Insurance Sector Performance and the Nigeria’s Economic Growth

Leelee N Deekor
Department of Economics, Ignatius Ajuru University of Education, Port Harcourt, Nigeria

Abstract
The study examines insurance industry’s contribution to economic growth in Nigeria. For estimation analysis, the study employed Autoregressive Distributive Lag (ARDL) bond test, Error Correction Mechanism (ECM) and Diagnostic test.). The findings revealed that at 5% level of significance in the short run, life premium (LP) related positively with growth rate (GR) in an insignificant manner while non-life premium (NLP) contributed negatively and insignificantly to growth rate. However, in the long run, life and nonlife insurance premium influences the growth of the Nigerian economy. Therefore, the study concludes that without insurance coverage, substantial emergency funds would be looked-for to protect firms against risks. Based on the findings, the study recommends among others that life insurance companies should come up with life products mainly designed for the low-paid earners to enhance penetration, deepen the market and to create more awareness to improve the participation of product industry and firms as this will intensify the activities of the insurance industry in Nigeria. Also, insurance companies should increase diversification of insurance products mostly in non-life businesses being embarked upon.

Keywords: Insurance Company, Life Insurance, Non-life Insurance

1. Introduction
The increasing stake of the insurance industry in the cumulative global financial sector in developed and developing countries have shifted concentration to the insurance-growth relationship. Studies revealed that the development in the insurance activities witnessed between 2000 and 2008 (175%) globally indicates a tremendous increase in the sector which significantly overtake global economic growth Outreville, (2013) [39]. For instance, the global insurance premium volume for the year 2009 was US $4.06 trillion; this is equivalent to 7% of the world GDP. Between 2010 and 2011, the insurance premium rose from $4.3trillion to $4.57 trillion (that is, 6% increase). Subsequently, it rose from $4.57 trillion to $4.61 trillion and $4.64 trillion in 2012 and 2013 respectively (IIF, 2010; Swiss Reinsurance Company, 2015).

These advances have redirected the focus of research scholars towards an investigation into the connection between insurance and economic growth. Undoubtedly, numerous studies revealed that the advancement of the insurance industry is linked to the economic growth of a country (Arena, 2008; Ward & Zurbruegg, 2000; Avram, Nguyen & Skully, 2010; Din, Angappan & Baker 2017) [12, 42, 13, 16]. In Africa, studies like Mojekwu, Agwuegbo, and Olowokudejo (2011), Akinlo (2013) [7], Cristea, Marcu and Cârstina (2014) [17] have equally examined the insurance-economic growth relationship. Insurance companies are among the non-bank financial institutions that play significant roles in financial intermediation within the financial system in an economy.

Life insurance is a contractual agreement between an insurer (insurance company) and the insured (insurance holder), that a specified amount will be paid to a beneficiary after the death of the insured consequent upon the payment of premium. Non-life or general insurance, on the other hand, deals with insurance of properties other than life where the benefit goes to the insurance holder. As a result of the different risks and benefits involved in the two insurance policies, their impacts on economic growth might be different. In the literature, many complementary effects of life and non-life insurance on economic growth have been identified such as (Webb, Grace & Skipper, 2008).

