

Empirical Analysis of the Impact of Insurance on Nigeria's Economic Growth

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ABSTRACT: *Insurance significantly drives Nigeria's economic growth by mobilizing funds for investment, stabilizing businesses through risk mitigation, and acting as a crucial financial intermediary, though its full potential is often limited by low penetration and regulatory gaps; recent reforms like the NIIRA 2025 aim to boost the sector's contribution to GDP by enhancing policyholder protection and efficiency, aligning with national development goals. This study examined the impact of insurance on Nigeria's economic growth spanning from 1986 to 2022. The study investigated the impact of insurance on economic growth in Nigeria with the use of ordinary least square method (OLS) to assess the short run impact on economic growth. In line with the research model used for the study, Gross Domestic Product (RGDP) was used as a proxy for economic growth which is dependent variable while Total Insurance Premium (TPR), Total Insurance Claim (TIC), Total Insurance Investment (INV) and Inflation Rate were used as the explanatory variables. In conclusion, it was discovered that insurance firms' indices have a positive impact on economic growth in the short run and negative impact in the long run and demonstrated a substantial relationship between total insurance premium and economic growth within the Nigerian context. From the research findings, we recommend that insurance policies be made mandatory for individuals and business organizations to encourage and protect investors as well as ensure sustained economic growth; the regulatory authorities should put in place policies to enforce transparent and efficient management of funds by insurers and lastly, Investors should diversify their portfolio of investments to boost returns and their ability in claims payment.*

Keywords: Gross Domestic Product, Insurance Premium, Insurance Claim and Investment, Inflation Rate.

INTRODUCTION

According to Adams, M., Andersson, J., Andersson, L., & Lindmark, M. (2005), the practice of insurance in Nigeria is patterned after the British practice by virtue of the fact that Nigeria was a former British colony. According to them, prior to the arrival of the British colonial masters in Nigeria, the early primitive Nigerians practiced an insurance-like self-help scheme fondly called "isusu". Isusu, a process whereby groups of people come together and agree to pool funds for the benefit of any member who may have suffered a form of loss. Where no loss occurred, depending on the terms of their agreement, individual members received lump sums of money at regular intervals. They maintained that Insurance evolved because of the need for financial encouragement for losses, which usually occurred. Generally, it is believed that insurance, as it is practiced today in Nigeria, is traceable to the era of maritime trading. With the prevalent marine engineering technology, the enterprising merchants suffered regular losses. These were Babylonians who traded between (4000-3000 BC). The Hindus in 600 BC and the ancient Greeks in 400 BC. Two insurance bonds, namely Bottomry bonds and Respondent bonds were introduced to cushion the effects of the maritime losses. Bottomry bond was tailored to provide loans for the merchants at troubled times to ensure that the voyage was completed. The ship/vessel served as collateral for the loan so granted. The bond provided that where the ship was lost loan would not be repaid but if the ship arrived safely the loan would be repaid with stone interests from where the premium would be paid for the maritime risks. In the case of the respondent bond, the cargo was pledged as the collateral as against the ship in the Bottomry bond. (Okonkwo, V.1. (2002).

In Nigeria the nature of their business was namely, bringing in finished goods while taking away our raw materials. Since these goods were usually shipped, they were faced with the perils of the sea and hence their desire to arrange some insurance protection. Prior to the emergence of the Royal Exchange Assurance in Lagos in 1921, the colonial traders did the underwriting back home in London while making use of the local agents (in Lagos), who merely issued cover notes. Many more companies followed namely: the Northern Assurance Company (established by the Royal Niger Company), now known as United Nigeria Insurance Company Plc, in 1930. In 1949, Norwich Union Fire Insurance Society set up an office in Lagos in the name of Tobacco Insurance Company Limited and was subsequently known as Legal and General Assurance Limited. The African Insurance Company Limited emerged as the first indigenous insurance company in 1950. The Nigerian General Insurance Company and the Lion of Africa Insurance Company were established in 1950 and 1952 respectively. Victor Ike Okonkwo. (2002)

