Investment on Insurance Premiums and Economic Growth in Nigeria

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ABSTRACT

The empirical study investigated the effect of investment on insurance premiums and its impact on economic growth in Nigeria over a period 1982-2012. To achieve the objectives of the study, data was collected from National Insurance Commission (NAICOM) and Central Bank of Nigeria (CBN) Statistical bulletin. The data collected were analyzed using relevant econometric model test such as OLS, ADF unit root, Johanson Co-integration, VAR. The result revealed that the estimated premium paid on health insurance (PPHI), accident insurance (PPAI), life assurance (PPLA) and property insurance (PPPI) are directly related to real gross domestic product (RGDP). This suggests an evidence of statistical significance of the endogenous variables on the economic growth. The overall model is statistically significant as the probability value of F-statistics is less than 5%. Durbin Watson statistic value falls between (2.0 and 4.0) standard scale; confirming no presence of serial autocorrelation. R^2 is 89% implying that the coefficient of determination (R^2) is relatively high at 91% which adjudge the model as accurate and fitted. The value of adjusted R-squares (0.79) indicates that the exogenous variables can explain economic growth positively with proceeds from insurance by 79% while 21% of economic growth cannot be explained by exogenous variables as a result of some financial factors. Johanson Co-integration, Val model, and Granger causality test revealed a long run relationship with the endogenous variable thereby the writer recommend that a proper insurance seminar and workshop should be encouraged to the pupils to achieve the targeted goal and enhance economic growth.

Keywords: Insurance, consolidation, recapitalization, insurance premium, insurance perils,

INTRODUCTION

Insurance appears simultaneously with the appearance of human society. Insurance is the equitable transfer of the risk of a loss of human being, from one entity to another in exchange for payment. It is a form of risk management primarily used to hedge against the risk of a contingent, uncertain loss. Insurance business is being carried out by an insurer or insurance carrier. An insurer, or insurance carrier, is a company selling the insurance policy to the insured and the insured, or policyholder, is the person or entity buying the insurance policy. The amount of money to be charged for a certain amount of insurance coverage is called the premium. While risk management is the practice of appraising and controlling risk occurrence.

Insurance involves pooling funds from *many* insured entities (known as exposures) to pay for the losses that some may incur. The insured entities are therefore protected from risk for a fee, with the fee being dependent upon the frequency and severity of the event occurring. In order to be an insurable risk, the risk insured against must meet certain characteristics. financial intermediary is a commercial enterprise. Kunreuther (1996) indentified some typically common characteristics of risk which can be insured as: the risk must have Large number of similar exposure units, definite loss, accident loss, large loss, affordable premium, calculable loss and limited risk of catastrophically large losses For a company to insure an individual entity, Mehr et al (1976) emphasized on the basic legal common requirements principles of insurance and these are identified as principles of indemnity, insurable interest, utmost good faith, contribution, subrogation, proximate cause, mitigation etc. Insurance can have various effects on society through the way that it changes who bears the cost of losses and damage. On one hand it can encourage investment and loss reduction. this is by indemnification. To "indemnify" means to make whole again, or to be reinstated to the position that one was in, to the extent possible, prior to the happening of a specified event or peril.

Accordingly, life insurance is generally not considered to be indemnity insurance, but rather contingent insurance (i.e., a claim arises on the occurrence of a specified event).

Feldstein et al (2008) identified two ways through which insurance make money through (1) Underwriting the process by which insurance selects the risk to insure and decide how much in premiums to charge for accepting those risk and (2) By Investing the premiums they collected from insured parties. Gollier (2003) posit that Investment on insurance premium is possible when the amount of premium taken from the insured for the different kinds of policy / cover taken minus the amount underwriter funds paid out as claims. The underwriting performance is measured by something called the "combined ratio which is the ratio of expenses / losses to premiums. Insurance companies earn investment profits on floats or available reserves. This is the amount of money on hand at any give n moment that an insurer has collected in insurance premiums but has not paid in claims. Brown (1993) argued that insurers start investing insurance premiums as soon as they collected premium and continue to earn interest or other income on them until claims are paid out. Naturally, the float method is difficult to carry out in an economically depressed period.

