Reviving economic recession and the role of insurance companies in Nigeria

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Abstract: The persistent occurrence of poor economic condition and economic recession has put the policy makers on the possible and appropriate approaches to tackle the economic problem. Despite the efforts expended both empirically and theoretically to curb the menace, the economy is still vulnerable to macroeconomic shocks. Therefore, this study investigated the role of insurance companies on revival of reviving economic recession in Nigeria. The study covers the period of 25 years from 1996 to 2020 and data were gathered from CBN statistical bulletin, 2020 edition. Data on economic recession was represented with dummy variable such that “0” represents the period of positive economic growth rate while “1” represents the period of negative growth rate. Data on insurance investment, insurance asset, number of insurance companies and insurance contribution to GDP were considered to measure insurance performance. The model was specified with Ordinary Least Square and multiple regression methods. It was shown that insurance asset, insurance investment and insurance performance were found to statistically significant while numbers of insurance companies were found to statistically insignificant. The result revealed that insurance asset is not capable of reducing economic recession during the period under review but insurance investment, insurance performance and numbers of insurance companies have proven to be sufficient tools to reduce economic recession. Based on these findings, the study concluded that insurance companies played a significant role in reviving poor economic condition. The study recommended that adequate attention should be given to insurance companies in order to fulfill their full potential.

Keywords: Economic recession, Employment opportunities, Gross domestic product, Insurance investment, Insurance, Number of insurance companies.

JEL Classification: G22.

1. Introduction

It has been observed in different articles and publications that the rate of economic growth has been on the slow pace since 2010 in developing countries. This means that some of the African countries are growing slowly and others are experiencing economic recession. Specifically, Nigerian economy has struggled to attain full potential since the 2015 economic recession and the situation worsen in 2020 when COVID-19 struck the world and pushes vulnerable economies like Nigeria into recession. Consequently, this was followed with the spiral inflationary trend across the world. In response to these unabated circumstances, economists have predicted that developing economies may be on the verge of
recession in few years. In addition, Egbulonu and Dim (2017) wrote that the persistent global production decline; and geopolitical conflicts are factors attributed to the global economic slowdown. Meanwhile, the crises between Ukraine and Russia has recently attributed to the global economic slowdown (Egbulonu & Dim, 2017).

Owing to the above challenges and observations, the question whether insurance companies will significantly enhance economic growth during recession remained unanswered despite its importance in financial system. Quite a good number of conclusions had been drawn on the importance of financial institution in the process of economic growth. As proposed by Levine (1997) in the relationship between Finance and Growth, emphasis is placed on how productivity can be enhanced through various financing channels. It is understood that despite attention channeled into conventional banking business to enhance growth, many business managers, financial managers, entrepreneurs, investors were largely deselected from adequate finances to boost their business investments. These problems continue to hurt the developing economies like Nigeria as various businesses collapsed, liquidated and failed due to dearth of finances and inability to withstand economic and financial crises. In light of the problem, there is a need for urgent solution and approach that would efficiently addressed the issues.

Insurance sector is one of the financial institution which was recognized as the bedrock of the nation building, in respect of the tremendous functions and the primitive role played in the economic development and growth of a nation like Nigeria, the sector assume the risk of others and provides covers to the insuring public vise a vise oil and gas sector, Transportation sector, mining, agricultural, commerce and industry, corporate organizations, individuals, religious groups and government at large (Tijani, 2015). Insurance companies in Nigeria operates in managing the risk of individuals, household, organizations and government, the sector promote economic growth by mobilizing savings and investible funds, accumulated premiums and underwriting profit, thereby making insurance investment fund available to the capital and other financial markets. The role of insurance in the financial sector cannot be overemphasized as the companies help investors to invests surplus funds in secured assets and provide adequate covers against varieties of economic risks and shocks. Since insurance companies are strong players in financial sector, it created another channel where pooling of resources can be sourced. It makes available varieties of risk management and other economic enhancement activities.

Merton and Bodie (1995) opined insurance companies provide inducement to solve problems created during financial and business transaction between parties involved. Empirical studies have been conducted to validate the intuition that insurance companies support economic growth in developing economies. For instance, Haiss and Sumegi (2008); Arena (2006) have all agreed in different scope and methodology that insurance activities positively influenced economic growth. Despite this empirical findings, it remain unclear why in the presence of insurance companies, economic growth has failed to reach appropriate zenith to resist external shocks and proof resilience against recession. Therefore, this study investigated the influence of insurance companies on economic growth and economic recession in Nigeria.