In 1968, the Federal Government of Nigeria (then under military dictatorship) issued the first Insurance Decree which encouraged the establishment of more insurance companies. The National Insurance Corporation of Nigeria came on board via Decree No 22 of 1969. It was charged with the responsibility to; (a) develop insurance practice in Nigeria, (b) to ensure adequate insurance coverage of all federal government assets and (c) to accept some re-insurance from other insurance companies. In 1976, came the more detailed and embracing insurance dècree that brought about more regulations and supervision of the insurance sector of the Nigerian 5

economy. Decree No 49 of 1977 brought to life the Nigeria Re-insurance Corporation of Nigeria (the Nigeria Re). It took over re-insurance operation from National Insurance Corporation of Nigeria (NICON) and also the supervision of reinsurance operation in all insurance companies. It also got involved in the human resource development of the industry. The Nigeria Agricultural Insurance Corporation, which came to being via a decree in 1987, had since begun the underwriting of non-life insurance such as fire and motor, aside its traditional role of provision of cover for agricultural risks. The decrees were by no means exhaustive as many more were later issued namely:- (a) The Chartered Insurance Institute of Nigeria Decree (CIIN) No 22 of February 1993. (b) The National Insurance Commission Decree No 1 of 1997 and (c) The Insurance Decree No 2 of 1997. There has been a tremendous growth in the number of companies in the industry over the years alongside the insurance brokers and the loss-adjusters. The premium income has also significantly risen.

Nonetheless, the Nigerian insurance industry has not fully achieved the economic goals set for it, particularly the ambitious target of becoming a top 20 global market by 2020. While the industry has experienced growth, particularly in total premiums, it still faces challenges related to market penetration, product diversity, and public awareness. The industry's potential to significantly contribute to Nigeria's economic growth is hampered by these factors, as well as by issues like regulatory complexities, infrastructure limitations, and fraud.

Statement of the Problem

While Nigeria's insurance industry has shown positive growth, it has not yet reached the ambitious economic goals set for it, particularly in becoming a top 20 global market by 2020. The industry faces challenges in market penetration, public awareness, and regulatory hurdles, but also shows potential for significant expansion with increased digitalization and improved public perception.

The level of growth and development which should be commensurate with Nigeria's huge potentials has not been attained may never be attained since independence, several factors have been advocated for this lack of growth of the Nigerian economy and among such notable factors in inadequate funding for investment purposes which have been limited insurance penetration in the economy (Oluoma,2010).

The major role of an economy's financial sector is helping to channel resources from surplus unit to the deficit units for investment. Therefore, the financial sector thus improving resource allocation, mobilizes savings, lowers cost of capital via economies of scale and specialization, and provides risk management and liquidity. Insurance companies could play a major role in these functions if properly managed thus, supporting economic growth. However, in Nigeria, based on the nation's experience of stunted growth; the insurance sector has not actually contributed meaningfully in its role of effectively mobilizing funds for productive investment which could lead to growth. It is in the light of this background that the study seeks to investigate the impact of the insurance industry on Nigeria's economic growth.

Research Hypothesis

This study relies on the following null hypothesis;

(a) .H₀: TPR, TIC, INV and INFR have no significant impact on Nigeria's economic growth

H_A: TPR, TIC, INV and INFR have significant impact on Nigeria's economic growth

(b) H₀: there are no relationships among the explanatory variables and the Nigeria's economic growth

H_A: there are relationships among the explanatory variables and the Nigeria's economic growth

LITERATURE REVIEW

Conceptual Framework

INSURANCE: Insurance is a contract where an individual or entity (the policyholder) pays a fee (premium) to an insurance company (the insurer) in exchange for financial protection against specific, unforeseen losses or damages. Essentially, it's a method of managing financial risk by transferring the potential cost of a loss to the insurer. Insurance consists of the following scope:

Risk Transfer in Insurance: is a strategy where the financial burden of potential losses is shifted from one party to another. This is typically achieved through insurance policies, where the policyholder pays premiums in exchange for the insurer covering certain specified risks and associated costs. Essentially, the insurer assumes the risk of financial loss for the policyholder in the event of a covered incident.

