

# An Assessment of the Impact of Insurance Investment on Nigeria's Economic Growth

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This paper is titled "An Assessment of the Impact of Insurance Investment on Nigeria's Economic Growth". Assessing the impact of insurance investment on Nigeria's economic growth is crucial because insurance mobilizes significant long-term capital (premiums) for productive investments, facilitates risk management for businesses, promotes financial stability, and contributes to GDP, with studies showing a positive link, though its full potential is hampered by low penetration and regulatory gaps, necessitating policy focus on deepening insurance uptake for sustained growth. It investigates the impact of insurance sector development and the Nigerian economy from 1990 to 2022. The study employed time series data sourced from CBN statistical bulletin and using ARDL model to analyze the data. The empirical results indicate that insurance investment does have a significant impact on the overall growth and development of the Nigerian economy, also insurance premium does have a significant impact on the overall growth and development of the Nigerian economy, and total insurance transaction does have a significant impact on the overall growth and development of the Nigerian economy. Based on the findings of this study, the following recommendations are made: Policymakers should encourage inclusive insurance practices through regulatory measures promoting accessibility and affordability for a broader Nigerian population, fostering competition, innovation, and consumer protection. Policymakers and regulators must carefully balance premium regulation to ensure profitability for insurance companies and affordability for consumers, preventing excessive premiums that could hinder economic growth. Regular collaboration among policymakers, industry stakeholders, and researchers is crucial for continuous monitoring and research of the insurance sector's performance and economic impact, facilitating evidence based decision-making.

**Keywords:** Gross Domestic Product, Total Premiums, Total Insurance Investment, Total Transaction.

## Introduction

Okonkwo and Eche (2019) states that the establishment and operation of insurance companies in the world started in the middle of the sixteen century in United Kingdom with marine risk insurance. This made sailors the first set of people to have their lives insured since they were afraid of being captured by Turks or Corsairs and sold into slavery. These early assurances lasted for only one voyage at a time and were mainly intended to provide ransom money, should that be needed.

According to Alabi (1987:316), in Nigeria there existed many forms of insurance practices before the advent of modern insurance. These traditional forms of insurance arrangement were entirely indigenous. They existed in the forms of extended family systems, age-grade associations, and cultural unions such as Ajo

or Esusu in Yoruba land. Members of these associations provided some kinds of insurance protections to their members especially during periods of adversity. For instance, if a breadwinner died prematurely, the cultural group would arrange for his burial and upkeep of his dependents until they can fend for themselves.

According to Okonkwo and Eche (2019), Insurance firms constitute one of the major segments of financial system in all economies of the world. As financial institutions, they are involved in financial intermediation; mobilizing financial resources and channeling them into the economy for productive uses. According to them, the main objective of insurance companies is to protect their customers against insured risks by selling insurance policies to them. The policy holders pay premium to the insurance firms while

expecting compensation from them should risk occur.

Consequently, these financial institutions pool and manager risk on behalf of their customers. Hence, insurance provides a risk transfer mechanism for household individuals, business firms and governments. The operation of insurance firms is guided by the law of large number. This law enables these enterprises to make approximate estimate of the level of losses they are likely to suffer every year. According to Nwafor (2019), since insurance companies often collect more money from the premiums than they lose on account of claims, they generally accumulate large amounts of money. As such, they constitute a major source of funds for investment. In a further analysis, the expert observes that: where the huge funds accumulated by insurance firms are invested, the economy is bound to benefit from their activities: existing jobs will be sustained and new ones created, output will be increased and price fluctuations may be minimized. Where they are not invested, the benefits of the operations of the companies will be limited to fat incomes for the few rich people who own such businesses.

Evidently, from the above exposition, insurance firms have significant role to play in employment generation, increase in output of goods and services, price stability and improved standard of living in the economy (depending on their investment practices). These are the key issues and challenges of economic development in most developing countries of the world including Nigeria.

In Nigeria, just like in most countries of the world, insurance companies constitute the next largest mobilizers of funds for investment after banks. Insurance premium income is a veritable tool for boosting activities at the money and capital markets and for the acquisition of real assets (Onoh, 2002: 102).

According to Etale and Edoumiekumo (2021), Contemporary insurance in the country however started with the establishment of trading posts among the West Coast of Africa by British Merchants in late 20th century. The main aim was to protect the interest of the expatriates and their businesses. The business of insurance as at then was carried out through agents. But later on, branch offices of oversea insurance companies were established to take over the business. The first major insurance company in Nigeria was established in Lagos with the name Royal Exchange Assurance in 1921. Alabi, (1987: 316).

With the establishment of the Royal Exchange Assurance, the insurance industry started to develop and grow. Hence, the number of insurance firms rose from 1 in 1921 to 4, 28 and 80 in 1949, 1960 and 1975, respectively. However, the industry was dominated by foreign companies within these periods. The first indigenous insurance companies namely: the Great Nigerian Insurance Company, the Nigeria General Insurance Company and the Universal Insurance Company were established and became operational in 1960. This was followed by the establishment of the National Insurance Corporation of Nigeria (NICON) in 1969 by the Federal Government of Nigeria. Since then,

the number of insurance companies in the country kept on increasing especially following the oil boom of 1970s. Within these periods, there was no effective laws to regulate the operation and activities of insurance firms in Nigeria even though they were some legislations such as the Insurance Companies Act of 1961, Insurance (Miscellaneous provision) Act of 1964, Insurance Decree of 1976 and the Nigerian Re-insurance Corporation Act of 1977. The insurance Decree of 1976 was the first effective legislation promulgated to regulate insurance business in Nigeria Onoh, (2002: 101). Following this were the Insurance Decree No.58 of 1991 and Insurance Decree No.2 of 1997.

