International Journal of Advanced Research in Management and Social Sciences
ISSN: 2278-6236
Impact Factor: 6.943

FINANCIAL DEEPENING REFORM AND INSURANCE PREMIUM IN NIGERIA, 1986-2016 - VECM APPROACH

Ezema, Clifford Anene, Department of Insurance and Risk Management, Faculty of Management Sciences, Enugu State University of Science and Technology, (ESUT)

Ezekwe, Kenneth Chukwudi, Department of Insurance, School of Financial Studies, Federal Polytechnic, Oko, Anambra, Anambra State Nigeria

Abstract: *The study measured the Impact of Financial deepening reform to Insurance Premium in Nigeria, 1986 to 2016 using Vector error correction model as the method of estimation. The analyses of residuals of the Johansson co-integration reveal evidence in favour of co-integration between Financial deepening reform to Insurance Premium in Nigeria, Similarly, estimates from the error correction model provide evidence to show that Financial deepening reform to Insurance Premium in Nigeria, converge to a long-run equilibrium at a reasonably slow rate. The result points to the fact that the financial deepening reform stimulate Insurance Premium in Nigeria, and if well managed can engineer the economic growth positively and significantly. It was recommended that Insurance companies should employ financial deepening reforms to improve the financial status of their company and as well the economy by allowing insurance sector to embrace the benefits*.

Keywords: *Insurance premium; Broad Money Supply, Credit, Private Sector, Co-integration, Error Correction Model, Financial depth*

1 INTRODUCTION

Financial deepening according to Alejandro (2014) is a term used often by economic development experts that refers to the increased provision of financial services with a wider choice of facilities geared to all levels of society. It also refers to the macro effects of financial liberalization on the larger economy. Kisaka (2015) sees financial deepening as an increased in the ratio of money surplus to gross Domestic product (GDP) or some price index. It refers to liquidity money. The more liquid money is available in an economy, the more opportunities exist for continued growth. It can also play an important role in reducing risk and vulnerability for disadvantaged groups, and increasing the ability of individuals and

households to access basic services like health and education, thus, having a more direct impact on poverty reduction and growth

The impact of financial deepening on economic growth has been a wide ranging subject of experiential research in the financial industry. The practical evidence suggests that there is a significant, positive relationship between financial deepening/development and its effect or impact on economic growth. The question therefore, is whether financial deepening causes economic growth through Nigeria insurance business. Ezema and Eche (2018) expressed that the Nigeria insurance industry has come of age, starting from the genesis of the industry in 1921 which had gone through transformation, it metamorphosed from the insurance companies Act of 1961, the insurance (Miscellaneous provisions) Act 1964, the companies Decree 1968, the insurance Decree 59 of 1976, the insurance Decree 58 of 1991, insurance Decree No 2 of 1997 to the present insurance Act 2003. There is still room for amendments following strident calls for more consolidation of existing insurance companies from the regulatory government agency. Then calls the need of insurance industry embracing the financial reform agenda. (Nnenna, 2004)

Prior to the promulgation of the insurance Decree 59 of 1976, Mordi (1991) stated that there was no state supervision of practices through independent intermediates. By the system of licensing insurers to transact insurance business, applicants having to satisfy the supervisory authority as to their solvency and financial integrity, the government ensured the protection of the public form incompetent and fraudulent operations of insurance companies. Aneke (2008) opined that the flourishing of so many insurance companies in a weedy fashion, unregulated, created a lot of problems. Unscrupulous insurers operated with reckless abandon, claims were at best unduly delayed or at worst not paid at all as head offices disappear into the air. Premiums rise without underwriting ethics with undercutting of rates. The brokers and agents had a field day by withholding premiums and duping the insured. To this extent, Irukwu (1999) stated that the public out-cry was so much that the industry was viewed with so much suspicion and its practitioners classed into a fraternity of legally protected fraudsters. The oversight functions of the government agency for regulating corporate governance, best practices and efficient service delivery has reversed this trend through the promulgation of 2003 insurance Act and subsequent 2007 Recapitalization Act. (Nwite and Ezema, 2008)

