earnings per share (Matlhaku & Ferreira-Schenk, 2025). The insurance industry receives premium

income, which is part of its future responsibilities as well as its profit. A portion of the premium must be kept by the business as a premium reserve so that it can easily pay any future claims.

One of the components of net income, which is also utilised for investments, is this underwriting outcome. The company's profits will rise if the underwriting results improve. Positive or negative underwriting outcomes can be explained by examining other profit ratios. According to Natalia and Riwayati (2022), a negative ratio suggests that the premium rate setting would be lower than anticipated. In light of this, this study aims to examine how underwriting performance affects the investment functions of Nigerian insurance companies.

Insurers must have enough money to cover any losses in order to balance their asset allocation with their liabilities (claims and benefits).

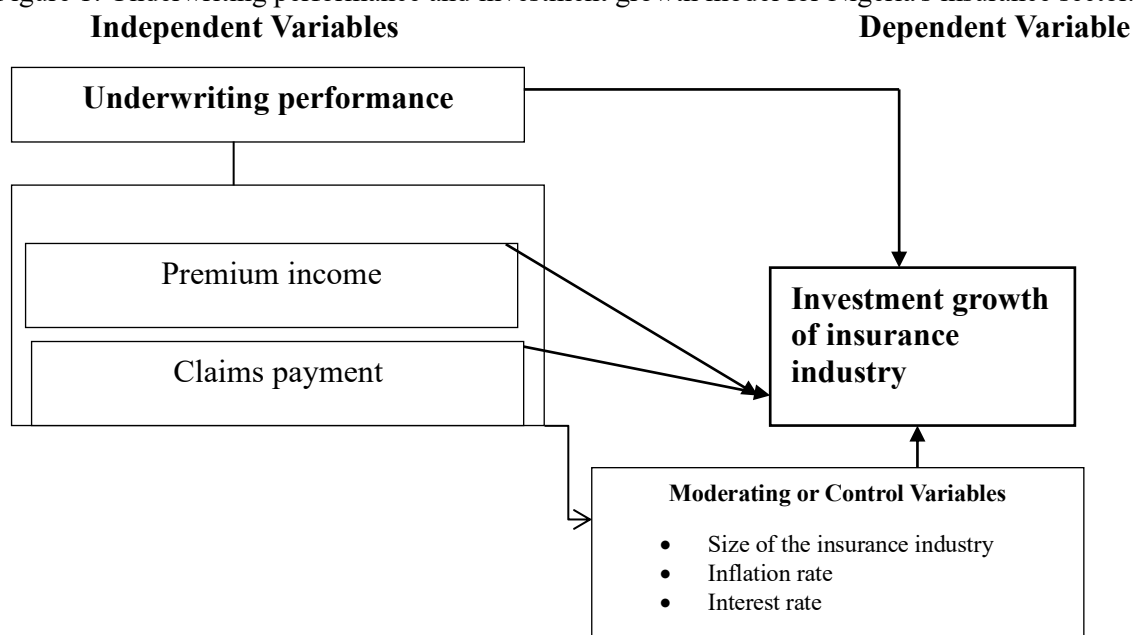
Higher risk is one of the difficulties associated with the expectation of greater profits. Only when greater risks are taken will conditions on the financial market reward larger profits. In the meanwhile, a number of internal and external factors affect how insurers invest their assets and take on risk. There appears to be a dearth of empirical study in this field in Nigeria, and the few studies carried out in industrialised nations have left a gap in the literature. The study's interest in examining the impact of underwriting performance on investment activities of insurance businesses in Nigeria was spurred by the aforementioned issues and the necessity to close the gap in the literature in a rising economy like Nigeria. This study's primary goal is to investigate the connection between Nigeria's insurance industry's investment growth and underwriting performance. Specifically, they are: (i) Determine the degree to which premium income and investment growth in Nigeria's insurance sector are related. (ii) Ascertain the degree of correlation between the settlement of claims and the expansion of investments in Nigeria's insurance sector. (iii) Examine the degree to which premium income and claims payment have a combined impact on the expansion of investments in Nigeria's insurance sector.