1. REVIEW OF RELATED LITERATURE

CONCEPTUAL ISSUES

Any risk that can be quantified can potentially be insured. Specific kinds of risk that may be insured, and give rise to premium payment by the insured and claim payment by the insurance company are known as perils. According to NAICOM (2013), An insurance policy will set out in detail which perils are covered by the policy and which are not. According to Fitz (2004) have non-exhaustive lists of the many different types of insurance that exist. A single policy may cover risks in one or more of the categories set out below. For example, Vehicle Insurance would typically cover both the property risk (theft or damage to the vehicle) and the liability risk (legal claims arising from an accident). A home insurance policy in the US typically includes coverage for damage to the home and the owner's belongings, certain legal claims against the owner, and even a small amount of coverage for medical expenses of guests who are injured on the owner's property (NAICOM). The overall perils of insurance company can take a different form. Onuorah (2010) posits that in order to have a positive effect of investment on insurance business, the following are the professional liability insurance, also called professional indemnity. such are: Auto insurance policy, Gap insurance, Disability insurance policies, Disability insurance policies, Casualty insurance, Life insurance, Burial insurance (which is a very old type of life insurance which is paid out upon death to cover final expenses, such as the cost of a funeral.) (NAICOM), Property insurance, Property insurance, Liability insurance, NAICOM classified insurance companied into two: Life insurance companies, which sell life insurance, annuities and pensions products, Non-life, general, or property/casualty insurance companies, which sell other types of insurance. General insurance companies can be further divided into two sub categories.

a. **Standard line insurance companies** usually charge lower premiums than excess line insurance and may sell directly to individual insurers. They are regulated by state laws, which include restrictions on rates and forms, and which aim to protect consumers and public from unfair or abusive practices. There insurers are also required to contribute to state guarantee funds, which are used to pay for losses if an insurer becomes solvent. In the United States, standard line insurance companies are insurers that have received a license or authorization from a state for the purpose of writing specific kinds of insurance in that state, such as automobile insurance or homeowners' insurance. They are typically

referred to as "admitted" insurers. Generally, such an insurance company must submit its rates and policy forms to the state's insurance regulator to receive his or her prior approval, although whether an insurance company must receive prior approval depends upon the kind of insurance being written.

b. **Excess line insurance companies (**also known as Excess and Surplus) typically insure risks not covered by the standard lines insurance market, due to a variety of reasons (e.g., new entity or an entity that does not have an adequate loss history, an entity with unique risk characteristics, or an entity that has a loss history that does not fit the underwriting requirements of the standard lines insurance market). They are typically referred to as non-admitted or unlicensed insurers. Non-admitted insurers are generally not licensed or authorized in the states in which they write business, although they must be licensed or authorized in the state in which they are domiciled. These companies have more flexibility and can react faster than standard line insurance companies because they are not required to file rates and forms. However, they still have substantial regulatory requirements placed upon them.

Most states require that excess line insurers submit financial information, articles of incorporation, a list of officers, and other general information. They also may not write insurance that is typically available in the admitted market, do not participate in state guarantee funds, may pay higher taxes, only may write coverage for a risk if it has been rejected by three different admitted insurers, and only when the insurance producer placing the business has a surplus lines license. Generally, when an excess line insurer writes a policy, it must, pursuant to state laws, provide disclosure to the policyholders that the policyholder's policy is being written by an excess line insurer. Insurance companies are generally classified as either mutual or proprietary companies. Mutual companies are owned by the policyholders, while shareholders (who may or may not own policies) own proprietary insurance companies.

In most countries, life and non-life insurers are subject to different regulatory regimes and different tax and accounting rules. In free encyclopedia, it was stated that the main reason for the distinction between the two types of company is that life, annuity, and pension business is very long-term in nature – coverage for life assurance or a pension can cover risks over many decades. By contrast, non-life insurance cover usually covers a shorter period, such as one year.

THEORIES UNDERPINNING INSURANCE BUSINESS

The first insurance company in the United States underwrote fire insurance and was formed in Charles Town (modern-day Charleston), South Carolina, in 1732. Benjamin Franklin helped to popularize and make standard the practice of insurance, particularly against fire in the form of perpetual insurance. In 1752, he founded the Philadelphia Contribution ship for the Insurance of Houses from Loss by Fire. Franklin's company was the first to make contributions toward fire prevention. Not only did his company warn against certain fire hazards, it refused to insure certain buildings where the risk of fire was too great, such as all wooden houses. In the United States, regulation of the insurance industry primary resides with individual state insurance departments. The current state insurance regulatory framework has its roots in the 19th century, when New Hampshire appointed the first insurance commissioner in 1851. Congress adopted the McCarran-Ferguson Act in 1945, which declared that states should regulate the business of insurance and to affirm that the continued regulation of the insurance industry by the states is in the public's best interest. The Financial Modernization Act of 1999, commonly referred to as "Gramm-Leach-Bliley", established a comprehensive framework to authorize affiliations between banks, securities firms, and insurers, and once again acknowledged that states should regulate

insurance. In Nigeria insurance laws of 1969, 1976, 1997 was introduced, but was fully popularized by the NAICON insurance act of 2003. The act put in place securities and established the reclassification of insurance companies and introduced new products which bring about consolidation in the insurance new industries.

