INSURANCE SECTOR AND THE NIGERIA ECONOMIC PERFORMANCE (1995-2017)

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Abstract

The paper examined insurance sector and economic performance in Nigeria spanning from1995-2017. Time Series data was sourced from CBN Statistical Bulletin, CBN Supervisory Annual Report and World Bank Development Indicators (2017) for the periods under review which was considered reliable for the study. The Statistical regression technique employed was E-views version 9. The study showed that all the independent variables (Insurance Investment (IIV), Life Insurance Premium (LIP), Non-Life Insurance Premium (NLIP)) and Interest Rate (INTR have significant effect on the economy in Nigeria (proxy by Human Development Index (HDI)) and Gross Domestic Product (GDP)except Insurance Claim (ICL) Inflation Rate (INFR).Therefore recommended that government should through Central Bank Nigeria CBN implement policies that will encourage the public to engage their surplus funds in insurance activities. Also that, management of insurance companies should endeavor to develop rigorous and robust policies of life insurance that will enable large amount of the population of Nigeria to take part in life insurance contracts.

Key-Words: Insurance Sector, Economy, Population, Central Bank of Nigeria, Human Development Index

Introduction

Insurance sector possess some characteristic of financial institutions in the sense that it acts as a financial intermediary in satisfying the need of families (household), corporate firms and government sectors in the economy. Insurance forms a major sector of the economy. Insurance can be divided into three (3) major groups which include the nonlife insurance, life insurance and reinsurance. Nonlife insurance is concerned with short term fund. That is, fund whose maturity period ranges from 1day to 1year. Life insurance is concerned with long term funds which consist of funds with maturity period of 3years and above. The reinsurance is concerned with assisting other insurance companies to indemnify their clients for huge losses, thus insurance plays an important role in the economic performance of Nigeria.

Insurance encourages investments by providing capital to industries for the production of goods and services which will in turn lead to an increase in human

development of the economy. It provides services which are geared towards hedging against general uncertainties or losses which frequently occurs at the micro and macro business undertakings, thereby resulting in liabilities which may be turned into a financial lose

In the study of (Nwosa & Mustapha, 2018; Cristea, Mariu & Carstina, 2014; Ouedraogo, Guerineau & Sawadogo, (2018), It Presented a strong correlation between insurance sector activities and economic growth both inside and outside the Nigeria context. There have also been other growing numbers of studies in Nigeria liking insurance sector activity with economic Performance.   For example the study embarked by Fashagba (2018), Akinlo and Olayaungbo (2015) examined the impact of insurance sector activity on economic growth. It was found to produce mixed findings as some of the studies of. (Alagidede & Ibrahim, 2018; Akinlo & Egbetunde, 2010) produced positive and others negative results. This therefore arouse the interest of the researcher to the study of insurance sector and economic Performance in Nigeria

Review of Related Literature
Insurance as Financial Intermediation

Insurance sector have played various positive roles to the economic performance of both developed and undeveloped countries. Adedokun, (2014) posited that insurance is central to modern-day financial services as it increases consumers' propensity to save (CPS) in the economy thereby making up a larger part of bank borrowings. The activities of the insurance sector in Nigeria create job opportunities for citizens of the country as a result of the massive investment it creates

According to Fadun and Shoyemi, (2018), it acts as financial intermediaries in the economy by ensuring the availability of loadable funds (premiums), to the deficit sector, thus promoting investment. Life insurance premium can be paid annually, quarterly or monthly. It encourages the culture of saving money. Life insurance premium also help the insured to enjoy a favorable tax treatment unlike other financial instruments. Nonlife insurance premium is an amount of money an individual, household or firm pays to an insurance company periodically for undertaking a nonlife insurance policy. These premiums collected from various policy holders can also be put into investment, hence uplifting the productivity level of goods and services thereby increasing the Real Gross Domestic Product Growth (RGDPG) of a given economy.

According to Osiegbu, Okereke, and Ezirim, (2002), Insurance transfers surplus resources (savings) from the surplus unit to the deficit unit of the economy thereby providing loan to borrowers to meet their financial and investment needs It provides cover to the policy holder

Theoretical Literature
The Growth Theory

The theory of economic growth emanates from the Keynesian school of thought. Lord Keynes argument was that demand cannot be equal to supply neither do savings equal to investment, because not all products supplied in the market in a particular period of time by producers or suppliers are demanded for by consumers and that not all savings are channeled into investment. In Eze and Okoye, (2013), the growth theory asserts that a well advanced financial intermediation can add to a positive impact on economic performance. This

paper supported the growth theory because insurance sector also carry out some functions of financial intermediation by transferring funds from the surplus sector to the deficit sector of the economy thereby encouraging economic growth.