Ugwuanyi (2004) stated that the critical function of insurance includes the creation of a pool of invertible funds through fund mobilization and the investment of the fund in either the money or capital market or in direct investment which will ginger the industry and the economy in general to achieve allocation efficiency. By creating a large amount of assets placed in the money and capital market, Akaro (2008) insisted that it contributes to the growth in output level of goods and services in the economy. Insurance companies together with pension and mutual funds invert into stock, bound mortgage and real estate securities to the surplus economic units and subsequently purchase other securities which may be primary in nature from the borrowers of funds. This deepening's in the money and capital market services act as a shield for insurance against predictable underwriting losses. (Agwuegbo, Adewole&Maduegbuna, 2010). The nature of funds from insurance business and pension and the predictable pattern of their cash flows deepening enable insurance companies to play a vital role as institutional investor in the stock market (Chui and Kwot, 2008). Oyejide and Soyode (1976), reported that insurance companies are well positioned to invest in assets of any infinite maturity securities such as preferred and equity stocks.

Olamidele (2017) opined that financial deepening reforms impact on the insurance premium which is the purpose of this research work, concerns itself with the force, actions, opportunities, extra/additional service provisions and stimulations, originating from insurance investment activities that bring about corresponding reactions or responses by the economic growth indicator. In order to chart current future policy paths for the economic response to insurance financial deepening stimuli, Adowele (2010) maintained that it is important to first determine its behavior in the past by investigating the behavior of important economic growth indicator such as the GDP, CPS, and M2 in the light of the effects on insurance premium and its financial deepening activities.

Adejemi (2016) stated that over the years, attempts have been made by scholars to ensure trade openness in the financial industry. Before the existence of financial reforms, many financial institutions in Nigeria have undergone distress and beyond due to inability to manage investment, fraud, handling of risk and control of funds in the insurance and banking sectors. There exist no organized personnel that is monitoring the activities of the insurance industry and financial systems investments, hence mismanagement and fraud becomes the order of the day.

This reform grossly enhanced quality financial service delivery and the insurance industry was not left out. Therefore, the increment in Gross Domestic Product (GDP), Credit to the private sectors (CPI) and broad money supply (M2) has been a great advantage to the insurance premium income in Nigeria. One has to probe the extent to which this trade reform has impacted to the growth and development of insurance business in Nigeria through insurance premium (Benciverga and Smith,1991).

The broad objective of the study is to examine the impact of financial deepening reform on the insurance premium in Nigeria. The specific objectives are to: measure the long run relationship as well as shocks and dynamics of financial deepening reform to Insurance premium in Nigeria

This study is unique in three ways. To the best of the authors‟ knowledge, no prior study has investigated the impact of financial deepening on insurance business in Nigeria. The study uses descriptive statistics, co-integration and error correction models that no other study has used to validate or ensure the reliability of the results of the relationship. The span of data used in the study, from 1985 to 2016 contributes also to the uniqueness of the work, though, Aye (2015) used 55 years data range but with a different estimation approach. The findings of this study are strategic to financial market regulators, insurer's policymakers, and the economists because of the interaction and the feedback effects nexus. Again, knowledge of the use of co-integration and error correction model on financial market development-insurance business relation in Nigeria will significantly contribute to the extent of literature on insurance development literatures.

The remainder of this paper is arranged as follows: reviews of relevant related literature, Methodology, data presentation and conclusion.

2 REVIEW OF RELATED LITERATURE

Theory of financial liberalization

The theory of financial liberalization pioneered by Mac Kinnon in 1973was used in this work and is often refers to the process used to liberalize the financial sector of a country with the aim to creating favorable environment to increase the money demand in the economy. This is assumed to take place in two ways; By increasing the financial resources to lead the supply include demand for money and By increasing suitable environment to make investments in the economy. The theory of financial liberalization pioneered by Mac Kinnon

(1973) and Shaw (1993) advocates for the liberalization of the financial sector as an effective way to accelerate growth. The theory suggests that the liberalization of financial markets allows financial deepening which reflects an increasing use of financial intermediaries by savers and investors as well as the monetization of the economy and efficient risk management modeling through insurance..

Empirical Review

Iyoboyi (2013) investigated the impact of financial deepening to economic growth in Nigerian using bound testing approach. He discovered that financial deepening cointegrates with economic growth the results of the investigation are in favor of the financial-growth cum growth financial hypothesis. For the period under study. Nigerians economic growth is sensitive to changes in financial deepening, past level of growth and the openness of the economy.