The National Insurance Commission was established in the country through the National Insurance Commission (NAICOM) Act 1997. The commission was set up to address the issue of ineffective regulation, supervision and control of insurance business in the economy which were largely in the hands of indigenous investors since the enactment of the Nigerian Enterprises Promotion Decree, 1977.

The industry increased on daily basis as the number of insurance firms rose from 28 in 1975 to 187 in 1996. The number however declined from this figure in 1996 to 104 in 1999 and rose again to 118 in 2000. With the recapitalization exercise in the industry in 2007 in which the capital base of insurance firms was increased the number of insurance companies declined drastically in the country. The new capital base for all categories of insurance is as shown below: This article is divided into five sections. Section one is the

introduction while section two is set aside for conceptual and theoretical review. Section three presents the methodology. In section four, statistical details are presented and analyzed while section five, covers the discussion of findings, recommendations and conclusion.

This paper prognosticates on economic security and gender budgeting in Nigeria. It interrogates the state of economic security in the country in relation to the national attitude towards gender budgeting. Gender budgeting seems to have become a critical tool in dealing with gender inequality and in so doing promoting economic security (Polzer et al, 2023). This article accordingly examines the intersection of economic security and gender budgeting in Nigeria. The work seeks to underscore the criticality of gender-sensitive budgeting in bridging gender divides in economic security. The article thus explores the issue of economic security within the framework of gender parity and sustainable development in Nigeria. The study is aimed at emphasizing the imperative of addressing gender-based bias as hindrance to women's economic empowerment.

This paper prognosticates the effects of investment (INVS), insurance premiums (Premium), and transactions (TRANS) on Gross Domestic Product (GDP). It is crucial because these variables are fundamental drivers and indicators of economic health, stability, and growth. The study provides valuable insights for policymakers, investors, and businesses.

It investigates the effect of insurance premium on GDP in Nigeria because

insurance fuels economic growth by providing risk management, boosting investor confidence, funding development, and encouraging long-term financial planning, making it a key sector for stability and expansion, though studies show mixed results on specific premium types (life/non-life). Understanding this relationship helps policymakers promote growth through better regulations, increased insurance adoption (especially life insurance), and stronger insurer capital (like recent

The research further looks into insurance investment because insurance mobilizes significant long-term capital (premiums) for investment in real estate, government securities, and other sectors, fostering economic growth, stability, and financial inclusion, while also mitigating risks and supporting entrepreneurship, despite studies showing its potential often remains untapped due to industry challenges like poor claims handling and low awareness. Understanding this link helps formulate policies to unlock the industry's full potential for national development, as it acts as a vital financial intermediary.

## Literature review

### Conceptual Elucidation

According to Etale and Edoumiekumo (2021) insurance is the business of protecting against the risk of unknowns and reducing the risk for both the insured party and third parties. According to them, Insurance provides coverage against unexpected events that may occur in the future and protects individuals and businesses. Premiums received from the

insured serve as a source of gross capital formation. They explained that insurance contracts involve small, regular payments in exchange for protection against unpredictable losses that are potentially severe. This helps to avoid extreme and costly disasters and facilitates commercial lending. Insurance also allows entrepreneurs to take on higher risks while engaging in activities that produce higher returns, thus encouraging higher productivity. Insurance Premiums According to Nwafor (2019), insurance premiums refer to the regular amount paid by the insured to the insurer, which serves as the basis for determining the amount that the insurer would pay to the insured in case of losses from insured perils. Since insurance premiums represent a pool of funds used to pay claims to the insured, Okonkwo and Eche (2019) suggest that the premium paid should be sufficient to cover future claims and expenses such as insurance commissions. Furthermore, the premium should be affordable to the insured, making them willing to pay it. Investment The insurance industry plays a crucial role in promoting investment activity in various sectors, such as capital, real estate, and money markets. The absence of insurance protection can impede economic progress, and the economy of any country cannot thrive without both local and foreign investments. Insurance facilitates the movement of financial resources between deficit and surplus units in all sectors of the economy, thereby promoting investment of all types.

### Aggregate assets of insurance in Nigeria

According to Business Day's findings, Wednesday, July 23, 2025, AIICO Insurance, AXA Mansard Insurance, Cornerstone Insurance, NEM Insurance, Coronation Insurance, Linkage Assurance, and Consolidated Hallmark Holdings recorded an aggregate net asset value of N343.3 billion in 2024, a 45.2 percent increase from N236.4 billion in 2023.

AIICO Insurance tops the list with a net asset of N64.7 billion, followed closely by NEM Insurance with N59.8 billion, and AXA Mansard Insurance with N52.7 billion.

The rise in net assets reflects the insurance firms' enhanced capacity to settle claims and expand their operations. Analysts note that a robust capital base is crucial in instilling confidence among policyholders and investors alike.

