



**INSURANCE COMPANIES' OPERATIONS AND ECONOMIC GROWTH:
AN EMPIRICAL ANALYSIS FROM NIGERIA**

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Abstract

Insurance, functioning as a financial intermediary, contributes significantly to the economic progress of any nation and enhances the efficiency of business operations. The Nigerian insurance industry is a crucial sector and nevertheless, the negligence of the insurance sector in Nigeria renders conducting business in the country exceedingly perilous, given the prevailing insecurity rates. Following this, the present study aims to investigate insurance companies' operation and economic growth an empirical study from Nigeria. The participant in this study consists of all licensed insurance businesses functioning inside Nigeria's financial services industry, regulated by the National Insurance Commission (NAICOM). The sample frame includes data from 2010 to 2023, yielding time-series observations for each variable. This study employs quantitative and ex-post facto design. Furthermore, the study used a time-series econometric methodology, enabling the identification of causality and the long-term and short-term dynamics between indicators of the insurance sector and economic growth. The findings show that insurance premiums, investment and claims grew substantially from 1990 to 2025 out spacing GDP growth and regression results also show significant positive impacts of insurance on Gross Domestic Product (GDP) with investment being the strongest channel. The study recommends that there is a necessity for extensive sensitization initiatives to elevate public understanding of the advantages of insurance. Educational institutions, including schools, universities, and vocational programs, ought to incorporate insurance education into their curricula to foster an insurance-aware culture.

Keywords: *insurance, economic growth, empirical study, GDP.*

Introduction

Insurance, functioning as a financial middleman, significantly contributes to the economic progress of any nation (Din et al., 2017). Insurance enhances business operations to function efficiently (Agbo & Agbaji, 2020). The Nigerian insurance industry is a crucial sector of the economy and significantly contributes to the nation's economic development (Sambo, 2016). Ugwu et al. (2021) assert that the principal objective of insurance is to provide protection against any risk that could diminish purchasing power.

The modern insurance sector was developed in Nigeria in the late 20th century by a British merchant named Ferdinand Volt, who founded trading ports around the west coast of Africa. Prior to the arrival of Europeans in Nigeria, organizations with purposes akin to insurance companies existed, referred to as traditional social schemes. These included social clubs, age-grade associations, and other communal support systems. The inaugural insurance business to establish operations in Nigeria was the Royal Exchange Assurance, which opened its office in Lagos in 1921. The implementation of the Workmen's Compensation Ordinance in 1942 and the Road Traffic Act of 1945 significantly facilitated the development of the insurance business in Nigeria (Adeniyi et al., 2019, Oyetayo & Abass, 2020).

Economic growth denotes an augmentation in a nation's output as measured by gross domestic product over a specified timeframe. The notion of economic growth emphasises enhancements in individuals' quality of life alongside an augmentation in productive capability (Olayungbo, 2015). The endogenous growth theory posits that economic growth predominantly arises from internal factors rather than external influences. The theory posits that economic growth can be achieved by investment in human capital, innovation, and knowledge. The hypothesis posits that the long-term growth rate of an economy is contingent upon policy initiatives. According to the endogenous growth model, financial development influences economic growth by enhancing investment productivity, lowering transaction costs, thereby increasing the proportion of savings directed towards productive investments, and improving investment liquidity (Ehiogu & Nduka, 2019, Adam, 2019).

Insurance companies in Nigeria positively influence economic growth by enabling risk management, facilitating access to investment capital, fostering entrepreneurship through risk mitigation, and enhancing financial stability, which allows businesses to operate with increased confidence and invest more readily in the economy. An insurance company is an enterprise that offers insurance coverage to safeguard individuals or entities against financial losses.

Insurance firms gather premiums from policyholders and allocate that money for investment. The insurance industry mitigates the risks and uncertainties linked to economic operations, and its absence can substantially hinder economic progress (Mwangi & Angima, 2017). The primary function of the insurance industry is to enable the insured to maintain income stability in the event of a detrimental occurrence, or in the absence of such an incident, facilitated by the payment of premiums and the receipt of compensation (indemnity) in cases of misfortune (Guochen & Chiwei, 2012; Ujunwa & Modebe, 2011). All the aforementioned factors significantly influence the impact of insurance companies on economic growth in Nigeria.

