

INSURANCE SECTOR DEVELOPMENT AND ECONOMIC GROWTH IN NIGERIA: AN EMPIRICAL ANALYSIS

Dr. Lyndon M. Etale

Department of Accountancy, Faculty of Management Sciences, Niger Delta University,
Wilberforce Island, Bayelsa State, Nigeria

ABSTRACT: *This study investigated the relationship between insurance sector development and economic growth in Nigeria using data from 2001 to 2017. The study adopted gross domestic product (GDP) as proxy for economic growth and the response variable, while total insurance investment (INV), total insurance premium (PRE), and total insurance claims (CLA) were used as proxies for insurance sector development and the predictive variables. Secondary time series data for the variables were sourced from annual reports of Central Bank of Nigeria (CBN) Statistical Bulletins and the Nigerian Insurance Digest covering the period 2001 to 2017. The study employed descriptive statistics and multiple regression technique based on the E-views 9.0 software as methods of data analysis. The empirical results showed that total insurance investment, total insurance premium and total insurance claims had positive effect on gross domestic product, proxy for economic growth (total insurance investment and total insurance premium were significant at 5% level, while total insurance claims, at 19% level, was not significant). This study has established that the insurance sector development contributed meaningfully to economic growth in Nigeria. Based on the findings this study recommended that insurance policies be made mandatory for individuals and business organizations to encourage and protect investors as well as ensure sustained economic growth. Besides, the regulatory authorities should put in place policies to enforce transparent and efficient management of funds by insurers; while the latter should diversify their portfolio of investments to boost returns and their ability in claims payment.*

KEYWORDS: claims, development, economic growth; insurance; investment; premium

INTRODUCTION

Insurance business plays an important role in economic growth by mitigating business risks occasioned by sudden and devastating occurrences in both developed and developing economies. The sector provides risk management and risk adjustment services to other sectors of the economy such as industrial, transportation, agricultural, mining, petroleum, banking, etc. It also contributes to economic growth by acting as financial intermediary through capital formation and provides business funding for deficit sectors of the economy. According to Akinlo (2015) many studies in the past have pointed out the contribution of the insurance sector to economic growth and development. These studies both empirical and theoretical have shown that insurance industry contributes to economic growth by providing a comfortable investment climate in the economy.

The development of insurance business is closely linked to the founding of British trading companies and the subsequent increase in inter-continental trade resulting to increased activities

in shipping and banking. This created the need for some foreign firms to handle business risks locally for some multinational establishments. In Nigeria, the first of such firms began in 1918 when the East and West African trade companies introduced the Royal Exchange Assurance Agency (Jegade, 2005). Other firms include Patterson Zochonis, Liverpool, London and Globe, BEWAC's legal and General Assurance, and the Law Union and Rock.

The pace of growth of the industry in Nigeria was initially slow, particularly between 1921 and 1949 due to the effect of World War II on global trading activities. After the war business activities gradually picked up and the insurance sector in Nigeria recorded significant growth; and the first indigenous company (African Insurance Company) was established in 1958. At Nigeria's independence in 1960 only seven of the twenty five insurance businesses were indigenous and their share of the market was below 10% (Usman, 2009). Following the introduction of the Structural Adjustment Programme (SAP) in mid-1986, and the involvement and control of insurance business by government leading to the setting up of the National Insurance Corporation of Nigeria (NICON) in 1989, the number of insurance companies in Nigeria increased. The number of insurance companies increased from 70 in 1976 to 110 in 1990. Over the years several steps have been taken to modernize and strengthen the insurance industry (Yinusa & Akinlo, 2013). First the capital base of insurance companies was increased from 1 million to 2 million naira when only 57 out of 152 companies qualified for registration. A second round of recapitalization introduced in the 2003 Insurance Act had the capital base increased to 150 million naira from 20 million for life insurance business, from 70 to 300 million for non-life and 150 to 350 million naira for reinsurance business. Thus, 14 insurance companies were forced out of business. Another round of recapitalization, in 2005, increased insurance companies' capital base to 2 billion naira for life business, 3 billion for non-life and 10 billion for reinsurance business. The 2005 reforms brought about a number of mergers in the industry and witnessed a drop in the number of insurance firms from 103 to 49. In the whole government regulation and control of insurance business upheld a lot of prospects for the insurance industry in Nigeria.

