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## **EFFECT OF INSURANCE BUSINESS ON FINANCIAL DEVELOPMENT IN NIGERIA (1996-2016)**

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### **Abstract**

This study was on effect of insurance business on financial development in Nigeria. The specific objectives of the study were to examine the extent to which total insurance investment positively affects Stock market capitalization to GDP, Credit to Private sector to GDP and Liquid assets to deposits and short term funding in Nigeria. Ordinary least square regression was used as analytical technique. It was found that total insurance investment has positive and no significant effect on Stock market capitalization to GDP; total insurance investment has positive and no significant effect on credit to private sector; and total insurance investment has positive and no significant effect on Liquid assets to deposits and short term funding. Based on the findings of the study it is concluded that despite the increasing volume of investments made by the insurance industry in the Nigerian economy there has not been a commensurate significant effect on the depth of financial development in the country. Therefore, it is recommended that the insurance industry needs to widen the spread of its investments in financial instruments; through its Life policies more policy loans should be used to advance loans to the private sector; and added efficiency in claims settlement through adoption of global insuretech best practices will improve the industry's capacity to stabilize the financial position of individuals and firms on short term.

**Keywords:** Insurance, Business, Financial development, Nigeria

### **Introduction**

Different types and combinations of information, enforcement, and transaction costs in conjunction with different legal, regulatory, and tax systems have motivated distinct financial contracts, markets, and intermediaries across countries and throughout history (Levine, 2005). In arising to ameliorate market frictions, financial systems naturally influence the allocation of resources across space and time (Merton and Bodie, 1995). For instance, the development of liquid stock and bond markets means that people who are reluctant to relinquish control over their savings for extended periods can trade claims to multiyear projects on an hourly basis. This may profoundly change how much and where people save. In addition, the emergence of banks that improve the acquisition of information about firms and managers will undoubtedly alter the allocation of credit. Similarly, financial contracts that make investors more confident that firms will pay them back will likely influence how people allocate their savings. Thus financial systems exert significant influence on economic decision making. In other words, financial intermediaries perform an important function in an economy, in that they may help to ensure that productive investment opportunities materialize (Demetriades, 2008).



Economic theory in general predicts that private investment and financial intermediary development contribute in a significant way to each other. On the one hand, an increase in private investment constitutes rising demand for external finance, enlarging the extent of financial intermediation by directly encouraging financial intermediaries to persuade savers to switch their holdings of unproductive tangible assets to bank deposits. Levine and Renelt (1992) suggest that more investment raises the rate of economic growth, which could stimulate financial development (Greenwood and Smith, 1997). On the other hand, the endogenous finance-growth models (for example Diamond and Dybvig, 1983; Diamond, 1984; Greenwood and Jovanovic, 1990; Bencivenga and Smith, 1991 and Greenwood and Smith, 1997) suggest that financial markets have an important role in channelling investment capital to its highest valued use. Financial intermediaries tend to induce a portfolio allocation in favour of productive investment by offering liquidity to savers, easing liquidity risks, reducing resource mobilization costs and exerting corporate control. It seems natural to wonder if what is possible in theory is consistent with what has happened in reality (Huang, 2010).

According to Ayadi, Arbak, Naceur and De Groen (2013) one common factor (or a set of factors) can enhance financial development across different measures. Strong legal institutions, good democratic governance and adequate implementation of financial reforms – all at the same time – appear to have a substantial positive impact on financial development. Beyond this simple common point, the determinants of well developed financial systems are divergent across different measures. For credit market development, there is good evidence that the growth of public debt tends to lower credit growth significantly and persistently, implying a clear confirmation of the ‘crowding-out’ hypothesis. External flows, in the form of official aid and portfolio investments, may also be beneficial for credit growth. For deposits, inflation has a negative impact on deposits; however, having an open capital account could offset these effects. These results show that, notwithstanding their effects on macroeconomic stability, the availability of currency-linked savings products could prevent losses in deposits when inflationary pressures are present. Once again, external official aid and portfolio investment inflows increase deposits, possibly through their impact on the incomes of households and firms. For the indicators of stock market development, the results are more mixed and limited. Beyond the positive impact of the interactive term on good institutions, democratic governance and financial reforms, stock market capitalisation appears to be weakly improved by official transfers, once again potentially an income effect. As for stock market value traded, the interactive term appears to have a more significant impact than on other measures.