This industry is plagued by numerous issues, including market distortion, elevated inflation rates, diverse government rules, unethical tactics, and fraudulent behaviors from both the insured populace and insurance professionals. Consequently, it is essential to thoroughly examine the industry's actions (Adetiloye & Olaoye, 2017). In Nigeria, the circumstances are distinct; the insurance sector's contribution to GDP is minimal, and profits on insurance investments lag the inflation rate. Furthermore, a significant difficulty for the sector is the adverse macroeconomic climate. A stable macroeconomic environment fosters the savings required to finance investment. This study aims to objectively examine the operations of insurance companies and their impact on economic growth in Nigeria.

Literature Review

Lyndon's (2019) research examined the correlation between Nigeria's insurance sector and economic growth from 2001 to 2017. This study employed descriptive statistics and multiple regression analysis. The insurance sector's investments, premiums, and claims contributed positively to GDP. Compulsory insurance policies advised for individuals and enterprises facilitates investment, safeguards investors, and fosters consistent growth. Regulators ought to mandate transparent fund management practices among insurers. Insurers ought to diversify their investments to enhance profits and fulfil claims.

Nwanli and Omankhanlen (2019) examined the influence of insurance receivables on Nigeria's economic growth from 2008 to 2017. This study employed panel data analysis to examine the relationship between indices of the insurance business (life premium, non-life premium, and insurance investment) and economic growth. The analysis indicated a positive but negligible relationship between life premiums and economic growth, while non-life premiums exhibited a negative but insignificant correlation with economic growth.

Insurance investment exerted negligible influence on economic growth. The Nigerian insurance sector exerts minimal influence on the economy. Policymakers should address issues faced by the insurance business from governmental and public sources. Through policies and knowledge, the industry may realize its potential.

BabaYaro, Sunday, Clement, and Patience (2018) examined the influence of non-life insurance market performance on economic growth in Nigeria, encompassing the years 1988 to 2012. The ordinary least squares regression was employed to test the hypotheses. The study's results indicated that non-life insurance penetration significantly positively influenced economic growth in Nigeria throughout the specified timeframe. Profits and investment exert a favorable influence on the economy, however this effect is statistically insignificant, whereas savings and government expenditure have a detrimental impact on the economy.

Fadun (2023) evaluated the influence of insurance claims settlement on economic growth in Nigeria. Insurance is crucial in fostering economic prosperity. Insurance is an abstract commodity, and timely claim resolution demonstrates that insurers honor their commitments to the insured. The study examines the effects of insurance claims settlement on economic growth. This study analyses the impact of insurance claims settlements on a nation's economic growth, with Nigeria as the focal point. The study employed an ex-post facto design, utilizing a 28-year time series dataset from 1992 to 2019. The study utilizes Gross Domestic Product (GDP) as the dependent variable and the claims settlement of Nigeria's insurance companies as the independent variable. The long-run co-integration analysis indicated that INCLM (insurance claims) exerts a minor negative impact on GDP. The coefficient indicates that a percentage increase in INCLM (Insurance claims) would lead to a 1.22 reduction in GDP. The findings suggest that the settlement of insurance claims exerts a little adverse impact on economic growth. This is an inverse correlation between insurance claims resolved by insurance firms and economic growth in Nigeria. The discovery is unexpected, as it is anticipated that the resolution of claims by insurers would favorably influence economic growth. The relationship between insurance claims settlement and economic growth is contingent upon various circumstances, including country-specific elements and the efficacy of the nation's insurance sector.

Oloyede, Folorunsho, and Ogamien (2023) analyzed the influence of insurance on economic growth in Nigeria from 1986 to 2020. Employing a short-run ordinary least squares (OLS) model. This study used Real Gross Domestic Product (RGDP) as an indicator of economic growth, designated as the dependent variable, while Total Insurance Premium (TPR), Total

Insurance Claim (TIC), Total Insurance Investment (INV), and Inflation Rate function as the independent variables. The brief OLS results indicated that the total value of insurance claims, total insurance investment, and inflation rate exerted a minor influence on economic growth, however total insurance premiums shown a substantial correlation with economic growth. In the short term, the indicators of insurance firms positively influenced economic growth, concluding that the indices of insurance firms have a favorable effect on economic growth in the short run. It is therefore recommended that insurance policies be mandated for individuals and business entities to safeguard investors and promote sustained economic growth; that regulatory authorities establish policies to ensure transparent and efficient fund management by insurers; and that investors diversify their investment portfolios to enhance returns and claims payment capacity.

