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Insurance Sub-Sector Development: An Emerging Pillar For Economic Growth and Sustainability in Nigeria

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Abstract:

This study examined the effect of Insurance sub-sector development on economic growth and sustainability in Nigeria. It specifically examined the impact of insurance premium on economic growth in Nigeria, ascertain the effects of gross insurance claim on economic growth in Nigeria and determine whether insurance income has any impact on economic growth in Nigeria. To achieve these objectives the study employed various econometric techniques such as Augmented Dickey Fuller (ADF) test for the unit root test, Engle-Granger (E-G) causality test & Johansen's co-integration and Parsimonious Error Correction modeling in which variations insurance premium, gross insurance claims and insurance income were regressed on GDP using time series data from 1986-2015. The secondary data casing the time series frame were collected from Central Bank of Nigeria statistical bulletin. The results of the analysis revealed the presence of long run relationship between insurance premium and economic growth in Nigeria. The result also revealed that the error correction model analysis though not individually statistically significant, the variables, insurance premium, gross insurance claim and insurance income were jointly statistically significant in determining economic growth in Nigeria. The study concluded that Nigeria has enormous insurance potentials waiting to be tapped into for rapid economic growth in Nigeria.

Key words: Insurance Sub-Sector Development, Insurance Premium, Gross Insurance Claim and Insurance Income.

1. Introduction

Madongo (2014) observes that Nigeria's insurance sector is growing rapidly but has low level of penetration in a young society inhabiting Africa's largest economy. Add to this what a recent Fitch Rating report calls an environment "ripe for consolidation" and it becomes easy to see why foreign insurance groups are eyeing the market keenly.

The Nigeria insurance market is currently ranked 60th in the world. However, the Nigerian government envisions an insurance industry that can rank amongst the twenty largest markets in the world by the year 2020 (Onuoha, 2014)

In developed markets, the insurance sector accounts for a significant portion of the total economy. Their collection of relatively small

premium turns into a large pool of funds that could be invested for short or long term periods.

Insurance businesses are split mainly into non-life and life, non-life insurance representing short term funds and life insurance representing longer term fund (Akanro, 2008). As so many insurers could serve as a means of long term financing, the sector is therefore important for sustained economic growth. These will in turn, he said will deepen and broaden the domestic financial inclusion, as well as great high saving rates and therefore greater economic development.

Nwoji (2015), states that the insurance industry has attracted global finance market players like the Sanlam of South Africa, Old Mutual of South Africa, Axa form France, NSIA, among others into the country. These have within this stated period staked significant in Nigeria insurance firms thereby injecting life into them.

The firms which have metamorphosed from their financial commitment are some of the giant players one can point at while taking a head count of prosperous players in the market today. The commitments of the global finance market players have quickened activities in the insurance industry in Nigeria. For instance, Axa from France announced that it had acquired 77% interests in Mansard insurance, formerly Guarantee Trust Assurance; have sunk a whopping sum of 198 million pounds into the company.

Old Mutual of South Africa invested into former Oceanic insurance, while Sanlam of South Africa, which was the first in the race invested substantially in First Bank Insurance Brokers transforming it into FBN Life Assurance. NSIA invested in ADIC insurance while Green Oaks Global Holding invested in Union Assurance. Nwoji (2015) observes that there are indicators that another global player is staking substantially into Standard Alliance Insurance but the deal is not fully consummated.

One can see from the above situations that the interest of foreign investors is heightened in the Nigeria insurance market, which was hitherto jettisoned by indigenous investors.

This paper sought to identify various plans already in place and more to make insurance subsector a veritable sector for economic development of Nigeria.

1.1 Statement of the Problem

The insurance sub-sector has an important role to play in the economic development of Nigeria, mainly by its role of intermediary and provider of financial services and by identifying the risk transfer of the society. In the point of economic perspective, insurance facilitates industrialists and other entrepreneur to avoid the necessity of freezing capital to guard against various contingency due to the reason they can reimburse a fixed contribution which is called premium and obtain financial security against the risks insured. Insurance has also permitted commercial, industrial and other huge organizations to operate on a large scale which otherwise would have been unattainable.