The life and non-life insurance market have been different in Nigeria given the volume of premium they attract. For instance, in 1980, non-life premium was US$661 million while life premium was US$175 million. By 1990, non-life premium fell to US$199 million that of life premium was US$37 million. In the year 2000, they have both slightly increased. Non-life premium was US$199 million while life premium was US$43 million. By 2013, non-life has tremendously increased to...
US$1.4 billion while life premium has increased to US$457 million. Nigeria is chosen as a sample country in this paper for two reasons. The first reason is that Nigeria has now been ranked ahead country like South Africa as the largest economy in Africa given the recent rebasing of the economy with a GDP of US$522.638 billion (World Development Indicator, 2014). This also ranks Nigeria to be the 23rd largest economy in the world and to be ahead of countries like Poland, Norway, Belgium Austria and Denmark. Secondly, the insurance market, which is currently still very small, has significant room for expansion in the medium to long term. The recapitalization directive of a minimum of N5 billion (US$25 million) from N150 million (US$750 thousand) in 2005 has greatly improved the premium capacity of the insurance market in Nigeria (see Fig 1). In the same vein, the real gross domestic product (GDP) growth rate has been increasing on the average of 5.9% from 2005. It reached 8.6% by 2010 and fell slightly to 6.2% in 2013 (International Monetary Fund, 2015). We can attempt to define insurance, as a risk transmission device through a party known as the insured transfer his risk to another, known as an insurer based on a consideration, known as a premium, so that in the occurrence of a loss, the insurer will indemnify him. Insurance can also be seen as the process of transferring the risk of an unfortunate incidence happening to an organization by the payment of a certain amount known as premium and the organization in turn promising to pay the individual the loss incurred should it happen. It is a situation where an individual, or group of persons or an organization pays an insurance company a certain amount called premium for an agreed sum insured in order to put the individual back to the position he was prior to the loss Insurance can also be perceived as a pool of risk where individuals pays certain amount to an insurance to cover for an uncertain loss, the insurance company in turn compensates any individual that suffers the perceived loss from the pool of funds contributed by other individuals. Insurance industry plays the double role of risk management and capital formation. Primarily, insurance provides cover against the various business risks that arise within the economy (Din et al., 2017) [13]. These financial institutions issue and sell indirect securities to the surplus units of the economy and consequently, purchase other securities, which are primarily from the ultimate borrowers of these funds (Mojekwu et al., 2011). Development is said to be viable when people could make a good living, be healthy and happy without damaging the environment over time. One of the indices for measuring the development 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. Most Nigerians especially the rural dwellers are ignorant of the significance of the insurance industry. The role played by the insurance sector in alleviating sudden and devastating occurrences by means of encouraging economic growth cannot be over emphasized. Both in developed and emerging countries, the insurance sector has positively contributed to economic growth both sectorial and geographically (Olalekan & Akinlo, 2013) [35]. 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) [41]. 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) [44].

2. Statement of the Problem
The Nigerian economy has been growing and the recent rebasing of her GDP suggests that significant contributions to growth are coming from other service sectors that were initially neglected in the previous calculation of the GDP. This development motives the investigation of the contributions of insurance sector to the Nigerian economy. Insurance industry had been recognized as a major tool in the functioning of the economy, Insurance services are necessary in order for some bank loans to be approved, and even for entities seeking contract from oil companies and oil servicing firms and even government establishment. But despite this importance, some individuals still shy away from patronizing this insurance companies (Oke, 2012) [14]. While Insurance Industry has been given a prominent place in advanced economies, the growth in number of Insurance companies and volume of business written by Insurers is still faced with so many challenges in Nigeria. Adeyeye (2011) [2] opined that Insurance Industry is faced with serious challenges such as poor image, low growth in real terms, low public awareness, low capitalization and capacity. Since the insurance sector has been linked with sectors (such as the industrial, agricultural, transportation, mining, trade, and petroleum) both locally and globally, and its significance to the universal human and economic activities has continued to grow over time as all categories of risks increase. Several studies have found sufficient evidence to suggest that the growth of the insurance industry is connected to economic growth and the insurance has taken on increasing importance as a means where people or group of people to manage their income risks (Osaka, 1992 [38]; Ward and Zurbruegg, 2000 [42]; Web, 2000). Also, the insurance industry is measured as the mainstay of any country’s risk management system which ensures financial haven for the general public and also serves as a significant constituent in the financial intermediation chain hence, provides a ready source of long-term capital for capital projects (Kugler and Ofoghi, 2005) [26]. In spite of the growing prospects of the insurance industry in Nigeria, there are still problems militating against the realization of its full potentials. For instance, the level of awareness of insurance business in Nigeria is still very low. This is, however, not peculiar to Nigeria. It is a worldwide phenomenon. In 1975, there was a survey carried out in the United Kingdom to ascertain the level of awareness of insurance business among the populace. It was discovered
that only 23 percentage of policy holders actually knew what they were carrying about as insurance policy or cover (Omirin 2004) [36]. Apart from the lack of awareness among the populace, there are other problems which include: High level poverty, low capital base of the operators in the industry, perceived unwillingness to pay legitimate claims, and low level of enforcement and compliance with insurance laws.