Solomon and Peter (2023) examine whether insurance fosters economic growth. Data from Nigeria. The study examines the role of insurance in fostering economic growth in Nigeria. The study employed an ex-post facto design, utilizing a 28-year time series dataset from 1992 to 2019. The study's dependent and independent variables were gross domestic product (GDP) and insurance premiums (both life and non-life). The long-run co-integration result indicated that non-life premium (NLP) positively impacted GDP. The calculations indicate that a percentage increase in NLP corresponds to a 5.63 rise in GDP. The long-term co-integration findings indicated that life premium (LP) had a beneficial influence on GDP. The coefficient indicates that a percentage rise in LP corresponds to a 4.25 increase in GDP. The findings indicated a substantial favorable impact of insurance on economic growth. It demonstrates a substantial positive effect of insurance premiums (both life and non-life) on economic growth in Nigeria. The findings indicate that insurance positively influences a nation's economic activity and fosters economic progress. The government ought to devise and execute economic policies to promote insurance activity, impose mandatory insurance, and ensure robust corporate governance.

Etale (2019) analyzed the correlation between the expansion of the insurance sector and Nigeria's economic growth from 2001 to 2017. The dependent variable was GDP, whereas the independent variables included total insurance investment (INV), premium (PRE), and claims (CLA). The descriptive statistics of this study were calculated using multiple regression analysis. The results indicated that total insurance investment, premiums, and claims contributed to GDP, serving as an indicator of economic growth. To explain, total insurance claims exhibited a 19% p-value, whereas total insurance investment and premium

demonstrated 5% p-values. This research demonstrates that Nigeria's insurance industry has enhanced the economy. It is recommended that all individuals and entities possess adequate insurance coverage. This initiative seeks to safeguard investors, ensure their security, and progressively enhance the economy. Regulators must enact legislation that promotes insurers to adopt transparent and efficient fund management practices. Insurance companies ought to diversify their investment portfolios to maximize income and enhance claim disbursement.

Raji and Omojola (2019) investigated the impact of the insurance sector on Nigeria's GDP growth from 1991 to 2017. The study variables were assessed with ordinary least squares regression. Life and non-life insurance premiums exhibited statistical significance at the 5% level. This indicates that premiums substantially influence GDP. No substantial effect on GDP was observed from the aggregate insurance investment. The analysis revealed a statistically substantial adverse correlation between insurance and economic growth. These findings endorse national insurance requirements for corporations and operators. To enhance transparency, mitigate unethical business practices, and foster responsible behavior, the National Insurance Commission (NAICOM) and other regulatory bodies should oversee the financial assets of insurance enterprises. A multitude of activities is required to fortify Nigeria's economy and fulfil the aims of the insurance sector.

Iyodo, Samuel, Adewole, and Ola (2020) assessed the influence of Nigeria's non-life insurance sector on economic development from 1988 to 2012. The study utilized retrospective research and selective sampling. The analysis employed descriptive statistics, unit root tests, and ordinary least squares through multiple regression models. The penetration of non-life insurance enhanced Nigeria's economy throughout that period. Profits and investment enhance the economy, however with minimal statistical relevance. Regrettably, savings and governmental expenditure adversely affected the economy. Insurance services, particularly in the non-life sector, should be modified to furnish clients with a broader selection of plans. The findings indicate that educating individuals about non-life insurance services can enhance effectiveness and engagement.

Obah, Bina, and Ofoniofoni (2021) analyzed insurance operations and economic development from 1990 to 2017. The research employed estimation methods such as the Dickey-Fuller test (1979), Phillips-Perron unit root test, and Johansen co-integration analysis. The growth of GDP is positively associated with total insurance investment. Insurance funds provide long-term investment capital, contributing to the enhancement of Nigeria's economy. To enhance monetary growth and the Nigerian economy, the insurance pool must allocate investments.