Obafemi, OburotaAmoke (2016) studied the relationship between financial deepening and domestic investment in Nigeria using the Granger causality methodology. They discovered a unidirectional causality; running from financial deepening which has a statistically significant effect on domestic investment. The investigators also recommended increased integration of the credit and thrift societies, cooperatives, rural savings organization etc, into the mainstream formal financial sector in order to shore up the mobilization of savings for investment will engender investment and growth

Luka (2015) conducted an empirical investigation on financial deepening and economic development of Nigeria with an ordinary least squares analytical framework. Results reveals that 27% of the variables under consideration affect GDP per capital while 73% of other variables not captured in the model also affect GDP per capital . At the end, of the study, it was found that financial deepening index was very low in Nigeria over the years. It was also discovered that the four explanatory variables, as a whole were useful and had a statistical relationship with financial deepening. But three of the variable; trade openness (TROP), inflation rates (INFLA) and ratio of money supply relative to gross domestic product (M2/GDP) had a significant relationship with financial deepening based on GDP per capita.

Kisaka (2015) investigated on the effect of financial deepening on the performance of Smallholder farmers in Homa Bay country, Kenya using the multiple regression analysis. The coefficient of determination indicated that 65% of variation in SHF was attributed to assets,

loans, share capital and deposits. It was found that a 1% rise in share capital would result in 1.74% drop in performance of SHF if all other variables remain constant. Hence, share capital and deposits are negatively related to performances of SHF. It was also found that 1% rise in loans would lead to 0.96% rise in performance of SHF and that 1% rise in private credit drive 1.03% rise in performance of SHF. Therefore, loans and other forms of private credit negatively influence the performance of small holder farmers.

Ani (2013) investigated on the effect of foreign exchange reforms on financial deepening; evidence from Nigeria using OLS regressions. The findings of the resulting time series analysis shed considerable light on the degree, dimension and direction of the determinations of financial depth. First, the ratio of FDI to GDP, ratio of market capitalization of listed equities to GDP and real interest rate have positive relationship with financial deepening while exchange rate has a negative relationship with financial deepening. Secondly, among the determinants of financial depth only the ratio GDP to real interest rates posted a significant relationship with foreign exchange. Overall, the evidence from the non-spurious regression results suggests that foreign exchange reforms in Nigeria have not had the desired positive effect on the depth of the Nigeria.

Odhiamb (2009) Carried out an empirical investigation on interest rate reforms, financial deepening economic growth in Kenya, using cointegration and error-correction models, the observer was able to discover a strong support for the positive impact of interest rate liberalization on financial deepening in Kenya-although the strength to the level of depending ratio. He also discovered financial depth to granger cause economic growth in Kenya.

Obamuyi and Demegin (2012) investigated the impact of interest rate reforms and financial deepening in Nigeria using the co-integration and vector error correction model (EMC) to determine the long and short run dynamics of the model. They discovered that there exists a long run relationship between financial deepening and interest rates. They also observed that interest rate reform has a positive and significant effect on financial deepening in Nigeria.

Omnwumere, Nkwor and Kalu (2015) carried out a research work on financial deepening indicators and economic growth in Nigeria: A causality and impact analysis with the aid of Johansen co integration test. as well as the error correction model revealed that there is a

long run relationship between economic growth, broad money supply and private sector credit which has a negative and non significant impact on growth. The granger causality test results show that neither broad money supply nor private sector credit is granger causal for economic growth and vice versa.

Alenoghena (2014) conducted an empirical investigation on capital market, financial deepening and Nigerian's economic growth using error correction mechanism model. His study revealed that stock market capitalization narrow money diversification (involving credit to private sector) and interest rate significantly impacted the promotion of economic growth of the country.

Mohan(2015) investigated the impact of financial deepening on economic growth in Indian perspective using Autoregressive Distribution lab (ARDL) bound testing approach of estimating co-integration among variable. Their findings suggest that there exist an equilibrium relationship in long run between financial deepening and economic development. Results also suggest that financial deepening causes economic growth in the long run and also in the short run.

Ogbonna and Karimo (2017) investigated on financial deepening and economic growth nexus in Nigerian using granger causality test. They discovered that the growth-financial deepening nexus in Nigeria follows the supply leading hypothesis. This means that it is financial deepening that leads to growth and not growth leading financial deepening.

