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Interrlationship Between Financial Institutions and Economic Growth in Nigeria: Insurance Industry Perspective (1986-2020)

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Abstract: The development growth in the Nigerian insurance industry as a financial safety-net within the last few decades brought about included debates among scholars on various aspect of its development which has contributed to economic growth. This study examined the interrelationship effect of financial institution on economic growth in Nigeria: Insurance industry perspective from 1986 to 2020. The study proposed that the insurance investment income and insurance penetration rate have no significant relationship with the economic growth of Nigeria. Ex-post facto research design was used and Data were sourced from the Central Bank of Nigeria statistical bulletin and Nigeria Insurers Digest. Using Ordinary Least Square (OLS) regression techniques, the work established that there exists a statistically significant relationship between insurance investment income and economic growth in Nigeria but no statistical significant relationship between insurance penetration rate and economic growth of Nigeria. It was recommended that the Nigerian insurance industry key players should intensify insurance awareness by promoting group insurance schemes through product development innovation strategies especially among the rural populace and market associations such as Microinsurance, Takarful insurance and

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strict implementation of compulsory insurances, among others with direct impact on economic growth through increase in insurance investment income and penetration.

Keywords: Investment income, Insurance premium income, Insurance penetration rate, Economic growth, financial institution,

INTRODUCTION

The financial institutions of an economy play vibrant roles in the development and growth of economy of a nation. The development of financial institutions of country determines how it will be able to undeniably emancipate its major role of fund mobilizing from the surplus unit to the deficit unit of the economy. Facilitating business transactions and economic development are part of the inevitabilities of this (Aderibigben, 2004). A well-developed financial system performs several crucial efficient financial intermediations aimed at reducing costs in information, transaction and monitoring. When a financial system is well developed, decent businesses opportunities would be funded with effective savings mobilization alongside risk diversification which facilitates efficient exchange of goods and services in an economy. All these provide efficient allocation of resources with rapid accumulation of physical and human capital and faster technological progress, which in turn affect economic growth (Salami and Adedipe, 2013). According to Ajayi (1995), development in the real sector influences the speed of growth of financial sector directly, while the growth of the finance, money and financial institutions influence the real economy.

The financial sector consists of a group of related institutions, market instrument operations that interact within the economy to provide financial services. Example of such institution includes deposit moneys, discount house, primary mortgage institutions, finance companies and Bureau-de-change and insurance companies etc. This study focuses on insurance industry as a financial institution through its inevitability in investment income and penetration rate as they affect economic growth in Nigeria.

Pooling risks and reducing the impact of large losses are primary functions of insurance which encourages new investment, innovation and competition being critical prerequisites in financial and economic development. Promotion of economic growth and development is also done by insurance industry by safeguarding proper allocation of scarce

financial resources from *the* excess entity to the shortage entity. However, this crucial role can only be effectively and efficiently achieved through a robust insurance penetration rate of a country.

General increase in saving rate is one of the conditions precedent to economic growth which normally come about as a result of steady and sturdy variation of economic activities in the long run. It also comes about as a result of positive changes which occur in goods and services production level in the country in at particular time. An essential method of measuring economic growth is through the amount of goods and services produced in a country. According to Jhingan, 2003, an economy is said to be growing when it increases it productive capacity which later yield more in production of more goods and services. Economic growth is usually brought about by technological innovation and positive external forces. An increase in standard of living of people signifies economic growth of a country. It has been submitted that insurance provides a risk transfer mechanism whereby policyholders are assured of rest of mind against loss, damage of property or loss of life in case of death. The financial compensation provides by insurance company in form of claims justify unblemished living standard of the people. However, establishing justification on insurance investment and penetration rate effect on economic growth is still inconclusive. The major challenge intermediation process is facing in Nigeria is the informal sector. One of the factors impeding effective contribution of insurance to economic growth is low awareness of insurance inevitability by the informal sector of the economy. This lack of confidence on the operation of insurance financial intermediation functions in financial system has done more than harm in reducing its leveraging advantage on economic growth in Nigeria (Oladunni, 2019).

