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### FOREIGN CAPITAL INFLOWS AND NIGERIAN ECONOMIC GROWTH NEXUS: A TODA YAMAMOTO APPROACH

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**ABSTRACT:** This study investigated the relationship between foreign capital inflows and economic growth in Nigeria for the period of 1981-2014. In this study, foreign capital inflows were proxied by Foreign Direct Investment, Foreign Portfolio Investment and Foreign Aid while economic growth was proxied by Gross Domestic Product (GDP). The study employed annual data generated from CBN statistical bulletin, and Toda Yamamoto test of causality was used to determine the relationship between foreign capital inflow and economic growth in Nigeria. The result revealed that there is bi-directional causality running from GDP to FDI as well as from FDI to GDP. It also indicates that there is a unidirectional causality between FPI and GDP with causation running from FPI to GDP. Furthermore, the result showed a unidirectional causality between all the components of foreign capital inflow i.e. FDI, FPI, FA and GDP indicates that increase in foreign capital inflow causes GDP to increase positively. And so, government should design policies and programs to enhance the inflows of foreign capital as the will accelerate the speed of growth in the economy.

KEYWORD: Foreign Capital Inflows, Toda Yamamoto, Economic Growth.

## **INTRODUCTION**

In recent time, finance and economic literatures have sought to ascertain the determinants of growth, especially in the emerging and developing economies of the world. Quite a number of the studies have come to discover that there exist a positive and direct relationship between growth and the various indicators of external capital inflow. Jointly, these indicators, among other factors, translate into economic growth, boost the development process, and improve standard of living of the citizenry if properly harnessed. It is evident that developing countries make concerted efforts to stimulate growth by tapping into such economic opportunities and harnessing them in order to foster sustained growth and overall welfare, and development. Hence, it is widely acknowledged that nations formulate and implement policies that will encourage the smooth inflow of capital as well as creating a conducive environment for its growth and viability. Due to the dynamism of the core economic underpinnings, modern methods are continuously being explored to attain these goals. One of the measures is to open the trade among nations and accelerate the smooth flow of foreign direct investment. However, it will be remiss not to emphasize that stable economic and political environment in a host country go a long way in attracting the inflow of foreign direct investment (Ramzan and Kiani, 2012).

Shafi, (2014) maintains that, besides researchers, the link between foreign direct investment and economic growth has also been broadly examined by practitioners and policy-makers. Various views emanating from such studies are based on the neoclassical theory or on new theory of economic growth, which is an economic theory founded on absolute optimism and progressive line of thought (Wan, 2010). Researchers and policymakers generally agree that FDI promotes

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economic growth of host countries through different ways. FDI enhance the growth of capital stock and increase employment. Technological change can be also stimulated through the technological transfers and the absorption of know-how which further enhances the process of competition (Khan, 2007). This can be achieved through employee training, licensing agreements and imitation. Bilateral or multilateral cooperation among trading nations necessitate the introduction of innovative ways of doing things, and products by overseas firms (Wan, 2010). Expectedly, the existing stock of knowledge of the host country can also be vastly promoted, which will go a long way in accelerating growth and development.

Chenery and Strout (1966) write that economists have come to understand that a huge savingsinvestment gap exists in developing countries. In fact, this has led to the arguments that external financing is very critical for the sustained growth of developing countries like Nigeria. It is has become evident that by gaining access to the global financial market, and continuous increase in foreign aids and direct investments, this substantial gap can be narrowed down significantly, or even wiped out. Liquidity and flexibility in world financial market and instrument is a major boost to considerable capital import. In his own contribution, Easterly, (1999) buttresses that such capital imports can come by ways of concessional lending, foreign direct investment, and foreign portfolio investment by foreigners. So far, it can be adduced that the major factor promotes economic globalization is the flow of foreign capital. The globalization process equally gives rise to vast consumer market, which, in principle, leads greater economies of scale alongside cost efficiency in these countries. Given that domestic resources are often insufficient to enhance growth among developing countries, foreign capital inflow has been relied upon to complement the domestic fortune, which will collectively stimulate economic growth and development.