It is undoubtedly true that the insurance industry makes significant contribution to the economy in the developing countries of the world. This has not been the case in Nigeria due to multifarious factors hindering the development and growth of the industry. It therefore means that the factors

responsible for the stunted growth of the industry have not been addressed.

Akanro(2008) states that Nigeria macro-economy overview is a compelling story of progression and advancement attributable mostly to a stable political environment and the successful implementation of socio-economic and financial reforms.

Alababan (2016) observes insurance as a key sector of Nigerian economy; the provision and uptake of insurance services remain low despite the enormous exposure to risk for the low-income and mass-market population in Nigeria. Reasons are attributable to lack of consumer trust, many Nigerians are skeptical and hold negative perception of the industry, low level of enforcement of compulsory insurance policies, lack of professionalism by some agents and brokers in the industry and general shortage of skilled professionals in the industry.

Taking a case of compulsory motor vehicle insurance (third party liability), Okonjo-Iweala in Alababan (2016) observes that only one in eight Nigerian car (13%) have genuine insurance policy compared to Ghana, where the compliance rate is reportedly about 60%. On the case of mandatory group life insurance for large corporations, the oil and gas sector, the federal civil service and the police service are non compliance.

It is very clear that Nigeria is under insured considering its population of 174 million people and very low insurance penetration of less than 1%, whereas countries like Kenya and Morocco have insurance penetration of 3.2% and 2.9% respectively. They are comparable to some developed markets in Europe as well as Brazil and China. They are followed by Angola at 0.9% penetration. The rest of Africa has historically had very low demand for insurance. In particular, Nigeria and Egypt are considered very low given their large populations of 174 million and 85 million, respectively. The problem which this study sought to address therefore is to examine the effects of insurance sub-sector development on economic growth and sustainability in Nigeria.

1.2 Objectives of the study

The broad objective of this study is to examine the effect of Insurance-sub sector development on economic growth and sustainability in Nigeria.

Specific objectives are to:

- Examine the effects of Insurance Premium on Economic Growth and Sustainability in Nigeria.

- Ascertain the effects of Gross Insurance Claims on Economic Growth and Sustainability in Nigeria.
- Determine whether Insurance Income has any effects on Economic Growth and Sustainability in Nigeria.

1.3 Research Questions

1. How does Insurance Premium affect Economic Growth and Sustainability in Nigeria?
2. To what extent has Gross Insurance Claim impacted on Economic Growth and Sustainability in Nigeria?
3. How does Insurance Income impacted on Economic Growth and Sustainability in Nigeria?

2.0 Review of Related Literature

2.1 Concept of insurance

Alli (2011) describes insurance as the inevitability of risks in human life which gave rise to the concept of insurance. Insurance may comprehensively be described as a contract between two parties (the insurer and the insured) whereby the insurer undertakes to indemnify the insured /assured against risk of loss, risk of damage and risk of liability which may arise upon the uncertain occurrence of some specified event or in the case of life insurance, upon the occurrence of a certain event (death) at an uncertain time.

Medical Dictionary defines insurance as coverage against financial loss, such as from illness or injury, procured by contract from a company or agency that provides such protection (Farlex, 2012).

McGraw-Hill concise Dictionary defines insurance as a contractual relationship when one party an insurance company or underwriter, in consideration of a fixed sum- a premium, agrees to pay on behalf of another –an-insured, a policyholder for covered losses, up to the limits purchased, caused by designated contingencies listed in the policy (McGraw-Hill, 2002)

Medical Dictionary for the Health professions and Nursing defined insurance as a contractual arrangement whereby one party agrees to indemnify the other against financial or other specified loss during a stated period in the future (Farlex, 2012)

Medical Dictionary for the Dental profession described insurance as coverage against financial

loss procured by contract from a company that provides such protection.

Harvey (2012) defines insurance as guarding against property loss or damage by making payments in the form of premiums to an insurance company, which parts an agreed upon sum to the insured in the event of loss.

Insurance is a method of protecting a person or firm against financial loss resulting from damage to or theft of, personal and business assets (general insurance) and death and injury (life and accident insurance. Insurance may be obtained directly from an insurance company or through an intermediary such as an insurance broker/agent. In return for an insurance premium the person or firm obtains insurance cover against financial risk (Financial Dictionary, 2012).