EMPIRICAL EVIDENCE

As a result of the growing challenges arising from huge levels of outstanding premium reports in the financial statements of insurance companies, In Nigeria the national insurance Commission (NAICOM) (2013) has carried out a detailed review of the subject and the findings show that, Insurance companies have continued to report huge amounts of outstanding premium while at the same time making large amounts of provision for bad debts without subsequent recoveries of the debts, thereafter there are wide disparities between what insurers claim are due from brokers and what the brokers claim are due to insurers. The insurance Act 2003 deems premium collected by brokers as having been collected by insurers. Such insurers are therefore presumed to be on cover for all such risks insured, because insurers are not immediately notified by brokers of the collection of the premiums on their behalf, insurers are nonetheless presumed to be on cover in respect of risk which they have not had the opportunity of documenting and arranging for reinsurance, where relevant.

Onuorah 2010, investigated how people perceive insurance companies and their services in Nigeria using four insurance companies in Port-Harcourt, the result reviews that majority of the respondant have unfavourable perception of insurance companies and their services and thereby concluded that there is a low confidence of insurance on the service delivery of the insurer, and the insurer should inform the insured on the policy interpretation.

Park, Borde & Choi (2002) concentrate in their research work on the linkage between insurance penetration and GNP and some socio-economic factors adopted from Hofstede (1983). The results of analysis of the cross-sectional data from 38 countries in 1997 show significance for GNP, masculinity, socio-political instability and economic freedom. All other factors lack importance and masculinity has to be dropped after checking for heteroscedasticity of unknown form. Deregulation was found to be a process able to facilitate growth in the insurance industry and supports the expectations of Kong & Singh (2005). Socio-political instability was found to be more a proxy for poverty than an indicator for the need to insurer.

Onuorah (2010) examines the relevance of financial engineering as a risk management strategy using the creation and design of financial securities such as Swaps, Options, features and forwards with custom. The paper therefore contends that understanding the key variables of financial engineering with the unpredictable nature of asset prices would at least reduce to the barest minimum volatility of asset prices. This basic factor has led financial experts to proffer engineering solution to the risks associated with prices of financial securities.

Webb, Grace & Skipper (2002) use a Solow-Swan model and incorporate both the insurance and the banking sector, with the insurances divided in property/liability and life products. Their findings indicate that financial intermediation is significant. When split into the three categories banking and life sector remain significant for GDP growth, while property/liability insurances loose their importance. Furthermore results show that a combination of one insurance type and banking has the strongest impact on growth.

METHODOLOGY

The aim of the study is to estimate and analyse the effects of an insurance premium paid by the insured (the policy holder) to the insurer (insurance company) on the economic growth of Nigeria using some describing test Statistics such Ordinary Least Square regression method, ADF-unit root test, Johnson Co-integration estimation technique, Error Correction Models (VECM) Analysis through Econometric model using E-view 3.5.

The data for the study are: Real Gross domestic product (GDP), as the exogenous variable while the endogenous variables are data collected from perils premium paid on Health insurance, Accident Insurance, Life Insurance and Property Insurance on time series data collected from the Annual reports of National Insurance Commission (NAICOM), Central bank of Nigeria (CBN) Statistical bulletin Spanning over a period 1982-2012.

Considering the functional notation, the model for this study are specified and modeled in its functional form as:

RGDP = F (PPHI PPAI PPLA PPPI)

Where:

RGDP is the Real Gross Domestic product

PPHI is the Premium Paid on Health Insurance

PPAI is the Premium Paid on Accident Insurance

PPLA is the Premium Paid on Life Assurance

PPPI is the Premium Paid on Property Insurance

The functional model is expressed in the Econometric Form as

$$RGDP = Y_0 + Y_1\ PPHI + Y_2\ PPAI + Y_3\ PPLA + Y_4\ PPPI + U_t \text{----------(2)}$$

When equ (1) is transformed in Log-Linearity, the variables are expressed as

$$LnGDP = L_nY_0 + L_nY_1\ PPHI + L_nY_2\ PPAI + L_nY_3PPLA + L_nY_4PPPI + U_t \text{-------(3)}$$

$Y_1 = Y_4$ are the proxies of insurance premium

Ln = Log Linearly

Ut = the error term

The expected causal relation between endogenous variable (RGDP) and the exogenous variables PPHI, PPHI, PPLA and PPPI are expressed: $Y_1 - Y_4 > 0$ ----------(4)

The above sign (Y>0) implies a positive relationship between RGDP and the coefficients of the independent variables.