2.0 REVIEW OF RELATED WORK

The literature pertinent to the study is reviewed in this section. The debate topics are divided into three categories: Conceptual review, theoretical review and empirical review. It is believed in the insurance industry literature that proper understanding and evaluation underwriting with proper variables will affect the investment growth of the industry positively.

2.1.1 Conceptual Review

Figure 1: Underwriting performance and investment growth model for Nigeria's insurance sector.



Source: Researcher's Conceptualization (2025).

2.1.2 Insurance company size

When it comes to how much risk insurers are willing to take on when making investments, size is crucial. Bigger insurers may be able to take on riskier bets than smaller ones because they appear to be more diversified and have better access to capital (Molk, 2024). Large size insurance companies have less knowledge asymmetry between managers and possible investors, which lowers the cost of capital needed to invest their assets at risk. According to a study by Kraut, La Bonté, and Richter (2024), larger insurers' ability to tolerate risk is increased by the advantages of economies of scale and well-established risk management teams. For instance, by hiring skilled investment managers to manage their sizable and well-diversified asset portfolios, larger insurance companies can prevent the volatility in investment returns. Conversely, smaller insurance companies can use reinsurance to spread a portion of the risk associated with their liabilities; nevertheless, reinsurance can be highly costly, placing additional financial strain on smaller companies. Investment risk-taking is thought to be significantly influenced by size, whereas smaller insurers are less affected. The natural log of investment portfolio size, the log of total assets, the log of gross premium, and the number of employees were used in previous studies to calculate industry size (Eladly, 2024; Shao, Tao, Chen, & Ye, 2023). The natural log of the total assets on the insurance industry's balance sheet is used in this study to calculate the size of the insurance sector.

2.1.3 Investment, interest rates, and inflation

Financial institutions' investment decisions are influenced by a number of factors, including inflation and interest rates. Increased inflation is expected to negatively impact business investment given the different investment categories. In the short run, output and investment rise as the nominal interest rate temporarily rises. Financial authorities frequently cut interest rates in response to inflation problems under a passive interest rate regime, which explains why the equilibrium is unique (Jonung, 2025). Conversely, interest rates have a favourable impact on investment (Juhro, Syarifuddin, & Sakti, 2025). Gürkaynak, Kısacıkoğlu, and Lee (2023) state. Low interest rates have an impact on the stability of the life insurance market, especially in nations where high-guaranteed-return plans still make up a portion of the overall portfolio. According to their findings in the study on the impact of low interest rates on life insurance, a protracted period of low interest rates has an impact on life insurers' solvency, increasing the risk of default in less funded insurance firms. A longer period of low interest rates impacts investment opportunities, which can harm insurers whose liabilities consist of fixed investment returns, according to a previous study by Malovaná, Bajzík, Ehrenbergerová, and Janków (2023).

2.2 Theoretical Review

As will be covered below, this study is predicated on two theories: Background Risk Theories and Market-Based Asset Allocation Theory.

2.2.1 Theory of Market-Based Asset Allocation

The theory, which focusses on portfolio selection, revolutionised finance theory and established the groundwork for contemporary capital market theory. The selection and design of asset portfolios based on measured risk, individual risk preferences, and expected return on investments are explained by modern portfolio theory. Fund managers create their portfolios based on predicted risk and return as well as the covariance of return between each pair of assets, according to the normative logic of the Markowitz model. Portfolios that fall on an efficient frontier that illustrates the risk-return trade-off are chosen. Because the options yield the best projected return for a given level of risk, the frontier is efficient. Because diversifying an investment portfolio entails taking risks, this notion is relevant to this study.

