

## THE IMPACT OF INSURANCE ON ECONOMIC GROWTH IN NIGERIA

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### ABSTRACT

*This study examined the impact of insurance on economic growth in Nigeria from 1986 to 2020. Using short run ordinary least square (OLS) model. The present study utilizes Real Gross Domestic Product (RGDP) as a proxy for economic growth, serving as the dependent variable while Total Insurance Premium (TPR), Total Insurance Claim (TIC), Total Insurance Investment (INV) and Inflation Rate were used as the explanatory variables. Short run of OLS result revealed that value total insurance claims, total insurance claim, total insurance investment and inflation rate had an insignificant impact on economic growth while total insurance premium has a significant relationship on economic growth. However, in the short run, insurance firm's indicator had a positive impact on economic growth in the short run and concluded that insurance firms indices has a positive impact on economic growth in the short run. Therefore, recommended that insurance policies be made mandatory for individuals and business organizations to encourage and protect investors as well as ensure sustained economic growth; that the regulatory authorities should put in place policies to enforce transparent and efficient management of funds by insurers; that investors should diversify their portfolio of investments to boost returns and their ability in claims payment.*

**Keynotes:** Gross Domestic Product (GDP), Total Insurance Premium (TPR), Total Insurance Claim (TIC), Total Insurance Investment (INV) and Inflation Rate (INTR)

### INTRODUCTION

Insurance as a financial intermediary plays a significant role in economic growth of any country (Srijana & Fatta, 2017). Insurance stimulates business activities to operate cost-effectively (Ibegbulem, 2021). The Nigeria Insurance Industry is one of the key sectors of the Nigerian economy and plays a very vital role in the nation as a whole (Agbamuche, 2012). According to Ubom (2012), the primary aim of insurance is to provide customers with safeguards against risks that may result in significant losses, such as job or income loss, inability to maintain social amenities and a decline in purchasing power. The reinstatement of the business after a major loss through insurance serves to prevent these adverse outcomes. Also, premium from the insurance constitute a large segment of the capital market which may be difficult for an individual to produce. Thus insurance generate large fund to the capital market from the premium paid by all individuals insured. The importance of insurance cannot be overemphasized considering the role of the capital market to the economy. Insurance in the nonbanking sector provides additional capital to finance economic activities toward the desired growth.

Due to the neglect of the insurance industry in Nigeria, carrying out business in Nigeria today is very risky considering the rate of insecurity in the country. Because of the uncertainty experienced in the country, the level of growth and economic advancement that should correspond with the country's

enormous potential has not been achieved yet even in other developing countries. One of the indices for measuring the progress of any economy is the size and maturity of its insurance industry. Insurance industry acts as the absorber of the risk and uncertainty associated with economic activities, and its absence can significantly reduce the growth of economic activity (Cristea, Marcu & Carstina, 2014). Most Nigerians especially the rural dwellers are ignorant of significant of the insurance industry. The essential contribution of the insurance industry in mitigating unforeseeable and disastrous events, consequently promoting economic advancement, is of significant importance (Guochen, 2012; Lee, Lin & Zeng, 2016). Among its benefits, one of which is that it allows the insured to stabilize their income every time a negating event happens, or on the state in which such an incident does not take place, and this is done through the fee of premium and the receiving of compensation (Indemnity), in the case of misfortune (Seyed, Farahnaz, Yaser, Omid & Abass, 2010; Olulekan, & Akinlo, 2013). In light of the above, this study will take a step forward to examine the impact of insurance in economic growth in Nigeria and the specific objective is to analyse the impact of total insurance premium on economic growth in Nigeria; determine the impact of total insurance claim on economic growth in Nigeria; investigate the impact of total insurance investment on economic growth in Nigeria and evaluate the impact of inflation rate on economic growth in Nigeria.