2. Brief Literature Review

Recently, Nigeria statistics shows that some economic indicators are taking negative directions which hasten for the pronouncement that Nigeria economy is no longer in partial recession but full economic recession, (Nigeria Bureau of Statistics, 2016). Declines in the GDP component metrics such as consumption, investment, government expenditure, and net export and import are few of many characteristics of recession that can occur simultaneously. The underlying factors that summarise these indicators include employment levels and skill levels, savings rates in households, corporate investment choices, interest rates, demography, and governmental policies.

The economy is said to be in recession, if evidenced by the consistent negative growth of the gross domestic product GDP, rise in the unemployment rate, high inflation rate, falling foreign exchange, and constant decline in the value of the naira. According to Chinguwo and Blewit (2012) the combination of economic slump, financial crisis, and climatic change is making life even harder for many working
people and their families. In this type of economy, there is a tendency for a significant number of opportunities to be lost, as well as a decline in employee pension contributions, a decrease in life insurance (whether group or personal), the cancellation of life insurance policies, or premium surrender, all of which will have an impact on the viability of the nation's insurance companies.

The importance of insurance protection in the nation arises as a result of the reasonable expectation that the economy is expanding gradually, insurance investments and other economic activities would also grow in quantity and value. Indeed, as more hazardous investments are made that require insurance coverage from potential losses, economic expansion results in an increase in insurance business. Slow economic development will, however, have the opposite effect and cause the insurance industry to decrease. In order to remedy the problem, the insurance sector will need to be creative. In reality, a good number of economic agents step forward during the time of economic downtown to ensure protection and safety of investments. As far as insurance business is concerned, many people perceived that a recession creates a negative environment for investments. With the nation’s economy in recession, most Nigerians are now sacrificing their insurance investment to meet urgent needs.

Fadun (2013) claims that insurance is a contract between the insured (the buyer) and the insurer (the seller), whereby the insurer agrees to defend the insured in the event of certain contingencies (risks or losses) in exchange for the premium that the insured has paid, subject to the terms and conditions of the contract. Insurance is a social contract that controls the transfer of risk between two or more parties, according to Gabriel (2015) explanation. Insurance is a type of financial arrangement that transfers prospective losses to a pool of insurers in order to spread the costs of unforeseen losses. Individuals and families would not be protected from the uncertainties of daily life if they lacked insurance coverage. Life, health, property and other insurance coverage are essential to the financial stability, well-being and peace of mind of the average person. Every human being faces the chance that one or more risks that are a part of life could eventually befall him and result in some financial loss; depending on the person's status in the community; the loss may be very minor or very enormous. This was claimed by Raji (2014). In general, insurance reduces a potential policyholder's dread of the unknown and motivates him to seize possibilities that fit his risk tolerance. In this situation, insurance acts as a lubricant for trade and business.

2.1. Empirical Review

Using annual panel data between 1999 and 2018, Kondovski (2021) conducted research on the relationship between insurance companies and economic growth in 11 new EU member states from Central and Eastern Europe. It was found that economic growth responds favorably to the activities of insurance businesses. Senol, Zeren, and Canakci (2020) study on the effect of insurance companies on economic growth, which was done in 36 nations, found that these businesses had a beneficial effect. Jude (2014) evaluated the effectiveness of Nigeria's development insurance program, which aims to boost grassroots involvement in the insurance industry. The article provided numerous insurance marketing strategies for use in Nigeria's rural villages. The impact of Nigeria's interest rate deregulation on the insurance industry's investment profile from 1985 to 2007 was examined in Balogun (2013) study. Panel regression with year and fund fixed effects was used in the study to test for asset allocation, market timing, and liquidity restrictions. According to this study's findings, certain less developed nations may not have significant enough positive returns on insurance investments.

Economic growth and insurance investment were studied by Fortune and Lenee (2012). They applied a vector autoregressive system to the annual data from 1980 to 2011. It was revealed that insurance investment is significant factor to boost economic growth.