## **REVIEW OF RELATED LITERATURE**

Various studies have sought to examine the relationship between foreign capital inflow and economic growth. However, from the observations thereof, the result and findings of those earlier studies differ. Nonetheless, this has ignited even more interest in the subject. One of the reasons for such growing attention is that there remains strong a priori expectation that the nexus between capital inflow and growth is not only direct but positive. Due to the position of developing countries in the global economies, it became evident that foreign capital inflow is not only critical but very indispensible in engineering economic growth.

Ramzan and Kiani, (2012), in their empirical study, used the econometric technique of Error Correction Methods (ECM) in analyzing the relationship between FDI, trade openness and economic growth in Pakistan. As a necessity, the study employed annual data set covering the period 1975 – 2011, while employing the Augmented Dicky Fuller (ADF) to test for unit root on each of the variables unit. The findings explained that FDI and trade advance growth of real sector of economy of Pakistan. In a related study, Khan and Khan (2011) empirically studied the nexus between industry-specific Foreign Direct Investment and output over the period 1981-2008. The Granger Causality and Panel Co-integration for Pakistan were utilized. The results revealed that FDI has a positive effect on real output in the long run. Moreover, the result also revealed the evidence of long-run relationship that trend from GDP to FDI. However, in the short run, there was evidence of two-way causality between FDI and gross domestic product. Kim and Bang (2008) conducted a similar study on the link between FDI and economic growth in Ireland. The empirical results found significant positive impact of foreign direct investment on economic

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growth in both short run and long run. Granger causality results indicated that foreign direct investment granger causes economic growth.

Nkoro and Uko, (2013) evaluated the nature of causality between foreign capital inflows and real economic growth and also, the effect of foreign capital inflows on GDP in Nigeria. The result of the variance decomposition was in consonance with that of cointegration analysis of causality, which revealed that causality runs from foreign direct investment (FDI) and foreign aid to real GDP (growth). In addition, the result of the error correction model indicated that there is a significant positive effect of FDI on real GDP. Duasa, (2007) utilized GARCH and pairwise granger causality tests to ascertain the impact of FDI on the stability of GDP, and causal link between FDI and economic growth respectively. The result revealed that there is no strong causal relationship between FDI and economic growth. But it was observed that foreign direct investment flows contributes negligibly to the instability of economic growth and vice versa. Hence, in Malaysia, according to the study, FDI does not granger cause economic growth although it does provide stability it.

Kolawole, (2013) evaluated the impact of official development assistance (ODA) and foreign direct investment (FDI) on real GDP in Nigeria between 1980 and 2011. The study employed the Two-Gap model and some other econometric techniques comprising Augmented Dickey Fuller (ADF) test, Pairwise Granger causality test, Johansen cointegration test and Error Correction Method (ECM). From the empirical results, it was discovered that there is nocausality between any pair of the variables. Findings further revealed a negative relationship between FDI and real growth as ODA has negative impact on real GDP in the Nigeria. In contrast, Oyatoye et al (2011), examining foreign direct investment, export and economic growth in Nigeria, revealed the existence of positive relationship between direct foreign investment and real gross domestic product in Nigeria. The results of studies of Nkoro & Furo (2012) and Fasanya & Onakoya (2012) on the capital inflows-Growth nexus equally established that there is positive and significant impact of foreign aids on economic growth in Nigeria. Ayanwale (2007) examined the determinants of foreign direct investment inflow to Nigeria found that market size, infrastructure development and stable macroeconomic policy are the determinants of FDI to Nigeria. He further disclosed that, from the result, there exist a positive link between FDI and GDP growth in Nigeria.

Roy and Berg (2006) used the time-series approach to ascertain whether FDI inflows promoted growth of the U.S. economy. Evidence from the simultaneous-equation model showed that there is bidirectional relationship between FDI and economic growth in U.S. it was also found that FDI have a positive and significant impact on U.S. economic growth. Interestingly, the simultaneous-equation model estimates pointed that FDI growth is income inelastic. the results indicates that a developed country such as the U.S. also benefits from FDI and therefore suggested that economic policies should focus key factors that would attract foreign direct investors. In contrast, Akinlo (2004), in his study, revealed that foreign capital has a small and statistically insignificant effect on economic growth in Nigeria.