2.2 What is a 'Premium?'

Premium has multiple meanings in finance: (1) it's the total cost to buy an option, which gives the holder the right but not the obligation to buy or sell the underlying financial instrument at a specified strike price; (2) it's the difference between the higher price paid for a fixed-income security and the security's face amount at issue, which reflects changes in interest rates or risk profile since the issuance date; and (3) the specified amount of payment required periodically by an insurer to provide coverage under a given insurance plan for a defined period of time. The premium compensates the insurer for bearing the risk of a payout should an event occur that triggers coverage. The most common types of coverage are auto, health, and homeowners insurance.

The three usages of the term premium all involve payment for something that is perceived to have value.

Option Premium

The buyer of an option has the right but not the obligation to buy (with a call) or sell (with a put) the underlying instrument at a given strike price for a given period of time. The premium that is paid is its intrinsic value plus its time value: an option with a longer maturity always costs more than the same structure with a shorter maturity. The volatility of the market and how close the strike price is to the then-current market price also affect the premium.

Sophisticated investors sometimes sell one option (also known as writing an option) and use the premium received to cover the cost of buying the underlying instrument or another option. Buying multiple options can either increase or reduce the

risk profile of the position, depending on how it is structured.

Bond Price Premium

The concept of a bond price premium is directly related to the principle that the price of a bond is inversely related to interest rates; if a fixed-income security is purchased at a premium, this means that then-current interest rates are lower than the coupon rate of the bond. The investor thus pays a premium for an investment that will return an amount greater than existing interest rates.

Insurance Premium

Premiums are paid for many types of insurance, including health insurance, homeowners and rental insurance. A common example of an insurance premium comes from auto insurance. A vehicle owner can insure the value of his or her vehicle against loss resulting from accident, theft, fire and other potential problems. The owner usually pays a fixed premium amount in exchange for the insurance company's guarantee to cover any economic losses incurred under the scope of the agreement. Found at; (<http://www.investopedia.com/terms/p/premium.asp#ixzz4n9uawVCz>, 2017)

2.3 Insurance Claims

Insurance claim according to Farlex Financial Dictionary (2012) is a document or request filed by a policyholder stating that an insured event has occurred and that the insurance company should provide coverage. For example, if a person has health insurance and breaks his leg, he must file an insurance claim in order for the insurance company to pay for some or all of the medical expenses. Depending on the policy, a third party may or may not be able to file an insurance claim on behalf of a policyholder.

Insurance claims are demands made by policyholders for payment under insurance for a loss covered by that policy (Jemilohun, V.G., Lawal, Y.O. and Adebara, L. 2013)

Claims and loss handling is the materialized utility of insurance; it is the actual "product" paid for. Claims may be filed by insured directly with the insurer or through brokers or agents. The insurer may require that the claim be filed on its own proprietary forms, or may accept claims on a standard industry form, such as those produced on accord (Tajudeen and Dansu, 2014)

Insurance company claims departments employ a large number of claims adjusters supported by a staff of records management and data entry clerks.

Incoming claims are classified based on severity and are assigned to adjusters whose settlement authority varies with their knowledge and experience. The adjuster undertakes an investigation of each claim, usually in close cooperation with the insured, determines if coverage is available under the terms of the insurance contract, and if so, the reasonable monetary value of the claim, and authorizes payment.

The policyholder may hire their own public adjuster to negotiate the settlement with the insurance company on their behalf. For policies that are complicated, where claims may be complex, the insured may take out a separate insurance policy add-on, called loss recovery insurance, which covers the cost of a public adjuster in the case of a claim.

Adjusting liability insurance claims is particularly difficult because there is a third party involved, the plaintiff, who is under no contractual obligation to cooperate with the insurer and may in fact regard the insurer as a deep pocket. The adjuster must obtain legal counsel for the insured (either inside "house" counsel or outside "panel" counsel), monitor litigation that may take years to complete, and appear in person or over the telephone with settlement authority at a mandatory settlement conference when requested by the judge.

If a claims adjuster suspects under-insurance, the condition of average may come into play to limit the insurance company's exposure.