According to Khalfaoui (2015) the factors of financial development success usually depend on a stable macroeconomic environment, an appropriate prudential regulation of the banking system of each country, a financial market efficient and rigorous legal and institutional framework. However, the measures taken actually lead to mixed effects on the indispensability of these conditions as guarantees for a successful financial development process.

La Porta, Lopez-de-Silanes, Shleifer and Vishny (1997) found that financial development is stronger when institutions that protect and match the needs of investors are present. Insurance



companies indemnify the ones who suffer a loss and stabilize the financial position of individuals and firms with possibility of transfer of different kinds of risks to insurance companies (Oke, 2012). This allows firms to concentrate their attention and resources on their core business which can lead to willingness and ability to take real investment which will help to generate higher level of economic growth. This means that without pooling and transferring of risk which insurance companies provide, part of the economic activities would not take place and positive effects on social welfare would fail (Oke, 2012). But beyond their risk covering service, insurance industry makes investments from its pool of gross written premium, as well as offer loans through its policy loans. In this various capacities the insurance industry stands the chance to exert institutional influence on the depth of financial development in the country.

### **Statement of the Problem**

The causes of financial development have become an increasingly significant research area in recent years. Economic theory in general predicts that private investment and financial intermediary development contribute in a significant way to each other (Huang, 2010). That is to say, an increase in private investment constitutes rising demand for external finance, enlarging the extent of financial intermediation. In Nigeria financial intermediation necessitated through private investment involves the insurance industry. The Insurance Act 2003 of Nigeria in Section 25 allows the insurance industry to engage in investments.

Levine and Renelt (1992) emphasize the critical role of investment in growth, leading to investment being included in most growth regressions. However, there has been little work on the role of investment in the determination of financial development. In particular, the role played by the insurance industry has received minimal empirical consideration. Therefore By exploiting the time series variation in both private investment of insurance industry and financial development indicators (Stock market capitalization to GDP, Credit to Private sector to GDP and Liquid assets to deposits and short term funding) this study aimed to examine the impact of insurance business on financial development in Nigeria.

### **Objectives of the Study**

The specific objectives of the study are:

1. To examine the extent to which total insurance investment positively affects Stock market capitalization to GDP in Nigeria
2. To ascertain the degree to which total insurance investment positively affects Credit to Private sector to GDP in Nigeria
3. To evaluate the level to which total insurance investment positively affects Liquid assets to deposits and short term funding in Nigeria.



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## **Research Hypotheses**

Based on the objectives the following null hypotheses were formulated for the study:

Total insurance investment has no positive and significant effect on Stock market capitalization to GDP

Total insurance investment has no positive and significant effect on Credit to Private sector to GDP

Total insurance investment has no positive and significant effect on Liquid assets to deposits and short term funding

## **Conceptual Review**

Financial development occurs when financial instruments, markets, and intermediaries ameliorate – though do not necessarily eliminate – the effects of information, enforcement, and transactions costs and therefore do a correspondingly better job at providing the five financial functions (Levine, 2005). Thus, financial development involves improvements in the (i) production of ex ante information about possible investments, (ii) monitoring of investments and implementation of corporate governance, (iii) trading, diversification, and management of risk, (iv) mobilization and pooling of savings, and (v) exchange of goods and services. Each of these financial functions may influence savings and investment decisions and hence economic growth. According to Astana (2014) financial development involves increasing the financial sector's soundness by addressing existing problems and strengthening its competitive position. Development of a country's financial sector depends on how its place and role in the country's economy is determined based on the needs of the society and the state. So, the state expects the financial sector to be able to provide sufficient volume of resources at a reasonable price to finance top-priority sectors of the economy as part of the economic development programs. An important factor for consumers (corporate entities and individuals) is to be satisfied with the quality, amount, price and list of services provided by the financial system, irrespective of phases of the economic development. As for financial organizations, their objective is to increase the current value of a business, maximize its profits, primarily by increasing the volume of services from core business along with manageable risks and the cost structure. A common goal, both for the society and the state, and for financial organizations is to develop such financial sector that will fulfill its function of a financial intermediary with maximum effectiveness (Astana, 2014).