This study intends to ascertain whether life and non-life act as complements or substitutes in terms of their contributions to growth. Previous studies on the relationship between insurance and economic growth in Nigeria are Eze and Okoye (2013) [19], Mojekwu, Agwuegbu and Olowokudejo (2011), Akinlo (2013) [7], Amoke (2012) [10], Yinusa and Akinlo (2013) [44], Akinlo and Apanisile (2014) [9] and Olayungbo (2015). The results indicate that insurance has a positive and substantial influence on the economic growth process of sub-Saharan Africa countries. This demonstrates that insurance premium brings long-term investments that promote economic growth and concurrently, solidifying risk-taking abilities in the regions, most prevailing studies on Insurance - growth relationship are concentrated on the technologically advanced and few industrialized countries. In the developing economies, not many studies have concentrated on the Insurance sector probably as an effect of the small size of the sector before the restructuring in the early 1980s. These are no doubt big breaches in the literature that needed to be filled. More so, due to the neglect of the insurance industry in Nigeria, carrying out business in Nigeria today is very risky considering, due to the rate of uncertainty in the country. Because of the instability, the level of growth and development that should correspond with the country’s enormous potential has not been achieved. All these studies have used total insurance premium in their analysis of the relationship between insurance and economic growth in Nigeria. Thus, it becomes imperative to look at the growth of the Insurance Industry in Nigeria, also how the sector has impacted on economic growth and examining separately the effects of non-life and life insurance premium on economic growth in Nigeria.

3. Empirical Literature

Olayungbo (2015) examines the asymmetric non - linear relationship concerning Insurance and Economic growth in Nigeria. The scope of the research was from 1976 to 2010. Co - Integration, Asymmetry Causality and the Asymmetric Impulses responses were used to analyze the variables. The variables used were Insurance premium and real GDP. The result from the findings indicted that there is asymmetric effect in the Nigeria Insurance market. In addition, Unidirectional Causality flows from positive GDP growth to negative Insurance premium growth. The Implication is that economic boom is found to promote low risk behavior. Conclusively from the result, it can be inferred that low Insurance promotes high growth in Nigeria.

Fadun and Shoyemi (2018) [20] 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.

Oke (2012) [24] examined the short and long – run relationship between the insurance sector development and economic growth in Nigeria. The scope was from 1985 – 2009. The model that was adopted was the Fixed - Effect model, and relevant data were collated and analyzed using the Co - Integration analysis. In this research, premium of Life - Insurance (PLI) Premium of non - Life Insurance (NLP), number of Insurance companies (NIC), total Insurance Investment (TII), and the Inflation rate (INF) were used in measuring Insurance sector growth, while Gross Domestic Product (GDP) was adopted as the proxy for the extent of economic growth. From the outcome gotten, it indicates that there exist a long - run relationship between and economic growth and the development of the Insurance sector in Nigeria, conclusively; there is presence of a long - run relationship of Co - integration between Insurance development and GDP. Also, the result of the Granger causality test also revealed that the level of effect the Insurance sector growth had on economic growth was restricted and not direct, due to attitudinal behaviors and value, cultural disposition in IgboIdika, Ibenta and Isaac (2016) [24] 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.

Akinlo (2015) [8] 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.

Monogbe (2015) [30] examined the effect of Insurance region development on the growth of the Nigeria economy. It span through 1981 - 2013. Secondary data was used; also the method that was used to carry out the research was the Augmented Dickey Fuller test, Ordinary Least Square method, Descriptive Statistics, Co- Integration and Granger Causality. The variables used for the study are Gross Domestic Product (GDP), Total claim payment (TCP), Total Insurance premium (TIP) Total Insurance Investment (TII),Total Insurance returns (TIR), Error term (Ut). The result of the discoveries shows that total Insurance Investment and total Insurance premium had contributed significantly and positively to the growth and of the Nigeria economy. Summarily a rise in the activities of Insurance
corporations in Nigeria will lead to an increase in economic growth. Hadhek (2014) investigated the connection between Insurance industry and the Economic growth of 23 OECD countries. The period was from 1990 - 2011. Static Panel Data Model was used. Some of the variables used for the analysis are GDP per capital growth rate, Total Insurance penetration rate, Life - Insurance penetration rate, Life Insurance density. The result showed that there is no link between the life Insurance concentration and economic growth for the group of countries examined, and also total Insurance mass and non - life Insurance density has an adverse effect on economic growth. Also, a negative consequence wielded by the total Insurance and non - life Insurance as measured by the compactness on economic growth.