The increase in net assets is a clear indicator that Nigerian insurance firms are on a path to sustainable growth," Abiodun Adebayo, a financial analyst said. "With regulatory backing and corporate governance improvements, we expect more foreign and institutional investors to take an interest in the sector.

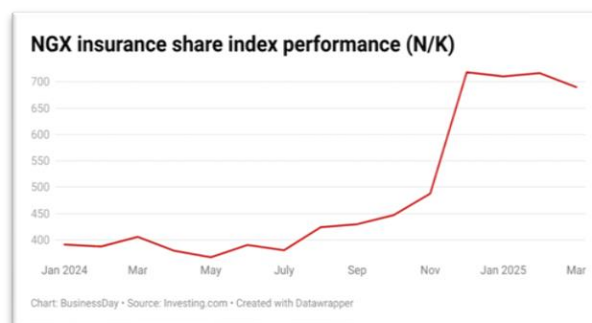
Adebayo Olaniyi, a financial analyst in an insurance firm described the increase as a testament to the sector's improved financial health. Olaniyi stated:

The rise in net assets indicates that insurance companies are strengthening their capital base. This, in turn, builds trust among investors and policyholders, ensuring stability in the industry,

For an insurance firm, net asset, which is also referred to as shareholders fund or book value represents the value of a company or entity's assets after deducting all its liabilities,

essentially reflecting its overall worth or equity.

The increase in net assets is expected to attract more investors, particularly foreign direct investment (FDI), into Nigeria's insurance space. With a stronger financial standing, firms are positioned to expand their service offerings, underwrite larger risks, and enhance policyholder benefits.



In 2024, the NGX Insurance Share Index was among the top-performing sectors in the stock market, delivering strong returns for investors.

Insurance stocks surged from N391.38 in January to N718 by December 28, reflecting increased investor interest and driving up share prices.

However, this year, profit-taking has weighed on the stock market, leading to a decline in insurance shares from N710.08 in January to N689.68. This downturn has not been limited to the insurance sector, as banking, consumer goods, and other industries are also experiencing lower returns on their share prices.

Looking at last year's performance, insurance firms cashed out as a Business Day survey of the seven firms collectively reported a double of their profit amounting to N104.8

billion in their after-tax profit compared to N58.6 billion reported in 2023.

The growth aligns with the National Insurance Commission's (NAICOM) ongoing efforts to deepen insurance penetration in Nigeria. Recent regulatory policies aimed at recapitalization and market expansion have played a crucial role in boosting insurers' financial health.

According to a Business Day report, Insurance companies in Nigeria may be facing a new minimum capital requirement of over 650 percent if the insurance bill scales through at the National Assembly.

The new bill entitled, 'Nigeria Insurance Industry Reform Bill 2024,' which has scaled the second reading at the floor of the Senate, seeks to increase the minimum capital requirement of life insurance companies from the current N2 billion to N15 billion, and general business from N3 billion to N25 billion. Reinsurance business' capital will move from N10 billion to N45 billion, according to the proposed bill seen by Business Day.

## Analysis of Individual Insurance Firms

### Aiico Insurance Plc.

AIICO commenced operations in Nigeria in 1963 as an Agency office of American Life Insurance Company ("ALICO") – at the time, a subsidiary of American International Group ("AIG"). The Company was incorporated, registered and licensed in Nigeria as American Life Insurance Company Limited – as a wholly owned subsidiary of ALICO/AIG – in 1970 – to offer Life and insurance services. The

Company was renamed American International Insurance Company Limited ("AIICO") upon the acquisition of a 60% stake by the Federal Government of Nigeria, and later listed on the Nigerian Stock Exchange in 1990, after which both shareholders – the Federal Government of Nigeria and AIG divested. AIICO is a non-banking financial services provider for health, Life, motor, travel, health insurance, and investment needs. At the end of 2024, the insurer's net assets value grew to N64.7 billion from N51.9 billion, while total liabilities rose to N343.2 billion from N266.3 billion. Retained earnings rose to N25.6 billion from N16.7 billion while after-tax profit grew to N14.9 billion from N13.8 billion. AXA Mansard Insurance Plc.

AXA Mansard Insurance Plc. is a leading provider of financial services in Nigeria, specializing in insurance, asset management, and health services. It is a member of the global AXA Group and operates in Nigeria through its subsidiaries, AXA Mansard Insurance, AXA Mansard Health, and AXA Mansard Investments. The company offers a wide range of products and services, including life and non-life insurance, health insurance, and investment solutions for both individuals and corporate clients. AXA Mansard's net assets value grew to N52.7 billion from N41.4 billion, while total liabilities increased to N132.5 billion from N99.7 billion. At the end of 2024, its retained earnings rose to N34.1 billion from N14.4 billion and after-tax profit grew to N14.3 billion from N10.9 billion.

### Cornerstone Insurance Plc.

Cornerstone Insurance Company Plc is an insurance company in Nigeria offering products for life and non-life classes. The company provides risk underwriting and related financial services for individuals, corporate and institutional customers. It offers motor vehicle insurance, travel insurance, aviation, marine, engineering, and assets, among others. At the end of 2024, its net assets value grew to N54 billion from N34 billion, while total liabilities increased to N60.5 billion from N48.6 billion. Retained earnings rose to N29.8 billion from N14.1 billion and after-tax profit grew to N23.4 billion from N15.4 billion.