Tight regulatory regime of less developed countries' financial sector highly encouraged financial disintermediation of insurance activities with domino impact on the insurance industry's contribution to economic growth. (Adekunle, 2013). This has invariably weakened the link between insurance operation and economic development. This weakness is a result of inadequate servicing of real sector who are the major drivers of economic growth by insurance companies. As revealed by Oladunni and Eche (2022), the insurance companies are declining millions of claims due to low penetration that affect their premium income and unstable investment environment which influence investment income. It is against

these backdrops that the study is undertaken to determine the effect of financial institution like insurance industry on economic growth in Nigeria.

The broad objective of this study is to determine the effect of financial institution on economic growth in Nigeria with emphasis on insurance industry from 1986 to 2020. Specifically, the objectives seek to examine the relationship between insurance investment income and economic growth in Nigeria and also to examine the relationship between insurance penetration rate and economic growth in Nigeria.

2. REVIEW OF RELATED LITERTURE

2.1. Conceptual Review

Economic Growth

Economic growth is a product of expansion in capita and trade volume evolved as a result of increase in a country's production of goods and services. (Jhingan, 2007). Economic growth can also be viewed as the increase in welfare or standard of living of citizens as a result of a country's increased manufacturing magnitude (Adamu & Hajara, 2015).

Akin (1998) posits that extensive and intensive growths are the two angles to economic growth. Extensive economic growth occurs when an output of a nation measured by real gross national product is increasing without considering per capita increase in output. Intensive economic growth means increase in output per individual or increase in the accessibility of goods and services per capita. Impliedly, a nation may experience extensive economic growth even though the output per capita is not increasing. For the purpose of this study, intensive economic growth perspective is adopted because it is rooted on the standard of citizens, and can be construed as economic development which measures the qualitative well-being of the citizens which is the cardinal function of insurance (i.e transfer of financial/insurable risks to the insurer which might hamper standard of living of the insured). Better living standard with low unemployment rate connotes a growing economy.

Insurance Investment Income

Insurance investment incomes are insurance funds or money put into things to make profit. The insurance business broadly entails three categories: non-

life, life and reinsurance. Non-life insurance denotes short term funds while Life denotes long term funds. However, re-insurance guarantees or protects other insurance companies against loss by spreading their risks to other insurers/reinsurance. The role of insurance in the Nigerian economy cannot be overelaborate. One major role of the insurance industry in Nigeria is to promote development and protection of the insuring public against their insurable risks.

By way of investment of insurance fund, the Nigerian insurance sector contributes to the Nigeria economy. Accordingly, the investment income of insurance industry has a positive effect on GDP (Umoren and Joseph, 2016). Fundamentally, the primary benefit of insurance fund investment is to engender good returns to ensure that insurers meet their obligations, including claims settlement.

Insurance Penetration Rate

Insurance penetration rate is a measure of the level of development of the insurance sector in a country. It is evidence of the rate at which insurance are activities are deepened and accepted by the populace. Nigeria insurance penetration rate stood at less than 4% (Angela and Gladys, 2018). This is not unconnected with several factor militating against the growth of the industry for the past few decades. Insurance marketing system in Nigeria is one of the factors affecting insurance products penetration which has impede the sector's significant contribution to economic growth. Thus, the increased importance of insurance as a provider of risk management financial services and of funds investment is especially pronounced in developed economies whereas insurance consumption in many developing countries such as Nigeria is still very low.

Accessibility and prompt payment of claims, level of knowledge, and awareness, professionalism, clarity of insurance policy wordings, and corporate image of the insurance providers are some of the factors affecting insurance penetration. In addition to these factors, economic conditions such as macroeconomic fundamentals of the nation, the dynamics of the insurance industry and market as well as the regulatory capability have tremendous contributions to insurance penetration rate (Okonkwo and Eche, 2019).

2.2. Empirical Review

Adams et al. (2005) explored historical relation between banking, insurance and economic growth in Sweden in the period 18301998. Insurance development is measured by annual premiums for nonlife and life insurance. They used time series data and econometric tests of causality. The results showed that the development of banking, but not the insurance impact on economic growth during the Nineteenth century until the twentieth century this relationship is in reverse. The results of the analysis indicated that the banking sector has a dominant influence on economic growth and demand for insurance, while the growth of insurance is more influenced by economic growth, than it contributes to the economic growth.