Cooperative and risk theory

The cooperative and risk sharing theory by Skogh (1999), states that the loss of an individual policy holder is shared among all policy holders of similar policy who are willing to cooperate. Under insurance contract, an individual policy holder cannot pay for his loss alone. Therefore, loss is being shared among all policy holders of the same policy. According to cooperative theory, all the policy holders contribute premium to the insurance scheme. This premium contributed by various policy holders are used to indemnify a single policy holder for loss suffered. This paper supports the cooperation and insurance risk theory because insurance contract is based on risk and cooperation. When a policy holder suffers a covered loss, indemnity payment is made from the accumulated premium of all policy holders of similar policy. This is only possible if there is cooperation among all policy holders of the same risk. . On the other hand, the basic aim of any insurance activity is to protect individuals and firms against risk and to reduce and absorb risk.

Theory of Financial Intermediation

Gurley and Shaw (1960) introduce the theory of financial intermediation. Financial intermediation involves the activities of financial intermediary's channeling assets from the savings sector to the investment sector of the Economy.

An observed studies in UI, Abu-Bakar, & Regupathi, (2017) confirmed that a combination of insurance business and

portfolio investment on Gross Domestic Product in Nigeria using monthly time series data for the period 1996-2012, using the ordinary least square (OLS) regression framework had a positive effect on the GDP . This was also confirmed in Eze and Okoye, (2013) using co-integration test and error correction model in analyzing insurance practices and economic growth. They also observed that the insurance premium capital had significantly impacted on economic growth in Nigeria; that the level of total insurance investment had significantly affected economic growth in Nigeria.

Abu-Bakar and Regupathi (2017), Ouedraogo, Guerineau and Sawadogo (2018), Nwosa and Mustapha (2018) and Nwosa and Mustapha (2018) tried to know the marginal contribution of insurance investment funds to economic growth in Nigeria for the period 2000-2015. The result reported a strong positive relationship between total insurance investment and GDP.

Njegomir (2020) tries to assess the relationship between the growth of insurance and entrepreneurship grown in a country of Serbia, for 21-year period between (1995-2016). The data were collected from the World Bank. The report suggested a direct relationship between the growth of insurance and entrepreneurship.

Ibrahim & Sanusi (2018) applied a survey research design to demonstrate insurance business on employee's wellbeing of 53 workers in Yola and Adamawa State. The result showed that the operations of the insurance sector have an indirect effect on the growth of the workers. The study recommended that the federal government should boost and as well as funding such businesses in Yola and Adamawa State.

In the same vien, Osho & Ademuyiwa (2017) researched on insurance operations

and entrepreneurship in Nigeria and the result exhibited a strong relationship although it has negligible impact on the growth of entrepreneurship in Nigeria

Research Method

The model for the study was adopted from the work of Matthew (2018) which specified the following model:

GDP= β_0 + β_1Lifprem + β_2Nlifprem + β_3Grossprem + E

Where GDP represents the economy, β_0, β_1, β_2, β_3 stands for the regression parameters and

eit also for the error term. Similarly, the foregoing model was modified to capture the variables under study. Specifically, two independent variables (Insurance Investment and Insurance Claim) were added in our model in addition to two control variables (Inflation Rate and Interest Rate). Also this study used two models, unlike the Matthew (Ibid) which used only one model. Consequently, the modified model for this study is stated as follows:

MODEL 1

RGDPG = f (IIV, ICL, LIP, NLIP, INFL, INTR)………………………… Model 1a

Expressed in regression equation, the model becomes

RGDPG= β_0+β_1IIV+β_2ICL+β_3LIP+β_4NLIP+β_5INFL+β_6INTR+ EIT…… Equation1b

MODEL 2

HDI= f (IIV, ICL, LIP, NLIP, INFL, INTR)………………………………. Model 2

Expressed in regression equation, the model becomes

HDI=β_0 + β_1IIV+β_2ICL+β_3LIP+β_4NLIP+β_5INFL+β_6INTR+EIT…………Equation 2b

Where;
RGDPG= Real Gross Domestic Product Growth; HDI= Human Development Index; IIV = Insurance Investment; ICL = Insurance Claims; LIP = Life Insurance Premium; NLIP = Non-Life Insurance Premium; INFL= Inflation; INTR= Interest Rate; EIT = Error Term; β_0, - β_6 are the regression coefficients.

A priori Expectation: In line with the variables underpins this work, the expectation is to have a positive relationship among the dependent variable, independent variable, and the control variable with the exception of insurance claim and inflation which are expected to show a negative effect.

Results and Discussion of Findings

DESCRIPTIVE STATISTICS

The descriptive statistics for the two models for analysis are presented in tables 1 and 2 below.