2.2.2 Theory of Background Risk

Background risk is an economic theory that can be used to explain the connection between investment risk-taking and the risk that insurers' operations encounter. An uninsurable risk in the insurance market is known as background risk. It is the risk resulting from the uncontrollable operational actions of the insurer. Background risk mostly stems from insurers' underwriting activities and the uncertainty surrounding insurance claims, since insurance companies are financial institutions and thus make crucial decisions regarding portfolio selections. Challa, Challa, Lakkarasu, Sriram, and Adusupalli

(2024) state. These uncertainties might be seen as a form of background risk for insurers' portfolio investment decisions because it is extremely difficult to trade away and beyond the control of portfolio managers in the insurance industry. Background risk is defined in this study as the firm's unique characteristics in insurance settings that affect the insurer's investment risk-taking. The following factors are taken into account when describing background risk: underwriting risk (loss ratio (LR) and expense ratio (ER)), capital ratio (CR), firm size (Size), leverage (LevR), investment income (INCR), and reinsurance ceded (RIR). According to the hypothesis, insurers can take on more risk in investment securities if they have less background risk, which includes large firms with more access to capital, less leverage, less underwriting risk (fewer claims and expenses), and giving up more premiums to reinsurers. Because it is directly related to the study field, the Market-Based Asset Allocation Theory served as the study's anchor out of the two theories mentioned above.

2.3 Empirical Review

Msomi and Nzama (2023) investigated the relationship between the overall profitability of publicly traded general insurance businesses in South Africa and underwriting profit determinants. A sample of 36 insurers was examined in the study, taking into account their definable markets and readily available financial data from 2008 to 2019. The study investigated the relationships between different financial indicators and Return on Assets (ROA) using signal correlation analysis. With correlation coefficients of -0.4500 , -0.3365 , and -0.4050 , respectively, the findings showed negative relationships between ROA and the logarithms of total investment (TI), shareholder funds (SF), and underwriting profits (UWP). These results show that ROA tends to decline for general insurance companies in South Africa as TI, SF, and UWP rise. Additionally, a favourable correlation was found between ROA and the earning-asset ratio. This implies that the ROA of South African general insurance companies tend to improve when the earning-asset ratio increases, suggesting a possibly positive effect on profitability. The study's important conclusions highlight how crucial it is for insurance companies to prioritise efficient risk management procedures. Insurance businesses can sustain positive underwriting profit by putting these strategies into practice, such as reducing the possibility of claims and guaranteeing that premium costs accurately represent perceived risks. This could therefore increase their overall profitability.

Owusu & Owusu (2023) used a correlational research methodology to investigate how risk management strategies affected the profitability of non-life insurance companies in Ghana. Both primary and secondary data were used in the investigation. A structured questionnaire on risk management procedures (risk identification, risk analysis, risk control, and risk monitoring) was used to collect the primary data. Interviews were conducted with 120 employees of ten (10) non-life insurance companies. The audited annual reports of ten chosen non-life insurance businesses in Ghana provided the secondary data (profit after tax). The Statistical Package for Social Sciences version 25 was used to fit Ordinary Least Squares Regression. The results show that while risk control and risk identification have a negative but statistically insignificant impact on the profitability of Ghanaian non-life insurance companies, risk monitoring as a risk management practice has a positive and statistically significant effect on profitability. The study found, among other things, that risk identification, risk analysis, and risk control have a small but detrimental short-term effect on financial performance. Since risk monitoring was the only risk management strategy that significantly and favourably affected Ghanaian non-life insurance businesses' financial performance, the study advised them to focus more on it. The impact of premium income, investment returns, claim costs, and operating net profit on Sharia Life Insurance Company was investigated by Hissiyah & Meylianingrum (2023). This study takes a descriptive approach using quantitative approaches. The findings demonstrated that net profit was somewhat impacted by investment returns and premium income. On the other hand, operating and claim costs had no discernible impact on net profit. According to the results of the simultaneous test, Net Profit in Sharia life insurance is significantly impacted by Premium Income, Investment Returns, Claim Expenses, and Operating Expenses.