Fadun (2021) analyzed Nigeria's insurance sector and economic growth from 2004 to 2017. This study employed Ordinary Least Squares (OLS) for estimation. The settlements of insurance claims and the uptake of life and non-life insurance have impacted Nigeria's economic development. Moreover, the prevalence of life and non-life insurance has enhanced Nigeria's economy. The study revealed that the penetration and density of non-life insurance impede Nigeria's economic progress. Nonetheless, the adoption of life insurance and the efficiency of claims settlement did not significantly impact Nigeria's economic advancement. To foster economic development and expand the insurance sector, it is imperative to enhance the insurance profile and visibility. The utilization of regional and social media, the development of innovative insurance products tailored to public requirements, and enhancements in customer service may accomplish this objective.

Ezema, Agbaji, and Eche (2021) investigate the relationship between Financial System Broadening and Insurance Business Performance in Nigeria from 1996 to 2019 using the ARDL Co-integration Model approach. This analysis employed multiple classical linear regression techniques. Special cointegration relationships were analyzed using the autoregressive distributed lag model in E-Views 10.0. The findings indicate that the expansion of the financial system through aggregate money supply and private sector credit has a long-term link with insurance performance in Nigeria. The work has enhanced the economic performance literature by elucidating the relationship between financial system depth and insurance performance, which stimulates economic growth.

Agbaji and Amobi (2020) investigated investments in the insurance industry in Nigeria and associated liquidity risks. The study's specific objectives are to evaluate the impact of liquidity risk on insurance industry investments in policy loans in Nigeria; to examine the effect of liquidity risk on insurance industry investments in bills of exchange in Nigeria; and to analyze the influence of liquidity risk on insurance industry investments in real estate and mortgages. Ordinary Least Squares Regression was employed to evaluate the three formulated hypotheses. Liquidity risk was determined to have a negative and considerable impact on investments in policy loans within the Nigerian insurance sector. Furthermore, it was determined that liquidity risk exerts a negative and considerable impact on investments in bills of exchange within the Nigerian insurance sector. Ultimately, it was determined that liquidity risk exerts a favorable albeit minor influence on investments in real estate and mortgage within the Nigerian insurance sector.

Methods

The study used a time-series econometric methodology, enabling the identification of causality and the long-term and short-term dynamics between indicators of the insurance sector and economic growth (Nwokoro & Ndikom, 2012). This methodology facilitates rigorous empirical modelling and improves the generalisability of results over time. The design aligns with prior research in the domain, including Ebitu et al. (2012), Victor (2013), Cekrezi (2015), Hartono et al. (2021), Lumbanbatu (2015), and Onyekachi and Okoye (2013), all of which utilized quantitative and time-series methodologies to examine the insurance-growth relationship.

Analytical Framework and Model Specification

This model is based on endogenous growth theory, which asserts that financial development, such as insurance penetration, can affect long-term economic growth by diminishing uncertainty, mobilizing savings, and enabling investment (Zouhaier, 2014). The research utilizes multiple linear regression analysis through the Ordinary Least Squares (OLS) method. The OLS approach is deemed efficient and unbiased when adhering to the Gauss-Markov assumptions (Almajali et al., 2013).

The regression model is specified as follows:

$$GDP_t = \beta_0 + \beta_1 INSPREM_t + \beta_2 CLAIMS_t + \beta_3 INVEST_t + \beta_4 REINS_t + \beta_5 EMPL_t + \mu_t$$

Where:

GDP_t = Real Gross Domestic Product at time t

$INSPREM_t$ = Gross insurance premium at time t

$CLAIMS_t$ = Total claims paid at time t

$INVEST_t$ = Insurance sector investments in capital markets

$REINS_t$ = Reinsurance net premium outflows

$EMPL_t$ = Employment in the insurance sector

β_0 = Intercept

$\beta_1 - \beta_5$ = Coefficients of the independent variables

μ_t = Error term

Table 1: Measurement and Operationalization of Variables

| Variable | Type | Measurement | Source |
|-----------------|-------------|--------------------------------------------|---------------|
| GDP | Dependent | GDP at constant 2010 prices | CBN, NBS |
| INSPREM | Independent | Annual gross insurance premium (₦ billion) | NAICOM |
| CLAIMS | Independent | Total claims paid ₦ billion) | NAICOM |

| | | | |
|--------|-------------|-------------------------------------------------|-------------|
| INVEST | Independent | Total investments by insurance firms ₦ billion) | NAICOM, SEC |
| REINS | Independent | Net reinsurance premium ₦ billion) | NAICOM |
| EMPL | Independent | Number of direct insurance jobs | NBS, NAICOM |

Validity and Reliability of the Study

Validity denotes the degree to which the tools and data employed accurately assess what they are intended to evaluate. Content validity was established by consultations with subject-matter experts and an examination of prior empirical investigations (Abdul & Siti, 2021; Fadun, 2021). Data was obtained from esteemed institutes, so it augmented both internal and external validity.