In terms of insurance business contribution towards job creation in Nigeria, mainstream insurance companies accounted for 61% of jobs in the industry, with the large establishments employing 250 or more workers. While agencies, brokers and providers of related services in the sector accounted for 39% of jobs (de Vos, Hougaard & Smith, 2011).

Several studies have in the past examined the contribution of the insurance sector to economic growth, but there are mixed findings. Where some studies revealed significant positive link between insurance investment and economic growth, others argued that the sector does not contribute to economic growth. For example, Ching, Kogid and Furuoka (2010) in their study established that the response by economic growth indicators to life insurance variables like risk management, savings mobilization and investment do not influence growth. Agwuegbo, Adewole and Maduegbuna (2010) suggests in their findings that the insurance sector does not only boost output levels of goods and services, but also enhance the performance of the risk management function of insurance and therefore contribute to growth and economic stability. The study of Nwinee and Torbira (2012) on insurance investment-economic growth link also concluded with mixed findings. Fashagba (2018) noted this in very clear terms that the link between insurance sector development and economic growth has been widely researched but with contradicting

findings. These mixed findings of past empirical studies on this subject indicates the existence of a study gap justifying the need for more studies, and this present study on insurance sector development and economic growth in Nigeria is meant to contribute to that gap in literature.

The study used time series secondary data covering 2001 to 2017 for this investigation. The study adopted gross domestic product (GDP) as proxy for economic growth and the response variable; while total insurance claims (CLA), total insurance premium (PRE) and total insurance investment (INV) were adopted as proxies for insurance sector development, and the predictive variables. The specific objectives of the study were to determine the effect of the selected insurance development indicators on gross domestic product. These objectives informed the research questions addressed as well as the hypotheses tested in the study. The study has made significant contribution in the sense that it has added to existing literature as well as provided further support for the role of the insurance sector in the financial system-economic growth nexus. The researcher hopes too that entrepreneurs, the academia, consultants and the general public would find this work useful in further studies and in making investment decisions.

This rest of the paper is arranged as follows: Section two covers the review of past empirical literature; while section three covers the methodology adopted for the study. The results of data analysis and discussion of findings are presented in section four, and the conclusion and recommendations of the study are covered in section five.

REVIEW OF PAST EMPIRICAL LITERATURE

This section presents the review of past empirical studies to provide justification for the need for this study to examine the relationship between insurance sector development and economic growth in Nigeria.

Avram, Nguyen and Skully (2010) examined the link between insurance business and economic growth in a cross country study of 93 countries covering the period 1980 to 2006. The study employed dynamic panel data technique for the analysis of data. The results revealed that insurance growth had significant positive link with economic growth. Also, Han, Li, Moshirian and Tian (2010) examined the link between life and general insurance sector and economic growth in 77 countries. They employed Generalized Moments Method (GMM) and dynamic panel data estimation factor as the tools for data analysis. The results revealed that general insurance practice had more impact on economic growth than life insurance business. Similarly, Chen, Lee and Lee (2011) examined the link between life insurance market development, stock market operations and economic growth in 60 countries using annual data for the period 1976 to 2005. They employed generalized moments method (GMM) based on a derivative of the endogenous growth model as the technique for data analysis. The result of their study revealed that insurance business influenced economic growth.

Lee, Lee and Chiu (2013) investigated the link between life insurance business and economic growth using secondary data from 41 countries for the period 1979 to 2007. They adopted life insurance premium representing insurance development as the predictive variable, while RGDP proxy for economic growth was used as the response variable. The study employed ADF unit root test to test for the stationarity of the variables and regression analysis for the test of their

hypotheses. The results showed that there was a long run equilibrium relationship between life insurance premium and RGDP. Also, Akinlo (2015) conducted an empirical investigation of the relationship between insurance business and economic growth using annual data of 30 Sub-Saharan African countries for the period 1995 to 2011. The study adopted gross domestic product as proxy for economic growth and the dependent variable, while insurance premium, interest rate, inflation and openness (representing insurance development) were used as the independent variables. He employed ADF unit root test, co-integration test and Granger causality test as the statistical techniques for the analysis of data. The results established that GDP granger cause insurance and insurance granger cause GDP. This means that insurance sector development exerted considerable impact on economic growth.