It is difficult to measure financial development given the complexity and dimensions it encompasses. The World Bank's Global Financial Development Database (GFDD) developed a comprehensive yet relatively simple conceptual 4x2 framework to measure financial development worldwide. This framework identifies four sets of proxy variables characterizing a well-functioning financial system: financial depth, access, efficiency, and stability.



The table below highlights these dimensions.

Figure 1

	Financial Institutions	Financial Markets
Depth	<ul style="list-style-type: none"> <li>Private Sector Credit to GDP</li> <li>Financial Institutions' asset to GDP</li> <li>M2 to GDP</li> <li>Deposits to GDP</li> <li>Gross value added of the financial sector to GDP</li> </ul>	<ul style="list-style-type: none"> <li>Stock market capitalization and outstanding domestic private debt securities to GDP</li> <li>Private Debt securities to GDP</li> <li>Public Debt Securities to GDP</li> <li>International Debt Securities to GDP</li> <li>Stock Market Capitalization to GDP</li> <li>Stocks traded to GDP</li> </ul>
Access	<ul style="list-style-type: none"> <li>Accounts per thousand adults (commercial banks)</li> <li>Branches per 100,000 adults (commercial banks)</li> <li>% of people with a bank account (from user survey)</li> <li>% of firms with line of credit (all firms)</li> <li>% of firms with line of credit (small firms)</li> </ul>	<ul style="list-style-type: none"> <li>Percent of market capitalization outside of top 10 largest companies</li> <li>Percent of value traded outside of top 10 traded companies</li> <li>Government bond yields (3 month and 10 years)</li> <li>Ratio of domestic to total debt securities</li> <li>Ratio of private to total debt securities (domestic)</li> <li>Ratio of new corporate bond issues to GDP</li> </ul>
Efficiency	<ul style="list-style-type: none"> <li>Net interest margin</li> <li>Lending-deposits spread</li> <li>Non-interest income to total income</li> <li>Overhead costs (% of total assets)</li> <li>Profitability (return on assets, return on equity)</li> <li>Boone indicator (or Herfindahl or H-statistics)</li> </ul>	<ul style="list-style-type: none"> <li>Turnover ratio for stock market</li> <li>Price synchronicity (co-movement)</li> <li>Private information trading</li> <li>Price impact</li> <li>Liquidity/transaction costs</li> <li>Quoted bid-ask spread for government bonds</li> <li>Turnover of bonds (private, public) on securities exchange</li> <li>Settlement efficiency</li> </ul>
Stability	<ul style="list-style-type: none"> <li>Z-score</li> <li>Capital adequacy ratios</li> <li>Asset quality ratios</li> <li>Liquidity ratios</li> <li>Others (net foreign exchange position to capital etc.)</li> </ul>	<ul style="list-style-type: none"> <li>Volatility (standard deviation / average) of stock price index, sovereign bond index</li> <li>Skewness of the index (stock price, sovereign bond)</li> <li>Vulnerability to earnings manipulation</li> <li>Price/earnings ratio</li> <li>Duration</li> <li>Ratio of short-term to total bonds (domestic, international)</li> <li>Correlation with major bond returns</li> </ul>

Source: World Bank's Global Financial Development Database, 2018



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## **Theoretical framework**

The study is based on financial possibility frontier theory. This was propounded by Barajas, Beck, Dabla-Norris, and Yousefi (2013). The financial possibility frontier is a rationed equilibrium of optimal supply and demand, variously affected by market frictions. It measures the maximum sustainable depth (e.g., credit or deposit volumes), outreach (e.g., share of population reached) or breadth of a financial system (e.g., diversity of domestic sources of long-term finance, including banks, longterm debt and equity markets, private equity companies, and different contractual savings institutions) that can be realistically achieved at a given point in time.