## LITERATURE REVIEW

### CONCEPTUAL REVIEW

#### INSURANCE

Dickson (1960) in Oke (2012) opined that insurance is designed to protect the financial wellbeing of an individual, company or other entity in case of unexpected loss. According to him, some forms of insurance are required by law; while others are optional. Agreeing to the terms of an insurance policy creates a contract between the insurer and the insured. Gollier (2003) argued that insurance involved the transfer of risk from one individual to another, sharing losses on an equitable basis by all members of the group. The group, known as insurance company, must increase its hold on the premium and widen its profit margin to cope with the demand of their customer.

#### The role of insurance in Nigeria economy

Insurance keeps assets and life under guarantee. Insurance plays a great role both in developed and developing countries' economies. Insurance provides safety and security: Insurance always provides financial support and decreases dangers in economic and social life. For example, we can say that in the case of life insurance financial assistance guarantee to the family of the insured on his death: Insurance makes financial resources: As economic category insurance, which is part of the financial system, is the foundation and utilization process of the targeted finance funds established to eliminate the damage from the sudden accidents and emergency, to provide financial support to the citizens in the accidents connected with their private lives (Bosworth & Triplett, 2004; Catalan, Impavido & Musale, 2000; des Assurances, 2007). Insurance always protects people from loss, from danger. Many people know that danger can occur every time. For this reason, a person, which wants to ensure his property, pays some insurance premium to the insurance company. So his property is guaranteed by the insurance company. Whenever a loss occurs, it is compensated out of funds of the insurer. With this process, insurance spreads risk in life. In addition to eliminating risk for the individual through transfer, the insurance device reduces the aggregate amount of risk in the economy by substituting certain costs for uncertain losses (Beck & Webb, 2003; Jafarova, 2021; Hartono, Suparto & Hassan, 2021).

## Economic growth

Economic growth refers to an increase in the country's production in terms of gross domestic production, over a period of time. The economic growth theory focuses on improvement in the quality life of people with an increase in productive capacity (Adamopoulos, 2010). Endogenous growth theory shows that economic growth is primarily the result of endogenous and not external forces. The theory holds that economic growth is possible if investment in human capital, innovation, and knowledge are made. The theory also primarily holds that the long run growth rate of an economy depends on policy measures. Under endogenous growth model, the development of financial development can affect economic growth by increasing the productivity of investments, reducing the transaction cost thus increasing the share of savings which channelled into productive investments and improving the liquidity of investments (Pagano, 1993).

## Theoretical Review

### Kaldor's Model

The Kaldor model is an endeavor to render the savings-income ratio a dynamic component of the mechanism of economic expansion. According to Kaldor (1966), the interpretative worth of this model lies in its conceptualization or treatment of investment, or the I/Y ratio, as an autonomous variable. "Mongale and Tafadzwa (2018) posit that an increase in the level of investment would result in an upsurge in demand levels, prices, and income. "

### Empirical Review

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, 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.

## Research Method

This study modifies Lyndon's (2019) model for empirical analysis. The model is expressed below as:

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

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  
 $\mu$  = Error term  
 $\beta_0$  = constant Parameter  
 $\beta_1$ - $\beta_3$  = Coefficients of Regression

## DATA ANALYSIS

The study examined the impact of insurance on economic growth in Nigeria from 1986 to 2022 with the use of short run ordinary least square (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.

However, it is worthy of note to state that the interpretation of results will begin from the Unit Root Test rather than the classical Ordinary Least Square (OLS) result as a result of the ARDL technique used because it also embraces the short run result which the OLS technique aim to present. In light of this, this part of the study is exclusively reserved for the analysis and interpretation of the research findings.