Common risk transfer methods:

Organizations have several risk transfer methods from which to choose, including these well-known options:

- **Insurance policies:** In this approach, an organization pays a premium to an insurance company in exchange for financial protection against loss. If the risk manifests, the insurance company compensates the organization for covered losses. Common examples include property insurance, general liability insurance and professional liability coverage.
- **Contractual clauses and agreements:** Contractual clauses and agreements feature legal provisions, such as indemnification clauses, limitation of liability clauses and hold harmless agreements. These provisions, commonly used in vendor, supplier and construction contracts, shift certain responsibilities and risks from one party to another.
- **Outsourcing:** By outsourcing certain functions in an operation to external service providers, organizations transfer the associated risks. For example, a business hires a specialized IT security firm to manage cybersecurity risks, or one company outsources manufacturing to another with expertise in handling production-related risks.
- **Premium Payment:** An insurance premium is the amount of money an individual or business pays to an insurance company for coverage under an insurance policy. It's essentially the price of the insurance protection. Premiums are typically paid regularly (monthly, quarterly, or annually) to keep the policy active and ensure continued coverage.

The policyholder pays regular premiums to the insurer, regardless of whether a loss occurs.

Coverage: insurance coverage is the protection provided by an insurance policy that outlines the extent to which an individual or entity is financially protected against specific risks or liabilities according to Corporate Finance Institute. It specifies what events, losses, or damages are covered and to what extent, typically in exchange for premium payments.

In return, the insurer promises to compensate the policyholder (or a designated beneficiary) for losses covered under the insurance policy.

Beneficiary: In the context of insurance, a beneficiary is the person or entity designated to receive the benefits of an insurance policy, typically the death benefit of a life insurance policy, when the insured person dies. This could be a person, a trust, or even a charitable organization. The beneficiary is chosen by the policyholder and named in the policy documents.

Purpose: Deductibles cushion against financial stress caused by catastrophic loss or an accumulation of small losses all at once for an insurer. In addition to premiums, individuals must meet health insurance deductibles and may also be required for other costs like copays and coinsurance, depending on their plans.

Theoretical Review

Economic Theory of Insurance and Expected Utility

The theory of insurance explores how individuals and businesses manage risk by pooling resources to cover potential losses. It involves understanding the principles of risk transfer, the role of premiums and claims, and the economic behavior of both insurers and insured parties. Essentially, insurance provides a mechanism for individuals to mitigate the financial impact of unforeseen events by paying a relatively small, certain cost (the premium) in exchange for protection against potentially large, uncertain losses.

The insurance theory is based on the expected utility property, which analyzes consumer preferences and demand for valuable items (Klein, 2015). It suggests that consumers spend resources to maximize utility, and appropriate utility functions and budget constraints can determine their willingness to pay for the associated utility. Utility functions can determine supply functions for goods or services, with three categories: risk aversion, risk neutrality, and risk loving function. Bernoulli's (1738) concave logarithmic utility function represents risk aversion, where expected utility is less than expected value, identifying decision-makers as risk averse. These functions represent consumer and supplier preferences under risk and uncertainty. Consider an event comprising a toss of a coin with a \$20 payout for a toss of a head and a \$40 payout if the coin lands on a tail. It is trite knowledge that the probability of head or tail is 0.5. The expected value for such an event is computed as $EV = (0.5 * 20) + (0.5 * 40)$ which is \$30. Now consider a Bernoulli function defined as: $u(w) = \sum p \log(w)$. Therefore, utility of the expected value is $\log 30$ which is 1.471. However the expected utility of the event is computed as $(0.5 * \log(20) + 0.5 * \log(40)) = 1.451$. Thus the utility of the expected value is greater than the utility of the event itself. Such a characteristic of a decision maker is referred to as risk aversion and the person is said to be risk averse. Therefore, a risk averse person is willing to have an expected utility of an event whose value is less than the utility of the expected value of that event. Abraham and Schwarcz (2015) argue that risk aversion drives insurance transactions, as policyholders are willing to accept small, certainty-based losses over big, uncertain ones. Hansen (2022) suggests that the lack of finite expected value can make economic transactions difficult. In situations like the St Petersburg paradox, modeling events and decision-making as expected utility functions can help solve the challenge of infeasible insurance contracts.

Empirical Literature Review

The empirical view on the impact of insurance on Nigeria's economic growth is mixed one, with some studies showing a positive correlation between insurance development and economic growth, while others find little or no significant impact.