Financial intermediaries arise in economies due to the presence of market frictions that restrict the free flow of capital from savers to borrowers (Baltagi, Demetriades and Law, 2009). Uncertainty, informational asymmetries and limited enforceability, transaction costs, and network externalities are some of the frictions that necessitate the presence of intermediaries. The presence of uncertainty in a world of risk-averse agents yields a demand for the pooling and sharing of risk and for diversification and insurance. The costs of assessing and monitoring potential investments, and of drawing out and enforcing contracts, give rise to financial institutions that specialize in these informational and legal services. Fixed costs associated with financial transactions give rise to economies of scale and are another contributing factor to the emergence of specialist intermediaries. However, financial intermediaries do not completely eliminate these market imperfections, and the very frictions that facilitate their emergence and the demand for their services, also limit the efficiency of their operations and the supply of such services.

## **Empirical Review**

Njimanted, Ngwengeh and Mobit (2016) undertook an assessment of the determinants of financial market development in Cameroon. To understand the length and breadth of financial market development in Cameroon a quarterly data set from 2006-2014 is analyzed using the Ordinary Least Square technique to highlight the key determinants of financial market development in Cameroon. From this analysis, it was established that Domestic Credit to the private sector, Commercial Bank Deposits, Commercial Bank Asset Concentration Ratio, Inflation Rate and Total Value Traded of the DSX market are very significantly tools in the Financial Market Development in Cameroon. Furthermore, Interest Rate Spreads and Stock Market Capitalization were insignificant. On these bases it is very clearly that developing the Banking System is very crucial for the effective financial market by guaranteeing commercial banks credit to the small and Medium Size enterprises, reducing the Lending/Deposit gap and encourage competition of commercial banks through bank assets concentration ratio. This typically says the potentials of the Banking systems have not been fully utilized in Cameroon yet.

Egbeonu (2016) investigated the pattern of flow between insurance investment portfolio and economic development in Nigeria. The individual coefficient result of Ordinary Least Square analysis revealed positive and significant relationship between bills of exchange, investment in stocks and bonds, while inverse and insignificance relationship was found between investment



in Government securities; Granger causality result revealed that the pattern of relationship between insurance investment portfolio and economic development was demand following (Economic development → Insurance investment portfolio).

Anchang (2016) provides evidence on the role of democratic institutions in fostering financial development in ten economies in the Southern African Development Community classified into three income groups from 1975 to 2013. Polity IV variables, considered as measure of democracy are applied to quantify institutions, while bank deposits, private credit and liquid liabilities proxy financial development. Initially, panel regressions are estimated using Ordinary Least Square and Instrumental Variable estimators and find evidence of a linear and non-linear association between democratic institutions and financial development. Evidence from panel regressions suggests that democratic institutions are positively associated with financial development for the upper middle income countries. A negative relationship is found for the lower middle and low-income countries. Applying Bayesian Vector Auto-regressions and variance decomposition of annual proxies for financial development, the results show that shocks to democratic variables positively affect financial development in the upper income countries, with substantive democracy and human capital development contributing the most towards variations in financial development while the effect is negative for the other income groups but, however, improved slightly after 1990.

Nwani, Iheanacho, Okogbue and McMillian (2016) examined the relationship between crude oil price and financial sector intermediary development in Nigeria over the period 1975–2011, using the autoregressive distributed lag approach to cointegration analysis. Four measures of financial intermediary development are used including an index of financial intermediary development constructed from three indicators of financial intermediary development using principal component analysis. The results show that crude oil price is a key driver of financial intermediary development in Nigeria. A positive and significant long run relationship between financial intermediary development and crude oil price coexists with a negative short run relationship. The results show that even if we control for economic growth, inflation and trade openness, crude oil price still has significant influence on the development of financial intermediation in Nigeria. The findings of this study have important policy implications for financial intermediary development in Nigeria and other developing oil-exporting countries.