Okodua, (2009) examined the FDI-growth relationship in Nigeria using the Johansen cointegration framework and a multivariate VAR within a VEC model. It was revealed that a longrun equilibrium relationship exists between economic growth and FDI inflows, and that a unidirectional causality runs from FDI to economic growth. And while investigating the determinants of foreign direct investment in Nigeria, Wafur and Nurudeen (2010) utilized an error correction technique to analyze the relationship between foreign direct investment and its determinants. The results reveal that the host country's market size, deregulation, political

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stability, and exchange rate depreciation are the key determinants of foreign direct investment in Nigeria.

Adegboye, Ogbebor and Egharvba (2014) empirically examined the dynamic relationships existing between economic growth and the foreign capital factors of foreign direct investment (FDI), external debt and short term capital inflows. Results from the empirical analysis indicated that the categorization of foreign capital inflows into direct and foreign portfolio investment has significant relevance with regards to their effect on economic growth in Nigeria. It is also revealed that external debt has the strongest impact on economic growth in Nigeria compared to the foreign capital factors. Mutascu (2011) evaluated the relationship between economic growth and FDI for Asian countries using the Panel data approach. They analyzed data of 23, covering the period 1986 - 2008. They observed that foreign direct investment and exports stimulate the growth process.

Umoh, Jacod and Chuku, (2012) empirically investigate the relationship between foreign direct investment and economic growth in Nigeria between within the period 1970 and 2008. Single and simultaneous equation systems were employed to determine if any kind of feed-back relationship exist between FDI and economic growth in Nigeria. The results obtained revealed that FDI and economic growth are jointly determined in Nigeria and there is positive feedback from FDI to growth and from growth to FDI, hence a bi-directional causality between the variables.

## METHODOLOGY

The main objective of this study is to establish the direction of causation between foreign capital inflows proxied by (Foreign direct Investment, Foreign Portfolio Investment and Foreign Aid) and economic growth in Nigeria. And to achieve this, the main econometric technique adopted was developed by Toda and Yamamoto (1995). The data employed in this study was secondary data sourced from Central Bank of Nigeria (CBN) Statistical Bulletin and World Bank data base. The study covered a period of 1989 to 2014 and relevant data was also generated for this period. The most suitable research design for this study is the *ex-post facto* research design. This was employed because the data used for the study does not provide a platform for any form of manipulation by the researcher.

## **Model Specification**

The model employed in establishing the direction of causality between Foreign Direct Investment (FDI), Foreign Private Investment (FPI), Foreign Aid (FA) which are used as proxies for foreign capital inflow and economic growth proxied by GDP is Toda Yamamoto causality test. This model was adopted from the work of Yamane (2005), who examined the relationship between Energy demand and economic growth with a particular emphasis on 19 African countries and modified to suit our study. The model for this study is a VAR stated in matrix form as follows:

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$$\begin{bmatrix} GD\dot{P}_{t} \\ FDI_{t} \\ FPI_{t} \\ FA_{t} \end{bmatrix} = \begin{bmatrix} \beta_{10} \\ \beta_{20} \\ \beta_{30} \\ \beta_{40} \end{bmatrix} + \sum_{i=1}^{k} \begin{bmatrix} \beta_{11,i} & \beta_{12,i} & \beta_{13,i} & \beta_{14,i} \\ \beta_{21,i} & \beta_{22,i} & \beta_{23,i} & \beta_{24,i} \\ \beta_{31,i} & \beta_{32,i} & \beta_{33,i} & \beta_{34,i} \\ \beta_{41,i} & \beta_{42,i} & \beta_{43,i} & \beta_{44,i} \end{bmatrix} \begin{bmatrix} GDP_{t-1} \\ FDI_{t-1} \\ FA_{t-1} \end{bmatrix} + \sum_{j=1}^{d_{max}} \begin{bmatrix} \beta_{11,k+j} & \beta_{12,k+j} & \beta_{13,k+j} & \beta_{14,k+j} \\ \beta_{21,k+j} & \beta_{22,k+j} & \beta_{23,k+j} & \beta_{24,k+j} \\ \beta_{31,k+j} & \beta_{32,k+j} & \beta_{33,k+j} & \beta_{34,k+j} \\ \beta_{31,k+j} & \beta_{32,k+j} & \beta_{33,k+j} & \beta_{34,k+j} \\ \beta_{41,k+j} & \beta_{42,k+j} & \beta_{43,k+j} & \beta_{44,k+j} \end{bmatrix} \begin{bmatrix} GDP_{t-k-j} \\ FDI_{t-k-j} \\ FPI_{t-k-j} \\ FA_{t-k-j} \end{bmatrix} + \begin{bmatrix} \varepsilon_{1} \\ \varepsilon_{2} \\ \varepsilon_{3} \\ \varepsilon_{4} \end{bmatrix}$$