In managing the claims handling function, insurers seek to balance the elements of customer satisfaction, administrative handling expenses, and claims overpayment leakages. As part of this balancing act, fraudulent insurance practices are a major business risk that must be managed and overcome. Disputes between insurers and insured's over the validity of claims or claims handling practices occasionally escalate into litigation.

2.4 Insurance Income:

This is a measure of earnings of insurance firms. When such earning grows, economic growth will occur since the industry will have good prospects (Edeh, Udch and Obiapuna, 2015)

Theoretical Framework

The insurance industry exists because people are willing to pay a price for being insured. There is an economic theory that explains why insured are willing to pay a premium larger than the net

premium, that is, the mathematical expectation of the insured loss. The theoretical framework of this study is anchored on the Utility theory propounded by Springer-Verlag, Berlin, Heidelberg (2008). This theory postulates that a decision maker, generally without being aware of it, attaches a value $u(w)$ to his wealth w instead of just w , where $u(\cdot)$ is called his *utility function*. To decide between random losses X and Y , he compares $E[u(w - X)]$ with $E[u(w - Y)]$ and chooses the loss with the highest expected utility. With this model, the insured with wealth w is able to determine the maximum premium P^+ he is prepared to pay for a random loss X . This is done by solving the equilibrium equation $E[u(w - X)] = u(w - P)$. At the equilibrium, he does not care, in terms of utility, if he is insured or not. The model applies to the other party involved as well. The insurer, with his own utility function and perhaps supplementary expenses, will determine a minimum premium P^- . If the insured's maximum premium P^+ is larger than the insurer's minimum premium P^- , both parties involved increase their utility if the premium is between P^- and P^+ . Although it is impossible to determine a person's utility function exactly, we can give some plausible properties of it. For example, more wealth would imply a larger utility level, so $u(\cdot)$ should be a non-decreasing function. It is also logical that 'reasonable' decision makers are *risk averse*, which means that they prefer a fixed loss over a random loss with the same expected value. We will define some classes of utility functions that possess these properties and study their advantages and disadvantages.

Suppose that an insured can choose between an insurance policy with a fixed deductible and another policy with the same expected payment by the insurer and with the same premium. It can be shown that it is better for the insured to choose the former policy. If a reinsurer is insuring the total claim amount of an insurer's portfolio of risks, insurance with a fixed maximal retained risk is called a *stop loss* reinsurance. From the theory of ordering of risks, we will see that this type of utility theory and insurance of reinsurance is optimal for risk averse decision makers. In this chapter we prove that a stop-loss reinsurance results in the smallest variance of the retained risk. We also discuss a situation where the insurer prefers a *proportional* reinsurance, with a reinsurance payment proportional to the claim amount.

Insurance Development and Economic Growth
CEA (2008) listed the following as ways by which insurance sector development can foster economic growth:

1. **Providing broader insurance coverage directly to firms, improving their financial soundness:** Insurance allows firms to expand and take on economic risks without the need to set aside capital in liquid contingency funds. The absence of adequate business insurance cover tends to be particularly harmful for small firms. Limited capital and difficulty in accessing financial markets make them vulnerable to adverse events. Without insurance, large contingency funds would be needed to protect firms against risk. For many this would represent more capital than they presently employ in total. Therefore, without insurance, the population of firms would decrease rapidly. It is difficult to assess the exact of the positive effect of business insurance on economic activity. Whereas comparison of insurance premiums to GDP conveys information on the performance of the insurance industry, it overlooks the wider contribution to the economy.
2. **Fostering entrepreneurial attitudes, encouraging investment, innovation, market dynamism, and competition:** Being innovative presupposes the willingness to take risks. Since (potential) entrepreneurs, much like ordinary people are characterized by risk aversion, the willingness to take risks can be considered as a scarce resource. The more willingness to take risk is available, the more will be produced. Even if insurance industry cannot change the overall willingness of actors in an economy to take risks (risk aversion does not change with insurance), it does play a key role in freeing entrepreneurial spirit. Insurance decreases the risk supported by entrepreneurs through mitigating and pooling procedures and allows them to take additional risks. Well developed insurance markets contribute by helping to optimize the allocation of the scarce resource of "risk-taking" by shifting it from conservative to innovative and high-profit activities. Underinsured firms, in contrast, usually do not exploit new business opportunities.

they invest less in innovation and their degree in participation in global markets is low. The relationship between insurers and the business customers should be considered at least as important as the relationship between banks and their business customers.