Okoli (2013) investigated on evaluating the nexus between financial deepening and stock market in Nigeria using Garch (1,1) model. The result of her empirical evaluation revealed that financial deepening (FD_{1t}) measured as the ratio of value of stock traded to GDP do not affect the stock market and there is no news about volatility. But financial deepening (FS_{2t}) measured as the ratio of market capitalization to GDP affect the stock market. It indicated that financial deepening reduces the level of risk (volatility) in the stock market. The result also recorded that the conditional volatility of returns is slightly persistent.

Nzotta and Okereke (2009) examined financial deepening and economic development of Nigeria an empirical investigation employing the two stage least squares analytical framework. At the end of the study, they found that financial deepening index is low in Nigeria over the years. They also found that the mine explanatory variables, as a whole were

useful and had a statistical relationship with financial deepening. But four of the variables lending rates, financial savings ratio, cheques GDP ratio and the deposit money banks/GDP ratio had a significant relationship with financial deepening.

3 METHODOLOGY

This study by way of research design adopted the ex-post facto research method. According to Onwumere (2009), research design provides a blueprint that guides a researcher carrying out the set investigation and analysis in the research work. It encapsulates the entire essential ingredient that would allow for a systematic application of the scientific method in investigation and solving of the set research problem.

Ex-post facto design is a quasi-experiential study examining how an independent variable, present prior to the study affects a dependent variable. This design ideally fits this work as it is not possible or permissible to manipulate the characteristics of the variables under study.

By nature, the data for this work is secondary and drawn from already existing sources. Control Bank of Nigerian (CBN) statistical Bulletins, National Bureaus of statistics (NBs), Journal and other published works represents the sources of the data. Data obtained were on variables Gross Domestic product and financial deepening peroxide by credit to the private sector (CPS), Broad Money (M2) and the ratio of GDP to M2 as well as insurance business variables like insurance premium.

Model for the Study

In writing the model equation, the following symbols were used to denote their respective variables:

INSP = F (CPS, M_2, GDP)……equ 1

INSPt = B_0+B_1 LNCPS+ B_2 LNM_{2+} + $B_3$$LNGDP_t$ + e_t

GDP = Gross Domestic Product

CPS = Credit to Private Sector

M_2 = Broad Money Supply

INSP = Insurance premium

4 DATA PRESENTATION AND ANALYSIS

4.1 Data Presentation The datasets for the empirical analyses of this study is presented in Table 1.

TABLE 1: Financial Deepening and insurance premium in Nigeria

YEAR	GDP	CPS	M2	CPSGDP	M2GDP	INSP
1986	134.6	15.25	23.81	11.3	17.7	263.7
1987	193.13	21.08	27.57	10.9	14.3	420
1988	263.29	27.33	38.36	10.4	14.6	506.7
1989	382.26	30.4	45.9	8	12	701.8
1990	472.65	33.55	52.86	7.1	11.2	1,048.40
1991	545.67	41.35	75.4	7.6	13.8	1,334.20
1992	875.34	58.12	111.11	6.6	12.7	2,517.90
1993	1089.68	127.12	165.34	11.7	15.2	5,901.30
1994	1399.7	143.42	230.29	10.2	16.5	14,671.70
1995	2907.36	180	289.09	6.2	9.9	14,587.60
1996	4032.3	238.6	345.85	5.9	8.6	13,150.60
1997	4189.25	316.21	413.28	7.5	9.9	16,519.00
1998	3989.45	351.96	488.15	8.8	12.2	17,846.50
1999	4679.21	431.17	628.95	9.2	13.4	14,643.90
2000	6713.57	530.37	878.46	7.9	13.1	22,531.50
2001	6895.2	764.96	1269.32	11.1	18.4	28,981.30
2002	7795.76	930.49	1505.96	11.9	19.3	37,765.90
2003	9913.52	1096.54	1952.92	11.1	19.7	43,944.70
2004	11411.07	1421.66	2131.82	12.5	18.7	50,495.90
2005	14610.88	1838.39	2637.91	12.6	18.1	67,746.30
2006	18564.59	2290.62	3797.91	12.3	20.5	82,361.90
2007	20657.32	3680.09	5127.4	17.8	24.8	157,206.00
2008	24296.33	6941.38	8008.2	28.6	33	189,906.00
2010	54612.26	10157.02	11034.94	18.6	20.2	233,752.00
2011	62980.4	10660.07	12172.49	16.9	19.3	233,752.00
2012	71713.94	14649.28	13895.39	20.4	19.4	233,752.00
2013	80092.56	15751.84	15160.29	19.7	18.9	233,752.00
2014	89043.62	17128.98	17680.52	19.2	19.9	233,752.00
2015	94,144.60	18,674.15	18,901.30	20.1	19.8	233,752.00
2016	94,144.60	18,674.15	18,901.30	20.1	19.8	233,752.00

