ABSTRACT
The effect of total marine insurance claims on real gross domestic product in Nigeria was evaluated. Secondary data was used in the study. Data were taken from Central Bank of Nigeria Statistical Bulletin and National Insurance Commission data publication of various years. The result of the research shows that total marine insurance claims had no significant effect on real gross domestic product in Nigeria. The result of hypothesis one test shows that claims settlement made under marine insurance had minimal effect on the growth of the economy. In conclusion, total marine insurance claims had no significant effect on real gross domestic product in Nigeria. This was based on p-value at 0.8596 being greater than 0.05.
Keywords: Total marine, insurance, gross domestic product and Nigeria.

INTRODUCTION
[1,2,3,4,5], stated that economic growth has been defined in two ways. In the first place, economic growth is defined as sustained annual increases in an economy’s real national income over a long period of time. In other words, economic growth means rising trend of net national product at constant prices [6,7,8,9]. This definition has been criticized by some economists as inadequate and unsatisfactory. They argued that total national income may be increasing and yet the standard of living of the people may be falling [10,11,12]. This can happen when the population is increasing at a faster rate than total national income. For instance, if national income is rising by 1% per year and population is increasing at 2% per year, the standard of living of the people will tend to fall [13]. This is so because when population is increasing more rapidly than national income, per capita income will go on falling. Per capita income will rise when the national income increases faster than population. Therefore, the second and better way of defining economic growth is to do so in terms of per capita income [14]. According to the second view, “economic growth means the annual increase in real per capita income of a country over the long period [16]. Thus Professor Arthur Lewis [15], says that “economic growth means the growth of output per head of population.” Since the main aim of economic growth is to raise the standards of living of the people, therefore the second way of defining economic growth which runs in terms of per capita income or output is better.

Objective of the Study
The objective of the study was to evaluate the effect of total marine insurance claims on real gross domestic product in Nigeria.
Research Question
The following research question was formulated to guide the study:

To what extent did total marine insurance claims have effect on real gross domestic product in Nigeria?

Research Hypothesis
The following null hypothesis was formulated for this study:

H₀. Total marine insurance claims had no significant effect on real gross domestic product in Nigeria.

REVIEW OF RELATED LITERATURE
Conceptual Review
Insurance

Insurance does not prevent losses, nor does it reduce the cost of losses to the economy as a whole. In fact, it may very well have the opposite effect of causing losses and increasing the cost of losses for the economy as a whole. The existence of insurance encourages some losses for the purpose of defrauding the insurer, and, in addition, people are less careful and may exert less effort to prevent losses than they might if the insurance did not exist. Also, the economy incurs certain additional costs in the operation of the insurance mechanism. It must bear not only the cost of the losses but also the additional expense of distributing the losses on some equitable basis [7]. This statement is not intended to disparage the loss-prevention activities of insurance companies. In many forms of property and casualty insurance, attempts to reduce loss are perhaps the most important feature of all, but these loss-prevention activities are not essentially a part of the operation of the insurance principle. Insurance could exist without them, and they could and do exist without insurance. Insurance in and of itself does not favorably alter the probability of loss. The primary function of insurance is the creation of the counterpart of risk, which is security [9]. Insurance does not prevent losses, nor does it reduce the cost of losses to the economy as a whole. Insurance does not decrease the uncertainty for the individual as to whether the event will occur, nor does it alter the probability of occurrence, but it does reduce the probability of financial loss connected with the event. The insurance contract provides a valuable feature in the freedom from the burden of uncertainty. Even if a loss is not sustained during the policy term, the insured has received something for the premium: the promise of indemnification if a loss had occurred. Pooling the exposures together permits more accurate statistical prediction of future losses. Individuals who transfer risk to a third-party are known as insured. The third party that accepts the risks transferred by insured is known as the insurer. If you think about the basis of insurance, you will realise that it is a form of co-operation through which all the insured, who are subject to a risk, pay premium and only one or few among them who actually suffer the loss or damage is/are compensated. Actually, the number of parties exposed to a risk is very large and only a few of them might actually suffer loss during a certain period. The insurer (company) acts as an agency to spread the actual loss suffered by a few insured parties among a large number of parties.
Pooling spreads the cost of losses between a number of policyholders. Take household contents insurance against fire, for example. When the risk of a fire is pooled, the large cost to the few who suffer from a fire is spread between all members of the pool. The average cost to members of the pool (the premium) is relatively low, as only a small number of them is likely to suffer a loss. The price of the insurance should be such that the individual is prepared to pay the smaller, known premium in return for not having to pay the unknown and potentially very large financial cost of the insured event [10].