Mbulawa (2015) used annual panel data (1996-2010) for 11 SADC countries to establish the determinants of credit to private sector and financial development. The contribution made by institutional quality is investigated using both the fixed effects and dynamic model based on GMM estimations. Financial development was significantly and positively influenced by credit to the public sector, per capita gross domestic product, gross fixed capital formation, financial openness, interest rates and institutional factors while savings and government debt have a negative influence. Financial development is enhanced by keeping corruption at low levels, increasing government accountability, improving regulation quality, maintaining rule of law and low levels of political violence. Thus institutional quality should be enhanced to complement the levels of financial development which in turn boosts economic growth. More private-public sector partnerships are preferable to enhance financial development and



monetary policy initiatives like favorable credit rationing policies play a key role in developing financial markets.

Torbira and Ogbulu (2014) looked into the relationship between fund mobilization by insurance companies and gross fixed capital formation (GFCF) in Nigeria and specifically how the latter responds to stimuli emanating from the insurance companies. A five variable-predictor multivariate regression model was estimated and analyzed. The short run results reveal that four explanatory variables namely: premium from fire, accidents, motor vehicles and employee liabilities insurance policies positively and insignificantly correlate with Gross Fixed Capital Formation while the relationship between premium from marine insurance policies and GFCF is both negative and insignificant. In the long run, the fund mobilization variables by insurance companies positively and significantly impact on the growth of gross fixed capital formation.

Ubom (2014) examined the link between investment portfolio of insurance firms and the variables of economic development from 1990 to 2011. Data were analyzed using descriptive and inferential tools. Insurance firms were not making any significant influence on economic development in the country as evidenced in the marginal growth rates of gross domestic products (GDP) and capacity utilization, among others.

Takyi and Obeng (2013) investigated the determinants of financial development in Ghana using the Autoregressive Distributed Lag (ARDL) approach. Using quarterly data from 1988 to 2010, the study found a unique cointegrating relationship between financial development trade openness, inflation, per capita income, reserve requirement and government borrowing. The regression results show that trade openness and per capita income are important determinants of financial development in Ghana. Further, inflation, interest rate, and reserve requirement exerted negative and statistically significant effects on financial development both in the short-run and long-run suggesting that these variables adversely influence financial development in Ghana. However, government borrowing did not have any significant effect on financial development both in the long-run and short-run suggesting that higher government borrowing from banking sector will not have any significant effect on private credit or even crowd in private sector credit. It is therefore recommended that Government of Ghana ensures an accommodative openness to trade; maintain low inflationary rate and high economic growth in order to stimulate financial development in Ghana. Moreover, Bank of Ghana should consider adjusting the cash reserve ratio of banks downwards while financial institutions are to also reduce their interest rate on lending.

Ayadi, Arbak, Naceur and De Groen (2013) assessed the determinants of Financial Development across the Mediterranean. Using a sample of both northern and southern Mediterranean countries for the years 1985 to 2009, this study empirically assesses the reasons underlying such conditions. The results show that strong legal institutions, good democratic governance and adequate implementation of financial reforms can have a substantial positive impact on financial development only when they are present collectively. Moreover, inflation appears to undermine banking development, but less so when the capital account is open. Government debt growth appears to weaken credit growth, which confirms that public debt





‘crowds out’ private debt. Lastly, capital inflows appear to primarily have an income effect, increasing income and thereby national savings, and thus increasing the availability of credit.

Baltagi, Demetriades and Law (2007) using panel data techniques and annual data, proved that trade openness and financial openness together with economic institutions determines the financial development dissimilarity across countries. Their results showed that countries that are least open can benefit greatly in terms of financial development if they open either their trade or capital accounts. These countries can have even greater benefits if they open both, though opening only one can still result in banking sector development. On the other hand, countries that are most open benefit the least from added openness.