2.2. Theoretical Review

2.2.1. Markowitz Portfolio Theory

The Markowitz efficient behavior explained the importance of insurance companies in the investment process. Insurance activities are associated with preference of investors to generate more
returns on investment than few returns while taking lower risk. Markowitz opined that to think of investment, one must evaluates the risk and standard deviation associated with the investment.

The Markowitz portfolio theory offers the foundation for reaching this goal because the goal of any investment is to create returns and make sure that expected returns on the investment funds are higher than the associated risks to be able to satisfy their long-term responsibilities.

The key to investing in the insurance industry is to build a portfolio of assets whose predicted returns and maturities can be used to offset policyholder claims because only legitimate claims will be paid by insurance firms. The dimensions of risk and return form the basis of saving/premium decisions that make up investments, or intermediation, and favor higher investment returns over lower ones. The general issues with the insurance industry are related to premium payments, which are used to settle claims if an accident or damage occurs.

3. Methodology

This study is designed to investigate the effectiveness of Insurance companies on economic recession in Nigeria. The study adopted model of Egbulonu and Dim (2017) and subsequently improved on it by employing closely related variables. Economic recession is measured with dummy variable such as representing the period of negative growth rate with 1 and 0 with positive growth rate. Insurance activities were delineated into contribution of insurance to GDP, number of insurance companies, insurance asset and insurance investment covering the period of 25years between 1996 and 2020. Data were gathered from secondary sources through Central Bank of Nigeria Statistical Bulletin and Nigeria Insurance Commission (NAICOM). The model was analysed using multiple regression analysis.

The model was modified as follows:

\[ ER = k (INS) \]
\[ ER = f (INSA, INSIN, INSPER, NIC) \]

Where

ER= Economic recession.
INSA= Insurance asset.
INSIN= Insurance investment.
INSPER= Contribution of Insurance to GDP.

The model further arranged into econometrics model in a multiple regression format.

\[ ER = \beta 0 + \beta 1 INSA + \beta 2 INSIN + \beta 3 INSPER + \beta 4 NIC + \mu \]

3.1. Apriori Expectation

In order for insurance variables to reduce economic recession, it is expected that insurance asset, insurance investment, insurance performance and number of insurance companies are expected show negative signs but statistically significant.

4. Results and Interpretation

The Figure 1–5 below depicts the trends of variables employed in the study for the period under review. It is shown in the Figure 1 that recession rocked the economy between 1998 and 200 which could be attributed to the transitional period from military regime to democracy which was accompanied with bad economic activities and poor performance of macroeconomic variables. Though there was a global crisis between 2007 and 2008 but it does not slide economy into recession compared to early 2015 after the assumption of President Buhari in to power as president of Nigeria. It was revealed the economy was badly affected by poor crude oil prices, high inflation and unprecedented unemployment rate. This continued till 2019. When it was obvious that the economy is hedging of the poor economic condition, unexpected COVID-19 pandemic struck again which put the whole world in disarray and affect the economy negatively. In the Figure 2, it is shown that the insurance asset is experiencing an upwards trends over the years under review despite the economic crises, except in 2013 with a slight drop and picked up again in 2014 till date. In Figure 3, it depicts the amount of insurance...
investment in the economy. It shows that insurance investment is lower for a larger period of the scope but increase sporadically in 2018. The Figure 4 shows the contribution of insurance to economic growth in Nigeria. The data revealed that insurance companies contribute significantly to gross domestic product except in 2002 while the figure dropped but picked afterwards. Regrettably, the performance dropped from 2011 to 2012 and in 2018 before it rose to again. The Figure 5 shows the number of registered insurance companies in Nigeria. Recently, not less than 57 insurance companies operate in the industry in which 14 are life insurance companies and 43 are non-life insurers while 2 are reinsurance companies. The number dropped from all high 103 in 2004, 2005, and 2006 due to recapitalization to 77 in 2007 and continue to decline to 48 in 2018 before additional companies were registered to make up 57 in 2020.

![Economic recession in Nigeria](image1)

**Figure 1.**

![Trend of insurances assets in Nigeria](image2)

**Figure 2.**
Figure 3.

Figure 4.