Why do we need insurance?

1. Benefit: Consumer and business confidence
   Insurance provides individuals and companies with the confidence to go about their daily life and business and to enter into transactions with others [7]. They can be secure in the knowledge that the company they are doing business with will be able to continue to operate and will be able to meet its obligations. For example, holidaymakers gain comfort and confidence from booking with a hotel that has insurance which would refund their deposit should a significant event, such as a fire, close the hotel.

2. Benefit: Control of risks and promotion of safe practices
   Society in general benefits from a competitive insurance market that can use sophisticated risk pricing to encourage better risk management practices. The prospect of lower premiums can change behaviour, encouraging individuals and businesses to reduce their risks where they can by altering their behavior or taking preventative measures. Examples include individuals giving up smoking to reduce their life insurance premiums or fitting smoke alarms to reduce their household insurance costs, and businesses implementing more effective risk management systems to reduce their liability premiums. Another common example is the promotion of safer driving through no-claims discounts on motor premiums.

3. Benefit: Long-term investment in the economy
   Insurers invest the premium income they receive, making them among the largest institutional investors. For life insurance companies in particular, the products they write are long-term in nature, and so correspondingly long-term investments are made and held to maturity. This steady flow of long-term capital provided to the financial markets by the insurance industry is crucial for the financial system as a whole, as it reduces market volatility and thus contributes considerably to the stability and functioning of markets [9].

4. Benefit: Stable and sustainable savings and pension provision
   Insurers are significant providers of savings and pension products. The products they provide are fundamental to old age financial security, particularly in light of ageing populations. As well as using their experience and sophisticated models to ensure a fair premium is charged, insurers are able to combine different risks. This reduces the likelihood of claims being significantly different from what was assumed in the underwriting and in turn reduces the costs of offering the products. For example, taking on both the longevity risks inherent in pension products and the mortality risk from life assurance
products reduces the financial impact of changes in life expectancy (increases in life expectancy will increase the costs to the insurance company for pensions products, as they will need to pay out for longer, but have an offsetting benefit for the insurance company on life assurance products).

METHODOLOGY

Research design

The research used ex-post facto research design. Ex post facto study or after-the-fact research is a category of research design in which the investigation starts after the fact has occurred without interference from the researcher [11]. This design is deemed appropriate considering that this study does not require the researchers’ direct control over the independent variables because they have already led to effects which can no more be manipulated. The conclusions regarding the relationship between the variables need to be inferred without intervening or varying the independent or dependent variable [13].

Area of Study

Nigeria is the area of the study. A country colonized by the UK and gained its independence in 1960. The country is divided into thirty six states and a federal capital territory.

Sources of Data

Secondary data was used in the study. Data were taken from Central Bank of Nigeria Statistical Bulletin and National Insurance Commission data publication of various years.

Population of the Study

A population is the entire set of either persons, objects, events, organizations, countries or otherwise that you want to draw conclusions about [5]. There was no population drawn for the study as individual elements were not required in the study.

Determination of Sample Size

Since individual elements were not required in the study a sample size was not derived for the study. Rather, the aggregate data were employed for the study.