3. **Offering social protection alongside the state, releasing pressure on public sector finance:** In all industrialized countries, the debate about the need to revise the social protection offered by the state is increasing. The population structure is changing fundamentally with a longer life expectancy, an increase in elderly people and a falling birth-rate. At the same time people expect to receive a high level of healthcare, pensions, unemployment allowance and other social benefits. This evolution according to CEA raises general concern for the future if reform is not rapidly introduced. A 2006 study prepared by the European Commission and the Economic Policy Committee notes that without a change in policy, public finance will be put under extreme pressure and the EU potential economic growth will be almost cut in half by 2030. Moreover, this situation will push wages upwards and reduce the propensity to consume or, in other words, it will depress demand and erode competitiveness. In addition, a large part of the population does seem to be fully aware of the reduced prospect for social protection. Significant reform of the current social security system is therefore needed in most Member States. Private insurers are naturally willing to contribute in the development of an additional pillar alongside the protection offered by the state. For instance, insurance products such as 'Payment Protection Insurance' play a vital role in protecting households from the consequences of unemployment in the event of economic downturn (CEA, 2008).

Benefit of Insurance to the Society

Kebal (2015) observes that people live in society. Society is full of risks and uncertainty. Insurance is a social tool providing financial compensation to those who suffer from bad luck. Such payment is being made from the accumulated contribution of all parties participating in the scheme.

Insurance provides durability in the society by necessary arrangement of security against loss from unexpected risks. Societies become more peaceful and safe by insurance, which provides different profits and financial security against losses from risk.

Kebal (2015) further states that the major benefits of insurance to society are:

1. **Indemnification for losses:** All members of society are facing different risks. If risks are insured, all losses arising from unexpected risks are compensated. Indemnification permits individuals and families to be returned to their former financial position after a loss occurs. As an outcome, they can maintain their financial security.
2. **Fewer burdens to society:** Because insured are restored either in part or whole as loss occurs, they are less likely to apply for civil assistance or welfare profit, or look financial assistance from relatives and friends. So other member of the society need not help the unlucky member even after suffering from loss. If the individual has not insured the risk, the relatives and friends should help him financially, when he becomes unlucky sufferer from the risks.
3. **Source of investment funds:** Insurance is a business of collection of fund and payment to insured suffered from sudden incidents. Hence, insurance industry accumulates funds as premium from society and become an important source for capital investment. Insurance companies collect premium in advance of the loss and funds not needed to pay immediate losses can be loaned to business forms. Generally, insurance companies invest such funds typically in shipping centers, hospitals, factories; housing development etc. in this way, insurance business creates capital funds and promotes economic development of a country.
4. **Less worry and fear:** Another benefit of insurance to society is that it decreases the worry and fear of members of society regarding the risk of accident and immature death. The family heads have adequate peace of mind because they know that they are covered if a loss occurs.

5. **Prevention of Loss:** When a loss occurs from risks, the insurer has to indemnify them financially. Since risk of insured is transferred to insurer in the insurance policy, the insurance company should bear the risk. It means occurrence of loss from now become the interest of the owner of the property as well as the insurance company. That is why: insurance parties are actively involved in numerous programs about loss prevention. They employ a wide variety of loss avoidance personnel, including safety engineers and professional in fire prevention, professional safety and health, and products culpability.

3.0 Methodology

The study adopted an *ex-post facto* and descriptive research method. *Ex-post facto* is mostly used in a study where it is not possible or acceptable to manipulate the characteristics of the variables under study. The use of descriptive statistics is necessary as the data set is entirely quantitative and requires the use of analytical and statistical techniques. In view of the above, this study adopted Augmented Dickey Fuller (ADF) test for the unit root test in order to attain stationarity. The Engle- Granger and Johansen's Co integration was conducted to ascertain if there is a long run relationship among the variables. The Parsimonious Error Correction modeling was adopted to correct for shocks and innovations, decomposing them into short run and long run impacts.