Ul Din, Abu-Bakar and Regupathi (2017) examined the link between insurance business and economic growth in 20 countries for the period 2006 to 2015. In their study model economic growth was represented by GDP, while insurance activity was represented by net insurance written premium, insurance penetration and insurance density as dependent variables. The Hausman test statistics they employed for data analysis confirmed that insurance activities had positive significant effect on economic growth. However, non-life insurance business was more predominant than life insurance practice.

Ouedraogo, Guerineau and Sawadogo (2018) investigated the association between the development of the life insurance sector and economic growth in 86 developing countries using data spanning 1996 to 2011 obtained from World Development Indicators compiled by the World Bank. They adopted total life insurance premium as the explanatory variable and GDP (proxy for economic growth) as the response variable. The study employed descriptive statistics, generalized moments method (GMM) for the analysis of data. The results indicated that insurance sector development had positive effect on economic growth, but it varies from country to country according to the structural characteristics of different countries.

Ching, Kogid and Mulok (2011) examined the causality link between general insurance sector and economic growth in Malaysia using time series secondary data from 1997 to 2008. Real gross domestic product (proxy for economic growth and response variable) was regressed against general insurance investment (the predictive variable). They employed ADF and Philip-Peron unit root test, Autoregressive Distributed Lag (ARDL), Granger causality test and Error Correction Model (ECM) as the statistical tools to analyse their study data. The results showed that total assets of the general insurance sector positively affected economic growth in Malaysia. Also, Chau, Khin and Teng (2013) investigated the link between life and general insurance consumption and economic growth in Malaysia using secondary data from 1970 to 2012. The study adopted capital stock, total employment, life and general insurance premium as the independent variables, regressed against GDP (proxy for economic development). They employed unit root test, co-integration test, Granger causality test and Error Correction Method (ECM) as the statistical tools for data analysis. Their findings showed that total employment and life insurance premium had short run significant positive impact on economic growth, while capital stock and general insurance had positive significant effect on economic growth in the long run.

Ming, Yung and Ting (2012) investigated the relationship between insurance demand, financial development and economic growth in Taiwan using secondary data from 1961 to 2006. They

adopted insurance demand and financial development as the explanatory variables, while GDP, proxy for economic growth was used as the dependent variable. The study employed Vector Autoregressive (VAR) model for the analysis of data. They found symmetry relationship between insurance demand, financial development and GDP growth. Richterкова and Korab (2013) conducted a meta-analysis of empirical literature on the impact of insurance activity on economic growth. The study adopted insurance premium, insurance penetration and insurance density to represent insurance sector activity, which they regressed against GDP (proxy for economic growth). The statistical tools used for the analysis of data include fixed-effect model and random-effect model. The results confirmed that insurance activities had positive effect on economic growth.

Cristea, Mariu and Carstina (2014) examined the relationship between insurance investment and economic growth in Romania using time series data from 1997 to 2012. The study adopted GDP as proxy for economic growth and the dependent variable, while total insurance premium was used as the independent variable to represent insurance practice. They conducted multiple regression correlation and Pearson correlation test and found a high level of correlation between insurance market and economic growth, though non-life insurance practice was more predominant compared to life insurance business.

Mojekwu, Agwuegbo and Olowokudejo (2011) examined the impact of insurance contribution to economic growth in Nigeria using time series data obtained from CBN Statistical Bulletin for the period 1981 to 2008. The study adopted the total volume of insurance business as the explanatory variable and GDP (proxy for economic growth) the response variable. They employed dynamic factor model comprising sample autocorrelation function and panel autocorrelation function as the statistical tools for the analysis of data. The results revealed positive relationship between insurance business and economic growth. Also, Oke (2012) investigated the relationship between insurance sector development and economic growth in Nigeria using secondary data for the period 1985 to 2009. The study adopted GDP as proxy for economic growth, while number of insurance companies, life insurance premium, non-life insurance premium, total insurance investment and inflation rate were used to represent insurance sector development. He employed Johansen co-integration test and parsimonious Error Correction Model (ECM) as the tools for data analysis. The findings revealed that insurance sector development had significant positive effect on economic growth in Nigeria.