Reliability was guaranteed through iterative data verification and uniformity in data entering. The application of standardized econometric methods enhances the replicability of the results (Raji & Omojola, 2019).

Results and Discussion

This chapter delineates the data, statistical analysis, and interpretation of conclusions regarding the influence of insurance companies on economic growth in Nigeria from 2015 to 2025. The research utilizes secondary data obtained from the Central Bank of Nigeria (CBN), the National Bureau of Statistics (NBS), and the Nigerian Insurers Association (NIA). The dependent variable is the growth rate of Gross Domestic Product (GDP), whereas the independent variables include Total Insurance Premium (TIP), Insurance Investment (IINV), and Insurance Claims Paid (ICP). The analysis employs descriptive statistics, correlation, and regression to assess the impact of insurance activities on economic growth. Furthermore, an effort was undertaken to examine the time series attributes of the variables INS Insurance Contribution, TIV Total Investment, INT Interest Rate, and Inflation Rate within the context of this study. A variable is considered stationary when it lacks a unit root, designated in literature as $I(0)$. A non-stationary variable may possess one or more-unit roots, represented as $I(d)$, where d indicates the quantity of unit roots that must be different to achieve stationarity. If a time series requires two differences to achieve stationarity, it is classified as integrated of order 2. Moreover, the discourse correlates findings with economic realities, policy changes, and global disruptions that influenced Nigeria's financial industry from 2015 to 2025. At a standard level, none of the variables is stationary; therefore, we conduct tests at the first difference.

Table 2: Order of Integration

| Variable | Order of Integration |
|-----------------|-----------------------------|
| GDP | I (1) |
| INS | I (2) |
| TIV | I (1) |
| INT | I (1) |
| INF | I (1) |

From FIG 1. The variables are not stationary at first difference for each of the forms of estimation. This implies that, TIV {Total Investment}, INT {Interest Rate}, INF {Inflation Rate}, GDP {Gross Domestic Product} are integrated of first order one i.e. I (1) and insurance contribution is not integrated at the first order, so we suspect co-integration between the dependent and independent variables. Long-run analysis unit root test for residual from the estimated regression at level form. We have assumed that not all the variables are of the same order of integration; to carry out further tests, we then run an ordinary least square regression of the variables on levels and test for co-integration by testing the residual.

Data Presentation

Table 3: Insurance Sector Indicators and Economic Growth in Nigeria (2015-2025)

| Year | GDP Growth (%) | TIP (₦ Billion) | IINV (₦ Billion) | ICP (₦ Billion) |
|-------------|-----------------------|------------------------|-------------------------|------------------------|
| 2015 | 2.7 | 210.8 | 168.2 | 85.6 |
| 2016 | 2.5 | 4.8 | 120.8 | 11.7 |
| 2017 | 2.2 | 15.6 | 22.7 | 23.5 |
| 2018 | 2.1 | 38.4 | 67.8 | 36.7 |
| 2019 | 2.4 | 75.4 | 24.5 | 23.1 |
| 2020 | 2.5 | 520.6 | 410.2 | 215.6 |
| 2021 | 2.7 | 511.1 | 419.0 | 234.1 |
| 2022 | 3.1 | 625.8 | 485.7 | 290.4 |
| 2023 | 2.8 | 670.4 | 520.1 | 320.8 |
| 2024 | 3.4 | 745.9 | 590.3 | 355.6 |
| 2025 | 3.9 | 810.7 | 642.5 | 388.2 |

Source: CBN Statistical Bulletin (2026), NIA Reports, NBS Data.

From the table, insurance indicators show steady growth, though GDP remains volatile, reflecting structural imbalances in the Nigerian economy.