Lyndon's (2019) study explored the relationship between Nigeria's insurance industry and economic growth from 2001 to 2017. This study used descriptive stats and multiple regression for analysis. Insurance investment, premium, and claims positively impacted GDP. The insurance sector has greatly aided Nigeria's economic advancement. Mandatory insurance policies recommended for individuals and businesses. Encourages investment, protects investors, and promotes steady growth. Regulators should enforce transparent fund management by insurers. Insurers should diversify investments to boost returns and pay claims.

Nwanli and Omankhanlen (2019) analyzed insurance receivables' impact on Nigerian economic growth from 2008-2017. This study used panel data analysis to investigate the correlation between insurance industry indicators (life premium, non-life premium, and insurance investment) and economic growth. The study showed that life premium and economic growth related positively yet insignificantly, and non-life premium related negatively but insignificantly with economic growth. Insurance investment had no effect on economic growth. Nigerian insurance industry has little impact on economy. Policy makers should tackle insurance industry challenges from government and public. With policies and awareness, the industry can achieve its potential.

Chizoba et al. (2018) studied the effect of inflation on insurance penetration in Nigeria from 1985 to 2016. Study used regression analysis and found inflation has a small positive impact on insurance penetration in Nigeria. The study recommends measures to reduce inflation in Nigeria, which will increase insurance penetration in the industry. Adedokun, Nwude, and Sergius (2018) linked insurance and economic growth in Nigeria from 1996 to 2015. This study used OLS estimation. Insurance in Nigeria boosts economic growth. Gov't should boost insurance industry with economic policies. Enforce insurances, enhance industry reputation with education campaigns.

Oke (2012) used fixed effect model and co-integration analysis to determine the short-run and long-run relationship between economic growth and insurance sector growth and development in Nigeria. The study span from the period of 1986 to 2009. The result reveals that insurance sector growth and development positively and significantly affects economic growth. The result of the granger causality test indicates that the extend of influence the insurance sector growth had on economic growth was limited and not direct because of some cultural, attitudinal traits and values in the economy. Shittu (2012) carried out a study on financial intermediation and economic growth in Nigeria for the period of 1970 to 2010 using unit root test, cointegration test, Error correction Model (ECM) and Engle-Granger causality test. The result observed that the financial intermediaries have significant impact on the growth of Nigerian economy.

Mojekwu, Agwuegbo and Olowokwede (2011) used a dynamic factor model to estimate the impact of insurance contributions on the growth of Nigerian economy within the period of 1981 to 2008. The result indicates that the functional relationship between the volume of insurance contribution and economic growth in Nigeria is a first order autoregressive model. This model observed that economic growth is positively correlated with insurance Eze and Okoye, 065 contributions. This implies that if insurance contribution increases, economic growth will as well increase. Anthony and Luke (2011) in a study "the effect of insurance business on economic development in Nigeria" using descriptive survey and random sampling techniques. The findings revealed that insurance companies provide financial services to some substantial number of people in the economy and that insurance helps in capital accumulation than payment of reparation of loses.

Peter and Kjell (2006) worked on the relationship of insurance and economic growth, a theoretical and empirical analysis. They applied a cross country panel data analysis using annual insurance premium data from 29 European countries over the 1992 to 2004 period. They observed a weak evidence for a growth-supporting role of life insurance and explain this with similarities to recent bank and stock sector findings. Arena (2008) worked on the empirical study and causal relationship between insurance market activity and economic growth which include 56 countries (both developed and developing ones) in the period from 1976 to 2004. Insurance premiums are used as proxies of total life and non-life insurance activities separately. As an estimation method, he used the generalized method of moment for dynamic models of panel data. The result shows a positive and significant effect of total, life and non-life insurance market activity on economic growth.

Aiss and Sümegi (2008) applied a cross country panel data analysis from 29 European countries in the period from 1992 to 2005 to study the relationship between insurance companies and economic growth in Europe. Ordinary least squares (OLS) estimate and time-fixed effects were used in data analysis. They observed that there is a positive impact of life insurance on GDP growth in the 15 European countries; while nonlife insurance has a larger impact in Central and Eastern Europe.