Where,

 $GDP_t = Gross$  Domestic Product at time t FDI<sub>t</sub> = Foreign Direct Investment at time t FPI<sub>t</sub> = Foreign Private Investment at time t FA<sub>t</sub> = Foreign Aid at time t

K = the optimal lag length ranging from i=1,2,3.....  $\beta_{10}$ ,  $\beta_{20}$ ,  $\beta_{30}$ , and  $\beta_{40}$  are the constant term  $\beta_{11,t}$ ,  $\beta_{12,t}$ ,  $\beta_{13,t}$ ,  $\beta_{14,t}$ .....  $\beta_{44,t}$  are the coefficients of the variables taking into consideration the lag length.

 $GDP_{t-1} = Gross Domestic Product at time t-1$   $FDI_{t-1} = Foreign Direct Investment at time t-1$   $FPI_{t-1} = Foreign Private Investment at time t-1$   $FA_{t-1} = Foreign Aid at time t-1$  $d_{max} = the maximum order of integration. j = 1,2,.....$ 

 $\beta_{11,k+j} \beta_{12,k+j} \beta_{13,k+j} \beta_{14,k+j} \dots \beta_{44,k+j}$  are also the coefficients of the variables taking into consideration the lag length and the maximum order of integration.

 $GDP_{t-k-j} = Gross Domestic Product at time t-k-j$   $FDI_{t-k-j} = Foreign Direct Investment at time t-k-j$   $FPI_{t-k-j} = Foreign Private Investment at time t-k-j$   $FA_{t-k-j} = Foreign Aid at time t-k-j$  $C_1, C_2, C_3 and C_4 are the error terms or the stochastic terms$ 

#### TEST OF CAUSALITY USING MODIFIED WALD TEST STATISTIC (MWTS)

To test the causality running from GDP to FDI

$$H_0^{GDP_t \Rightarrow FDI_t}: \beta_{21,1} = \beta_{21,2} = \dots = \beta_{21,K} = 0$$

To test the causality running from GDP to FPI

$$H_0^{GDP_t \Rightarrow FPI_t}: \boldsymbol{\beta}_{31,1} = \boldsymbol{\beta}_{31,2} = \cdots = \boldsymbol{\beta}_{31,K} = \mathbf{0}$$

To test the causality running from GDP to FA

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$$H_0^{GDP_t \Rightarrow FA_t}: \beta_{41,1} = \beta_{41,2} = \dots = \beta_{41,K} = 0$$

To test the causality running from FDI to GDP

$$H_0^{FDI_t \Rightarrow GDP_t}: \boldsymbol{\beta}_{12,1} = \boldsymbol{\beta}_{12,2} = \cdots = \boldsymbol{\beta}_{12,K} = \mathbf{0}$$

To test the causality running from FPI to GDP

$$H_0^{FPI_t \Rightarrow GDP_t}: \beta_{13,1} = \beta_{13,2} = \dots = \beta_{13,K} = 0$$

To test the causality running from FA to GDP

$$H_0^{FA_t \Rightarrow GDP_t}: \beta_{14,1} = \beta_{14,2} = \dots = \beta_{14,K} = 0$$

To test the causality running jointly from FDI, FPI and FA to GDP

$$H_0^{fDI_t, FPI_t \& FA_t \Rightarrow GDP_t} : \beta_{12,1} = \beta_{12,2} = \dots = \beta_{12,K} = \beta_{13,1} = \beta_{13,2} = \dots = \beta_{13,K} = \beta_{14,1} = \beta_{14,2} = \dots = \beta_{14,K} = 0$$