Model specification

The functional relation of the model is given as:

\[ GDP = f(TMIC) \] \(\text{(i)}\)

The model was specified as follows:

\[ GDP = \beta_0 + \beta_1 TMIC + \mu \] \(\text{(ii)}\)

Where:

\[ GDP = \text{Gross Domestic Product} \]

\[ TMIC = \text{Total Marine Insurance Claims} \]

\[ \beta_0, \beta_1 = \text{Constant parameters} \]

\[ \mu = \text{Error term} \]
Description of variables

Independent variables

Marine insurance premium: This refers to the total value of all payments generated under the marine class of insurance by the entire Nigerian insurance business in a given business year. Marine insurance claims: This refers to the total value of all settlements made as the marine class of insurance by the entire Nigerian insurance business in a given business year. Marine insurance claims: This refers to the total value of all settlements made as the marine class of insurance by the entire Nigerian insurance business in a given business year. Marine insurance penetration: This refers to the ratio of insurance policies bought to gross domestic product in Nigeria. Marine insurance density: This refers to the ratio of insurance policies bought to population of Nigerians.

Dependent variable

Real GDP: Real gross domestic product (GDP) is an inflation-adjusted measure that reflects the value of all goods and services produced by an economy in a given year, expressed in base-year prices [11]. Without real GDP, it could seem like a country is producing more when it's only that prices have gone up.

Method of Data analysis

Stationarity test was run to avoid having a spurious regression. This was done to determine what is the most appropriate technique for estimating the models in the study. The results show that at levels, four variables: premium, claims, penetration and density were stationary. On the other hand the variable real gross domestic product was stationary at first difference. The results show that the order of integration was not the same. There was a mixed order of integration after the stationarity test. Therefore, the variables were estimated using Autoregressive Distributive Lag model. Data analysis was at five percent level of significance. The decision rule was that where p-value of the independent variable is higher than the level of significance the null hypothesis will be upheld. On the other hand, where the p-value of the independent variable is lower than the level of significance the null hypothesis will be rejected and its alternative accepted.

A priori Expectations

An a priori expectation refers to an assumption that based on certain basic principles the outcome of a model equation will go in a given direction and magnitude.
Table 1  A priori expectation

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Expected relationship with the Dependent variable</th>
<th>Reason for expected relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marine insurance premium</td>
<td>Positive (+)</td>
<td>The present economic performance of the country is not favourable and has made people more risk averse. Therefore more persons involved in international business are expected to take up new or renew old insurance marine insurance policies. The growing premium pool will provide more liquidity to the insurance industry for investment which enhances economic growth (Torbira and Ogbulu, 2014).</td>
</tr>
<tr>
<td>Marine insurance claims</td>
<td>Positive (+)</td>
<td>Indemnifying the ones who suffer a loss stabilizes their financial position of individuals and firms with possibility of allowing them to concentrate their attention and resources on their core business which can lead to willingness and ability to take real investment which will help to generate higher level of economic growth (Oke, 2012).</td>
</tr>
<tr>
<td>Marine insurance penetration</td>
<td>Positive (+)</td>
<td>The net result of well functioning insurance markets should be better pricing of risk, greater efficiency in the overall allocation of capital and mix of economic activities, and higher productivity (Brainard, 2008).</td>
</tr>
<tr>
<td>Marine insurance density</td>
<td>Negative (+)</td>
<td>High population does not translate easily to high demand. With a larger</td>
</tr>
</tbody>
</table>
The percentage of the population being dependants they have less capacity to buy insurance (Varella, 2021).

Source: Author’s compilation, 2021

PRESENTATION AND ANALYSIS OF DATA

Data Presentation

Below is the time series data on marine insurance premium, marine insurance claims, marine insurance penetration, marine insurance density and real gross domestic product.