In order to determine how premium income, underwriting ratio, return on investment, and return on equity affect an insurance company's profit, Natalia & Riwayati (2022) conducted a study. This study used a quantitative approach. The general insurance businesses listed on the Indonesia Stock Exchange between 2015 and 2019 comprised the population. Ten insurance companies were chosen for the study's

samples using a purposive sampling method. Secondary data was the sort of data used in this investigation. The documentation approach was used for data collection, and multiple linear regression with a five percent significance threshold was used for data analysis. The analysis's findings demonstrated that: (1) premium income had a positive and significant impact on insurance profit; (2) the underwriting ratio had a positive and significant impact on insurance profit; (3) return on investment had a positive and significant impact on insurance profit; and (4) return on equity had neither a significant nor a negative impact on insurance profit.

Oko-osi and Aroyehun (2024) investigated the connection between Nigerian general insurance companies' profitability and underwriting profit. The study analysed data from Nigerian general insurance providers over a ten-year period, from 2007 to 2018. The study's findings demonstrated a strong and favourable correlation between underwriting profit and profitability.

This implies that when underwriting profit increases, general insurance companies become more profitable.

Previous researchers have examined how underwriting performance affects the profitability of insurance companies (Msomi & Nzama, 2023; Owusu & Owusu, 2023; Oko-osi, & Aroyehun, 2024). While some seemed to focus on how the operating and net profit of insurance companies were impacted by premium income, investment returns, and claim costs (Hissiyah & Meylianingrum, 2023; Natalia & Riwayati, 2022), others examined how the performance of investments in the insurance industry affected economic growth, (Ogamien, Folorunsho, and Oloyede, 2023). Research in this field is inconclusive since the empirical evaluation conducted by earlier researchers revealed conflicting findings regarding the link between the factors. Additionally, taking into account the few studies that explicitly look at the connection between investment growth and underwriting performance in Nigeria's insurance sector. Therefore, the fundamental research theories that have been developed in different ways are: H_{A1} : There is a discernible correlation between premium income and the expansion of investments in Nigeria's insurance sector. H_{A2} : The expansion of investments in Nigeria's insurance sector is significantly correlated with the settlement of claims. H_{A3} : The insurance industry's investment growth in Nigeria is significantly impacted by premium income or claims payments.

3.0 METHODS OF RESEARCH

The ex post facto research design is used in this study. Because the independent variables have already happened, the researcher is unable to change them in an ex post facto research design. Every licensed insurance company in Nigeria is covered by the study. Nigeria is hence the studied area. Secondary sources provided the study's data. Textbooks, journals, magazines, Central Bank of Nigeria (CBN) statistical bulletins, Nigerian Insurance Digest reports, and NAICOM reports from 1995 to 2024 were all included. When gathering data, the desk research method was used. This was due to the secondary sources' easy access to the data. This technique was utilised to collect data on the study's variables.

The population of the study consists of the numerous insurance companies that make up the insurance industry. As of December 31, 2024, there were fifty-eight (58) registered insurance businesses in Nigeria, according to CBN (2024). Thus, the fifty-eight (58) insurance companies that comprised Nigeria's insurance sector served as the study's population. However, since information about them was obtained from the CBN Statistical Bulletin, they were not contacted.

3.1 Model Details

The link between the variables in the study's hypotheses was examined using the multiple linear regression technique. The models for multiple linear regression are described below:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots \dots \dots \beta_n X_n + U_t$$

Where:

y = dependent variable

β_0 = regression constant

$\beta_1 - \beta_n$ = the parameters or the independent variables' coefficients

u_t = the stochastic error term or random variable.

The model above indicates that 'y is a linear function of $X_1, X_2, \dots, X_n$.

$X_1 - X_n$ = independent variables.