Table 1: Descriptive Statistics for Model 1

	RGDPG	IIV	ICL	LIP	NLIP	INFLR	INTR
Mean	5.731818	258452.8	49261.75	36038.52	103549.3	11.94591	23.60318
Median	5.870000	272803.9	31272.90	8137.200	85344.35	11.85000	22.55500
Maximum	14.60000	602316.0	148345.1	161068.1	210772.5	23.80000	39.19000
Minimum	-1.580000	12379.50	5629.500	0.000000	10941.60	0.200000	18.36000
Std. Dev.	3.665455	225340.1	48171.91	47321.44	77071.59	4.720571	4.548864
Skewness	0.196108	0.259694	0.760690	1.167598	0.135545	0.086196	1.841756
Kurtosis	3.203419	1.501950	2.292726	3.428677	1.349909	4.315741	7.293112
Jarque-Bera	0.178945	2.304425	2.580264	5.167161	2.563267	1.614152	29.33247

Probability	0.014414	0.015937	0.005234	0.005503	0.007584	0.006161	0.000000
Sum	126.1000	5685962.	1083759.	792847.4	2278084.	262.8100	519.2700
Sum Sq. Dev.	282.1467	1.07E+12	4.87E+10	4.70E+10	1.25E+11	467.9595	434.5355
Observations	22	22	22	22	22	22	22

Source: Eviews 9 Output (2019)

Table 2: Descriptive Statistics for Model 2

	HDI	IIV	ICL	LIP	NLIP	INFLR	INTR
Mean	0.342227	258452.8	49261.75	36038.52	103549.3	11.94591	23.60318
Median	0.479000	272803.9	31272.90	8137.200	85344.35	11.85000	22.55500
Maximum	0.592000	602316.0	148345.1	161068.1	210772.5	23.80000	39.19000
Minimum	0.000000	12379.50	5629.500	0.000000	10941.60	0.200000	18.36000
Std. Dev.	0.241086	225340.1	48171.91	47321.44	77071.59	4.720571	4.548864
Skewness	-0.731482	0.259694	0.760690	1.167598	0.135545	0.086196	1.841756
Kurtosis	1.608738	1.501950	2.292726	3.428677	1.349909	4.315741	7.293112
Jarque-Bera	3.736219	2.304425	2.580264	5.167161	2.563267	1.614152	29.33247
Probability	0.004415	0.015937	0.005234	0.005503	0.007584	0.006161	0.000000
Sum	7.529000	5685962.	1083759.	792847.4	2278084.	262.8100	519.2700
Sum Sq. Dev.	1.220572	1.07E+12	4.87E+10	4.70E+10	1.25E+11	467.9595	434.5355
Observations	22	22	22	22	22	22	22

Source: Extracted from EVIEWS 9.0 output

Data Analysis

We carried pre- tests to assure the stationarity of the data. This includes the unit root test and the normality test. The results for both models are presented below.

Stationarity Test Result

This test was applied to check if the data series are stationary or not. If a set of data is not stationary, then the result obtained would be absurd and hence, the result from such data would be unacceptable. The best way of checking the stationary of a set of data is to carry out a unit root test using the Augmented Dicker-Fuller's Test

Table 3: Unit Root Test Result for Model 1

Data Series (Variables)	Augmented Dicker-Fuller (ADF)	Mackinnon Test Critical Value (TCV)			Probability of ADF
		1%	5%	10%	
RGDPG	-5.430037	-3.788030	-3.012363	-2.646119	0.0003
IIV	-4.345506	-3.808546	-3.020686	-2.650413	0.0032
ICL	5.148871	-3.808546	-3.020686	-2.650413	0.0006
LIP	-4.890231	-3.788030	-3.012363	-2.646119	0.0008
NLIP	-3.988133	-3.788030	-3.012363	-2.646119	0.0524
INFLR	-3.788389	-3.857386	-3.040391	-2.660551	0.0115

| INTR | -5.730764 | -3.808546 | -3.020686 | -2.650413 | 0.0002 |

Source: Eviews9 Output (2019)

Using the Augmented Dickey-Fuller Test, the result must show a probability value that is lower than the critical value of 0.05 at any level of significance, in order to reject the null hypothesis. From table 3 above, the augmented dicker-fuller (ADF) test statistics are greater than the test critical values (TCV) at 5% level of significance in all the data series. Also all probability values of ADF are less than 5% level of significance. Therefore, we hereby reject the null hypothesis.