Table 2 Data on Explanatory and Dependent Variables

<table>
<thead>
<tr>
<th>Year</th>
<th>Premium (Millions)</th>
<th>Claims (Millions)</th>
<th>Penetration (%)</th>
<th>Density (Thousands)</th>
<th>RGDP (Billions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1985</td>
<td>12,220,000</td>
<td>100,000</td>
<td>8.17178E-05</td>
<td>14.62373</td>
<td>14,953,910,000,000</td>
</tr>
<tr>
<td>1986</td>
<td>34,740,000</td>
<td>11,400,000</td>
<td>0.000227983</td>
<td>40.50537</td>
<td>15,237,990,000,000</td>
</tr>
<tr>
<td>1987</td>
<td>95,090,000</td>
<td>3,260,000</td>
<td>0.000622972</td>
<td>107.9979</td>
<td>15,263,930,000,000</td>
</tr>
<tr>
<td>1988</td>
<td>103,520,000</td>
<td>30,150,000</td>
<td>0.000638407</td>
<td>114.5193</td>
<td>16,215,370,000,000</td>
</tr>
<tr>
<td>1989</td>
<td>149,500,000</td>
<td>110,050,000</td>
<td>0.000864428</td>
<td>161.1199</td>
<td>17,294,680,000,000</td>
</tr>
<tr>
<td>1990</td>
<td>188,580,000</td>
<td>37,340,000</td>
<td>0.000976813</td>
<td>198.0623</td>
<td>19,305,630,000,000</td>
</tr>
<tr>
<td>1991</td>
<td>213,210,000</td>
<td>58,030,000</td>
<td>0.001110523</td>
<td>218.3016</td>
<td>19,199,060,000,000</td>
</tr>
<tr>
<td>1992</td>
<td>363,480,000</td>
<td>81,210,000</td>
<td>0.001852581</td>
<td>362.8932</td>
<td>19,620,190,000,000</td>
</tr>
<tr>
<td>1993</td>
<td>566,600,000</td>
<td>119,480,000</td>
<td>0.002843237</td>
<td>551.6999</td>
<td>19,927,990,000,000</td>
</tr>
<tr>
<td>1994</td>
<td>10,703,490,000</td>
<td>132,370,000</td>
<td>0.053573381</td>
<td>10165.37</td>
<td>19,979,120,000,000</td>
</tr>
<tr>
<td>1995</td>
<td>9,083,420,000</td>
<td>184,390,000</td>
<td>0.044628953</td>
<td>8626.746</td>
<td>20,353,200,000,000</td>
</tr>
<tr>
<td>1996</td>
<td>2,771,950,000</td>
<td>191,780,000</td>
<td>0.01308868</td>
<td>2504.726</td>
<td>21,177,920,000,000</td>
</tr>
<tr>
<td>1997</td>
<td>1,786,400,000</td>
<td>106,090,000</td>
<td>0.008198595</td>
<td>1574.508</td>
<td>21,789,100,000,000</td>
</tr>
<tr>
<td>1998</td>
<td>1,624,010,000</td>
<td>129,480,000</td>
<td>0.007271837</td>
<td>1396.16</td>
<td>22,332,870,000,000</td>
</tr>
<tr>
<td>1999</td>
<td>2,349,660,000</td>
<td>1,068,930,000</td>
<td>0.010466467</td>
<td>1970.199</td>
<td>22,449,410,000,000</td>
</tr>
<tr>
<td>2000</td>
<td>3,103,370,000</td>
<td>440,830,000</td>
<td>0.01310086</td>
<td>2537.841</td>
<td>23,688,280,000,000</td>
</tr>
<tr>
<td>Year</td>
<td>Premium Generated</td>
<td>Claims Settled</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>-------------------</td>
<td>----------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1985</td>
<td>N12,220,000</td>
<td>N100,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td>N188,580,000</td>
<td>N3,103,370,000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: CBN bulletin, NAICOM and World bank reports

In 1985 premium generated by the insurance industry through marine insurance business was N12,220,000 which at the beginning of the next decade had grown to N188,580,000. In 2000 marine premium was N3,103,370,000 and N21,264,620,000 in 2010. As at 2020 it was at N24,083,082,500. Claims settled in 1985 was N100,000 and N37,340,000 in 2000.
five years later. It grew to N4,408,830,000 in 2000, N2,965,170,000 in 2010 and N11,370,400,000 in 2020. Insurance penetration was at 0.00081718 percent in 1985. By 1990 it had grown to 0.00976813 percent. In the year 2000 further growth was recorded up to 0.013100867 percent. 2010 had 0.038937447 percent while it was 0.03411497 in 2020. Insurance density was N14.62 in 1985 and N198.0623 in 1990. By 2000 it rose to N2537.841, dropped to N13415.89 in 2010 and was at N12374.13 in 2020. Real gross domestic product from N14,953,910,000,000 in 1985 increased to N19,305,630,000,000 in 1990, N23,688,280,000,000 in 2000. From N54,612,260,000,000 in 2010 it increased to N70,593,885,000,000.