### Data presentation.

The raw and log-linearized data used in the study were secondary data spanning from 1986 to 2022 culled and analyzed and is duly presented as shown in table A (1 &2) in the appendix

### Test for Stationary of Variables (Unit Root Test)

The Augmented Dickey Fuller Unit Root test as duly presented in table D is summarized in table 1 and 2 below

**Table 1: Result of ADF Unit Root Test at Level**

Variables	ADF Statistical Value	Mackinnon Critical Value @ 5%	$\pi_0$	$\pi_1$	Remarks
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 (2022)

The table 1 above revealed that of all variables under consideration, Gross Domestic Product (GDP) and Inflation Rate (INFR) was found to be stationary before it first differencing 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**

Variable	ADF Statistical value	Mackinnon Critical value @ 5%	H <sub>0</sub>	H <sub>1</sub>	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 (2022)

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)
LNTPR	I(1)
LNTIC	I(1)
LNINV	I(1)
LNINFR	I(0)

Source: Author's computation (2022)

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 Augmented Dickey Fuller Test Equations

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 (2022)

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

The short run result of the model obtained through the use of the ARDL technique as presented in table 6 is summarized below:

**Table 6: Short Run Result of the Model**

Dependent Variable: GDP

Variable	Co-efficient	Std. Error	T-Statistics	Prob.
LNINFR	0.013609	0.065431	0.207990	0.8390
LNINV	0.208432	0.113668	1.833687	0.0939
LNTIC	0.103526	0.057528	1.799581	0.0994
LNTPR	0.587646	0.130157	4.514886	0.0009
C	-0.088593	0.379935	-0.233181	0.8199

Source: Author's Computation (2022)

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

$$\text{GDP} = -0.088593 + 0.013609\text{INFR} + 0.208432\text{INV} - 0.103526\text{TIC} + 0.587646\text{TPR} + \mu$$

(0.379935) (0.065431) (0.113668) (0.057528) (0.130157)

Note: The standard error statistics are those stated in parenthesis

From the short run equation above, the coefficient of the constant parameter was found to be -0.088593 which means that if all variables are held constant in the short run, GDP which is the explained variable will decrease by -0.088593 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.

## Summary of the Research Findings

The objective of the study is to empirically investigate the impact of insurance on economic growth in Nigeria. The test for the stationarity 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.

Evidence 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 exhibit a significant relationship with gross domestic product. Hence, the findings of the study can be relied on for proper recommendations and decision making.

### **Implication of Research Findings**

The objective of this study is to examine the impact of insurance on economic growth in Nigeria. The Auto Regressive Distributed Lag (ARDL) model result revealed that there are no long run relationship among variables, therefore the short run relationship was revealed among variables and ordinary least square (OLS) was interpreted.

In the present study, the results indicate a statistically significant and positive relationship between total insurance premium and short-term economic growth. Moreover, the observed variables were found to align with the a-priori expectation, consistent with prior research conducted by Lyndon (2019), which similarly demonstrated a substantial association between total insurance premium and economic growth within the Nigerian context. Moreover, it was determined that the overall insurance claim displayed a positive and insignificant correlation with the advancement of the economy, coinciding with the findings of Lyndon's (2019) investigation. In consonance with the a-priori expectation, Total insurance Investment was found to be positively related to economic growth in the short run. This implies that increase the Total insurance Investment will improve economic growth. On the other hand, as expected in conformity with theoretical expectation, Total insurance claim, Total insurance premium, Total insurance investment and Inflation rate were found to be positively related to economic growth. This means that an increase in Total insurance claim, Total insurance premium, Total insurance investment and Inflation rate will improve economic growth.

### **CONCLUSION AND RECOMMENDATIONS**

The study examined the impact of insurance on economic growth in Nigeria. The study used Gross Domestic Product (GDP) as the dependent variable and also used Total Insurance Premium (TPR), Total Insurance Claim (TIC), Total Insurance Investment (INV) and Inflation Rate as independent variables. The study used the Ordinary Least Square (OLS) approach for analysis to reveal the short run relationship among variables. The study was carried out from 1986 to 2022.

In summary, it was discovered that insurance firms indices has a positive impact on economic growth in the short run and recommended 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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