Akinlo (2013) examined the link between insurance business and economic growth in Nigeria using secondary data obtained from CBN Statistical Bulletin and National Bureau of Statistics for the period 1986 to 2010. The study adopted GDP (proxy for economic growth and the response variable), while insurance premium was used as the explanatory variable. Two macroeconomic indicators (inflation rate and interest rate) were introduced as moderating variables. He employed descriptive statistics, ADF unit root test, Johansen-Juselius co-integration test and Vector Error Correction Model (VECM) as the statistical tools for the analysis of data. The results of the study established that insurance sector development had positive impact on GDP (proxy for economic growth). Eze and Okoye (2013) in their study investigated the impact of insurance practice on economic growth in Nigeria using time series data for the period 1980 to 2011. The study adopted GDP as proxy for economic growth, while insurance practice was represented by insurance

premium capital, total insurance investment and insurance sector development. They employed ADF and Philip Peron unit root test, Johansen co-integration test and Error Correction Model (ECM) as the statistical tools for data analysis. The results established that insurance practice had positive significant effect on economic growth in Nigeria.

Madukwe and Obi-Nweke (2014) examined the link between total insurance business and economic growth in Nigeria using secondary data collected from CBN Statistical Bulletin and Nigerian Insurance Digest for the period 2000 to 2011. In their study model 2, GDP (proxy for economic growth and dependent variable) was regressed against total insurance business (the independent variable) using Pearson's Product Movement correlation technique. The results indicated a strong positive relationship between insurance business and economic growth. Also, Madukwe and Anyanwaokoro (2014) investigated the relationship between life insurance business and economic growth in Nigeria using secondary data obtained from the Nigerian Insurance Digest and IMF World economic data for the period 2000 to 2011. Their study regressed GDP (proxy for economic growth) against life insurance premium using Pearson's Product Movement correlation technique. Though the regression results showed a strong link between life insurance premium and GDP, there was a low level of patronage of life insurance business by individuals and corporate organizations in Nigeria.

Oyedotun and Adesina (2015) examined the impact of insurance business on economic growth in Nigeria using secondary time series data obtained from CBN Statistical Bulletin and National Bureau of Statistics for the period 1980 to 2011. The study adopted GDP as proxy for economic growth and the response variable, while insurance investment was used as the explanatory variable. Two macroeconomic indicators, inflation rate and exchange rate, were added as moderating variables. The study employed ADF and Philip-Peron unit root test as well as the OLS regression technique for the analysis of data, and found that insurance business made strong contribution to economic growth. Gabriel (2015) investigated the effect of insurance sector development on economic growth in Nigeria using time series data obtained from CBN Statistical Bulletin for the period 1981 to 2013. The study adopted GDP (proxy for economic growth) as the response variable, while insurance sector development indicators such as total insurance payment, total insurance premium, total insurance investment and total insurance returns were used as the predictive variables. Descriptive statistics, multiple regression (based on OLS), ADF unit root test, unrestricted co-integration test and Granger causality test were the statistical tools employed for the analysis of data. The results revealed that total insurance investment and total insurance premium had significant positive link with GDP, while total insurance claims had significant negative effect on GDP. The study concluded that insurance sector development had strong effect on economic growth in Nigeria.

Igbodika, Ibenta and Isaac (2016) examined the contribution of insurance investment to economic growth in Nigeria using time series data obtained from CBN Statistical Bulletin and Nigerian Insurance Digest for the period 1980 to 2014. The study adopted gross domestic product as proxy for economic growth and dependent variable, while insurance sector investment was used as the independent variable. The study added interest rate as a control variable to capture investors' reaction to changes in cost of investment. They employed ADF and Philip-Peron unit root test, Johansen co-integration test and Generalized Method of Moments (GMM) as the statistical tools

for the analysis of data. The results showed that insurance sector investment had significant positive effect on economic growth.