## **NEM Insurance Plc.**

NEM Insurance Plc is a prominent Nigerian non-life insurance company. Established in 1948 as an agent for Edward Turner & Co., it later became a Nigerian branch of NEM General Insurance Association Limited of London in 1965, and then incorporated as a Nigerian company in 1970. NEM Insurance is publicly quoted on the Nigerian Stock Exchange and offers a wide array of general insurance products. The Company's segments include General Accident, Fire, Marine, Motor, Oil and Gas, and Agriculture. The Company's products include corporate, personal, and small and medium-sized enterprises (SMEs) products. At the end of 2024, retained earnings rose to N37.4 billion from N21.8 billion while after-tax profit rose to N9.8 billion from N8 billion.

## **Coronation Insurance Plc.**

Coronation Insurance Plc, formerly Wapic Insurance Plc, is a Nigerian insurance

company established in 1958. It offers a wide range of insurance products and services, including life, general, and special risk insurance, operating in both Nigeria and Ghana. The company is a full-line insurer, licensed to underwrite various classes of insurance, such as fire, motor, marine, and aviation. Net assets at the end of 2024 rose to N78.6 billion from N48 billion while total liabilities grew to N39.8 billion from N23.7 billion in 2023. Retained earnings grew to N10.2 billion from a loss of N1.7 billion while its after-tax profit rose to 9.9 billion from N1.8 billion.

## **Linkage Assurance**

Linkage Assurance Plc is a Nigerian insurance company specializing in non-life (general) insurance products. They offer a range of insurance solutions for both individual and corporate clients, including motor, marine, general accident, oil & gas, travel, and property insurance. The company was incorporated in 1991 and has a strong focus on customer satisfaction and prompt service delivery. At the end of 2024, retained earnings grew to N4.1 billion from N1.5 billion while after-tax profit was N9.4 billion.

## **Consolidated Hallmark Holdings**

Consolidated Hallmark Holdings Plc (CHH Plc) is a Nigerian non-operating holding company with interests in investment, insurance, finance, and health services. It's the parent company of several subsidiaries, including Consolidated Hallmark Insurance, CHI Microinsurance, Hallmark Finance Company, and Hallmark Health Services. The

company is publicly traded on the Nigerian Stock Exchange under the ticker symbol CONHALLPLC. At the end of 2024, its net assets grew to N56.3 billion from N26.2 billion while total liabilities rose to N20.5 billion from N13.3 billion. Retained earnings grew to N21.6 billion from N3.4 billion while after-tax profit rose to N23.1 billion from N3.8 billion.

### Empirical Review

In a study by Akpan and Joseph (2017), the authors examined the impact of investment portfolios of insurance companies and commercial banks on economic growth in Nigeria from 1996 to 2011. The study utilized multiple linear regression to analyze secondary data. The findings indicated that insurance investment portfolios did not significantly contribute to the growth of the Nigerian economy during the period of the study. However, the study reported that the investment portfolios of commercial banks significantly facilitated economic growth in Nigeria within the study period.

Nwafor (2019) examined the impact of insurance business on the economic growth and development of Nigeria between 2007 and 2016 was investigated. The study aimed to determine the effect of insurance business on the Nigerian economy. The analysis of the study revealed that the insurance business in Nigeria had a significant negative impact on both Nigerian economic growth and unemployment rate. Therefore, the study recommended that the National Insurance Commission should monitor the payment of claims by Nigerian insurance companies to maintain transparency, avoid extortion, and

promote public confidence in the services provided by Nigerian insurance companies. This would ultimately promote economic growth in Nigeria. (Nwafor, 2019).

Olayungbo (2015) conducted a study to examine the impact of life and non-life insurance on economic growth in Nigeria from 1976 to 2013. The study utilized Autoregressive Distributed lags to analyze the data. The results showed that there is a positive and significant relationship between economic life, non-life insurance, and economic growth in Nigeria in both the long and short run. Consequently, the study concluded that the business of life and non-life insurance enhances economic growth in Nigeria.

Okparaka (2018) conducted a study on the impact of insurance investments on the Nigerian capital market. The study focused on the relationship between market capitalization and insurance companies' investments in government securities, stocks, and bonds. The study utilized secondary data and analyzed it through regression. The results indicated that insurance investments in government securities and in stocks and bonds.

Fashagba's study in (2018), which analyzed data from 2007-2016, found no significant evidence of a positive relationship between non-life insurance and economic growth, while a negative and significant association was observed between the business of life insurance and Nigerian economic growth. In summary, while nonlife insurance was found to stimulate economic growth in Nigeria, life insurance was found to have a negative impact.

Ukpong and Acha (2017) investigated the link between insurance and economic development in Nigeria using co-integration and causality analysis. They collected time series data from secondary sources covering the period between 1990 and 2013. The data was analyzed using stationarity tests, co-integration tests, multiple regression methods, and Granger causality tests. The results showed that all variables were cointegrated when GDP was the endogenous variable. The Granger causality test showed a bidirectional relationship between GDP and non-life insurance premiums total, while a unidirectional relationship existed between GDP and life insurance premiums total. As a result, the study concluded that insurance business had a long-term equilibrium relationship with Nigerian economic development and contributed to it. In their study, Onyebuchi, Nwankwo, and Onyebuchi (2018) investigated the impact of the insurance sector's development on the sustainability and growth of the Nigerian economy. They examined the relationship between insurance income and economic growth by analyzing the effects of insurance premiums and gross insurance demand on the country's growth.