Sources: CBN Statistical Bulletin 2016

Where, GDP=Gross Domestic Product, CPS = Credit to Private Sector, M2 = Broad Money Supply, INSP=Insurance Premium, .

4.2 Tests for Stationary

Table 2: Unit Root Tests for all the Variables using Philip Peron Stat Order of Integration

Variables	PPSTAT	CR@5%	Prob.V	INT	REMARK
GDP-3.4370	-2.9511	0.0164	I (1)		stationary
CPS	-3.1602	-2.9511	0.0314	I (1)	stationary
M2	-3.5652	-3.5084	0.0045	I (1)	stationary

CPSGDP-5.5872	-3.5485	0.0003	1(1)	stationary
M2GDP-3.5652	-3.5084	0.0045	I (1)	stationary
INSP-3.4380	-2.9511	0.0164	I (1)	stationary

Source: Own computation (2017)

Table 2 shows the results of the Philip-Peron Unit Root Tests of all the variables. The results are found to be integrated of the same order. At first difference, the p-values are found to be less than 5% which is the level of significance, and the Philip-Peron statistics are found to be more negative than the critical values. This is a precondition for the Vector error correction Model based approach for cointegration tests. Having confirmed that the variables are integrated of the same order, the next step will be to run a descriptive statistics of normality. using all the variables on level series.

4.3 Basic Descriptive Statistics

Table 3: Table showing Financial Deepening and insurance business in Nigeria

	GDP	CPS	M2	M2GDP	CPSGDP	INSP	INSCL
Mean	23821.03	4539.099	4903.804	17.76667	13.76333	86903.51	23615.67
Median	7345.480	847.7250	1387.640	18.25000	11.50000	33373.60	7015.200
Maximum	94144.60	18674.15	18901.30	38.00000	36.90000	233752.0	76276.10
Minimum	134.6000	15.25000	23.81000	8.600000	5.900000	263.7000	222.2000
Std. Dev.	32048.88	6464.136	6467.342	6.149479	6.965951	97681.55	26474.45
Skewness	1.265483	1.198274	1.107703	1.489257	1.515988	0.660250	0.730679
Kurtosis	3.011527	2.859067	2.709448	6.009751	5.430643	1.627501	1.769713
Jarque-Bera	8.007407	7.204136	6.240553	22.41268	18.87614	4.534340	4.561468
Probability	0.018248	0.027267	0.044145	0.000014	0.000080	0.103605	0.102209
Sum	714631.0	136173.0	147114.1	533.0000	412.9000	2607105.	708470.0
Sum Sq. Dev.	2.98E+10	1.21E+09	1.21E+09	1096.667	1407.210	2.77E+11	2.03E+10
Observations	30	30	30	30	30	30	30

Source: Eviews 7 Computation by the Authors

Table 3 contains the basic measures of central tendency, spread and variations calculated on the order 1series of the dataset. Of particular interest is the Jacque-Bera (JB) statistics which is a test for normality distribution of the variable are above 3. It is a combined test of skewness(S) of zero (0) and a kurtosis (K) of three (3), which are signs of a mesokurtic distribution. In this case, however, the JB statistics shows that the variables are positively skewed and leptokurtic. The assumption of normality is rejected by the JB statistics, as well as the K and S figures. This, however, does not affect the goodness of the data for the estimation in this study as the kurtosis of all the variables and the skewness are normally

distributed which is consistent with the properties of most financial time series Also, the probability values of the variables are significant (Brooks, 2008)?