Akinlo (2012) examined the effects of insurance on economic growth in Nigeria during the period of 1986 to 2010. The structure, growth of insurance subsectors, and the direction of causality between insurance and economic growth in Nigeria were addressed in the study. An error-correction model analysis and cointegration technique were adopted in the analysis. The cointegration technique showed that all the variables apart from premium are highly significant. The coefficient of premium was significant at 10%. The findings of the study indicated that insurance proxied as premium income had a positive significant influence on economic growth; and a long-run relationship between insurance and economic growth in Nigeria.

Omoke (2012) determined the impact of insurance market activity on economic growth in Nigeria between 1970 and 2008. Insurance density (premium per capita) was a measure for insurance market activity and real GDP for economic growth in Nigeria. The study employed control variables such as inflation and savings rates as other determinants of growth. The Johansen cointegration and vector error correction approach were used to estimate the relationship between the variables. The findings of the study indicated that insurance had no positive and significant effect on economic growth in Nigeria within the period of study.

Yinusa and Akinlo (2013) analyzed both the long-run and short-run relationships between insurance development and economic growth in Nigeria over the period 1986–2010. Using an error correction model (ECM), the study found that insurance development was cointegrated with

economic growth in Nigeria. There was a long-run relationship between insurance development and economic growth in Nigeria. The results also showed that physical capital and interest rate both at contemporary and one lagged value have a significant positive effect on economic growth in Nigeria.

Okonkwo and Eche (2019) examined the effect of insurance penetration rate on economic growth in Nigeria: 1981-2017. The study sourced data from the Central Bank of Nigeria statistical bulletin and used regression analysis technique. It was found that there was no significant relationship between insurance penetration rate and economic growth of Nigeria.

3. METHODOLOGY

This study adopted ex-post facto research design, using the regression approach. This is suitable for the work given that it is based on an already completed event and the researcher is meant to analyze the outcomes of the already completed event and draw reasonable conclusions (Udeze, 2003). Data were sourced from the Central Bank of Nigeria Statistical Bulletin. The period covered in the study was 1986-2020.

This study modelled that:

$$TGDP = f(TINV, INPR) \quad (1)$$

$$GDP_t = \beta_0 + \beta_1 TINV_t + \beta_2 INPR_t + \mu t \quad (2)$$

Where:

TGDP = Total Gross Domestic Product

TINV = Total Insurance Investment Income

INPR = Insurance Penetration Rate

β_0 = Constant coefficient

β_1, β_2 = Parameter estimates of the independent variables, TINV and INPR

μ_t = Stochastic error term

A linear regression technique was adopted using on ordinary least square method. The data were tested for unit roots using Augmented Dickey-Fuller Test, and the model parameters were evaluated for goodness of fit using F- statistic, R^2, Adjusted R^2, and Durbin-Watson statistic. The hypothesis was tested at 5% level of significance using p-value and t-statistic.

4. DATA PRESENTATION, ANALYSIS AND DISCUSSION

The data generated for this study were displayed in Table 1. The descriptive statistics of the data for the study were shown in Table 2. The graphic representations of the data were depicted in figure 1.

Table 1: GDP, TINV and INPR of Nigerian insurance industry: 1986-2020

YEAR	*TINV(₦'million)*	*INPR*	*TGDP (₦'billion)*
1986	1,855.50	0.0035	202.44
1987	1,796.90	0.0043	249.44
1988	2,350.30	0.0037	320.33
1989	3,171.60	0.0039	419.2
1990	3,401.80	0.0040	499.68
1991	3,574.20	0.0035	596.04
1992	5,546.60	0.0046	909.8
1993	6,973.40	0.0055	1,259.07
1994	9,071.90	0.0049	1,762.81
1995	16,841.60	0.0061	2,895.20
1996	22,915.20	0.0056	3,779.13
1997	34,910.20	0.0045	4,111.64
1998	36,737.80	0.0042	4,588.99
1999	50,395.70	0.0040	5,307.36
2000	54,296.60	0.0040	6,897.48
2001	66,343.00	0.0041	8,134.14
2002	79,855.10	0.0039	11,332.25
2003	123,192.40	0.0042	13,301.56
2004	154,119.20	0.0040	17,321.30
2005	184,235.20	0.0034	22,269.98
2006	257,859.30	0.0029	28,662.47
2007	379,914.50	0.0030	32,995.38
2008	427,571.40	0.0038	39,157.88
2009	327,482.00	0.0041	44,285.56
2010	321,140.30	0.0034	54,612.26
2011	288,497.90	0.0035	62,980.40
2012	399,373.20	0.0035	71,713.94
2013	506,241.50	0.0033	80,092.56
2014	566,931.90	0.0033	89,043.62
2015	651,630.30	0.0033	94,144.96
2016	737,189.40	0.0031	101,489.49
2017	824,892.20	0.0032	113,711.63
2018	956,150.40	0.0032	127,736.83
2019	1,361,450.00	0.0034	144,210.49
2020	1,607,970.00	0.0034	154,252.32