Table 4: Unit Root Test Result for Model 2

Data Series (Variables)	Augmented Dicker-Fuller (ADF)	Mackinnon Critical Value			Probability of ADF
		1%	5%	10%	
HDI	-4.525723	-3.788030	-3.012363	-2.646119	0.0020
IIV	-4.345506	-3.808546	-3.020686	-2.650413	0.0032
ICL	5.148871	-3.808546	-3.020686	-2.650413	0.0006
LIP	-4.890231	-3.788030	-3.012363	-2.646119	0.0008
NLIP	-3.988133	-3.788030	-3.012363	-2.646119	0.0524
INFLR	-3.788389	-3.857386	-3.040391	-2.660551	0.0115
INTR	-5.730764	-3.808546	-3.020686	-2.650413	0.0002

Source: Eviews9 Output (2019)

From table 4 above, the augmented dicker-fuller (ADF) test statistics are greater than the test critical values (TCV) at 5% level of significance for all the data series. Also all probability values of ADF are less than 5% level of significance. Therefore, we hereby reject the null hypothesis which states that the data is not stationary.

Test for Normality

Normality test was carried out in order to correct an abnormal distribution by converting it to a normal distribution using interlog and converting it into its logarithm form.

The normality test carried out on each variable using Eviews9 is give below

Table 5   Test for Normality for Model 1

Data Series	Jarque-Bera Statistics	Probability Values
RGDPG	10.0001	0.0003
IIV	2.3044	0.0159
ICL	2.9563	0.0281
LIP	6.1177	0.0469

NLIP	2.7318	0.0051
INFLR	118.5406	0.0000
INTR	34.0573	0.0000

Source: Eviews9 Output (2019)

The normality test carried out reveals the probability values as shown above. The Jarque-Bera (JB) chi-square statistic at 5% level of significance shows that all the variables are higher and their respective corresponding probability value is less than the 0.05 level of significance. This implies that all the variables are normally distributed and are suitable for conducting the analysis.

Table 6: Test for Normality for Model 2

Data Series	Jarque-Bera Statistics	Probability Values
HDI	3.7832	0.0031
IIV	2.3044	0.0159
ICL	2.9563	0.0281
LIP	6.1177	0.0469
NLIP	2.7318	0.0051
INFLR	118.5406	0.0000
INTR	34.0573	0.0000

Source: Eviews9 Output (2019)

As with model 1, the result shows that all the variables are normally distributed and the variables are suitable for the conducting of the analysis

Summary of the OLS Test Results
Decision:
Table 7: Showing the regression results obtained for both models

Variable	Model 1		Model 2	
	Co-efficient	Prob.	Co-efficient	Prob.
C	3.512930	0.0269	0.241004	0.0056
IIV	-1.44E-06	0.0308	3.63E-07	0.0071
ICL	3.35E-05	0.4585	1.41E-06	0.0001
LIP	0.000101	0.0327	-3.69E-06	0.0599

NLIP	6.79E-05	0.0047	2.72E-06	0.0030
INFLR	0.198798	0.0184	0.006968	0.2608
INTR	0.232871	0.0035	-0.012460	0.0070
R-squared	0.985819		0.828331	
Adj. R-squared	0.920147		0.759663	
Durb-Watson stat	1.981705		1.967169	

Source: Extracted from EVIEWS 9.0 output

The result of the analysis in table 7 above presents some interesting findings that would arouse one's interest. Hypothesis one shows that (IIV) has a significant relationship on (HDI). This implies that (IIV) is contributing significantly to the (RGDPG) and (HDI) in Nigeria. .

In hypothesis two, the study revealed that (ICL) has a statistically insignificant relationship on (RGDPG) in Nigeria, thus suggesting a lack of evidence that insurance promotes economic growth in post-transition economies, while (ICL), on (HDI) is significant It proved that the effect of Insurance Claim (ICL) access to safe and healthy life, access to education, and a decent living standard (HDI) is significant.

Hypothesis three reveals that (LIP) has a significant relationship with (RGDPG) and (HDI). Indicating that (LIP) contributed significantly to (GDP) and Nigerians access to safe and healthy life, access to education, and a decent living standard (HDI). Matthew, (2018), Also (INFLR) has a statistically significant relationship on (RGDPG), while on (HDI) it is insignificant. This indicates that (INFLR) access to safe and healthy life, access to education, and a decent living standard (HDI) is insignificant.

Also (INTR) has a significant relationship on Nigerian (RGDPG) and (HDI). This reveals that both are contributing significantly to the (RGDPG) and to Nigerians access to safe and healthy life, education and a good living standard.

Conclusion and Recommendations
Conclusion
The findings revealed that most of all the independent variables have significant effect on the economic performance in Nigeria (proxy by (RGDPG) except (ICL). Similarly the same findings applied to the economic performance in Nigeria (proxy by (HDI) except (INFR). The study therefore concluded that insurance sector have a significant effect on economic performance in Nigeria.

Recommendations
The study recommended that, the government should through Central Bank of Nigeria (CBN) implement rigorous and robust policies that will encourage the public to engage their surplus funds in insurance activities and protect members of the public who are venturing into insurance activities against fraudulent activities in the insurance sector

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