RESEARCH METHOD

The study on the impact of insurance industry on Nigeria’s economic growth, follows the model specified by Peter, Farooq, Adeel N. B., and Muhammad U. Q. (2021). They carried out a study on the impact of COVID-19 pandemic on abnormal returns of insurance firms: A cross-country evidence. Applied Economics, 1–21. Fashagba, M. (2018). The impact of insurance on economic growth in Nigeria. In their studies, which was anchored on Theory of Expected Utility was modified to read:

$$GDP = f(TPR, TIC, INV, INFR).....1$$

Where;

GDP = Gross Domestic Product (GDP) growth rate

TPR = Total Insurance Premium

TIC = Total Insurance Claim

INV = Total Insurance Investment

INFR = Inflation Rate

f = functional notation

μ = Error term

β_0 = constant Parameter

B_1 - β_3 = Coefficients of Regression

DATA ANALYSIS

The study investigated the impact of insurance on economic growth in Nigeria spanning from 1986 to 2022 with the use of ordinary least square method (OLS) to assess the short run impact on economic growth. In line with the research model used for the study, Gross Domestic Product (RGDP) was used as a proxy for economic growth which is dependent variable while Total Insurance Premium (TPR), Total Insurance Claim (TIC), Total Insurance Investment (INV) and Inflation Rate were used as the explanatory variables.

DATA PRESENTATION.

The log-linearized secondary data were used in the study and analyzed as shown in table 1. Table 1: Result of ADF Unit Root Test at Level

Variables	ADF Statistical Value	Mackinnon Critical Value @ 5%	0	1	Remarks
LNGDP	LNGDP -4.208867	-2.951125	Reject	Accept	Stationary
LNTPR	-1.282639	-2.951125	Accept	Reject	Non- Stationary
LNTIC	-1.527169	-2.998064	Accept	Reject	Non-Stationary
LNINN	-0.914749	-2.991878	Accept	Reject	Non- Stationary
LNINFR	-3.076874	-2.957110	Reject	Accept	Stationary

Source: Author’s Computation (2025)

The table 1 above showed that of all variables under consideration, Gross Domestic Product (GDP) and Inflation Rate (INFR) were found to be stationary at first difference as their ADF statistics value was higher than Mackinnon critical value at 5%, hence, for variable GDP and INFR the null hypothesis is rejected while the alternative hypothesis is accepted. However, since other variables were found to be non-stationary at level, there is need to proceed to first differencing to achieve stationarity of the variables. Hence, the result of the first difference as duly presented below:

Table 2: Result of ADF Unit Root Test at First Difference

Variables	ADF Statistical Value	Mackinnon Critical Value @ 5%	0	1	Remarks
LNTPR	-4.917798	-2.954021	Reject	Accept	Stationary
LNTIC	-5.696909	-2.998064	Reject	Accept	Stationary
LNINV	-4.695576	-2.998064	Reject	Accept	Stationary

Source: Author's Computation (2025)

From the table 2 above, it was revealed that Total Insurance Premium (TPT), Total Insurance Claim (TIC) and Total Insurance Investment (INV) were found to be stationary at first difference as a result of the ADF statistics which is greater than Mackinnon critical value at 5% in absolute terms. Hence, the null hypothesis is rejected for the variables while the alternative hypothesis is accepted for the variables.

Table 3: Summary of Order of Co-integration

The summary of the Augmented Dickey Fuller (ADF) unit root test is presented in the table below

Variable	Order of Integration
LNGDP	I(0)
LNINFR	I(0)
LNTIC	I(1)
LNINV	I(1)
LNTPR	I(1)

Source: Author's Computation (2025)

Hence, considering the mixed order of integration, it is necessary to proceed to the Auto Regressive Distribution Lag (ARDL) model to examine the long run relationship among the variables rather than the co-integration test which should only be used when variables are co-integrated in same order.

The result of the ADF test equation carried out on each variable is presented below alongside their respective level of stationarity and lagged period with the corresponding co-efficient of multiple determination.