Nwosa and Mustapha (2018) investigated the dynamics of insurance development and economic growth in using secondary data for the period 1996 to 2014. They used OLS and Granger causality test as the statistical techniques to analyse their study data. The results showed that insurance development had insignificant effect on economic growth in Nigeria. The study concluded with a recommendation that government should put in place sound policies and regulation to sustainable development in the insurance sector. Fadun and Shoyemi (2018) examined the contribution of insurance investment funds to economic growth in Nigeria time series data obtained from CBN Statistical Bulletin and Nigerian Insurers Digest covering the period 2000 to 2015. The study adopted total insurance investment and gross domestic product (proxy for economic growth) as the independent and dependent variables respectively. Data analysis techniques employed include Pearson's correlation coefficient and OLS. The results revealed strong positive relationship between the study variables. Fashagba (2018) examined the relationship between insurance and economic growth in Nigeria using secondary data obtained from CBN for the period 2007 to 2016. The study employed OLS regression technique as the statistical tool for data analysis. The results showed that non-life insurance premium and total insurance premium had insignificant positive link with economic growth, while life insurance premium had negative also insignificant relationship with economic growth.

Research Gap

The review of past empirical studies above shows that there is a lack of consensus in the findings of previous researchers on the relationship between insurance sector development and economic growth. Fashagba (2018) noted this in very clear terms that the link between insurance sector development and economic growth has been widely researched but with contradicting findings. This lack of consensus in the empirical results of previous studies indicates the existence of a research gap. Therefore, this study on the link between insurance sector development and economic growth in Nigeria was aimed at contributing to that gap in literature.

METHODOLOGY

This section covers the methodology adopted for the study, which is ex post facto research design since the study relies on already existing time series secondary data. This makes it impossible for the researcher to manipulate the data used in the study. The study source of data, variables, model specification and methods of data analysis are covered here.

Source of data

Time series secondary data for the study variables covering the period 2001 to 2017, were collected from various annual reports from the Central Bank of Nigeria (CBN) Statistical Bulletins and Nigerian Insurance Digest. These sources were considered the most reliable data sources for this type of study. The period covered by the study is 17 years, which was considered long enough for the researcher draw meaningful conclusions.

Variables of the study

The aim of this study was to investigate the relationship between insurance sector development and economic growth in Nigeria using secondary data for the period from 2001 to 2017. The study adopted gross domestic product (GDP) as proxy for economic growth and the dependent variable; while total insurance investment (INV), total insurance premium (PRE) and total insurance claims (CLA) were adopted as proxies for insurance sector development, and the explanatory variables.

Gross domestic product (GDP)

GDP is used to proxy economic growth which is defined as an increase in per capita national output or net national product over a long period of time. It is considered as growth if the rate of increase in total output (goods and services) is greater than the rate of growth of the population. It is the quantitative increase in the monetary value of goods and services produced in the economy within a given year, and can be measured as a percentage change in the gross domestic product or gross national product.

Total insurance claims (CLA)

Total claim is a formal request to an insurance company asking for payment based on the terms of the policy. The insurance company reviews the claim for its validity and makes payment to the insured or the requesting party on behalf of the insured.

Total insurance premium (PRE)

An insurance premium is the amount of money that an individual or business must pay for an insurance policy. The premium is considered as income by the insurance company once it is earned. It also represents a liability in that the insurer must provide coverage for claims that may be made against the policy.

Total insurance investment (INV)

Insurance investment is the total amount of money invested by the insurance company in various assets. The amount invested is usually derived from the proportion of the total premium.

Model specification

The functional relationship between the response variable and the predictive variables were expressed in the following model which is an adaptation of a model that has been widely used in previous studies such as (Eze et al, 2013 & Igbodika et al, 2016).

$$GDP = f(INV, PRE, CLA)$$

The above functional relationship is translated into an econometric equation as follows:

$$GDP = \beta_0 + \beta_1 INV + \beta_2 PRE + \beta_3 CLA + \mu \quad \text{Equation 1}$$

Where:

GDP = Gross Domestic Product

INV= Total insurance investment (predictive variable 1)

PRE= Total insurance premium (predictive variable 2)

CLA = Total insurance claims (predictive variable 3)

β_0 = intercept or constant

$\beta_1, \beta_2, \& \beta_3$ = coefficients of the explanatory variables or factor sensitivities

A priori expectations: $\beta_0, \beta_1, \beta_2, \& \beta_3 \neq 0$

μ = the error term

Methods of data analysis

The study employed descriptive statistics and multiple regression technique based on the E-views computer software as methods of data analysis for predicting the relationship between the adopted insurance sector development variables (INV, PRE and CLA) and economic growth proxy by gross domestic product (GDP) based on the model specified above. The multiple regression technique possesses the unique property of best linear unbiased estimator including efficiency and consistency when compared with other estimating techniques.