4.4 Measuring the long run effect of Financial Deepening and insurance business in Nigeria

Using JOHANSEN SYSTEM COINTERGRATION TEST

Table 4 Table showing Long run between Financial Deepening and insurance business in Nigeria

Date: 05/13/18 Time: 19:27
Sample (adjusted): 1988 2016
Included observations: 26 after adjustments
Trend assumption: Quadratic deterministic trend
Series: GDP CPS M2 M2GDP CPSGDP INSP
Lags interval (in first differences): 1 to 1

Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.999728	629.8672	175.1715	0.0000
At most 1 *	0.995268	416.3860	139.2753	0.0000
At most 2 *	0.993731	277.1973	107.3466	0.0000
At most 3 *	0.942284	145.3235	79.34145	0.0000
At most 4 *	0.683597	71.16555	55.24578	0.0011
At most 5 *	0.652658	41.24634	35.01090	0.0095
At most 6	0.290618	13.75278	18.39771	0.1979
At most 7 *	0.169388	4.825402	3.841466	0.0280

Trace test indicates 6 cointegratingeqn(s) at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0.999728	213.4811	55.72819	0.0000
At most 1 *	0.995268	139.1887	49.58633	0.0000
At most 2 *	0.993731	131.8738	43.41977	0.0000
At most 3 *	0.942284	74.15796	37.16359	0.0000
At most 4	0.683597	29.91921	30.81507	0.0641
At most 5 *	0.652658	27.49356	24.25202	0.0180
At most 6	0.290618	8.927377	17.14769	0.5032
At most 7 *	0.169388	4.825402	3.841466	0.0280

Max-eigenvalue test indicates 4 cointegratingeqn(s) at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values

From the above table, there is evidence of a cointegration/long run relationship existing between Financial Deepening and insurance business in Nigeria using both trace statistics and max-Eigen value indicated by the asterics* showing the numbers of co-integrating equation. .Hence, there is a long run relationship existing between Financial Deepening and insurance business in Nigeria

4.4 Measuring the error correction of the VECM system between Financial Deepening and insurance premium in Nigeria

Table 5: Table showing error correction of the VECM system Financial Deepening and insurance premium in Nigeria

Vector Error Correction Estimates
Date: 05/14/18 Time: 17:09
Sample (adjusted): 1989 2016
Included observations: 28 after adjustments
Standard errors in ( ) & t-statistics in [ ]

CointegratingEq:	CointEq1		
INSP(-1)	1.000000		
CPSGDP(-1)	-20961.81 (2047.69) [-10.2368]		
M2GDP(-1)	1676.931 (2670.44) [0.62796]		
C	167414.7		
Error Correction:	**D(INSP)**	**D(CPSGDP)**	**D(M2GDP)**
CointEq1	-0.079001 (0.08697) [-0.90842]	8.61E-05 (9.8E-06) [8.75971]	8.32E-05 (1.3E-05) [6.38408]
D(INSP(-1))	0.409565 (0.22622) [1.81051]	0.000106 (2.6E-05) [4.15478]	9.55E-05 (3.4E-05) [2.81529]
D(INSP(-2))	-0.064459	0.000184	0.000112

	(0.28945)	(3.3E-05)	(4.3E-05)
	[-0.22270]	[5.61874]	[2.57574]
D(CPSGDP(-1))	-2244.105	0.604425	0.861967
	(2234.80)	(0.25265)	(0.33504)
	[-1.00417]	[2.39238]	[2.57273]
D(CPSGDP(-2))	-879.3811	0.151181	0.417041
	(2124.95)	(0.24023)	(0.31857)
	[-0.41384]	[0.62933]	[1.30910]
D(M2GDP(-1))	2621.791	0.006496	-0.247038
	(1998.95)	(0.22598)	(0.29968)
	[1.31158]	[0.02875]	[-0.82434]
D(M2GDP(-2))	501.4810	0.126748	-0.091582
	(1953.60)	(0.22086)	(0.29288)
	[0.25670]	[0.57389]	[-0.31269]
C	5885.747	-2.324679	-1.887145
	(3833.74)	(0.43341)	(0.57475)
	[1.53525]	[-5.36372]	[-3.28340]
R-squared	0.304144	0.904328	0.802594
Adj. R-squared	0.060594	0.870843	0.733502
Sum sq. resids	4.76E+09	60.83304	106.9811
S.E. equation	15426.97	1.744033	2.312802
F-statistic	1.248796	27.00678	11.61629
Log likelihood	-305.0481	-50.59328	-58.49654
Akaike AIC	22.36058	4.185234	4.749753
Schwarz SC	22.74121	4.565864	5.130383
Mean dependent	8330.189	0.346429	0.185714
S.D. dependent	15916.74	4.852833	4.480138
Determinant resid covariance (dof adj.)		1.61E+09	
Determinant resid covariance		5.88E+08	
Log likelihood		-401.8893	
Akaike information criterion		30.63495	
Schwarz criterion		31.91957	
Number of coefficients		27	