Source: CBN statistical bulletin, 1986-2020 and Nigeria Insurance Digest, 2009-2020

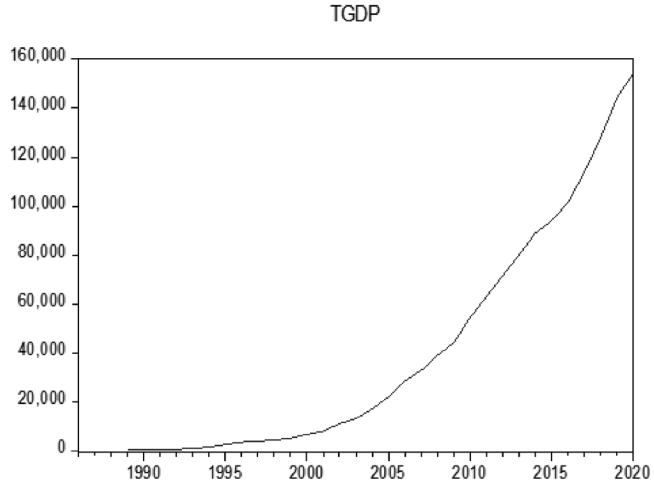
Table 2: Descriptive Statistics of input data

	TGDP	*TINV*	*INPR*
Mean	38435.65	299310.8	0.003905
Median	13301.56	123192.4	0.003837
Maximum	154252.3	1607970.	0.006110
Minimum	202.4400	1796.900	0.002871
Std. Dev.	46793.06	397916.5	0.000744
Skewness	1.095464	1.729851	1.277084
Kurtosis	2.941291	5.593954	4.364350
Jarque-Bera	7.005267	27.26811	12.22846
Probability	0.030118	0.000001	0.002211
Sum	1345248.	10475879	0.136664
Sum Sq. Dev.	7.44E+10	5.38E+12	1.88E-05
Observations	35	35	35

Source: E-View 10.0 Output (2022)

From Table 1 and considerable processed data in table 2, the Jarque-Bera statistics of the three variables indicated normal distribution given that all the variables produced a probability of fewer than 0.005 benchmarks.

The trends in the TGDP and TINV indicate growth tendencies (see Figure 1). There are possibilities of recessions in the trends if the real GDP figures are used or the current price is adjusted to US dollar.