4. EMPIRICAL ANALYSIS

The empirical analysis regressed and analyzed the data series for the study.

TABLE 1 ORDINARY LEAST SQUARE

Dependent Variable: RGDP
Method: Least Squares
Date: 11/23/13 Time: 08:14
Sample(adjusted): 1982 2012
Included observations: 31 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
PPHI	0.626784	0.482810	0.554757	0.0000
PPAI	0.544.697	24491.91	-0.226389	0.0227
PPLA	0.768296	1.303894	-0.359152	0.0224
PPPI	0.517659	0.769109	1.323167	0.0173
C	21277294	48473409	0.232649	0.0179

R-squared	0.899287	Mean dependent var	298254.6
Adjusted R-squared	0.799177	S.D. dependent var	522850.7
S.E. of regression	405276.0	Akaike info criterion	28.80921
Sum squared resid	4.27E+12	Schwarz criterion	29.04050
Log likelihood	-441.5428	F-statistic	5.982884
Durbin-Watson stat	2.854854	Prob(F-statistic)	0.000384

REPRESENTATION OF OUTPUT

Estimation Command:
==========
LS RGDP PPHI PPAI PPLA PPPI C

Estimation Equation:
==========
RGDP = C(1)*PPHI + C(2)*PPAI + C(3)*PPLA + C(4)*PPPI+ C(5)

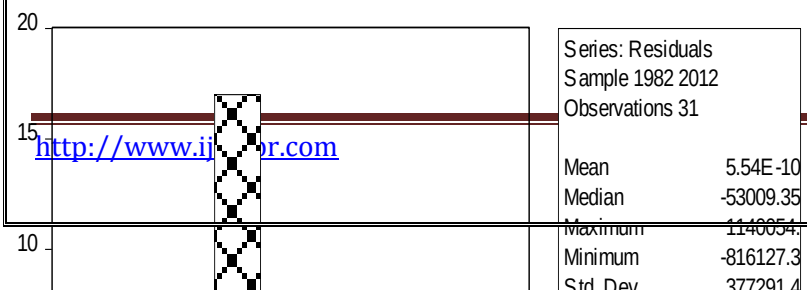
Substituted Coefficients:
==========
RGDP = 0.626784*PPHI 0.54469780*PPAI 0.768296*PPLA + 0.517659*PPPI + 21277294.11

Source: E-View 4.0

The table 1 above shows that the estimated premium paid on health insurance (PPHI) is (62%), premium paid on accident insurance (PPAI) (54%), premium paid on life assurance (PPLA) (76%) and premium paid on property insurance (PPPI) (0.51%) are positively related to real gross domestic product (RGDP), that means they have direct relationship to the RGDP. Also, PPHI, PPAI, PPLA, and PPPI have significant relationship with the Real Gross Domestic Product (RGDP) indicating that the probability values associated with the t-calculated values of the exogenous variables are less than the 0.01 and 0.05 at both 1% and 5% critical values. This suggests an evidence of statistical significance of the endogenous variables on the economic growth. The overall model is statistically significant as the probability value of F-statistics is 0.000384 less than 1% and 5%, indicating a very strong significant evidence that the insurance variables impact on the economic growth. Durbin Watson statistic value falls between (2.0 and 4.0) standard scale; that is 2.85 confirming no presence of serial autocorrelation. R-square is 89% implying that the coefficient of determination (R^2) is relatively high at 91% which adjudge the model as accurate and highly fitted. The value of adjusted R-squares (0.79) indicates that PPHI, PPAI, PPLA and PPPI can explain economic growth positively with proceeds from insurance by 31% while about 41% of economic growth cannot be explained by exogenous variables as a result of some financial factors.