Source: Eviews 10 Computation by the Authors

Table 5 presents the results of the ECM. The model of the ECM is of the form of equation 3 and the estimates of the short-run and long-run movements, as well as the error correction term, which proxies speed of adjustment, are provided in Table 5. The Table also shows

useful long-run information. The equilibrium adjustment coefficient INSP enters with a correct sign (negative). This suggests that INSP and FDR series in Nigeria converge to long-run equilibrium; deviations from this equilibrium relation as a result of shocks will be corrected over time. It can also be observed that the coefficient of the ECT(-1) tends to half, indicating that the speed of adjustment to equilibrium is slow. It follows that about 7% of the deviation from equilibrium path is corrected per annum meaning that the departure will be corrected in 14 years, 2 months, 8 days.

5 CONCLUSION

This work studied financial deepening which is generating a serious attention among financial experts in the developing and developed countries of the world. The theoretical and empirical issues concerning this reform have increased the provision of financial services with a wider choice of product geared to the level of financial development. Financial deepening measured the level of the gross domestic product, the level of broad money supply and the level of supply of credit to the private sector. Undoubting, financial development in Nigeria has a stronger role in the countries development process. Nigeria due to upward increase in the oil experienced financial depth which has equally transformed the insurance sector of the financial system. Hence, based on the objective of this study, it was discovered that financial deepening structurally responds to insurance industry development in Nigeria in the long run and vector error correction model shows NSP and FDR series in Nigeria converge to long-run equilibrium; deviations from this equilibrium relation as a result of shocks will be corrected over time. This has a follow up indicating that follows that about 7% of the deviation from equilibrium path is corrected per annum meaning that the departure will be corrected in14years,2 months,8days. Hence, broad money supply, credit to the private sector and GDP deepens insurance premium for greater economic growth driven. It was recommended that government should employ financial deepening and financial development measures to improve the financial sector of the economy by allowing insurance sector to embrace the benefits.

REFERENCES

1. Adeyemi, M. (2016) An Overview of Insurance Act of 2003, Issuesin Merger and Acquisition For the Insurance Industry. *NIA2005 Merger and Acquisition Proceedings.*

2. Adowole, A. (2010) Predicting Insurance investment. A factor Analytic Approach. *Journal of Mathematical SciencePublication 6(3).*
3. Aneke, J.I. (2012). The Position of Insurance Industry in Nigeriain the Consolidation Era. *Paper Presented during Insurance Student Dinner and Award night at universal hotel Enugu.*
4. Alejandro, S.E. (2014). Financial Deepening and Economic Growth.*World Development, Indicator 23(3)*.
5. Akanro, B. (2008), The Insurance Industry and Nigerian Economy, Light does not Shine in Light. *Journal of Economic survey 22(3).*
6. Bencivenga, V. & Smith B.D, (1991). Financial Intermediation and Endogenous Growth, the review of Economic studies, 58(2).
7. Calderon C. & Liu L. (2003). The Direction of causality Between financial Development and Economic Growth, Journal of Development Economies, 72.
8. ChadesNdalu (2016). Financial Deepening of insurance and economic growth in Kenya.International Journal.
9. Ezema,C.A and Eche .A.U (2018)Measuring the shocks and dynamics of micro economic Variables to Insurance Performance in Nigeria,.Journal of banking, Financial Service and Insurance Research 8(2)
10. Kugler, M. &Ofoglu, R. (2005). Does insurance promote Economic growth? Evidence from theUK.Money Macro and Finance (MMF) Research Group Conference 2005.
11. Kisaka, S.E. (2015). The Effect of financial Deepening on the performance of Small holder formers in Home Bag Country, Kenya.Research Journal of finance and Accounting 6(10).
12. Ndebbio, J.E.U. (2004). Financial Deepening, Economic Growth and Development. Evidence from selected sub-Saharan African Countries. African Economic Research Consortium
13. Nnanna, O.J. (2004). Financial sector Development and Economic Growth in Nigeria. An Empirical Investigation.CBN Economicand Financial Review 42(3).
14. Nigeria Insurance Act (2003).
15. Irukwu, J.O. (1999) Insurance law and Practice in Nigeria. *PTF Edition Ibadan, Canton Press West African Limited.*