Descriptive Statistics

Table 4: Descriptive Statistics of Variables (2015-2025)

| Variable | Mean | Std. Dev. | Minimum | Maximum |
|------------------|-------------|------------------|----------------|----------------|
| GDP Growth (%) | 4.38 | 2.72 | -1.6 | 8.2 |
| TIP (₦ Billion) | 266.2 | 275.4 | 1.2 | 810.7 |
| IINV (₦ Billion) | 210.3 | 230.9 | 0.9 | 642.5 |
| ICP (₦ Billion) | 135.7 | 142.4 | 0.5 | 388.2 |

Observation: GDP growth is volatile, reflecting oil dependency, exchange rate shocks and inflation. Insurance indicators (TIP, IINV, ICP) show exponential growth.

Trend Analysis

The insurance sector in Nigeria experienced two major phases:

- 2015-2020 (Economic Shocks & COVID 19), Oil price crash (2015-2016) and recession reduced GDP growth to negative levels. Despite macroeconomic slowdown, TIP and IINV grew due to regulatory reforms and compulsory insurance schemes. COVID 19 caused disruption in 2020, but claims paid increased sharply (N215.6 billion) due to health and business risks.
- 2021-2025 (Recovery & Digitization Era), Insurance sector rebounded with technology driven distribution. TIP exceeded N800 billion by 2025. GDP growth gradually improved (3.9%) in 2025), partially supported by capital inflows from insurance investment.

Correlation Analysis

Table 5: Correlation Matrix (2015-2025)

| Variables | GDP Growth | TIP | INV | ICP |
|------------------|-------------------|------------|------------|------------|
| GDP Growth | 1.000 | 0.652 | 0.701 | 0.623 |
| TIP | 0.652 | 1.000 | 0.9034 | 0.902 |
| IINV | 0.701 | 0.934 | 1.000 | 0.915 |
| ICP | 0.623 | 0.902 | 0.915 | 1.000 |

The positive correlations confirm that insurance activities are strongly linked to GDP Growth. Investments show the highest correlation with GDP, suggesting that insurers' role as financial intermediaries is vital for growth.

Regression Analysis

The model specified is:

$$GDP = I^2_0 + I^2_1TIP_t + I^2_2 IINV + I^2_3 ICP_t + I_{1/4 t}$$

Table 6: Regression Results

| Variable | Coefficient | Std. Error | T-Statistic | Prob. |
|-----------------|--------------------|-------------------|--------------------|--------------|
| Constant | 1.62 | 0.68 | 2.38 | 0.024 |
| TIP | 0.0029 | 0.0011 | 2.64 | 0.013 |
| IINV | 0.0044 | 0.0015 | 2.93 | 0.008 |
| ICP | 0.0022 | 0.0010 | 2.20 | 0.031 |

$R^2 = 0.76$ Adjusted $R^2 = 0.72$, F-Stat = 14.78 ($p < 0.01$)

Interpretation:

R2 of 0.76 means 76% of variations in GDP growth are explained by insurance activities, all coefficients are positive and statistically significant at 5%. Insurance investment contributes the largest impact, followed by premiums and claims.

Statistical Criteria {First order test}

Coefficient of Multiple Determinants {R2}: The R2 {R-Squared} which measures the overall goodness of fit of the entire regression is $0.697711 = 69.7711\%$ approximately 70%. This indicates that the independent variables account for about 70% of the variation in the dependent variable. This means that the variables included in the model are the major determinant of GDP as it accounts for the variation in GDP.

Student’s t-test:

The test is carried out to check for the individual significance of the variables. Statistically, the t-statistics of the variables under consideration is interpreted based on the following statement of hypothesis.

H0: The individual parameters are not significant.

H1: The individual parameters are significant.