### Methodology

The study was based on *ex-post* facto research design. Three univariate models were used in the study. They are specified as follows:

$$1. SMC = \beta_0 + \beta_1 TII + \varepsilon$$

$$2. CPS = \beta_0 + \beta_1 TII + \varepsilon$$

$$3. LADSF = \beta_0 + \beta_1 TII + \varepsilon$$

Where: SMC = Stock market capitalization, CPS = Credit to Private sector, LADSF = Liquid assets to deposits and short term funding, and TII = Total insurance investment,  $\beta_0$  = Constant parameter,  $\beta_1$  = Coefficient parameter,  $\varepsilon$  = Error term.

The models were estimated using Ordinary least square regression.

### Model Specification

#### Dependent Variables

Stock market capitalization to GDP: This is the ratio of aggregate of market value of all publicly traded company's outstanding shares in the Nigerian stock exchange to GDP.

Credit to Private sector to GDP: This refers to the ratio of financial resources (loans, purchases of non-equity securities, and trade credits) provided to the private sector by financial corporations to GDP.

Liquid assets to deposits and short term funding: Liquid assets include cash and due from banks, trading securities and at fair value through income, loans and advances to banks, reverse repos and cash collaterals. Deposits and short term funding includes total customer deposits (current, savings and term) and short term borrowing (money market instruments, CDs, and other deposits).



### Independent variable

Total insurance investment: This is the aggregate of investments made by the insurance industry in Nigeria. It was proxied by ratio of Total insurance investment to GDP.

### Descriptive Statistics

Table 1 Descriptive statistics

	DCPS	DLADSF	DMS	DSMC	DTII
Mean	0.710526	-2.792632	0.573684	-0.971053	0.016368
Median	0.000000	-1.240000	0.800000	-0.510000	0.003400
Maximum	6.500000	6.130000	5.000000	15.92000	0.243000
Minimum	-2.100000	-35.45000	-2.400000	-16.64000	-0.138600
Std. Dev.	2.098384	8.864725	1.745738	7.893858	0.116471
Skewness	1.192166	-2.735273	0.482131	-0.165310	0.716102
Kurtosis	4.144120	10.96163	3.683176	2.946112	2.483470
Jarque-Bera	5.536956	73.87397	1.105587	0.088836	1.835092
Probability	0.062757	0.000000	0.575340	0.956554	0.399498
Sum	13.50000	-53.06000	10.90000	-18.45000	0.311000
Sum Sq. Dev.	79.25789	1414.500	54.85684	1121.634	0.244178
Observations	19	19	19	19	19

The respective standard deviations of the variables in the study were all higher than their respective means. Each was at single digit value, a pointer to their low volatility.

## Unit root test

Table 2

Variable	Calculated value	Order of Integration	Test Critical value	
			1% level	5% level
Stock market capitalization to GDP in Nigeria	-9.497551	1(2)	1% level	-3.857386
			5% level	-3.040391
			10% level	-2.660551
Credit to Private sector to GDP in Nigeria	-9.492700	1(2)	1% level	-3.857386
			5% level	-3.040391
			10% level	-2.660551
Liquid assets to deposits and short term funding in Nigeria	-15.69477	1(2)	1% level	-3.857386
			5% level	-3.040391
			10% level	-2.660551
Total insurance investment	-5.132270	1(2)	1% level	-3.857386
			5% level	-3.040391
			10% level	-2.660551

Source: Author's calculation using Eviews 9

The unit root method used was Phillips Perron. Table 2 shows that all the variables were stationary at second difference.

## Model goodness of fit

Table 3 Coefficient of determination result

Hypothesis	Adjusted R <sup>2</sup>
One	0.072475
Two	-0.016811
Three	-0.050777

Source: Author's compilation using Eviews

From Table 3 a coefficient of determination of 0.072475 shows that only 7.2475 percent of variation in Stock market capitalization to GDP in Nigeria can be explained by model of hypothesis one. 92.7525 percent of such variation can be attributed to other factors other than total insurance investment. With a coefficient of determination of -0.016811 percent only 98.3189 percent variation in Credit to Private sector to GDP in Nigeria cannot be explained by Hypothesis two model. At -0.050777 the coefficient of determination in Hypothesis three shows that the model is only responsible for 5.0777 percent variation in Liquid assets to deposits and short term funding in Nigeria. The remaining 94.9223 percent will be due to other factors.