Descriptive Statistics
The descriptive statistics of the time series data was estimated and the outcome presented in table 3

<table>
<thead>
<tr>
<th></th>
<th>CLAI</th>
<th>DENS</th>
<th>DRGDP</th>
<th>LAGPENE</th>
<th>PREM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>8.909581</td>
<td>3.496523</td>
<td>-0.000383</td>
<td>-1.975516</td>
<td>9.623017</td>
</tr>
<tr>
<td>Median</td>
<td>9.098065</td>
<td>3.817949</td>
<td>0.001636</td>
<td>-1.678475</td>
<td>9.969377</td>
</tr>
<tr>
<td>Maximum</td>
<td>10.12398</td>
<td>4.141649</td>
<td>0.031172</td>
<td>-1.271051</td>
<td>10.42279</td>
</tr>
<tr>
<td>Minimum</td>
<td>6.513218</td>
<td>2.033415</td>
<td>-0.050175</td>
<td>-3.642098</td>
<td>7.978135</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>0.909091</td>
<td>0.672919</td>
<td>0.014939</td>
<td>0.650455</td>
<td>0.766372</td>
</tr>
<tr>
<td>Skewness</td>
<td>-0.601859</td>
<td>-1.057587</td>
<td>-0.726793</td>
<td>-1.143252</td>
<td>-0.984565</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>2.565450</td>
<td>2.724185</td>
<td>5.311526</td>
<td>3.000421</td>
<td>2.618091</td>
</tr>
<tr>
<td>Jarque-Bera</td>
<td>2.320176</td>
<td>6.445887</td>
<td>10.56275</td>
<td>7.406475</td>
<td>5.699710</td>
</tr>
<tr>
<td>Probability</td>
<td>0.313459</td>
<td>0.039838</td>
<td>0.005085</td>
<td>0.024644</td>
<td>0.057853</td>
</tr>
<tr>
<td>Sum</td>
<td>302.9258</td>
<td>118.8818</td>
<td>-0.013030</td>
<td>-67.16754</td>
<td>327.1826</td>
</tr>
<tr>
<td>Sum Sq. Dev.</td>
<td>27.27276</td>
<td>14.94307</td>
<td>0.007364</td>
<td>13.96205</td>
<td>19.38176</td>
</tr>
<tr>
<td>Observations</td>
<td>34</td>
<td>34</td>
<td>34</td>
<td>34</td>
<td>34</td>
</tr>
</tbody>
</table>

Source: Author’s Eviews 10 output, 2021

Where
CLAI = Marine insurance claims settlement
DENS = Insurance density
DRGDP = Real gross domestic product
LAGPENE = Insurance penetration
PREM = Marine insurance premium

The mean of CLAI, DENS, DRGDP, LAGPENE and PREM were 8.909581, 3.496523, -0.000383, -1.975516 and 9.623017 respectively. The standard deviations were 0.909091, 0.672919, 0.014939, 0.672919 and 0.766372. For CLAI, DENS and PREM their standard deviations were lower than their respective mean. This shows that the variability of each variable was low. For DRGDP and LAGPENE their standard deviations were higher than their respective mean. This shows that the variability of each variable is high. The skewness estimate for each variable shows they are negatively
skewed. This suggests that a relatively larger probability distribution of the variables means have fatter tails to the left of the distribution.

Diagonistic test

Stationarity test

It is necessary to determine the stationarity of the data used in the study. This is to prevent the result of the analysis from being biased. In order to guard against a biased result a stationarity test was conducted. This was done using the Phillips Perron method of unit root test.