Meanwhile, Ogunlokun and Adeleke (2018) conducted a study on the impact of the insurance sector's development on economic growth using inferential statistics to analyze the data. The results revealed that although the insurance sector has a considerable impact on economic growth, most insurance proxies had a negative association with economic growth, suggesting the underdevelopment of the insurance sector. To address this issue, the

study recommended better management of gross insurance premiums and investment in viable initiatives that can generate more revenue for the insurance industry. Additionally, efforts should be made to raise public awareness of insurance operational activities and their benefits.

Ul Din, Abu-Bakar, and Regupathi (2017) conducted a study using data from 20 nations between 2006 and 2015 to examine the impact of the insurance industry on economic growth, as measured by GDP, in Nigeria. They used Hausman test statistics for data analysis and found that insurance activities had a significant positive impact on economic growth, with non-life insurance having a greater impact than life insurance.

Fadun and Shoyemi (2018) also analyzed the impact of insurance investment funds on Nigerian economic growth from 2000 to 2015 using secondary data from the CBN. They used Pearson's correlation coefficient and the OLS approach for data analysis and found a strong positive relationship between insurance investment and GDP. Skalska (2018) used financial time series analysis to investigate the effect of insurance business on economic growth in the Czech Republic from 2000 to 2017, and found a positive relationship between the growth of the insurance industry and economic growth.

## Research Methodology

### Research Design

The research design employed in this research is the ex-post facto research design. The choice of research design depends on objectives that the researcher wants to achieve.

It is, therefore, the framework which specifies the type of information to be collected, the source of data and the data collection techniques (Baridam 2001). This study utilized secondary data. The data is preferred in this study due to the nature of the study which is time series based. For the purpose of this study, secondary data will be sourced from Central Bank of Nigeria Statistical Bulletin, NSE fact book, journals, Textbooks and Seminar Papers.

## Model Specification

We specify our model with reference to our specific objectives as follows. The functional/mathematical model is given as

$$GDP = F(W, X, Z)$$

1

$$GDP = \alpha + \beta_1 W + \beta_2 X + \beta_3 Z$$

.....2

Where

W is the total insurance investment

X is the total premium

Z is the total transaction

$\alpha$  is the intercept of the model and

$\beta_i$  is vector of coefficient to be estimated

The a priori expectation of the model is

$$\alpha, \beta_i > 0$$

The econometric model is given as

$$GDP = \alpha + \beta_1 W + \beta_2 X + \beta_3 Z + \mu$$

..... 3

Where  $\mu$  is the random/error term which addresses the effects of other variables on the economy. There is no gainsaying that not just the selected variables determine the total variation of the explained variable. The

random term is assumed to be independently and identically distributed.

## Data Analysis Method

The model will be estimated using multiple regression analysis, which will allow us to measure the relationship between insurance sector development and the Nigerian economy while controlling for the impact of other relevant factors.

## Hypothesis Testing and Decision Rule Criteria

The decision rule was employed to test the hypothesis of the study and to make comparison between the probability value and the critical value. The study adopted 5% as its level of significance. The following decision rules were adopted for rejecting or accepting the null hypotheses: If

- i. Probability value (p-value) > 0.05 critical value; do not reject the null hypothesis ( $H_0$ ).
- ii. Probability value (p-value) < 0.05 critical value; reject the null hypothesis ( $H_0$ )

## Unit Root Test

The Augmented Dickey-Fuller Unit Root Test is performed on each variable to determine its stationarity at the level and to identify the order of integration.

Table 4.2 Augmented Dickey-Fuller Test Result

Variable	ADF Statistics	First Difference	Order of Integration
GDP	-0.166155	-2.939606*	I(1)
INVS	-0.298006	-3.611992*	I(1)
PREM	2.669307	-5.281735*	I(1)
TRANS	-0.599032	-5.384810*	I(1)

Source: Author's computation

The Augmented Dickey-Fuller (ADF) Unit Root Test results, as shown in Table 4.2, provide valuable insights into the stationarity properties of four key variables: GDP, INVS, PREM, and TRANS. Initially, when examining these variables at their original levels, the ADF statistics reveal values of -0.166155, -0.298006, -2.669307, and -0.599032, respectively. These statistics represent the degree of non-stationarity of each variable. Importantly, they are all less than the ADF critical value at the 1% significance level, indicating that at their original levels, these variables are non-stationary. However, the story changes when we consider first differencing these variables. After taking the first difference, the ADF statistics for all four variables become greater than the ADF critical values at both the 1% and 5% significance levels. For example, the ADF statistics for GDP, INVS, PREM, and TRANS are -2.939606, -3.611992, -5.281735, and -5.384810, respectively. These results indicate that after the first differencing, the variables become stationary.