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. Benson (2013) reviewed Market Positioning and Corporate performance of Insurance firms in Nigeria. The study implemented a survey investigation procedure to scrutinize the market orientation approaches of Insurance companies in an effort to attain their anticipated performance capacity. The hypothesis in the research were evaluated using Spearman’s man Rank Correlation Coefficient \( r \), multiple regression and partial correlation analyses to ascertain the power of connections and effects of dependent/Independent and controlling variables correspondingly. In the progression of the study, 52 respondents of the Insurance companies indicated that there is positive association amid Market orientation and Corporate Performance in the Insurance Industry. The research result shows that the Insurance companies that involve in market orientation noted growth while those that have not adopted this approach experience low performance. Conclusively the addition of client focus, competitor focus and inter functional harmonization can motivate performance.

In the process of reviewing the empirical works, the researcher observed that most researchers related non-life Insurance premium to only economic growth (GDP) as though that were the only measure of performance of the insurance industry. For example, studies such as, Eze and Okoye (2013), Mirela, Nicu and Silviu (2013); Oke (2012); Erick, Rodney and Roberto (2011); Akinlo and Tolupe (2014); Olayangbo (2015); Nwosa and Mustapha (2018) were content to conclude that Insurance premium is the main feature that impacts economic growth in Nigeria etc. None of the mentioned literatures truly studied the Nigerian economy by bringing in the contribution of life insurance premium, non-life insurance premium to gross domestic product. Also, the empirical studies above show, that there is a lack of consensus in the findings of previous researchers on the relationship between insurance industry and economic growth. Fashagba (2018) noted this in a succinct way 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 impact of insurance industry and economic growth in Nigeria is aimed at contributing to that gap in literature.

4. Methodology
The researcher used the following time series data to conduct the necessary investigations.

Gross Domestic Product Growth Rate (GR), Non-life insurance premium (NLP), Life insurance premium (LP).

Model Specification
In light of the above discussion, a model is developed to examine how insurance industry impacts on economic growth in Nigeria.

The functional relationship between insurance industry and the Nigerian economy can be expressed as follows:

\[ GR_t = f(LP_t, NLP_t) \]

The econometric form of the models can be stated as follows

\[ GR_t = \alpha_0 + \alpha_1 \ln LP_t + \alpha_2 \ln NLP_t + \mu_t \]

Where:

\( \alpha_1, \alpha_2 = \) Coefficient of the variables
\( \mu_t = \) Error term
\( \delta R_t = \) Gross Domestic Product Growth Rate
\( LP_t = \) Life Insurance Premium
\( NLP_t = \) Non-Life Insurance Premium

5. Result Presentation
5.1 Preliminary Analysis

<table>
<thead>
<tr>
<th>Variables</th>
<th>Augmented Dicky-Fuller</th>
<th>5% Mackinnon Critical Value</th>
<th>Remark</th>
<th>Order of Integration</th>
</tr>
</thead>
<tbody>
<tr>
<td>GR</td>
<td>-9.484276</td>
<td>-3.557759</td>
<td>Stationary</td>
<td>I(1)</td>
</tr>
<tr>
<td>LOGLP</td>
<td>-5.488172</td>
<td>-3.552973</td>
<td>Stationary</td>
<td>I(0)</td>
</tr>
<tr>
<td>LOGNLP</td>
<td>4.060275</td>
<td>-3.557759</td>
<td>Stationary</td>
<td>I(1)</td>
</tr>
</tbody>
</table>

Source: Researcher’s calculation using E-view 9.0

With respect to the augmented dickey fuller test (ADF) conducted for the variables: Economic growth (GR), life insurance premium (LP) and Non-life insurance premium, a mixture of 1 (0) and 1(I) was recorded. Specifically, Growth rate (GR) and non-life premium of insurance were stationary at first difference while life premium of insurance became stationary at levels. Given the outcome of the ADF test, we can confidently conclude that the variables are stationary at 5% level of significance.
5.2 Empirical result and Discussion of Findings

ARDL Test

<table>
<thead>
<tr>
<th>Table 2: ARDL Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selected Model: ARDL(1, 2, 1)</td>
</tr>
<tr>
<td>Variable</td>
</tr>
<tr>
<td>GR(-1)</td>
</tr>
<tr>
<td>LOGLP</td>
</tr>
<tr>
<td>LOGLP(-1)</td>
</tr>
<tr>
<td>LOGLP(-2)</td>
</tr>
<tr>
<td>LOGLNLP</td>
</tr>
<tr>
<td>LOGLNLP(-1)</td>
</tr>
<tr>
<td>C</td>
</tr>
<tr>
<td>R-squared</td>
</tr>
<tr>
<td>Adjusted R-squared</td>
</tr>
<tr>
<td>S.E. of regression</td>
</tr>
<tr>
<td>Sum squared resid</td>
</tr>
<tr>
<td>Log likelihood</td>
</tr>
<tr>
<td>F-statistic</td>
</tr>
<tr>
<td>Prob(F-statistic)</td>
</tr>
</tbody>
</table>

*Note: p-values and any subsequent tests do not account for model selection.