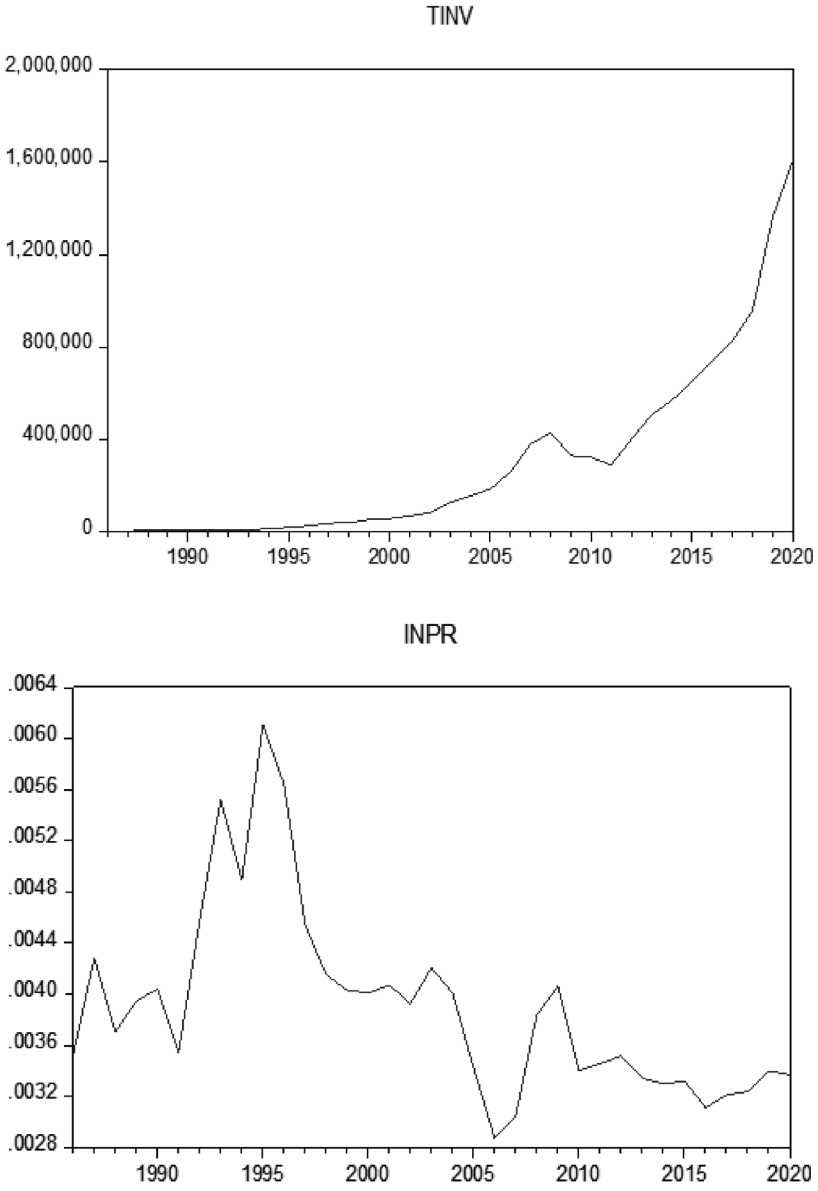


Figure 1: Graphs on GDP, IPR and TPI: 1986-2020

From Tables 1 and 2, the general insurance penetration rate (all insurances investment income put together) seems growing at very slow pace, recording the highest rate in 1995 (0.0061 or 0.61%) and the lowest in 2006 (0.0029 or 0.29%).

Table 3: Unit root tests summary results: Augmented Dickey-Fuller (ADF) Test

Variable	*t- statistic*	*Prob. (F-statistic)*	*Durbin-Watson stat*	*p - value*
TGDP	11.53920	0.000000	1.235757	0.0000
TINV	6.202134	0.000001	1.727973	0.0000
INPR	-2.022050	0.0051598	1.866781	0.00516

Source: Extracted from E-view data output on the ADF tests, 2023

The preliminary tests conducted showed stationarity of the variables as indicated summary results extracted from the e-view output data depicted in Table 3. The p-values are less than 0.005, therefore there are no unit roots in the variables. The data of the model was processed at a year percentage change mode using the least square method. The output data are shown in Table 4.

Table 4: Model estimated output data

Variable	*Coefficient*	*Std. Error*	*t-Statistic*	*Prob.*
C	27751.72	13813.73	2.008995	0.0530
TINV	0.108146	0.006053	17.86738	0.0000
INPR	-5553665.	3235208.	-1.716633	0.0957
R-squared	0.938248	Mean dependent var		38435.65
Adjusted R-squared	0.934388	S.D. dependent var		46793.06
S.E. of regression	11985.95	Akaike info criterion		21.70267
Sum squared resid.	4.60E+09	Schwarz criterion		21.83599
Log likelihood	-376.7968	Hannan-Quinn criter.		21.74869
F-statistic	243.0999	Durbin-Watson stat		0.410718
Prob(F-statistic)	0.000000			
Source: E-View 10.0 Output, 2023				

Table 5: Selected Global utility statistics summary and decisions

Parameter	*Statistic*	*Decision*
R-squared	0.938248	94% of changes in TINV and INPR were explained by changes in TGDP (a good fit relationship)
Adjusted R-squared	0.934388	93% of changes in TINV and INPR were explained by changes in GDP after adjustments (a good fit relationship)
Prob (F-statistic)	0.000000	A good fit; less than 0.05 benchmark
Durbin-Watson stat	0.410718	A fair fit relationship, the benchmark of 2 is above this statistic. Thus, there is minor autocorrelation in the model.