## **TECHNIQUES OF DATA ANALYSIS**

The procedure for Toda Yamamoto (T-Y) test of causality begins with the test of stationarity using Augmented Dickey-Fuller test to establish the order of integration in the variables under consideration. This is to determine the maximum order of integration (d<sub>max</sub>) as T-Y test will consider all the variables irrespective of their order of integration. Having determined the maximum order of integration, the next step in the T-Y test is to state a VAR model at level without any consideration on the order of integration. And so, running the VAR model at level form we then determine the optimum lag length (k) using some of the information criteria such as Akaike Information criterion (AIC), Hannan-Quinn information criterion (HQ), Schwarz Information Criterion (SIC) and Final prediction error (FPE). To ensure that the VAR model is well behaved, we test for VAR residual serial correlation using LM-stat as well as VAR residual normality tests. When the test of stationarity indicates that two or more variables are integrated of the same order, a co-integration test will be conducted, this approach does not change the existing procedure in T-Y test as the test for co-integration is only done for the purpose of crosschecking the result of T-Y test if need be. When there is co-integration among the variables, it is important to note that the result of T-Y test must show evidence of causation between the variables otherwise something is wrong with the specification of VAR model. No matter what the conclusion about co-integration is, it is not going to affect what follows in T-Y test procedures. It just provides a possible cross-check on the validity of the results at the very end of the analysis. Therefore, having estimated the preferred VAR model, the maximum order of integration is added to the optimum lag length in each of the variables in the equation. Finally, to draw valid casual inferences, T-Y test procedure utilizes a modified Wald test statistic (MWTS) restricting the parameters of k<sup>th</sup> optimal lag order of the vector autoregressive. The MWTS statistic has an asymptotic chi-square distribution when VAR (k+d<sub>max</sub>) is estimated. The MWTS test the hypothesis that the coefficients of (only) the first K lagged values of X are zero in the Y-equation, using a standard Wald test. Then do the same thing for the coefficients of the lagged values of *Y* in the X-equation.

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### **Model Justification**

The Granger causality proposed by Granger (1969) has probable shortcomings of specification bias and spurious regression. Engel and Granger (1987) have defined X and Y as being cointegrated if the linear combination of X and Y is stationary but each variable is not always stationary. Engel and Granger (1987) pointed out that while these two variables are nonstationary and co-integrated, the standard Granger -causal inference will be invalid. On the other hand, the ordinary granger causality test can only be carried out between variables that are integrated of the same order one I(1) in which the variables are not always integrated of the same order one. To mitigate these problems, Toda and Yamamoto (1995) and Dolado and Lutkepohl (1996) developed a procedure based on augmented VAR modeling, by introducing a modified Wald test statistic (MWALD). This procedure has been found to be superior to ordinary Granger - causality tests since it does not require pre-testing for the co-integrating properties of the system and thus avoids the potential bias associated with unit roots and co-integrated or co-integrated of an arbitrary order.

# DATA ANALYSIS

The analysis of the data commenced with a test for stationarity using ADF test statistic. The result indicates that FDI and FA are integrated of order one I(1) while GDP and FPI are integrated of order zero I(0) see table 1. Based on this result, the maximum order of integration is one  $(d_{max}=1)$ . The result of the VAR lag order selection indicates that the maximum lag length is 4 using both AIC, SIC, FPE and HQ information criteria see table 2. Based on this result, the optimum lag length is 4 (k=4).

	ADF test statistic (level)	ADF test statistic (1 <sup>st</sup> defference)	Test critical values 5% level	Order of integration	Remarks
Gdp	3.373140	-	-2.954021	I(0)	Stationary
Fdi	-0.267300	-8.047187	-2.954021	I(1)	Stationary
Fpi	3.411020	-	-2.954021	I(0)	Stationary
fa	-0.423455	-4.987087	-2.954021	I(1)	Stationary

## **TABLE 1: RESULT OF ADF TEST**

Source: Eview result

## Table 2: VAR LAG ORDER SELECTION CRITERIA

Endogenous variables: GDP FDI FPI FA Exogenous variables: C Date: 01/08/16 Time: 10:44 Sample: 1980 2014