## Johansen Co-Integration Test

To test for the existence of long-term relationships among the variables in the model, the Johansen co-integration test was performed and the results are presented in Table 4.3. The trace statistic indicated the presence of three (3) co-integrating relationships at a 5% level of significance. Therefore, the null hypothesis of no significant co-integration was rejected at a 5% level of significance, and the alternative hypothesis was accepted. This implies that GDP, INVS,

PREM, and TRANS have a long-term relationship among them.

Table 4.3 Johansen Co-Integration Test Summary

Statistic	Value
R <sup>2</sup>	0.815470
Adjusted R <sup>2</sup>	0.779904
Durbin-Watson (DW)	1.526673
F-statistic	20.11657
Prob(F-statistic)	0.000000

Source: Author's computation using E-view 9  
Substituting these values in our model, we have:  $GDP = 3.05013 + 16189.260 (INVS) - 1390.4000 (PREM) + 1.650 (TRANS)$

## 4.4.1 Interpretation of OLS Result

Table 4.4 presents the results of the Ordinary Least Squares (OLS) regression analysis, examining the relationship between Gross Domestic Product (GDP, denoted as the dependent variable. This analysis also considers the influence of other variables: Investment (INVS), Premium (PREM), and Transaction (TRANS).

First, let's consider the goodness-of-fit measures. The R-squared (R<sup>2</sup>) value of 0.815470 indicates that approximately 81.55% of the variation in stock prices is explained by the independent variables in the model. This suggests a robust explanatory power, implying that the chosen variables collectively account for a substantial portion of the fluctuations in stock prices. The adjusted R-squared value, adjusted for the number of independent

variables and sample size, is 0.779904, slightly lower but still reflecting a strong model fit.

The Durbin-Watson (DW) statistic, with a value of 1.526673, indicates the absence of serial correlation in the residuals. This suggests that the model effectively captures the linear relationship between the variables, enhancing the reliability of the coefficient estimates and the validity of the regression outcomes. The overall significance of the regression model is confirmed by the F-statistic of 20.11657, with an extremely low probability (p-value) of 0.000000. This signifies that the entire model is statistically significant, implying that at least one of the independent variables has a significant relationship with stock prices.

## Testing Hypothesis

To test the hypotheses, we will use probability criteria,

if:  $p > 0.05$ : Accept  $H_0$ .

$p < 0.05$ : Reject  $H_0$ .

Hypothesis one is restated below:

**H01:** The insurance sector total investment contribution does not significantly affect the overall growth and development of the Nigerian economy (GDP).

From the OLS results, the coefficient of INVESTMENT is estimated to be 16,189,260 with a t-statistic of 1.757363. The probability value (p-value) for this relationship is 0.0016. Since the p-value (0.0016) is less than the 0.05 significance level, we reject the null hypothesis. Therefore, the insurance sector's (INVESTMENT) contribution does have a significant impact on the overall growth and development of the Nigerian economy (GDP)

**H02:** The Insurance sector total premium does not have a significant impact on the Nigerian economy. The coefficient of PREMIUM is estimated to be -13,904,000 with a t-statistic of -1.457513, and the probability value (p-value) is 0.0379. As the p-value (0.0379) is less than the 0.05 significance level, we reject the null hypothesis. This implies that the development of the insurance sector (PREMIUM) does have a significant impact on key macroeconomic indicators, including GDP

**H03:** The insurance sector's total transaction does not have a significant impact on the Nigerian economy. For the relationship between TRANSACTION and investment in the Nigerian economy, the coefficient of TRANSACTION has a t-statistic of 1.181895, and the probability value (p-value) is 0.2488. Since the pvalue (0.2488) is greater than the 0.05 significance level, we accept the null hypothesis. Therefore, the insurance sector's (TRANSACTION) development does not have a significant impact on investment in the Nigerian economy.

## ERROR CORRECTION MODEL (ECM)

Having established a long run relationship among the variables used in the model, using the Johansen cointegration test shown in Table 4.6 which a prerequisite condition for running an error correction mechanism, we estimate an error correction model which represents the long run and short run relationship between manufacturing output and its explanatory variables. The ECM also captures the speed of adjustment from the short run equilibrium to the long run steady state. To estimate this, the lag length structure criterion was established using the Schwarz Information Criterion.

Table 4.6 Short Run Model/ Error Correction Model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(GDP (-1))	7.181124	16.16781	0.444162	0.0571
D(INVS (-1))	-2.532914	0.079429	-31.88894	0.0000
D(PREM (-1))	-4.23556	0.33245	-12.54322	0.7642
D(TRANS (-1))	-3.54814	0.14541	-12.1451	0.1245
ECM (-1)	-0.006075	0.005446	-1.115643	0.0352
C	-0.183819	0.237663	-0.773444	0.4483

R<sup>2</sup> = 0.803205 Adjusted R<sup>2</sup> = 0.701818 D.W = 1.903691 F-stats = 4.085759 Prob.(F-stats) = 0.006254 Source: Author's computation using E-view 9

**ECM Result Interpretation** The table above shows the coefficients and associated statistical measures of the Short Run Model/Error Correction Model. Notably, the lagged GDP variable (D(GDP (-1))) shows a positive coefficient of 7.181124, indicating that in the short run, GDP has a potential positive impact on the dependent variable. However, this effect is not statistically significant at the conventional 5% significance level, as evidenced by the t-statistic of 0.444162 and a p-value of 0.0571. Conversely, the lagged investment variable (D(INVS (-1))) demonstrates a highly significant negative relationship with the dependent variable, as indicated by its substantial coefficient of -2.532914, a t-statistic of -31.88894, and a p-

value of 0.0000. This implies that changes in investment levels from the previous period significantly affect the dependent variable in the short term. It's worth noting that the lagged premium (D(PREM (-1))) and lagged transaction (D(TRANS (-1))) variables display coefficients of -4.23556 and -3.54814, respectively. However, their statistical significance is questionable, particularly for the lagged premium variable, as the t-statistic is unusually high, yet the pvalue is remarkably high at 0.7642.