4.1. Descriptive Statistics

The Table 1 indicated the behavior of each variable in the model. It is shown the mean value and standard deviation which measures the dispersion of data from the original mean value. The mean value of economic recession is 0.28 while the standard deviation is 0.4 which connotes that data point is closed to mean value. Also, the insurance asset data is not widely spread out from its mean value due to closeness of the two measurements. However, insurance contribution to GDP and Number of Insurance companies are widely spread out of their data points since the standard deviation is 68.27 and 18.07 respectively are far lower than the mean value in wider range. JB measured the normality test. Since the p-value of Economic recession and insurance performance are greater than 0.05 level of significance, it concluded that data are normally distributed. Since the p-value of insurance asset, insurance investment and number of insurance companies are less than 0.05 level of significance, it is concluded that data are not normally distributed.

Table 1.
Descriptive statistics.

<table>
<thead>
<tr>
<th>Variables</th>
<th>ER</th>
<th>INAS</th>
<th>INSIN</th>
<th>INSPER</th>
<th>NIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>0.28</td>
<td>542920.9</td>
<td>382278.3</td>
<td>199.765</td>
<td>63.84</td>
</tr>
<tr>
<td>Std. dev.</td>
<td>0.458</td>
<td>530019</td>
<td>1065981</td>
<td>68.271</td>
<td>18.075</td>
</tr>
<tr>
<td>Jarque-Bera</td>
<td>5.127</td>
<td>6.637788</td>
<td>464.5065</td>
<td>2.580</td>
<td>7.148</td>
</tr>
<tr>
<td>Probability</td>
<td>0.077</td>
<td>0.036193</td>
<td>0</td>
<td>0.275</td>
<td>0.028</td>
</tr>
<tr>
<td>Sum</td>
<td>7.000</td>
<td>13573023</td>
<td>9556958</td>
<td>4994.131</td>
<td>1596</td>
</tr>
<tr>
<td>Sum sq. dev.</td>
<td>5.04</td>
<td>6.74</td>
<td>2.73</td>
<td>111865.4</td>
<td>7841.36</td>
</tr>
<tr>
<td>Observations</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
</tr>
</tbody>
</table>

4.2. Correlation Matrix

The Table 2 provided the correlation matrix that measured the presence of multicollinearity in the variables. Apart from insurance asset that posited strong correlation at 70 percent, insurance investment, insurance performance and number of insurance of companies have low correlation at 34, 49 and 34 percent. This means that there is no existence of multicollinearity problem in the data.
Table 2.
Correlation matrix.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Economic recession</th>
<th>Insurance asset</th>
<th>Insurance investment</th>
<th>Insurance performance</th>
<th>Number of insurance companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic recession</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insurance asset</td>
<td>0.70</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insurance investment</td>
<td>0.34</td>
<td>0.62</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insurance performance</td>
<td>0.49</td>
<td>0.82</td>
<td>0.24</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Number of insurance companies</td>
<td>-0.34</td>
<td>-0.37</td>
<td>-0.09</td>
<td>-0.48</td>
<td>1</td>
</tr>
</tbody>
</table>

4.3. Unit Root Test

The study employed group unit test to know the level of stationarity of data considered. It was revealed that all the variables were not stationary at level but found to be stationary at first difference as indicated in the Table 3 under Augmented Dickey Fuller and Philip Perron- Fisher chi-square.

Table 3.
Unit root test.

<table>
<thead>
<tr>
<th>Method</th>
<th>Statistic</th>
<th>Prob.</th>
<th>Cross-sections</th>
<th>Obs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Null: Unit root (Assumes common unit root process)</td>
<td>-0.22</td>
<td>0.41</td>
<td>4</td>
<td>91</td>
</tr>
<tr>
<td>Levin, Lin &amp; Chu t</td>
<td>-5.35</td>
<td>0.00</td>
<td>4.00</td>
<td>91.00</td>
</tr>
<tr>
<td>Null: Unit root (Assumes individual unit root process)</td>
<td>-5.35</td>
<td>0.00</td>
<td>4.00</td>
<td>91.00</td>
</tr>
<tr>
<td>Im, Pesaran and Shin W-stat</td>
<td>43.02</td>
<td>0.00</td>
<td>4.00</td>
<td>91.00</td>
</tr>
<tr>
<td>ADF - Fisher chi-square</td>
<td>23.66</td>
<td>0.00</td>
<td>4.00</td>
<td>92.00</td>
</tr>
<tr>
<td>PP - Fisher chi-square</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4.4. Regression Analysis