3.1 Nature and Sources of Data

The data for the work is annualized time series consist of mainly secondary data. The study covers 1981 to 2015. The data are accessed from

the Central Bank of Nigeria databank and statistical Bulletin various issues. The choice of the period 1986 to 2015 was informed by the availability of data in the form detailed enough to allow for robust analyses

3.2 Model Specification

The model of this study is based on the Classical Linear Regression Model of Brooks (2014). An econometric analysis of which Economic Growth proxies RGDP is the dependent variable while the independent/ explanatory variables are insurance premium, gross Insurance Claims and Insurance Income. The model is shown as follows;

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \dots + \beta_n X_n + U_t \quad 3.1$$

Where;

Y = Dependent variable

$X_1, X_2, X_3, \dots, X_n$ = the explanatory or independent variables

$\beta_1, \beta_2, \beta_3, \dots, \beta_n$ = the coefficient of the parameter estimate or the slope

ε = Error or disturbance term

In relating this to the study;

$$RGDP = f(\text{INPR, GINCL, INCOM}) \quad 3.2$$

Relating it in econometric form and the variables log linearised, it will appear thus:

$$\text{LRGDP} = \beta_0 + \beta_1 \text{LINPR} + \beta_2 \text{LGINCL} + \beta_3 \text{LINCOM} + U_t \quad 3.3$$

Where;

LGDGP = Real Gross Domestic Product

LINPR = Insurance Premium

LGINCL = Gross Insurance Claims

LINCOM = Insurance Income

β_0 = intercept (Constant term)

U_t = Error term

A priore expectation: It is expected that $\beta_1 - \beta_1 > 0$

4.0 Presentation of data, analysis, findings and Conclusion

4.1 Presentation of data

Table 4.1 shows the Real GDP growth rate, Insurance Premium, Gross insurance claims and Insurance Income in Nigeria (1986-2015)

1998	2.82	0.080359	-0.046696	0.4260064
1999	1.19	-0.17945	0.148471	0.27271
2000	4.89	0.538629	0.120309	0.3002112
2001	4.72	0.286259	0.091017	0.2746778
2002	4.63	0.303113	0.099434	0.318129
2003	9.57	0.163608	0.120773	0.47215
2004	6.58	0.149079	0.121895	0.4179258
2005	6.51	0.34162	0.108687	0.04412232

2006	6.03	0.21574	0.52205	0.3549322
2007	6.45	0.279467	0.085344	0.5676358
2008	5.98	0.491811	0.125209	0.7610186
2009	6.96	0.208354	0.20373	0.7818484
2010	7.98	0.05483	0.151606	0.8081554
2011	7.43	0.166571	0.072125	0.4280227
2012	6.58	0.041985	0.065786	0.0004024
2013	6.89	0.085664	0.056225	0.378213
2014	5.79	0.501811	0.169424	0.7810191
2015	6.70	0.690234	0.064892	0.5776366

Source: Central Bank of Nigeria statistical Bulletin various issues

4.2 Data Analysis and Discussion of Results

Unit Root Test:

Table 4.2: Result of Unit Test Analysis

S/N	Variables	ADF t-stat	5% critical value	Order of Integration	Trend
1	(GDP)	-8.307644	-2.307644	1(1)	With intercept
2	INPR	-3.253225	-2.957110	1(1)	With intercept
3	GINCL	-5.363889	-2.957110	1(1)	With intercept
4	INCOM	-3.457620	-2.960411	1(1)	With intercept

Source: E-view 9 computations

Table 4.2 shows the presentation of ADF Unit root test of stationarity of the time series variables. The result shows that all the variables are 1(1), where the absolute values of the t-test exceeded the 5% values.

Table 4.3: Result of Johansen Co-integration
GDP, INPR, GINCL, INCOM

Series: GDP, INPR, GINCL, INCOM				
Lags interval (in first differences): 1 to 1				
Hypothesized		Trace	0.05	Prob**
No. of CE(s)	Eigen value	Statistic	Critical Value	
None*	0.702716	88.87634	69.81889	0.0007
At most 1*	0.541468	51.27122	47.85613	0.0231
At most 2	0.353137	27.09972	29.79707	0.0992
At most 3	0.237142	13.59546	15.49471	0.0947

Trace test indicates 2 co-integrating eqn. (s) at 0.05 level of significance

Table 4.3 was used to estimate the Johansen co-integration to establish a long run relationship of the variables. The result indicates the presence of two (2) co-integrating equations at 5% level of significance. The trace statistic values of 88.87 and 51.27 exceed the 5% critical values of 69.81 and 47.85 which show that co-integration exists.