		23				
Lag	LogL	LR	FPE	AIC	SC	HQ
0	-1360.158	NA	2.92e+42	109.1326	109.3276	109.1867
1	-1263.209	155.1178	4.60e+39	102.6567	103.6318	102.9272
2	-1207.997	70.67168	2.24e+38	99.51974	101.2749	100.0066
3	-1121.585	82.95539	1.10e+36	93.88679	96.42205	94.58997
4	-1063.055	37.45897*	7.67e+34*	90.48442*	93.79976*	91.40396*
	_					

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Source: Eview result. \* indicates lag order selected by the criterion

The result of the test for VAR residual serial correlation using LM test indicates that there is no serial autocorrelation in the model. This however implies that the variables included in the VAR model are well behaved, implying that the result of the VAR model has a high predictive ability; it also shows that the result can be relied on in making forecasting. The result in the table below showed a probability value greater than 0.05 and so, we cannot reject the null hypothesis which states that there is no serial correlation in the model.

# **TABLE 3: LM TEST FOR SERIAL AUTOCORRELATION**

VAR Residual Serial Correlation LM Tests Null Hypothesis: no serial correlation at lag order h Date: 01/08/16 Time: 11:24 Sample: 1980 2014 Included observations: 27

Lags	LM-Stat	Prob
1	53.20195	0.85190
2	51.85067	0.19501
3	61.29810	0.27354
4	48.78046	0.59425

Probs from chi-square with 16 df.

Having determined the maximum order of integration and the optimum lag length, with the result of VAR residual serial correlation and normality indicating that the variables are well behaved, we ignored the test for co-integration as it will not affect any of the T-Y test procedures. The modified Wald test statistic was conducted with the addition of the optimum lag length with the maximum order of integration ( $k+d_{max}$ ) in each of the exogenous variables included in the model. It is important to note that the k=4, while  $d_{max}=1$ . The result of the T-Y test using modified wald test statistic is presented on the table 4 below.

VARIABLES	Chi-sq	Df	Prob.
GDP TO FDI	25.68494	4	0.0000
FDI TO GDP	39.67202	4	0.0000
GDP to FPI	3.137098	4	0.5352
FPI to GDP	570.2485	4	0.0000
GDP to FA	7.839893	4	0.0976
FA to GDP	90.11931	4	0.0000
GDP to FDI, FPI and FA	171.6685	12	0.0000

### **Table 4: BLOCK EXOGENEITY WALD TESTS**

Source: Extracted from Eview result

The result of the wald test as shown in table 4 above indicates that there is a bi-directional causality between GDP and FDI. This however implies that increase in economic growth will lead to increase in FDI inflow to the host country, the same is the case with increase in FDI. Meaning that and increase in the inflow of FDI causes GDP to increase positively. This however conforms to the endogenous growth theory. This result is inconsistent with the findings of Duasa, (2007) who employed ordinary granger causality in evaluating the relationship between FDI and growth and found evidence of no-causation between the variables under consideration. The result also reveals that there is a unidirectional causality between GDP and FPI with causation running from FPI to GDP. This however implies that increase in FPI causes GDP also to increase. The result also reveals that there is a unidirectional causality between GDP and FA with causation running from FA to GDP indicating that a change in FA will cause GDP to also change positively. This result negates the findings of Kolawole, (2013), who examined the relationship between official development assistant (ODA), FDI and economic growth and found no causation between the variables. The joint causation between GDP and all the components of foreign capital inflow included in the model shows that increase in foreign capital inflow causes GDP to increase as well. This result corroborated the findings of Nkoro and Uko, (2013) who evaluated the nature of causality between foreign capital inflows and real economic growth in Nigeria. They concluded in their study that causality runs from foreign direct investment (FDI) and foreign aid to real GDP (growth).