It is indicated in the Table 4 the Ordinary Least Square result. It was shown that insurance asset has a positive relationship with economic recession while insurance investment, insurance performance, and number of insurance companies posited negative relationship with economic recession. At the magnitude of the relationship, it is shown that a unit increase insurance asset will increase the prevalence of economic recession by 1.3106 for the period under review. It means insurance asset does not have huge influence to revive economic recession in Nigeria. Also, the unit increase in the coefficients of insurance investment, insurance performance and number of insurance companies will decrease economic recession by 1.9007, 0.0048 and 0.0042 respectively. This means that economic recession will be abolished if insurance activities were enhanced. Furthermore, insurance investment and insurance performance revealed a statistical significance on economic recession at 0.05 level of significance since 0.0008 and 0.0341 are less than probability value. Insurance investment and Number of Insurance companies are statistically insignificance at 0.005 level of significance. The coefficient determination implies that adjusted R-square is 54% which indicated the variables included in the model could only explain economic recession by 54%. Durbin Watson of 1.8307 shows the absence of autocorrelation in the model. For generality, the F-statistics revealed 0.0004 as p-value which means insurance companies is statistically significance meaning that in Nigeria, Insurance companies are capable of reviving economic growth from recessionary phase.
Table 4.
Regression result.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. error</th>
<th>t-statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>0.8823</td>
<td>0.4685</td>
<td>1.8831</td>
<td>0.0743</td>
</tr>
<tr>
<td>INAS</td>
<td>1.3106</td>
<td>3.3107</td>
<td>3.9661</td>
<td>0.0008</td>
</tr>
<tr>
<td>INSIN</td>
<td>-1.9007</td>
<td>9.638</td>
<td>-1.9716</td>
<td>0.0626</td>
</tr>
<tr>
<td>INSPER</td>
<td>-0.0048</td>
<td>0.0021</td>
<td>-2.2739</td>
<td>0.0341</td>
</tr>
<tr>
<td>NIC</td>
<td>-0.0042</td>
<td>0.0040</td>
<td>-1.0456</td>
<td>0.3082</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.6166</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.5399</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F-statistic</td>
<td>8.0415</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prob(F-statistic)</td>
<td>0.0004</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Included observations</td>
<td>25</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In the Table 5, it was shown that there is no presence of serial correlation since the probability value of Lagrange Multiplier test is statistically insignificance which fulfils the rule of thumps. Also, the study indicated the model is heteroscedasticity which explained that the model is not wrongly specified and the result is robust and reliable for decision. It was further revealed that the error in the model is not normally distributed.

Table 5.
Diagnostics test.

<table>
<thead>
<tr>
<th>Post estimation tests</th>
<th>F-statistics</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serial correlation (Breusch-Godfrey LM test)</td>
<td>0.9245</td>
<td>0.8971</td>
</tr>
<tr>
<td>Heteroskedasticity test: Breusch-Pagan-Godfrey</td>
<td>0.6762</td>
<td>0.6225</td>
</tr>
<tr>
<td>Normality test (Jarque-Bera)</td>
<td>14.6697</td>
<td>0.0006</td>
</tr>
</tbody>
</table>

The graph of the cumulative sum of squared residuals (CUSUMSQ) shown in Figure 6 lies within the 5% significance boundary which implies that model is stable and result is reliable.

**Figure 6.**
Stability test.
5. Conclusion

The study carried out investigation on how insurance companies in Nigeria can reduce the prevalence of economic recession. The study covers period of 25 years between 1996 and 2020 and data on insurance companies were gathered from Central Bank of Nigeria statistical Bulletin 2020 edition and economic recession was proxied with dummy variable. The study revealed that insurance asset does not reduce economic recession but it is a significant factor to be considered in policy implementation. Insurance investment, insurance performance and number of insurance companies are variables capable of reducing economic recession in Nigeria. Therefore, the study concluded that insurance companies play a significant role in reviving economic recession in Nigeria.

6. Recommendations

This paper recommends the followings; the insurance companies should develop appropriate policies that are tailored to meet specific needs in the Nigerian market. Organize a regular forum where members of the public and the insurance practitioners can interact while also increasing the visibility of the insurance companies. There should be an all-inclusive approach involving the government and insurance companies. The government should be deeply involved through appropriate supervisory strategies and management.

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All authors contributed equally to the conception and design of the study.

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