The statistics tested for in the regression equation included the coefficient of determination (R^2), the probability of F-statistics, and the Durbin-Watson statistics. The coefficient of determination (R^2) measures the explanatory power of the predictive variables on the response variable. The probability of F-statistics test for the overall statistical significance of the regression model, which was used to generalize the hypotheses. While the Durbin-Watson statistics was used to test for autocorrelation in the regression equation. The coefficients of the explanatory variables indicate the extent to which the predictive variables individually influence the response variable.

Results of Data Analysis and Discussion of Findings

The results of data analysis and the discussion of the findings including the test of hypotheses are presented in this section.

Descriptive statistics

The descriptive statistics of the study variables, generated from the E-views 9.0 computer software are presented in Table 1 below. From Table 1, the mean figures of GDP, INV, PRE and CLA are 40748.71, 138344.30, 75683.07 and 23281.76 respectively. In the order the variables are presented, the minimum figures are 6713.57, 6606.00, 3950.00 and 2428.00 respectively, while the maximum figures are 94487.93, 359192.00, 233752.90 and 76276.10, with standard deviation of 34068.64, 146074.70, 74557.84 and 24594.06 respectively.

Regression results and Discussion of findings

From the multiple regression results in Table 2 below, the regression equation could be stated as:

$$GDP = 14244.48 + 0.113174INV + 0.105419PRE + 0.123222CLA + 23422.94$$

This indicates that the constant or intercept is 14244.48, meaning that if all the predictive variables (total insurance investment, total insurance premium, and total insurance claims) are held constant, the response variable, GDP (proxy for economic growth) would be 14244.48 units in an annual basis. This implies that without the intervention of insurance sector development elements the economy of Nigeria would be growing at that rate. All the predictive variables (INV, PRE and CLA) have positive coefficients except that CLA is not significant at 5% level (with a probability value of 0.1878). This means that all the predictive have positive effect on GDP. The results as it where in Table 2 showed that INV and PRE have significant positive relationship with GDP (with probability values of 0.0152 and 0.0423 respectively). However, CLA has an insignificant positive relationship with GDP (with probability value of 0.1878). This result, while contradicting the

findings of Ahmed (2011) a study based in Pakistan, agrees with the results of (Babalola, 2015; Agu et al, 2014 & Kareem et al, 2013).

Table 1: Descriptive Statistics

	GDP	INV	PRE	CLA
Mean	40748.71	138344.3	75683.07	23281.76
Median	24296.33	54642.80	43944.70	9415.200
Maximum	94487.93	359192.0	233752.9	76276.10
Minimum	6713.570	6606.000	3950.000	2428.000
Std. Dev.	34068.64	146074.7	74557.84	24594.06
Skewness	0.505624	0.623058	0.987419	1.039256
Kurtosis	1.577154	1.575696	2.529084	2.491588
Probability	0.339872	0.281273	0.232286	0.197578
Sum	692728.1	2351853.	1286612.	395790.0
Observations	17	17	17	17

Source: E-views 9.0 output

Though, all the predictive variables have significant positive relationship with the response variable (GDP) as indicated by the probability values (except CLA which is not significant at 5% level, that is, 0.1878 probability value). The coefficient of determination R^2 value at 0.72 shows that 72% of changes in the response variable are explained by the combined effect of changes in the predictive variables; and the value of the Adjusted R^2 shows at 63% confidence level that the regression model adopted as the basis of the analysis is a proper and good fit.

Also, the Durbin-Watson statistics value of 1.95, is approximately equal to the 2.0 benchmark, indicates that there was no autocorrelation among the predictive variables (INV, PRE and CLA). Therefore, with the coefficient of determination, R^2 value at 0.72 and the probability of the F-statistic value of 0.004934 it has been established in this study that insurance sector development positively contributed to economic growth in Nigeria.

Testing of hypotheses

GDP and INV

Hypothesis: Total insurance investment (INV) has no significant influence on gross domestic product (proxy for economic growth). The results in Table 2 show that the coefficient of INV is 0.11 with a prob. of 0.0152. This means that the null hypothesis is rejected as the results show that INV has a significant positive influence on GDP at 5% level. A unit increase in INV will result in 0.11 units increase in GDP. The economic implication being that total insurance investment contributes significantly to the growth of the Nigerian economy. This finding agrees with the results of (Gabriel, 2015).