Table 4 Result of Stationarity test

<table>
<thead>
<tr>
<th>Variable</th>
<th>Phillips-Perron test statistic</th>
<th>Test critical value @ 5%</th>
<th>Order of Integration</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLAIMS</td>
<td>-3.969255</td>
<td>-2.948404</td>
<td>1(0)</td>
<td>0.0042</td>
</tr>
<tr>
<td>DENSITY</td>
<td>-4.652762</td>
<td>-2.948404</td>
<td>1(0)</td>
<td>0.0007</td>
</tr>
<tr>
<td>PENETRATION</td>
<td>-5.117710</td>
<td>-2.948404</td>
<td>1(0)</td>
<td>0.0002</td>
</tr>
<tr>
<td>PREMIUM</td>
<td>-4.586200</td>
<td>-2.948404</td>
<td>1(0)</td>
<td>0.0008</td>
</tr>
<tr>
<td>RGDP</td>
<td>-9.062557</td>
<td>-2.954021</td>
<td>1(1)</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

Source: Author’s Eview 10 output, 2021

Table 4 reveals that all the time series were stationary at levels except RGDP. This is evidenced by its Phillips-Perron test statistic at levels being less than or more negative their respective Critical values @ 5%. This is corroborated by their respective p-values being lower than 0.05 (the level of significance) which shows statistical significance. On the other hand, RGDP became stationary at first difference. It was at first difference that its Phillips-Perron test statistic became less than its Critical value @ 5%.

Heteroskedasticity Test

A basic regression analysis assumption is that the variance of the time series is the same for all observations. Through a heteroskedasticity test this assumption is determined.

Table 5 Heteroskedasticity Test: Breusch-Pagan-Godfrey

<table>
<thead>
<tr>
<th>F-statistic</th>
<th>2.184984</th>
<th>Prob. F(4,26)</th>
<th>0.0987</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obs*R-squared</td>
<td>7.799037</td>
<td>Prob. Chi-Square(4)</td>
<td>0.0992</td>
</tr>
<tr>
<td>Scaled explained SS</td>
<td>9.605410</td>
<td>Prob. Chi-Square(4)</td>
<td>0.0476</td>
</tr>
</tbody>
</table>

Source: Author’s Eviews 10 output, 2021

Table 5 shows that F-statistics and Obs*R-squared have a probability value of 0.0987 and 0.0992 which are all greater than 0.0.05. This indicates that in the test of hypothesis two regression results, there is no heteroskedasticity.

Serial Correlation Test

To check if the error terms in the data used in this study transfer or not from one year into another, a serial correlation test was carried out. This test was conducted using Breusch-Godfrey method.
Serial Correlation Test for Hypothesis 1

Table 6 Breusch-Godfrey Serial Correlation LM Test:

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>F-statistic</td>
<td>0.24468</td>
<td>0.7850</td>
</tr>
<tr>
<td>Obs*R-squared</td>
<td>0.618932</td>
<td>0.7338</td>
</tr>
</tbody>
</table>

Source: Author’s Eviews 10 Output, 2021

The probability value of F-statistic and Obs*R-squared is 0.7850 and 0.7338 respectively. Both are greater than 0.05 (the level of significance). Therefore, we conclude that there is no presence of serial correlation or autocorrelation in the regression analysis of hypothesis one.

Test of Hypothesis Two

Step One: Statement of the hypothesis in both null and alternate forms

H₀₂: Total marine insurance claims had no significant effect on real gross domestic product in Nigeria

Hₐ₂: Total marine insurance claims had significant effect on real gross domestic product in Nigeria

Step Two: Statement of the decision criteria

Accept the null hypothesis if p-value is greater than 5% or 0.05, otherwise reject the null hypothesis and accept the alternate accordingly.

Step Three: Presentation of the result for the hypothesis test
Table 7 Regression Result for Test of Hypothesis two

Dependent Variable: DRGDP
Method: ARDL
Date: 07/09/21   Time: 13:16
Sample (adjusted): 6 36
Included observations: 31 after adjustments
Maximum dependent lags: 4 (Automatic selection)
Model selection method: Akaike info criterion (AIC)
Dynamic regressors (4 lags, automatic):
Fixed regressors: CLAI C
Number of models evaluated: 4
Selected Model: ARDL(3)
Note: final equation sample is larger than selection sample