The linear equations for testing the research hypotheses are stated below:

$$\text{INSVT} = \beta_0 + \beta_1 \text{PREIN} + \beta_2 \text{INFLR} + \beta_3 \text{INTER} + \beta_4 \text{SIZEI} + u_t \dots \dots \dots (\text{Eqn. 1})$$

$$\text{INSVT} = \beta_0 + \beta_1 \text{CLAPS} + \beta_2 \text{INFLR} + \beta_3 \text{INTER} + \beta_4 \text{SIZEI} + u_t \dots \dots \dots (\text{Eqn. 2})$$

$$\text{INSVT} = \beta_0 + \beta_1 \text{PREIN} + \beta_2 \text{CLAPS} + \beta_3 \text{INFLR} + \beta_4 \text{INTER} + \beta_5 \text{SIZEI} + u_t \dots (\text{Eqn. 3})$$

Where;

INSVT = Insurance investment growth of the insurance industry in Nigeria.

PREIN = Premium income of the insurance industry

CLAPS = Claims payment of the insurance industry

INFLR = Inflation rate

INTER = Interest rate.

SIZEI = Size of insurance industry in Nigeria (log of total assets of the industry).

U_t is the stochastic error term.

β_0 is a regression constant or intercept

$\beta_1 \dots \dots \dots \beta_3$ are the regression coefficients

3.2 Data Analysis Tools

The link between the dependent and independent variables in this study was investigated using a multiple regression model. The link between a single outcome measure and multiple predictor or independent variables is examined using multiple regression analysis. An examination of association known as multiple regression analysis examines the effects of two or more independent variables on a single dependent variable that is either interval-scaled or ratio-scaled. The statistical significance of the independent factors on the dependent variables is ascertained using the t-statistic. The statistical dependability of the estimated result is assessed using the R-squared (R^2) and F-value statistics. The regression equations' explanatory power is evaluated using the R^2 . It evaluates how well the regression line fits the data. The relevance of the entire model is tested using the F-statistic. When testing the null hypothesis (H_0) against the alternative hypothesis (H_A), H_0 is rejected if the computed p-value is below the significance level of 0.05.

4.0 DISCUSSION OF FINDINGS, ANALYSIS, AND PRESENTATION OF DATA

In this section, research hypotheses are tested, data is presented and analysed, and the results are discussed.

4.1 Data Display

The researcher calculated the statistics in this study using raw data from the Nigeria Insurers Digest Reports, NAICOM Report, and Central Bank of Nigeria (CBN) Statistical Bulletins. Below are the summary time series secondary data that were calculated for this investigation.