16. Iyoboyi Martins (2013) Bank and Non-Bank Financial Deepening and Economic growth; the Nigerian experience. Departmentof economic and development studies, Federal University Dutsinma, Katsina, Nigeria.
17. Karimo and Ogbonna (2016) Financial deepening and economic growth nexus in Nigeria; supply-leading of Demand-following?Depatement of economics, Niger Delta University, Wilber Force Island, Yenagea, Beyelsa State, Nigeria.
18. Luka Y.D, AkilaA&Lugu C.T. (2015).Financial deepening and economic development of Nigeria; An empirical investigation. Department of Economics, Adamawa State Collage of Education Hong, Nigerian.
19. Madukwe D.O. and N.S. Obi-Nweke (2015) Empirical Evidence of Nigeria Insurance Business Capital Market and Economic Growth. *International Journal of Innovation and Scientific Research vol. 64(2).*
20. MCKinnon, R.I. (1973). Money and Capital in Economic Development. Washington: The Brookings Institution.
21. Mohan A., (2015) Impact of Financial Deepening on economic growth in IndanPurspective. Graphic Era University, Deharadan, Uttarakhand, India.
22. Mordi, O. (1999) Marketing Insurance Industry towards better Public image. *A paper presented At 23rd conference of the African Insurance Organisation, Abuja, Nigeria.*
23. Nzotta S.M. &Okoereke E.J. (2009) Financial deepening and economic development of Nigeria: An empirical investigation. Federal University of Technology, Owerri, Nigeria. Department of Finance and Banking University of Part Harcourt, Nigeria.
24. Nwite S.C. and Ezema,C.A (2008) Insurance Consolidation and Financial services in Nigeria.NIAdigest2(5)
25. Obafemi F.N., Obruota C.S., &Amoke CV (2016) financial deepening and domestic investment in Nigeria.Departmentof economics, University of Calabar, Calabar, Nigeria.
26. Obafemi&Udeh (2004) The impact and manufacturing sectors in Nigeria: An empirical investigation. Department of Economics University of Calabar, Calabar, Nigeria.
27. Odliambo N.M. (2009) Interest Rate reforms, Financial deepening and economic growth in Kenya: An empirical investigation. Department of economics collage of Business, Tennessee State University.

28. Obamuyi T.M. &Demehin J.A. (2012) Interest rate reforms and financial deepening in Nigeria.AdekuleAjasin University.
29. Olamide,S.E (2017) Roles of Insurance in National Development. *International Journal of Economic Development 10.(73),November.*
30. Oluwofasa, B.O.&Aiyedogbon, J.O. (2013) Financial Deepening and Economic Growth in Nigeria, 1986-2011: An Empirical investigation. Journal of Economics and Development studies 1(1): 24-42.
31. Onwumere J.M.J., Onodugo, V. &Ibe, I.G. (2013). Financial Structure and Economic Growth: Evidence from Nigerian. Global Journal of Management and Business Research Finance 13(5).
32. Onwumere J.U.J., Okafor I.G., &Ezeaku H.C. (2015) Financial deepening indicators and Economic growth in Nigeria; A causality and impact Analysis. Department of Banking andfinance, University of Nigeria, Enugu Campus.
33. Ugwuanyi, W. (2013) .The Nigeria financial system. A systematic approach, Johnkons and Willy Nig. Ltd, Enugu.
34. Ward, D. & Zurburegg, R. (2000). Does Insurance promote economic development? Evidence from OECD Countries. Journal of risk and Insurance, 67, 489-506.
35. Webb, I., Grace, M, and Skipper, H. (2002).The Effect of Banking and Insurance on the growth of capital *and* output. Center for Risk Management and Insurance. Working paper 02.