The error correction term (ECM (-1)) bears a negative coefficient of -0.006075, a standard error of 0.005446, and a t-statistic of -1.115643. This term signifies that deviations from the equilibrium established in the previous year's shock gradually revert to the long-term equilibrium at a speed of approximately 0.006%. This indicates the model's responsiveness to corrections and its tendency to return to equilibrium over time. The constant (C) term has a coefficient of -0.183819, with a t-statistic of -0.773444 and a p-value of 0.4483, suggesting that this constant does not significantly influence the dependent variable. These findings collectively illuminate the dynamics and relationships within the Short Run Model/Error Correction Model.

## DISCUSSION OF FINDINGS

This discussion aims to provide a deeper understanding of the implications of these findings and their significance for policymakers, investors, and market analysts. The analysis began with an assessment of stationarity using the Augmented Dickey-Fuller (ADF) Unit Root Test. The results revealed that key variables - GDP, INVS

(Investment), PREM (Premium), and TRANS (Transaction) - were non-stationary at their original levels but achieved stationarity after first differencing. This is a critical step, as non-stationary data can lead to misleading conclusions in time series analysis. Furthermore, the Johansen Co-Integration Test identified three co-integrating relationships among these variables. This suggests that GDP, INVS, PREM, and TRANS have long-term relationships and move together over time. These findings provided a foundation for the subsequent regression analysis, shedding light on the interconnectedness of these economic variables. The Ordinary Least Squares (OLS) regression analysis examined the impact of GDP on stock prices, considering INVS, PREM, and TRANS. The results revealed important insights. GDP was found to have a positive and statistically significant influence on stock prices. This aligns with economic theory, as a growing GDP is often associated with a healthy economy, boosting investor confidence and leading to higher stock prices. This finding also agree with Oloyede et al, 2023, who in their study also saw a positive relationship between insurance sector development and Nigerian economic growth. Conversely, PREM exhibited a negative and statistically significant impact on stock prices. This suggests that higher premiums can lead to lower stock prices, possibly indicating increased market risk or reduced profitability. Effective premium management is crucial for maintaining market stability. However, the impact of TRANS on stock prices was not statistically significant within the considered

range. This finding implies that other factors, not included in the analysis, may play a more substantial role in driving stock price movements.

The goodness-of-fit measures for the regression model indicated its robust explanatory power. An R-squared ( $R^2$ ) value of approximately 81.55% and an adjusted R-squared value of 0.779904 reflected a strong model fit. The absence of serial correlation in the residuals, as indicated by the Durbin-Watson (DW) statistic, enhanced the reliability of the coefficient estimates and the validity of the regression results. The overall significance of the model was confirmed by an F-statistic with an extremely low probability (p-value) of 0.000000, underscoring the model's credibility. The Error Correction Model (ECM) further examined short-term and long-term relationships among the variables. It revealed that lagged INVS displayed a highly significant negative relationship with the dependent variable in the short term, emphasizing the role of investment in shaping short-term economic outcomes. Diagnostic tests, including the Breusch-Godfrey Serial Correlation LM Test, Breusch-PaganGodfrey Heteroskedasticity Test, and Jarque-Bera Normality Test, confirmed that the model's residuals met necessary assumptions, enhancing the validity of the results. In conclusion, these findings have significant implications for policymakers, investors, and market analysts in the Nigerian economy. The insurance sector, represented by INVESTMENT and PREMIUM, plays a crucial role in economic growth and market stability. Effective premium management is

essential, and policies should encourage investment to foster economic development. However, the complexity of factors affecting investment necessitates further exploration to better understand its drivers.

## CONCLUSION

This study has shed light on the intricate interconnection between the insurance sector and the Nigerian economy. The results highlight the substantial role the insurance sector plays in fostering economic growth, particularly in its impact on the GDP. This underscores the importance of crafting policies that sustainably support the development of the insurance sector, ensuring its positive contributions to the overall economy. The study also brings attention to the nuanced relationship between insurance premiums and GDP, emphasizing the need for effective regulation to strike a balance between profitability and economic growth. Policymakers are urged to create an environment that fosters competition, innovation, and affordability within the insurance sector, positioning it as a driver for broader economic development. While the research provides valuable insights, it is important to acknowledge its limitations. The analysis did not encompass the full range of variables influencing the insurance sector and the Nigerian economy. Future research could delve deeper into areas such as the impact of regulatory policies, consumer behavior, and market competition, offering a more comprehensive understanding of how these factors shape the development of the insurance sector and its broader economic implications.

## RECOMMENDATIONS

On the basis of the findings of this study, the following recommendations are made.