YEAR	INSVT (N'000)	PREIN (N'000)	CLAPS (N'000)	INFLR (%)	INTER (%)	SIZEI (LOG Total Assets)
1995	12,379.46	13,525.13	1,508.88	29.29	13.5	4.19
1996	12,379.46	11,091.33	1,654.07	29.29	13.5	4.46
1997	13,613.08	10,941.58	1,677.28	10.67	13.5	4.58
1998	15,656.88	11,688.25	1,956.21	7.86	13.5	4.62
1999	21,583.46	14,597.28	5,923.18	6.62	18	4.7
2000	25,192.64	22,531.46	5,629.52	6.94	14	4.79
2001	32,157.27	28,981.29	6,110.52	18.87	20.5	4.89
2002	36,940.87	37,765.89	6,856.15	12.88	16.5	4.93
2003	54,642.84	43,441.81	9,415.20	14.03	15	5.09
2004	74,590.75	50,100.83	12,084.04	15	15	5.15
2005	121,844.22	67,465.56	12,402.40	17.86	13	5.31
2006	216,359.91	81,583.75	76,276.11	8.23	10	5.49
2007	329,247.93	89,104.89	15,843.73	5.39	9.5	5.63
2008	336,491.38	126,470.30	25,864.87	11.58	9.75	5.76
2009	343,894.19	153,127.12	49,498.93	12.54	6	5.77
2010	351,459.87	157,336.81	37,589.56	13.7	6.25	5.77
2011	359,191.98	175,756.75	39,389.16	10.8	12	5.79
2012	545,394.00	217,748,008	52,641,686	12.2	12	2.77
2013	12,603,133.00	252,138,077	73,162,280	8.5	12	2.67
2014	24,304,874.00	267,835,305	92,951,094	8.05	13	2.84
2015	33,438,665.00	293,543,959	87,007,805	9.01	11	2.9
2016	33,477,682.00	312,555,063	105,217,232	15.7	14	3
2017	52,584,810.00	315,975,938	119,632,518	16.5	14	3.07
2018	101,699,586.00	365,057,394	142,830,122	12.1	14	3.1
2019	66,237,684.00	413,847,374	192,109,423	11.4	13.5	3.21
2020	79,850,866.00	490,800,765	185,907,724	13.25	11.5	3.3
2021	86,826,276.00	508,439,534	224,034,140	16.95	11.5	3.33
2022	98,648,986.00	514,587.85	247,234.93	18.85	16.5	3.37
2023	73,716,573.00	631,415.72	323,804.65	24.66	18.75	3.43
2024	82,454,687.00	789,648.75	348,424.53	34.8	18.75	3.54

Sources: Central Bank of Nigeria Statistical Bulletin, NAICOM reports, and Nigeria Insurance Digest Publication Reports of various issues

4.2 Analysis of Data

The variables' dataset is examined in accordance with the goals of the study.

4.2.1 Descriptive Statistics

Table 4.1: Descriptive Statistics

	INSVT	PREIN	CLAPS	INFLR	INTER	SIZEI
Mean	2.4958228	1.15E+08	4.2557439	14.45067	13.33333	4.248333
Median	3.476770	155232.0	44444.05	12.71000	13.50000	4.520000
Maximum	1.02E+08	5.08E+08	2.24E+08	34.80000	20.50000	5.790000
Minimum	12379.46	10941.58	1508.880	5.390000	6.000000	2.670000
Std. Dev.	3.6044478	1.74E+08	6.8843255	7.128264	3.320089	1.091810
Skewness	1.030987	1.039690	1.364083	1.284228	-0.057317	0.009202
Kurtosis	2.426324	2.528910	3.550066	4.169186	3.237224	1.478313
Jarque-Bera	5.726055	5.682187	9.681829	9.954957	0.086770	2.894839
Probability	0.057096	0.058362	0.007900	0.006891	0.957543	0.235176
Sum	7.49E+08	3.44E+09	1.28E+09	433.5200	400.0000	127.4500
Sum Sq. Dev.	3.77E+16	8.76E+17	1.37E+17	1473.552	319.6667	34.56942
Observations	30	30	30	30	30	30

According to the findings of the descriptive statistics analysis, which are displayed in Table 4.1, the variables' mean and standard deviation values were both low. This suggests that the variables' data values are generally low. This suggests that there were little differences in the variables' data values

since they were near to the mean. The asymmetry of the data distribution is measured by skewness. All of the variables, with the exception of interest rate, have positive skewness, which indicates that the dataset of the variables is skewed to the right, whereas INTER has negative skewness, which indicates that the dataset of the variable is skewed to the left, as Table 4.1 illustrates. Additionally, kurtosis quantifies how tailed the dataset distribution is. All of the variables in Table 4.1 have low kurtosis values, which suggests that the dataset containing those variables has light tails.

4.3 Tests of Research Hypotheses

4.3.1 First Hypothesis

H_{A1}: The increase of investments in Nigeria's insurance sector is significantly correlated with premium income.