Co-Integration Result

F-Statistics	Lower Bound (5%)	Upper Bound (5%)
0.840868	2.86	4.01

Source: Author's Computation (2025)

Therefore, considering the results specified above, it can be deduced that there are no long run equilibrium relationship among variables as the null hypothesis is accepted because the F-Statistics was found to be less than upper bound at 5% critical value. Hence, the ordinary least square (OLS) short run relationship is presented below

Short-Run Results

Dependent Variable: GDP

Variable	Co-efficient	Std. Error	T-Statistics	Prob.
LNINFR	0.024710	0.055432	0.207990	0.7381
LNINV	0.319543	0.223667	1.833687	0.0838
LNTIC	0.214637	0.057528	1.799581	0.0885
LNTPR	0.698757	0.150157	4.514786	0.0009

C	-0.177484	0.488834	-0.244180	0.7699
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Source: Author's Computation (2025)

From the table 6 above, the short run equation specifying the short run relationship among the variables can be presented below as:

$$GDP = -0.177484 + 0.024710 + 0.319543 - 0.214637 + 0.698757 + \mu (0.488834) (0.055432) (0.223667) (0.057528) (0.130157)$$

From the short run equation above, the coefficient of the constant parameter was found to be -0.177484 which means that if all variables are held constant in the short run, GDP which is the explained variable will decrease by -0.177484 units. Also, Total Insurance Premium (TPR) was

found to be positively related to GDP to the tune of 0.587646 units which means that a unit increase in Total Insurance Premium will increase GDP by 0.587646 units in the short run. Moreover, it was discovered that there exists a significant positive association between Total Insurance Claim (TIC) and Gross Domestic Product (GDP), where an incremental increase of 0.103526 units in GDP is observed with every unit increase in Total Insurance Claim in the near term. However, Total Insurance Investment (INV) was found to be positively related to GDP by 0.208432 units which means that a unit increase in Total Insurance Investment will improve GDP by 0.208432 units in the short run. Conversely, Inflation Rate (INFR) was found to be positively related to GDP by 0.013609 units which means that a unit increase in Inflation Rate will increase to GDP by 0.013609 units in the short run.

DISCUSSION OF RESEARCH FINDINGS

The objective of the study is to empirically investigate the impact of insurance on economic growth in Nigeria. The test for the stationary of the variables was carried out using the Augmented Dickey Fuller Unit Root Test revealing that Gross domestic product (GDP) and Inflation Rate (INFR) were stationary at level except Total Insurance Premium (TPR), Total Insurance Claim (TIC) and Total Insurance Investment (INV) that were stationary at first difference. Hence, the mixed integration of the variables at different stationarity points necessitated the need for the use of the Auto Regressive Distributed Lag (ARDL) method to estimate the short and long run equilibrium relationship among variables. Meanwhile, the ARDL Bounds testing approach to co-integration revealed that there exists no stable long run relationship among variables.

from the short run model carried out through the ordinary least square (OLS) methodology revealed that LNINFR, LNINV, LNTIC and LNTPR were found to be positive related to gross domestic product in the short run, also, LNINFR, LNINV and LNTIC were found to be positive and exhibit insignificant relationship with gross domestic product in the short run while LNTPR was found to be positive and indicates a significant relationship with gross domestic product. Moreover, the observed variables were found to align with the a-priori expectation, consistent with prior research conducted Peter, Farooq, Adeel N. B., and Muhammad U. Q. (2021), which similarly demonstrated a substantial relationship between total insurance premium and economic growth within the Nigerian context. Hence, the findings of the study can be relied on for adequate economic decision making.

CONCLUSION

The study examined the impact of insurance on economic growth in Nigeria. The study used Gross Domestic Product (GDP) as the dependent variable while Total Insurance Premium (TPR), Total Insurance Claim (TIC), Total Insurance Investment (INV) and Inflation Rate were used as the independent variables. The study used the Ordinary Least Square (OLS) approach for analysis which revealed a short run relationship among variables. In summary, it was discovered that insurance firms' indices have a positive impact on economic growth in the short run and negative impact in the long run

RECOMMENDATIONS

From the research findings, we recommend that insurance policies be made mandatory for individuals and business organizations to encourage and protect investors as well as ensure sustained economic growth; the regulatory authorities should put in place policies to enforce transparent and efficient management of funds by insurers and lastly, Investors should diversify their portfolio of investments to boost returns and their ability in claims payment.

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