## Test of Hypotheses

### Statement of the decision criteria

The decision criteria is to accept the null hypothesis if the sign of the coefficient is positive and the p-value  $> 0.05$ , otherwise reject the null hypothesis while accepting the alternate accordingly.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	10.03655	5.338630	1.879986	0.0755
TII	15.70716	9.811674	1.600865	0.1259

Source: Author's calculation using Eviews 9

From Table 4 the regression equation is  $SMC = 10.03655 + 15.70716TII$ . The regression coefficient point out that total insurance investment has a positive relationship with stock market capitalization in Nigeria. In other words, one percent change in total insurance investment will increase stock market capitalization by 1570.716 percent. Table 4 show that p-value was 0.1259. This is higher than the level of significance of 0.05 percent. Based on the Decision rule, we uphold the null hypothesis. Thus, we state that total insurance investment has positive and no significant effect on Stock market capitalization to GDP.

Table 5 Result of Hypothesis two test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	10.60957	3.172363	3.344376	0.0034
TII	4.769980	5.830371	0.818126	0.4234

Source: Author's calculation using Eviews 9

From Table 5 the regression equation is  $SMC = 10.60957 + 4.769980TII$ . The regression coefficient point out that total insurance investment has a positive relationship with Credit to Private sector to GDP in Nigeria. In other words, one percent change in total insurance investment will increase Credit to Private sector to GDP by 1570.716 percent. Table 5 show that p-value was 0.4234. This is higher than the level of significance of 0.05 percent. Based on the Decision rule, we uphold the null hypothesis. Thus, we state that total insurance investment has positive and no significant effect on credit to private sector.



Table 6 Result of Hypothesis three test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	51.01200	12.60798	4.046010	0.0007
TII	4.243272	23.17174	0.183123	0.8566

Source: Author’s calculation using Eviews 9

Table 6 shows its regression coefficient as  $LADSF = 51.01200 + 4.243272TII$ . It establishes a positive relation between total insurance investment and Liquid assets to deposits and short term funding in Nigeria. Therefore, a percentage change in total insurance investment in Nigeria will lead to 424.3272 percent increase in Liquid assets to deposits and short term funding in Nigeria. The p-value is at 0.8566 which is higher than the level of significance of 0.05 percent. Given the decision rule the null hypothesis is taken. Thus, we state that total insurance investment has positive and no significant effect on Liquid assets to deposits and short term funding.

**Discussion of Findings**

The findings of the study point out that there was statistical insignificance in all hypotheses tests. This implies that at p-value of 0.1259 the probability that the effect of total insurance investment positively affects stock market capitalization to GDP in Nigeria was by chance is only 12.59 percent. At p-value of 0.4234 the probability that the effect of total insurance investment positively affects Credit to Private sector to GDP in Nigeria was by chance is only 42.34 percent. The p-value of 0.8566 shows the probability that the effect of total insurance investment positively affects Liquid assets to deposits and short term funding in Nigeria was by chance is only 85.66 percent.

The insignificant effect means that total insurance investment will not exert an appreciable influence in facilitating financial development in Nigeria. That is to say, investments made by the insurance industry do not promote a meaningful growth in financial development. The industry’s institutional effect on financial development in Nigeria is not strong. However, the positive nature of the coefficients puts the industry in a position to have direct effect on financial development.

The findings of the study were in line with Ubom (2014) who found Insurance firms were not making any significant influence on economic development in the country. Also, the study agrees with Baltagi, Demetriades and Law (2007) that economic institutions determine the financial development dissimilarity across countries.

**Conclusion and Recommendations**

Based on the findings of the study it is concluded that despite the increasing volume of investments made by the insurance industry in the Nigerian economy there has not been a commensurate significant effect on the depth of financial development in the country. Therefore, it is recommended that:



1. The insurance industry needs to widen the spread of its investments in financial instruments. Particularly, the industry should invest in bonds major bond returns both within and outside the Nigeria economy.
2. Through its Life policies more policy loans should be used to advance loans to the private sector.
3. Added efficiency in claims settlement through adoption of global insuretech best practices will improve the industry's capacity to stabilize the financial position of individuals and firms on short term.