Table 4.2: Regression Output for Hypothesis One

Dependent Variable: LOG(INSVT)

Method: Least Squares

Date: 08/11/25 Time: 01:32

Sample: 1995 2024

Included observations: 30

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4.844278	10.62254	0.456038	0.6523
LOG(PREIN)	0.764476	0.192508	3.971136	0.0005
LOG(INFLR)	1.468113	0.807390	1.818344	0.0810
LOG(INTER)	0.987962	1.686858	0.585682	0.5633
LOG(SIZEI)	1.252001	3.206312	0.390480	0.6995
R-squared	0.753070	Mean dependent var		13.85216
Adjusted R-squared	0.713562	S.D. dependent var		3.460680
S.E. of regression	1.852154	Akaike info criterion		4.221587
Sum squared resid	85.76184	Schwarz criterion		4.455120
Log likelihood	-58.32381	Hannan-Quinn criter.		4.296296
F-statistic	19.06086	Durbin-Watson stat		1.844710
Prob(F-statistic)	0.000000			

Source: E-Views Output, 2025

The null hypothesis was rejected and the alternative hypothesis was accepted because, according to the preceding table, the insurance industry's premium income p-value of 0.0005 was less than the 0.05 significance level. The conclusion is that the expansion of investments in Nigeria's insurance sector is significantly correlated with premium income. The model producing this result appears to be accurate and legitimate based on the f-statistic value (19.06086), which is significant at the 5per cent level. According to the R² value of 0.75, the model accounts for 75per cent of the variation in investment caused by premium income, with variables outside the model accounting for the remaining 25 per cent.

4.3.2 Hypothesis Two

H_{A2}: Claims payment has a significant relationship with the investment growth in the insurance industry in Nigeria.

Table 4.3: Regression Output for hypothesis two

Dependent Variable: LOG(INSVT)

Method: Least Squares

Date: 08/11/25 Time: 01:36

Sample: 1995 2024

Included observations: 30

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Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	6.066184	8.851087	0.685360	0.4994
LOG(CLAPS)	0.786634	0.157024	5.009639	0.0000
LOG(INFLR)	1.562689	0.729208	2.142993	0.0420
LOG(INTER)	1.154954	1.478148	0.781352	0.4419
LOG(SIZEI)	2.131707	2.763885	0.771272	0.4478
R-squared	0.799042	Mean dependent var		13.85216
Adjusted R-squared	0.766888	S.D. dependent var		3.460680
S.E. of regression	1.670873	Akaike info criterion		4.015581
Sum squared resid	69.79539	Schwarz criterion		4.249114
Log likelihood	-55.23372	Hannan-Quinn criter.		4.090290
F-statistic	24.85099	Durbin-Watson stat		1.041725
Prob(F-statistic)	0.000000			

Source: E-Views Output (2025)

According to the above table, the alternative hypothesis was accepted and the null hypothesis was rejected because the p-value of 0.0000 for insurance sector claims payment was less than the 0.05 significance level. The conclusion is that the expansion of investments in Nigeria's insurance sector is significantly correlated with the settlement of claims. The model producing this result appears to be accurate and valid based on the f-statistic value (24.85099), which is significant at the 5per cent level. The model explains 79 per cent of the variation in investment, which is explained by claims payment, according to the R^2 value of 0.79. The remaining 21per cent of the variation is explained by factors not included in the model.

4.3.3 Hypothesis Three

H_{A3}: Premium income and claims payment have a jointly significant effects on the investment growth of the insurance industry in Nigeria.