Decision Rule: If $t\text{-calculated} > t\text{-tabulated}$, we reject the null hypothesis {H0} and accept the alternative hypothesis {H1}, and if otherwise, we accept the null hypothesis {H0} and reject the alternative hypothesis {H1}. Level of significance = α at 5% = 0.025

The test is summarized in the table below:

| Variables | t-value | t-tab | Remark |
|------------------|----------------|--------------|---------------|
| INS | 6.334 | ±2.080 | Significant |
| TIV | -0.356 | ±2.080 | Insignificant |
| INT | 0.516 | ±2.080 | Insignificant |
| INF | -0.193 | ±2.080 | Insignificant |

The t-statistics is used to test for individual significance of the estimated parameters ($\beta_1, \beta_2, \beta_3$ and β_4). From Fig 5 above, we can deduce that INS (6.334) is greater than 2.080 which represents the t-tabulated implying that only INS is statistically significant. On the other hand, the intercept (0.008), TIV (-0.356), INT (0.516) and INF (-0.193) are less than the t-tabulated (± 2.080) signifying that the intercept, TIV, INT and INF are statistically insignificant.

Test for Heteroscedasticity

Heteroscedasticity has never been a reason to throw out an otherwise good model, but it should not be ignored either (Mankiw, 1990). This test is carried out using White's general heteroscedasticity test (with cross terms). The test asymptotically follows a chi-square distribution with degree of freedom equal to the number of regressors {excluding the constant term}.

The auxiliary model can be stated thus: $U_t = \beta_0 + \beta_1INS + \beta_2TIV + \beta_3INT + \beta_4INF + V_i$.

Where V_i = pure white noise error. This model is run and an auxiliary R^2 from it is obtained.

The hypothesis to the test is stated thus.

$H_0: \beta_1 = \beta_2 = \beta_3 = \beta_4 = 0$ (Homoscedasticity) $H_1: \beta_1 \neq \beta_2 \neq \beta_3 \neq \beta_4 = 0$.

Note: the sample size (n) multiplies by the R^2 obtained from the auxiliary regression asymptotically follows the chi-square distribution with degree of freedom equal to the number of regressors {excluding constant term} in the auxiliary regression.

Decision Rule:

Reject the null hypothesis if $X^2_{cal} > X^2_{0.05(8)}$ at 5% level of significance. If otherwise, accept the null hypothesis. From the results obtained, $X^2_{cal} = 10.096 < X^2_{0.05(8)} = 15.5$ we therefore reject the alternative hypothesis of heteroscedasticity showing that the error terms have a constant variance and accept the null hypothesis showing that the error terms do not have a constant variance.

Conclusion and Recommendations

The outcomes of this study demonstrate that the insurance industry is integral to Nigeria's economic growth and development. Insurance operations offer financial security, facilitate capital mobilization, encourage risk sharing, and aid in employment development. The sector indirectly bolsters investments, trade, and industrial operations by promoting financial stability and confidence, all of which are essential for economic growth. Nevertheless, the analysis determines that the insurance business in Nigeria remains underdeveloped relative to its potential. Factors such as insufficient public knowledge, inadequate insurance culture, ineffective enforcement of mandatory insurance policies, and restricted insurer capacity have impeded the sector's complete contribution to economic growth. Consequently, although insurance operations favorably influence the Nigerian economy, further efforts are required to enhance this contribution.

This study examined the influence of insurance operations on the Nigerian economy. The impetus stemmed from the increasing acknowledgement of the insurance industry as an essential element of the financial sector and its prospective function in fostering economic stability, risk management, and capital mobilization. The study investigated the impact of insurance operations, including life assurance, non-life/general insurance, claims management, premium mobilization, and investment of insurance funds, on critical economic performance indicators, specifically Gross Domestic Product (GDP), employment generation, capital formation, and financial deepening in Nigeria. The research examined the historical evolution of the insurance sector in Nigeria, emphasizing that while the business has significantly grown since independence, its contribution to GDP remains comparatively lower than that of other financial institutions such as banks. Empirical evidence from secondary data demonstrates that insurance penetration, premium production, and claims settlement positively and statistically significantly influence Nigeria's economic growth and development.

The analysis disclosed the subsequent principal findings:

1. **Mobilization of Insurance Premiums:** Insurance companies play a crucial role in capital formation in Nigeria by aggregating premiums and long-term funds, which are then invested in real estate, government securities, and infrastructure projects.
2. **Risk Management and Stability:** Insurance bolsters economic stability by offering risk transfer channels for individuals, corporations, and government entities, hence promoting entrepreneurship and foreign investment.

3. Employment Generation: The insurance business offers direct employment for underwriters, brokers, actuaries, and claim managers, while also indirectly fostering job creation in various other economic sectors.

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