<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>DRGDP(-1)</td>
<td>-0.323898</td>
<td>0.181789</td>
<td>-1.781726</td>
<td>0.0865</td>
</tr>
<tr>
<td>DRGDP(-2)</td>
<td>-0.111339</td>
<td>0.184385</td>
<td>-0.603839</td>
<td>0.5512</td>
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<tr>
<td>DRGDP(-3)</td>
<td>-0.379466</td>
<td>0.176009</td>
<td>-2.155946</td>
<td>0.0405</td>
</tr>
<tr>
<td>CLAI</td>
<td>-0.002446</td>
<td>0.003352</td>
<td>-0.729716</td>
<td>0.4721</td>
</tr>
<tr>
<td>C</td>
<td>0.020900</td>
<td>0.030468</td>
<td>0.685951</td>
<td>0.4988</td>
</tr>
</tbody>
</table>

R-squared 0.249195
Adjusted R-squared 0.133686
Mean dependent var 0.001059
S.D. dependent var 0.014860
Akaike info criterion 5.577066
Schwarz criterion 5.345778
Hannan-Quinn criter. 5.501672
Durbin-Watson stat 2.037309
Prob(F-statistic) 0.102135

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

Source: Author's Eviews 10 Output, 2021

Step Four: Decision.
Table 7 shows the probability of marine insurance claims is 0.4721 and is greater than 0.05 the level of significance. Thus, we accept the null hypothesis and concluded that total marine insurance claims had no significant effect on real gross domestic product in Nigeria.

From Table 7 it is seen that total marine insurance claims had a regression coefficient of -0.002446. This is a negative coefficient. It shows that there is a decreasing interaction
between total marine insurance claims and real gross domestic product in Nigeria. That is to say for any unit change in total marine insurance claims, there will be -0.002446 basis points change in real gross domestic product in Nigeria. The Adjusted Coefficient of Determination ($R^2$) at 0.133686 shows that in hypothesis two model the independent variable (total marine insurance claims) can only explain 13.3686 percent of any variation seen in real gross domestic product in Nigeria. The remaining 86.6314 percent can be attributed to other variables not used in the model.

Discussion of Findings

The result of multivariate analysis shows that p-value of marine insurance claims at 0.8596 was greater than 0.05 (the level of significance). This shows that total marine insurance claims had no significant effect on real gross domestic product in Nigeria. The result of hypothesis one test shows that claims settlement made under marine insurance had minimal effect on the growth of the economy. This may be attributed to the growing reliance on technology, shift to remote working, reduction in air travel, expansion of green energy and infrastructure and a rethink of global supply chains which shaped loss trends of insurers [5]. In addition, due to the outbreak of COVID-19 insurers instead of paying claims had to refund. Operators had to contend with customers’ demands and claims on business disruption in form of premium refunds. These included premiums paid on travel insurance especially those whose flights were canceled as a result of the lockdown. Also operators had to refund part of premium collected on motor insurance policies especially comprehensive motor insurance policies as well as on premium paid on aviation insurance as a way of retaining their customers’ good will [9]. More businesses especially in the oil and gas and aviation sectors are now being reinsured abroad [10]. This reduces the risk load of local insurance operators as well as the extent of claims involvement in the economy. The finding of hypothesis two test did not agree with [11], who revealed that a lot of companies don’t know how to underwrite, therefore, the loss ratio is getting high. High loss ratio means settling more claims which in extension makes the insurance industry to be more involved in facilitating economic activities and engendering growth. Commercial trade stimulates production and consumption, which in turn drives economic growth and efficiency [8]. The result of hypothesis two test disagreed with [7] who found that economic growth is positively correlated with insurance contributions. Also, [9] revealed in the study that insurance claims had significant but negative association to economic growth. On the other hand, the finding agreed with [11], who found that insurance firms were not making any significant influence on economic development in the country.

CONCLUSION

The relevance of insurance to an economy has been established in lots of empirical studies undertaken in various countries Nigeria included. As an import dependent country the Nigerian economy is abuzz with lots of foreign goods and services. Total marine insurance claims had no significant effect on real gross domestic product in Nigeria. This was
based on p-value at 0.8596 being greater than 0.05.

REFERENCES