### **References**

- Anchang (2016). *The institutional determinants of financial development: evidence from the Southern African Development Community (SADC)*. Thesis submitted in accordance with the requirements for the degree of Doctor of Commerce in the subject Economics at the University of South Africa
- Astana (2014). Concept for the Financial Sector Development of the Republic of Kazakhstan till 2030
- Ayadi, R., Arbak, E., Naceur, S. B.& De Groen, W. P. (2013). Determinants of Financial Development across the Mediterranean, *MEDPRO Technical Report No. 29*. Retrieved from [www.medpro-foresight.eu](http://www.medpro-foresight.eu) on June 23, 2018
- Baltagi, B. H., Demetriades, P. O. & Law, S. H. (2009). Financial development and openness: Evidence from panel data. *Journal of development economics*, 89 (2); 285-296.
- Demetriades, P. O. (2008). *New perspectives on finance and growth, keynote address at a conference on Financial Development and Economic Growth* organised by the Department of Economics and the Asian Business and Economics Research Unit at Monash University
- Diamond, D.W. (1984). Financial intermediation and delegated monitoring. *Review of Economic Studies*, 51, 393-414.
- Egbeonu, O. C. (2016). Insurance investment portfolio and economic development in Nigeria: a co-integration analysis (1996 – 2013). *International Journal of Advanced Academic Research Social & Management Sciences*. 2(5); 22-31
- Greenwood, J. & B. D. Smith. (1997). Financial markets in development, and the development of financial markets. *Journal of Economic Dynamics and Control*, 21, 145-81.
- Greenwood, J. and B. Jovanovic. 1990. Financial development, growth, and the distribution of income. *Journal of Political Economy*, 98, 1076-1107.



- Khalfaoui, K. (2015). The Determinants of Financial Development: Empirical Evidence from Developed and Developing Countries, *Applied Economics and Finance*, 2(4); 1-9
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A. & Vishny, R.W. (1997). Legal Determinants of External Finance, *Journal of Finance*, 52(3); 1131-1150.
- Levine, R. (2005). *Finance and Growth: Theory and Evidence*, Chapter 12, Handbook of Economic Growth, Volume 1A
- Levine, R. & Renelt, D. (1992). A sensitivity analysis of cross-country growth regressions. *American Economic Review*, 82, 942-63
- Mbulawa, S. (2015). Determinants of financial development in Southern Africa Development Community (SADC): Do institutions matter? *European Journal of Accounting Auditing and Finance Research*, 3(6), 39-62
- Merton, R.C., & Bodie, Z. (1995). *A conceptual framework for analyzing the financial environment*, In: Crane, D.B., et al. (Eds.), *The Global Financial System: A Functional Perspective*. Harvard Business School Press, Boston, MA
- Njimanted, G. F., Ngwengeh, B. B. & Mobit, M. O. (2016). An Assessment of the Determinants of Financial Market Development in Cameroon. *Global Advanced Research Journal of Economics, Accounting and Finance*, 4(1); 001-010
- Nwani, Iheanacho, Okogbue and McMillian (2016). Oil price and the development of financial intermediation in developing oil-exporting countries: Evidence from Nigeria. *Cogent Economics and Finance*, 4(1)
- Oke, M.O. (2012). Insurance sector development and economic growth, in Nigeria. *African Journal of Business Management*, 6 (23), 7016 – 7023
- Takyi, P. O. & Obeng, C. K. (2013). Determinants of financial development in Ghana. *International Journal of Development and Sustainability*, 2 (4); 2324-2336
- Torbira, L. L. & Ogbulu, O. M. (2014) Fund Mobilization by Insurance Companies and Fixed Capital Formation: Evidence from the Nigerian Economy. *International Journal of Financial Research*, 5 (2), 69-78
- Ubom, U. B. (2014). Investment Portfolio of Insurance Firms and Economic Development in Nigeria. *International Journal of Finance and Accounting*. 3(5): 286-294