Table 2. DIAGNOSTIC TEST

2a) Normality Test



2b) Breusch-Godfrey Serial Correlation LM Test:

F-statistic	5.760004	Probability	0.001688
Obs*R-squared	17.92772	Probability	0.003038

2c) White Heteroskedasticity Test:

F-statistic	37.58120	Probability	0.030000
Obs*R-squared	30.08510	Probability	0.057429

2d Ramsey RESET Test: 0.06

F-statistic	90.13169	Probability	0.030000
Log likelihood ratio	96.46371	Probability	0.020000

Source: E-View 4.0

The result above shows strong evidence that the time series residual variables are normally distributed as the probabilistic value of JB stat is 0.00005 which is very much lesser than 0.05 critical value, hence we fail to accept the null hypothesis (Ho) in favor of the alternative hypothesis (H1) and concluded that the series are normally distributed and the model is good for predictions.

The diagnostic test in Table 2; shows that the P-value of F-statistic of Lm test 0.001688 and P-value of F-statistics of white heteroskelasticity test is 0.03 are less than the 0.05 critical value which is the bench mark for acceptancy/rejection rule . We therefore fail to accept H_0 that (1) There is no serial correlation among the series. (2) There is no heteroskedasticity among the variables and conclude that the model is not significant because the variables generally Corrected and there is presence of heteroskedascity. The result of 2d revealed that as the probability value of the Log likelihood ratio (LH) of Ramsey Reset Test is 0.03 which is less than 0.05 critical value. we therefore fail to reject H1 and conclude that the model is significant and fit, stable for predictions.

TABLE 3 Unit Root Output Result

(a) RGDP 1ST DIFFERENCE 1 (1)

ADF Test Statistic	-4.755134	1%	Critical Value*	-3.6752
		5%	Critical Value	-2.9665
		10%	Critical Value	-2.6220

*MacKinnon critical values for rejection of hypothesis of a unit root.

(b) PPHI 1ST DIFFERENCE 1 (1)

ADF Test Statistic	-5.416821	1%	Critical Value*	-3.6752
		5%	Critical Value	-2.9665
		10%	Critical Value	-2.6220

*MacKinnon critical values for rejection of hypothesis of a unit root.

(c) PPAI 1ST DIFFERENCE 1 (1)

ADF Test Statistic	3.098925	1%	Critical Value*	-3.6452
		5%	Critical Value	-2.9705
		10%	Critical Value	-2.6242

*MacKinnon critical values for rejection of hypothesis of a unit root.

(d) PPLA 1st DIFFERENCE 1 (1)

ADF Test Statistic	-5.074063	1%	Critical Value*	-3.6752
		5%	Critical Value	-2.9665
		10%	Critical Value	-2.6220

*MacKinnon critical values for rejection of hypothesis of a unit root.

(e) PPPI 1ST DIFFERENCE 1 (1)

ADF Test Statistic	-3.020078	1%	Critical Value*	-3.6852
		5%	Critical Value	-2.9705
		10%	Critical Value	-2.6242

*MacKinnon critical values for rejection of hypothesis of a unit root.

Source: E-View 4.0

Table 4.4a through 4.4e reveal that there is no unit root in the time series properties when the variables RGDP, PPHI, PPAI, PPLA and PPPI are subjected to ADF-test at 5% critical level. This is because the calculated values of the ADF test result are greater than the critical values at 5% irrespective of sign difference hence the variables are stationary and significant. The result suggests evidence of co integration and possible VAR model application of long run relationship.

Table 5
Johansen Co-Integration Test

Date: 11/23/13 Time: 08:25
Sample: 1982 2012
Included observations: 31
Test assumption: Linear deterministic trend in the data

Series: RGDP PPHI PPAI PPLA PPPI
Lags interval: No lags

Eigenvalue	Likelihood Ratio	5 Percent Critical Value	1 Percent Critical Value	Hypothesized No. of CE(s)

0.724292	142.2101	68.52	76.07	None **
0.818349	58.4766	47.21	54.46	At most 1 **
0.217462	42.46102	29.68	35.65	At most 2**
0.187134	28.231,504	15.41	20.04	At most 3
0.003440	2.171476	3.76	6.65	At most 4

*(**) denotes rejection of the hypothesis at 5%(1%) significance level L.R. test indicates 5 cointegrating equation(s) at 5% significance level

Source: E-View 4.0

From Table 5 above, the trace statistic and likelihood function values are greater than critical value at 1% and 5% suggesting that there is co-integration at most 3 with an implication of at least 4 co integrating equations among the variables which the null hypothesis was rejected in favour of the alternative hypotheses at 1 and 5 per cent critical level. This is because their values exceed the critical values at the 0.01 and 0.05 which implies that a long-run relationship existing among the variables (PPHI, PPAI, PPLA, PPPI and RGDP).The Johansen co integration shows that there is no presence of full rank given that subtraction of the number of co integrating equations and the variables under study is not equal to zero, (Ezirim 2012) therefore implying that the model is good and is in functional form. There is no presence of multi co linearity as the value of the log likelihood is positive. Based on this VAR is performed to estimate the parameters of the model (Johansen 1995; Granger and Jin-Lung Lin, 1994).