Table 4.4: Regression Output for hypothesis three

Dependent Variable: LOG(INSVT)
Method: Least Squares
Date: 08/11/25 Time: 01:38
Sample: 1995 2024
Included observations: 30

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	6.223986	8.888050	0.700264	0.4905
LOG(PREIN)	2.195603	0.763942	2.874042	0.0084
LOG(CLAPS)	2.731677	0.690735	3.954740	0.0006
LOG(INFLR)	1.601004	0.642070	2.493503	0.0199
LOG(INTER)	-0.014899	1.363411	-0.010928	0.9914
LOG(SIZEI)	-0.304792	2.576546	-0.118295	0.9068
R-squared	0.850497	Mean dependent var		13.85216
Adjusted R-squared	0.819350	S.D. dependent var		3.460680
S.E. of regression	1.470891	Akaike info criterion		3.786470
Sum squared resid	51.92447	Schwarz criterion		4.066709
Log likelihood	-50.79705	Hannan-Quinn criter.		3.876121
F-statistic	27.30629	Durbin-Watson stat		1.908011
Prob(F-statistic)	0.000000			

Source: E-Views Output (2025)

According to the above table, the alternative hypothesis was accepted and the null hypothesis was rejected since the p-values for premium income and claims payment, respectively, were less than the 0.05 significance level (0.0084 and 0.0006). The results show that the growth of investments in Nigeria's insurance sector is significantly impacted by both premium income and claims payments. The model yielding this result appears to be accurate and valid based on the f-stat value (27.30629), which is significant at the 5per cent level. The model explains 85% of the variance in investment caused by both premium revenue and claims payment, according to the R^2 value of 0.85. The remaining 15per cent of the variation is explained by factors not included in the model.

4.4 Analysis of the Results

The first hypothesis was tested, and the results in Table 4.2 showed that premium income and the growth of investments in Nigeria's insurance sector are significantly correlated. Premium income and investment are positively correlated, according to the regression coefficient value of 0.764476. These results support Hissiyah & Meylianingrum's (2023) conclusion that premium significantly affects net profit. The results further support Natalia & Riwayati's (2022) conclusion that premium income significantly increased insurance profit. The results in Table 4.3 showed that the growth of investments in Nigeria's insurance sector is significantly correlated with the settlement of claims. Investment growth and claims payment are positively correlated, according to the regression coefficient value of 0.786634. This result supports the conclusion made by Osasona, Isimoya, and Fadun (2025) that underwriting and claims management procedures have a strong positive correlation. The results for hypothesis three in Table 4.4 demonstrated that the insurance industry's investment growth in Nigeria is significantly impacted by both premium income and claims payments. This result is consistent with that of Hissiyah & Meylianingrum (2023), who found that the growth of investments is significantly impacted by both premium revenue and claims payment.

5.0 RECOMMENDATIONS, SUMMARY, AND CONCLUSION

The researcher looks at the finding's summary, the conclusion, and the suggestions in this part.

5.1 Synopsis of the Results

The following is a summary of the study's findings:

1. The increase of investments in Nigeria's insurance sector is significantly correlated with premium income.
2. The increase of investments in Nigeria's insurance sector is significantly correlated with the settlement of claims.
3. The expansion of investments in Nigeria's insurance sector is significantly influenced by both premium income and claims payments.

5.2 Conclusions

The study looked at the connection between Nigeria's insurance industry's investment growth and underwriting performance. It was discovered that the rise of investments in Nigeria's insurance sector is significantly correlated with premium income. Another study revealed a strong correlation between the rise of investments in Nigeria's insurance sector and the settlement of claims. Additional findings showed that the insurance industry's investment growth in Nigeria is significantly impacted by both premium income and claims payments. The aforementioned results lead to the conclusion that underwriting performance and investment growth in Nigeria's insurance sector are significantly correlated.

5.3 Recommendations

The following recommendations are offered in light of the study's findings:

1. To ensure that insurance companies maintain high standards in premium income generation and claims payment, Nigeria's insurance industry needs to strengthen its regulatory framework. This can be done by implementing stricter guidelines and monitoring mechanisms to support industry growth and stability.

2. In order to reduce claims payments and enhance investment growth, insurance companies should be encouraged to have strong risk management and underwriting procedures.
3. Policies that encourage insurance companies to participate in profitable and sustainable projects must be developed in order to promote investment opportunities, while also making sure that investments are in line with the industry's risk management goals.

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