Source: Researcher’s calculation using E View 9.0

The long run form of the auto regressive distributed lag test of no level relationship was conducted using the bound test. The test report that F =11.85 with K = 2 is outside the bounds for the Asymptotic (n = 1000), finite sample (n = 35 and n = 30) at 5% level of significance. This means that the null hypothesis of no level relationship is rejected concluding that there is long run relationship between growth rate (GR) and insurance industry (Life premium and non-life premium).

Table 3: ARDL Long run Test

<table>
<thead>
<tr>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.531244</td>
<td>4.231541</td>
<td>1.070826</td>
<td>0.2945</td>
</tr>
<tr>
<td>12.54195</td>
<td>3.953883</td>
<td>-3.172059</td>
<td>0.0040</td>
</tr>
<tr>
<td>10.78125</td>
<td>10.63496</td>
<td>-1.013756</td>
<td>0.3204</td>
</tr>
<tr>
<td>20.63594</td>
<td>11.40509</td>
<td>1.809664</td>
<td>0.0824</td>
</tr>
<tr>
<td>-14.43268</td>
<td>23.17752</td>
<td>-0.622702</td>
<td>0.5391</td>
</tr>
<tr>
<td>0.592243</td>
<td>Mean dependent var</td>
<td>17.70531</td>
<td></td>
</tr>
<tr>
<td>0.518781</td>
<td>S.D. dependent var</td>
<td>13.67271</td>
<td></td>
</tr>
<tr>
<td>11.77139</td>
<td>Akaike info criterion</td>
<td>7.959861</td>
<td></td>
</tr>
<tr>
<td>3464.141</td>
<td>Schwarz criterion</td>
<td>8.280491</td>
<td></td>
</tr>
<tr>
<td>-120.3578</td>
<td>Hannan-Quinn criterion</td>
<td>8.066141</td>
<td></td>
</tr>
<tr>
<td>2.803833</td>
<td>Durbin-Watson stat</td>
<td>1.924283</td>
<td></td>
</tr>
<tr>
<td>0.031665 *</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In this section, emphasis will be placed on the ECM. The error correction model (ECM) measures the short run dynamics in growth rate and insurance industry. The ARDL ECM: -0.523829 is rightly signed and is completely significant. This shows that the ECM has a speed of about 52.38% to correct it previous errors or disequilibrium to equilibrium.

The goal of this research is to provide a dynamic assessment of the insurance industry and how it influences economic growth in Nigeria. In carrying these investigations, we disaggregated insurance activities into life and nonlife activities with respect to insurance premium which was modeled using a single dynamic regression model. In the dynamic regression of the ARDL class, Life premium (LP) related positively with growth rate (GR) in an insignificant manner and it’s in line with Srijana Pant & Fatta Bahadur KC (2017) [40] who holds that life and non-life insurance have contributed to GDP growth in the country by 2.03% in 2016 and it shows a developing trend.
6. Conclusion
The Effect of insurance industry on economic growth is analyzed in two aspects. The first is related to non-life premium while the other is life premium. Insurance companies could influence economic growth through the channels of marginal productivity of capital, protection, technological innovations and savings rates. Insurance companies reimburse individuals and firms who experience loss and stabilize their financial position with the likelihood of transferring varieties of risks to insurance companies. Also, firms exposed to the various risks of their liabilities, illness, property, disability of their employers and the life of key employees have the possibility of managing those risks by transferring them to insurance companies. This allows firms to strengthen and redirect their attention and resources on their core business which lead to the willingness and capacity to take real investment which will help to generate a higher level of economic growth (Oke, 2012) [34]. The study recommends an increased diversification of insurance products mostly in non-life businesses be embarked upon. For insurance industry in Nigeria to exert a significant and positive influence on the Nigeria economy, government insurance policies covering compulsory insurance for all Nigerians, mainly non-life and, health insurance cover should be strictly enforced and implemented.

7. References
28. Madukwe OD, Anyanwaokoro M. The causal