Table 5 VAR Model Test

Date: 11/23/13 Time: 11:28

Sample(adjusted): 1982 2012

Included observations: 31 after

Adjusting endpoints

Standard errors & t-statistics in parentheses

	GDP	PPHI
RGDP(-1)	0.771476	-1.681521
	(0.24821)	(1.21128)
	(5.61161)**	(-0.62324)
RGDP(-2)	-0.104246	-0.41122
	(0.21116)	(1.83768)

	(-0.7278)	(-0.16822)
PPHI(-1)	0.016141	-0.382082
	(0.03109)	(0.12116)
	(0.98712)	(-2.12061)
PPHI(-2)	0.019722	-0.113211
	(0.02677)	(0.11976)
	(2.28802)**	(-1.21462)
C	2.168822	42.21106
	(1.76616)	(161235)
	(1.30216)	(2.57116)
PPAI	-0.046912	-2.343516
	(0.06124)	(0.30737)
	(-0.7048)	(-3.18816)
PPLA	-0.054961	0.189589
	(0.02821)	(0.26068)
	(-1.36312)	(0.75487)
PPPI	-0.004832	-0.021156
	(0.10929)	(0.01196)
	(-1.24861)	(-0.55296)

Source: E-View 4.0

Econometric result of the vector autoregressive model shows that RGDP is statistically significant at the current year (-1) as the probability of the t-ratios (5.61101) is greater than the rule of thumb of 2.0 points but not significant in the previous year 0.77278. Hence, economic growth is estimated at 77% index performance in that period. VAR model estimates imply that inverse relationship between the estimates of PPAI, PPLA and PPPI with the economic growth. A unit change in PPAI, PPLA and PPPI will result in about 4.6%, 5.4% and 0.4% decrease in GDP. The estimate of PPHI is 0.016. This implies that there is direct relationship between the PPHI and the GDP indicating that a unit change in PPHI will bring about 1.6 percentage increases in the economic growth and it statistically significant at the previous year (-2) as the probability value of the t-ratio is (2.28802) greater than 0.05 critical value.

Table 5: GRANGER TEST

Pairwise Granger Causality Tests

Date: 10/26/13 Time: 11:30

Sample: 1980 2012

Lags: 2

Null Hypothesis:	Obs	F-Statistic	Probability

PPHI does not Granger Cause RGDP	31	5.39812	0.01089
RGDP does not Granger Cause PPHI		0.21856	0.81567
PPAI does not Granger Cause GDP	31	1.16251	0.32843
RGDP does not Granger Cause PPAI		2.46933	0.04261
PPLA does not Granger Cause RGDP	31	1.54709	0.23183
RGDP does not Granger Cause PPLA		0.54332	0.02727
PPPI does not Granger Cause RGDP	31	4.02435	0.03002
GDP does not Granger Cause EXR		0.17260	0.84243

Source: E-View 4.0

The causality effect of exogenous variables on economic growth reveals that PPHI causes the RGDP but RGDP does not granger cause PPHI. PPAI does not granger cause RGDP. RGDP granger cause PPAI. However, PPLA does not granger cause RGDP while RGDP granger cause PPLA. PPPI granger cause RGDP while RGDP does not granger cause PPPI. Thereby we concluded that the exogenous variables statistically impact on economic growth. We say that the premiums paid on insurance industry have significant effect on the growth of the economy.

CONCLUSION AND RECOMMENDATIONS

From the empirical analysis the VAR model and OLS stands a better model to estimate the performance of economic growth in Nigeria by the insurance firms. The study finds a positive and significant long run relationship between insurance premium and economic growth. The findings also revealed that there the finding. The Granger causality revealed that there is a bi-causality between the exogenous variables and endogenous variables. This findings are in line with Kunreuther (1996) given the statistical significant of his study. We recommend that NAICON should gear their insurance policy that are yet to be announces towards creating awareness, engaging training and insurance marketing and advertisement.

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