4.3 Error correlation model

Table 4.4: Result of Error Correlation Modeling

Dependent Variables: (GDP)
Method: Least Squares
Date: 20/07/2017
Sample (adjusted): 1986 2015
Included observations: 30 after adjustments

Variables	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.061247	0.533758	-0.114747	0.9095
D(INPR)	-2.380328	1.534956	-1.550747	0.1331
D(GINCL)	-1.681851	4.326397	-0.388742	0.7006
D(INCOM)	0.112023	2.522207	0.044415	0.9649

ECM(-1)	-0.840410	0.192910	-4.356477	0.0002
R-Squared	0.437049	Mean dependent var		-0.028437
Adjusted R-square	0.328789	S.D. dependent var		3.675407
S.E. of regression	3.011167	Akaike info criterion		5.209893
Sum squared resid	235.7452	Schwarz criterion		5.484718
Log likelihood	-77.35829	Hannan-Quinn criter		5.300990
F-statistic	4.037041	Durbin-Watson stat		2-023053
Prob(F-statistic)	0.007623			

Table 4.4 presents the result of the error correction model analysis. The F-statistic indicates that all the explanatory variables are jointly significant in determining the dependent variables, with the probability of the F-ratio falls below 5 percent (0.05). The coefficients for the individual t-statistic indicate that all our variables of focus; real gross domestic product (RGDP), insurance premium (INPR), gross insurance claim (GINCL) and insurance income (INCOM) are statistically significant at 5 percent, since their *p* value is less than 0.05. This result agreed with the work of Fideh, Udeh and Obiapuna, (2015).

The model is dynamic since the ECM coefficient is well behaved. It is negative, but it is statistically significant. This indicates that the speed of adjustment from the short time to the long run equilibrium is only 84.04%

5.0 Summary of findings and Conclusion

5.1 Summary of findings

- (i) The testing of time series data for stationarity using the ADF unit root test, the Engle-Granger and Johansen Co-integration test, confirmed the presence of long run relationship between Insurance Premium and Economic Growth in Nigeria.
- (ii) The error correction model analysis reveals that though not individually statistically significant, the variables, insurance premium, gross insurance claim and insurance income were jointly statically significant in determining economic growth in Nigeria.
- (iii) The ECM co-efficient was well behaved, with a negative sign, implying a dynamic model that takes into account the long and short run properties of the relationship between the dependent and independent variables in the study.

5.2 Conclusion

The objective of this study is to examine the effects of insurance sub-sector development on economic growth and sustainability in Nigeria. Nigeria has enormous insurance potentials waiting to be tapped into, the new impetus put into the implementation of the NAICOM laws which provides that receipt of an insurance premium shall be a condition precedent to a valid contract of insurance and there shall be no cover in respect of an insurance risk unless the premium is paid in advance. This will surely improve the financial viability of all insurance companies in Nigeria.

A world without insurance would be much less developed economically and much less stable. The risk transfer function of the insurance sector contributes, on the one hand, to the creation of a more stable operating environment for companies and, on the other hand, to a reduction in the level of capital required by undertakings to protect themselves against risk.

By protecting firms and citizens against adverse events, the insurance sector provides a safety net that allows policyholders to restart their activities whatever the difficulties they have to cope with. Insurance plays, at this level, a key role in economic growth and sustainability.

Insurance not only provides a stable operating environment, but it also improves companies' awareness of risk management, and influences their investment decisions. Differences in price and policy conditions are key factors influence undertakings' and households' decisions, and contribute to sustainable and responsible use of available resources. For instance, insurance contributes to the reduction of risks linked to climate change by supporting Government policies designed to limit climate change and to reduce its impact.

This study applauds the change agenda of the present Government in Nigeria especially the total removal of oil subsidy.

Now, more foreign investors are welcome into investing in the Nigerian Insurance Sub-Sector.

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