GDP and PRE

Hypothesis: Total insurance premium (PRE) has no significant effect on gross domestic product (proxy for economic growth). The coefficient of PRE in Table 2 is 0.11 at 5% significant level (with a prob. of 0.0423). The null hypothesis therefore was rejected as PRE has a significant

positive relationship with GDP. A unit increase in PRE would bring about 0.11 units increase in GDP, implying that through insurance premium payment insurance companies would have available more funds to invest in the economy. This result is supported by the findings of (Gabriel, 2015).

Table 2: Multiple Regression Results

Dependent Variable: GDP

Method: Least Squares

Date: 03/20/19 Time: 00:19

Sample: 1 17

Included observations: 17

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	14244.48	8323.859	1.711283	0.0130
INV	0.113174	0.134476	0.841592	0.0152
PRE	0.105419	0.254285	0.414568	0.0423
CLA	0.123222	0.448491	0.274747	0.1878
R-squared	0.715942	Mean dependent var		40748.71
Adjusted R-squared	0.627313	S.D. dependent var		34068.64
S.E. of regression	23422.94	Akaike info criterion		23.16314
F-statistic	6.949691	Schwarz criterion		23.35919
Prob(F-statistic)	0.004934	Durbin-Watson stat		1.947381

Source: E-views 9.0 output

GDP and CLA

Hypothesis: Total insurance claims (CLA) have no significant effect on gross domestic product (proxy for economic growth). The coefficient of CLA in Table 2 is 0.12 at 19% significant level (with a prob. of 0.1878). This means that an acceptance of the null hypothesis; CLA has a positive insignificant effect on GDP. Here, it was found that a unit increase in CLA would bring about 0.12 units increase in GDP only at 81% level of confidence. This shows that total insurance claims have positive effect on economic growth, but this is not significant at 5% level. This finding contradicted the results of (Gabriel, 2015).

The aim of this study was to examine the effect of the insurance sector development on economic growth in Nigeria in order to contribute to the gap in research literature. From the findings this study has established that insurance sector development has made meaningful contribution to the growth of the Nigerian economy. To that end, this study has made purposeful contribution to the gap in literature identified in the review of past empirical literature. It would be necessary for government to consider making insurance protection mandatory for individuals and businesses to ensure safety of investment and sustain growth in the economy. There may also be need to set up some requirements to guarantee efficient and transparent management of funds and diversification of investment portfolio in the insurance industry.

CONCLUSION AND RECOMMENDATIONS

The conclusion and recommendations based on the study findings are presented in this section of the paper.

Conclusion

This study investigated the relationship between insurance sector development and economic growth in Nigeria using data from 2001 to 2017. The study adopted gross domestic product (GDP) as proxy for economic growth and the response variable, while total insurance investment (INV), total insurance premium (PRE), and total insurance claims (CLA) were used as proxies for insurance sector development and the predictive variables. Secondary time series data for the variables were sourced from annual reports of Central Bank of Nigeria (CBN) Statistical Bulletins and the Nigerian Insurance Digest covering the period 2001 to 2017. The study employed descriptive statistics and multiple regression technique based on the E-views 9.0 software as methods of data analysis.

The empirical results showed that total insurance investment, total insurance premium and total insurance claims had positive effect on gross domestic product, proxy for economic growth (total insurance investment and total insurance premium were significant at 5% level, while total insurance claims were insignificant at 19%). This study therefore established that insurance sector development contributes meaningfully to economic growth in Nigeria. In summary this study was able to establish that insurance sector development has made significant contribution to economic growth in Nigeria. It is left for government to make insurance protection mandatory for individuals and businesses to ensure safety of investment and sustain the level of growth in the economy. Government may also consider setting up requirements for insurers to comply with in order to guarantee the efficient and transparent management of funds and diversification of investment portfolio in the industry.

Recommendations

Based on the findings, this study recommends that insurance policies be made mandatory for individuals and business organizations to encourage and protect investors as well as ensure sustained economic growth. Also, regulatory authorities should put in place policies to ensure transparent and efficient management of funds by insurers; while the latter should diversify their portfolio of investment to boost returns and ability in claims payment.

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