## CONCLUSION

The study investigated the relationship between foreign capital inflow and economic growth in Nigeria by adopting FDI, FPI and FA as proxies for foreign capital inflow while GDP was employed as a proxy for growth. The study employed Toda Yamamoto causality test and found that there is bi-directional causality running from GDP to FDI as well as from FDI to GDP. The result also revealed that there is a unidirectional causality between FPI and GDP with causation running from FPI to GDP. Furthermore, the result showed a unidirectional causality between GDP and FA with causation running from FA to GDP. Finally the joint causation between all the components of foreign capital inflow i.e. FDI, FPI, FA and GDP indicates that increase in foreign capital inflow causes GDP to also increase positively. Based on this result, we recommend that government should design policies and programs that will enhance the inflow of foreign capital into the country like tax reliefs to foreign investors so as to encourage them to invest in Nigeria. Concerted effort should be made to cob insecurity ravaging the nation,

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instigated by the Boko-Haram sect in the northern part of the country as well as the debilitating and distorting civil and criminal rampage by the insurgent group in the Niger-Delta. More so, government and monetary authorities should develop economic and financial policies that will stimulate other sectors of the Nigerian economy like Mining and Agriculture by increasing budgetary allocation to these potential growth sectors as well as sectorial allocation of bank credit to growth potential sectors of the Nigerian economy.

### REFERENCES

- Adegboye, A. C., Ogbebor, O. A., and Egharvba, M. I. (2014). External capital flows and economic growth in Nigeria. *JORDIN 12(2)*. www.transcampus.org/journals.
- Akinlo, A.E. (2004), "Foreign direct investment and growth in Nigeria: An empirical investigation", *Journal of Policy Modelling*, 26, 627-639.
- Ayanwale B. Adeolu (2007). "FDI and economic growth: Evidence from Nigeria.". African Economic Research Consortium, Nairobi. AERC Research Paper 165.
- Chenery, H. B. and Stout, A. (1966). Foreign assistance and economic development. *The American Economic Review*, 55, 679-733.
- Duasa, J. (2007). Malaysian foreign direct investment and growth: does stability matters? *Journal of Economic Corporation, 28, 83-98.*
- Fasanya, I.O. and Onakoya, A.B. (2012). Does Foreign Aid Accelerate Economic Growth? An Empirical Analysis for Nigeria. *International Journal of Economics and Financial Issues*, 2(4), 423-431.
- Khan, M. A. (2007). "Trade Liberalization, Financial development and economic growth". *Pakistan Institute of Development Economics Working Paper*.
- Kolawole, B. O. (2013). Foreign assistance and economic growth in Nigeria: The Two-Gap model framework. *American International Journal of Contemporary Research*, 3(10).
- Nkoro, E. and Furo, A.O. (2012). foreign capital inflows and economic growth in Nigeria: An Empirical Approach. *Academic Journal of Interdisciplinary Studies*, 1(2).
- Nkoro, E., and Uko, A. K. (2013). Foreign capital inflows and economic growth in Nigeria: An empirical approach. *Asian Journal of Empirical Research* 2(5):149-161
- Okodua, H (2009). Foreign direct investment and economic growth: Co-Integration and causality analysis of Nigeria, *The African Finance Journal*, 11(1), 29–45.
- Oyatoye, E.O., Arogundade, K.K., Adebisi, S.O., and Oluwakayode, E.F. (2011). Foreign Direct Investment, Export and Economic Growth in Nigeria. *European Journal of Humanities and Social Sciences*, 1(2).
- Ramzan, 1., and Kiani, A. K. (2012). Analyzing the relationship between FDI, Trade Openness and Real Output Growth: An ECM Application for Pakistan. *International Journal of Basic And Applied Science*, 1(2).
- Roy, A. G., and Berg, H. F. (2006), "Foreign direct investment and economic growth: A time-Series approach", *Global Economy Journal, Volume 6, Issue 1 2006 Article 7.*
- Shafi, M. (2014). Relationship between fdi inflows and economic growth: A review. Singaporean Journall of Business Economics, and Management Studies, 2(9).
- Umoh OJ, Jacob AO, Chuku AC (2012). Foreign direct investment and economic growth in Nigeria: An analysis of the endogenous effects. *Current Research. Journal of economic theory*, 4(3): 53-66.
- Wafure OG, Nurudeen A (2010). Determinants of foreign direct investment in Nigeria: An empirical analysis. *Glob. J. Hum. Soc. Sci.* 10(1): 26-34.

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Wan, X. (2010). "A literature review on the relationship between foreign direct investment and economic growth." *International Business Research*, *3*(1).