Source: Authors' compilation from Table 4

Concerning the first hypothesis that says: insurance investment income has no significant relationship with economic growth in Nigeria, the work concluded that investment income of Nigerian insurance industry has significant statistical relationship with economic growth in Nigeria (p-value of 0.0000 in table 4 attested). However, the second hypothesis test unveiled that there is no statistically significant relationship between insurance penetration and economic growth in Nigeria (p-value of 0.0957 in table 4 confirmed).

DISCUSSION OF FINDINGS

This study aimed at answering two pertinent questions: Can it be affirmed that the insurance industry investment income as a player in financial institution in Nigeria has actually contributed significantly to economic growth? How has the insurance penetration rate contributed to economic growth in Nigeria?

From the results, the insurance sector has not shown remarkable growth over the years. The increase in premium income may be as a result of compulsory insurances in the nation. There were sixteen insurance products made compulsory by law in Nigeria, but only five are being enforced. The Nigeria insurance Digest (2021) put insurance penetration rates in 2019 and 2020 at 0.045 (4.5%) and 0.050 (5%) respectively.

The findings of this study on the relationship between insurance investment income and economic growth supported the findings of Yinusa and Akinlo (2013) who found a positive statistical significant relationship between insurance investment income and economic growth in Nigeria. However, insurance investment income in Nigeria is hampered by unstable macroeconomic variables such as inflation, interest rate, unemployment etc. The need for macroeconomic environment stability is an essential prerequisite for economic growth. Regrettably, the World Economic Forum (2015) correctly commented that poor infrastructure, corruption and access to financing are the most problematic factors for doing insurance business in Nigeria.

Insurance penetration rate has not been significant in Nigeria. The relationship between insurance penetration rate and economic growth is negative and insignificant. This finding contradict that of Okonkwo and

Eche (2019) who found out that there exist positive and insignificant relationship between insurance penetration rate and economic growth in Nigeria. The seeming growing economic activities allowed rooms for insurances, especially the compulsory insurances. Nigeria insurance industry ranks 62nd in the world in 2018 (Vanguard, 2019). For a remarkable penetration rate to emerge, there must be a strong regulatory framework, and better knowledge of insurance services by the prospective insured must be developed.

5. SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

Summary of Findings

This study showed that:

(i) insurance industry investment income had significant relationship with economic growth in Nigeria

(ii) There was no statistical significant relationship between insurance penetration rate and economic growth in Nigeria.

CONCLUSION

Financial institutions as finance intermediators provide channel for economic growth. Insurance as financial institution performs risk management functions through risk transfer and investment of premium income which serve as booster to economic growth. The Nigerian economy needs strong institutional framework that will entrench respect for the rule of law, enhancing patriotic behaviours which trigger entrepreneurial character and innovations towards insurance. The insurance sub-sector seems the least in the lack of trust on the financial sector by the general public. The insuring public is more likely to be satisfied and tend to trust insurance more if the insurers deliver their promises promptly.

RECOMMENDATIONS

Based on the findings, we recommend that:

(i) the insurance industry should work indirectly to regain public trust by promoting group insurance schemes especially among the rural

populace and market associations. Microinsurance and Takaful insurance should be promoted to address the phobia low income earners and Muslims in modern insurance. Effective and efficient claims management strategies must be promoted towards reducing scarce resources wastage and increase investment income.

(ii) the insurance market associations should continue to promote professionalism and sponsor career development in insurance and related disciplines aimed at boosting man-power development and public trust on insurance business transaction with positive effect on insurance penetration.

(iii) creation of innovative insurance products that meet the needs of the insuring public, use of relationship marketing strategies and the establishment of adequately capitalized insurance firms will improve insurance investment income and insurance penetration rate which would contribute significantly to economic growth in Nigeria.

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