- a) Policymakers should encourage inclusive insurance practices through regulatory measures promoting accessibility and affordability for a broader Nigerian population, fostering competition, innovation, and consumer protection.
- b) Policymakers and regulators must carefully balance premium regulation to ensure profitability for insurance companies and affordability for consumers, preventing excessive premiums that could hinder economic growth.
- c) Regular collaboration among policymakers, industry stakeholders, and researchers is crucial for continuous monitoring and research of the insurance sector's performance and economic impact, facilitating evidence-based decision-making.

## REFERENCES

- Ajayi, LA. (2000) Element and Scope of Insurance. Hybrid Publishers Limited: Akure.
- Akpan, IT. & Joseph, EM. (2017) Comparative analysis of insurance companies and commercials banks' investment portfolios and economic growth in Nigeria. *Arabian Journal of Business and Management Review* (Nigerian Chapter), 4(2): 6-25
- Billah, MM. (2013) Effect of Insurance on Maritime Liability Law: A Legal and Economic Analysis. Springer International Publishing.
- Din, UI., Abu-Bakar, A. & Regupathi A. (2017) Does insurance promote economic growth? A comparative study of developed and emerging/developing economies, *Cogent Economics and Finance*. 5(1): 1- 12.
- Etale, LM.

- & Edoumiekumo, AR. (2020) Financial sector policies and economic growth: evidence from insurance sector in Nigeria. *Research in Business and Social Sciences*. 10(9).
- Ezu, GK. Okoye, NJ & Ogbogu OS. (2020) Effect of Consolidation of the Nigerian Insurance Industry on the Growth of the Nigerian Economy (1996-2018). *Journal of Economics and Finance*. 2(6): 22-32.
- Fadun, OS. & Shoyemi, OS. (2018) Insurance investment funds and economic growth in Nigeria: An empirical analysis (2000-2015), *International Journal of Development and Management Review*. 2018; 13(1): 73-88
- Fashagba, MO. (2018) The impact of insurance on economic growth in Nigeria. *Afro Asian Journal of Social Sciences*. 9(1): 1-10.
- Iyodo, BY. Samuel SE & Inyada SJ (2019) Effect of insurance industry performance on economic growth in Nigeria. *International Journal Business Finance and Management Research*. 6(2) 33.
- Kaya, UN. & Beser, NO. (2010) The effect of insurance premium on economic growth in european union countries: panel data analysis. *Journal of Academic Researches and Studies*. 12(23): 442-451
- Njegomir, V. & Stojic, D. (2010) Does insurance promote economic growth: The evidence from ExYugoslavia region. *Ekonomika Misao I Praksa*. 1: 31-48.
- Nwafor, (2019) Impact of Insurance Deepening on Economic Growth in Nigeria. *International Journal of Research and Innovation in Social Science*. 2019; 3(3): 2454-6186.
- Nwoji, E. (2022) Nigeria's insurance sector total premium reached N508 billion in 2021 as claims on Endsars protest hits N11 billion. This Day; 2022. Available: <https://www.allafrica.com>.
- Ogunlokun, AD & Adeleke KO. (2018) Development of insurance sector and economic growth in Nigeria (1982-2016): Autoregressive Distributed Lag Approach. *International Journal of Management and Social Sciences Research*. 7(7): 11-22.
- Oke, MO. (2012) Insurance sector development and economic growth in Nigeria. *African Journal of Business Management*. 6(23): 7016-7023
- Okonkwo, IV. & Eche, EA. (2019) Insurance penetration rate and economic growth in Nigeria: 1981-2017. *International Journal of Social Sciences and Management Review*. 2(1), pp.22-45
- Okpara, VC. (2018) Impact of insurance investments on nigerian capital market. *International Journal of Advanced Research in ISSN: 2278-6236 Management and Social Sciences*; 2018.
- Olayungbo, O. (2015) Effect of life and non-life insurance on economic growth in Nigeria: An Autoregressive Distributed Lag (ARDL) Approach. *Global Journal of Management and Business Research*. 15(1).
- Onyebuchi, B. Nwankwo, SP. & Onuka, OI. (2018) Insurance Sub-sector development: an emerging pillar for economic growth and sustainability in Nigeria, *Journal of Economics, Finance and Management Studies*. 1(1): 75-84.
- Onyekachi, E. R. & Okoye, V. (2013) Analysis of insurance practices and economic growth in Nigeria: Using co-integration test and error correction model. *Global Adv. Res. Journal. Management. Bus. Stud*. 2(1): 63-70.

Oyedotun, TM. & Adesina, BD. (2015) Nexus between economic growth and insurance business in Nigeria. *Research Journal of Finance and Accounting*. 6(9): 2222- 2847

Skalska, M. (2018) The relationship between insurance development and economic growth: the motor third party liability insurance in the Czech Republic, *The 12th International Days of Statistics and Economics*, Prague.

Ukpong, MS. & Acha IA. (2017) Insurance and economic development in Nigeria: cointegration and causality analysis. *Scholedge International Journal of Management & Development*. 4(4): 28-39

Verma, A. & Bala, R. (2013) The relationship between life insurance and economic growth: Evidence from India. *Global J. Manage. Bus. Stud*. 3(4): 413-422