### FOREIGN DIRECT INVESTMENT, FINANCIAL DEVELOPMENT AND ECONOMIC GROWTH IN KEY EMERGING MARKETS

Ashakah Onoriode Felix\*

Department of Economics, Western Delta University, Oghara, Delta State, Nigeria Email: ashakah.felix@wdu.edu.ng GSM: +2348033955998

And

#### **Ogbebor Timothy Ogieva**

Department of Economics, University of Benin, Benin City, Edo State, Nigeria Email: timogbegor@yahoo.co.uk GSM: +2348033932934

#### Abstract

This paper investigated the impact of foreign direct investment on economic growth and the role of financial development in absorbing the positive effects of foreign direct investment in key emerging markets using the fixed and random effects regression models. The study analysed data from twenty-four emerging markets from 1990 to 2018. The empirical results revealed that foreign direct investment was a major driver of growth in the emerging markets as the coefficient of FDI was positively and significantly related to economic growth in the emerging markets. The results further showed that financial development and an interaction term between FDI and financial development had negative influence on growth in the emerging markets. The paper recommended that governments should make effort to formulate and implement investment friendly policies in the emerging markets to attract high inflows of FDI. The paper further recommended that governments in the emerging markets should strive to formulate and implement financial development.

Keywords: FDI, Financial Development, Economic Growth, Emerging Market, Fixed Effect,

JEL Classification: F21, F43, G15, G24,

#### 1. Introduction

Foreign direct investment (FDI) creates spillover effects in terms of technology and managerial transfers in addition to its contribution to capital accumulation to exert positive effect on economic growth in the domestic economy. The existing literature on foreign direct investment (FDI) confirms that FDI's positive impact on growth depends on absorptive capacities of the recipient country. Prominent amongst these capacities needed for FDI to strive is financial development (Hermes & Lensink, 2003; Lee & Chang, 2009; Omran & Bolbol, 2003; Sirang & Sidahmed, 2018; Waliu, 2017). It is widely believed that a more

developed financial system positively contributes to the process of technological diffusion associated with FDI inflows. FDI inflows increase the host country's capital stock, labour and knowledge capital (Hermes & Lensink, 2003). However, a neoclassical economist (Solow, 1956) concluded that improved capital stock was unconnected to long run growth due to diminishing returns, but the endogenous growth models linked the importance of FDI to economic growth (Waliu, 2017).

FDI exercises demonstration, competition and linkages effects on domestic producers which induce them to invest in new technologies and practices in order to increase productive output. This requires that new and potential entrepreneurs who do not have enough internal funds may access the services of the financial institutions for financial supports for loans. The development of the domestic financial institutions is very crucial in determining to what extent foreign firms can borrow to enable them to expand their innovative activities in the domestic economy (Rajan and Zingales, 1998; Hermes and Lensink, 2001). To this end, the government formulates economic policies that aim at promoting financial development at the same time attracting FDI to the domestic economy.

The purpose of this study is to empirically investigate the impact of FDI on economic growth in key emerging markets contingent on the role of financial development for the period of 1990–2018. Some empirical studies postulate that FDI promotes growth only when the host country's financial sector is relatively developed (Hermes & Lensink, 2003; Lee & Chang, 2009; Omran & Bolbol, 2003). Majority of the Studies focusing on emerging markets examined the role of FDI in influencing economic growth. This study has added to the existing literature by examining the interlinked impact of FDI and financial development on growth in the emerging markets. Also, to the best knowledge of the authors, no other study has employed the fixed and random effect models in examining the impact of FDI on economic growth contingent on financial development in the emerging markets.

The remaining part of the paper is organised as follows: Section 2 reviews related conceptual, theoretical and empirical literature. Section 3 describes the methods of estimation and the data. Section 4 presents the results of data analysis and discussion. Section 5 contains conclusion and policy recommendations, while section 6 presents the reference list.

### 2. Literature Review

The review covers the conceptual literature, theoretical literature and empirical literature.

### **2.1.Conceptual Literature**

In this study, three main concepts are identified; foreign direct investment, financial development and economic growth. Each of these three concepts is carefully discussed in the following sub-sections.

# 2.1.1. Foreign Direct Investment(FDI)

Foreign direct investment (FDI) arises when a firm or individual invests directly or indirectly in an organization to produce and/or market a product in a foreign country. Foreign Direct investment can be grouped into FDI stock and FDI flow. The former is the accumulated amount of FDI at a given time, while the latter refers to the amount of FDI undertaken over a given period of time usually on annual basis. Ozakhome (2017) identifies FDI inflows to include flows of physical capital, labour, firm specific advantages, knowledge capital and externalities.

# 2.1.2. Financial Development

Financial Development refers to the improvement of the financial system which occurs overtime. The areas of improvement of the financial system will include structure and size of assets and liabilities of all types of financial institutions, services render, yields and security of financial instruments (Waliu, 2017). A well-developed financial system is essential in a market economy as it helps in allocating funds to end users. The measures of financial development adopted by various authors include broad money to gross domestic product (M2/GDP), currency in circulation to broad money (CIC/M2), currency outside banks to broad money(COB/M2), quasi money (savings) to broad money(QM/M2), currency in circulation to GDP (CIC/GDP), credit to private sector to GDP (CP/GDP), credit to private sector to non-oil GDP (CP/non-oil GDP) and deposit money banks' assets to GDP (DBMs Asset/GDP).

# 2.1.3. Economic Growth

Economic growth refers to sustained increase in inflation-adjusted gross domestic product (market value of goods and services produced in a country) over time. Conventionally, it is measured as the percentage increase in real gross domestic product (GDP) usually in per capita terms. Thus economic growth can be defined as the rate of growth of real GDP per capita. This measure of growth is quite prominent in growth theories such as the Solow growth model and endogenous growth theory among others. This measure has been used in numerous empirical studies (Barro, 1996; Agosin, 2007; Hamed, Hadi and Hossein, 2012; Adamu, Ighodaro and Iyoha, 2012).

# **2.2.Theoretical Literature**

The theoretical literature reviewed in this study covers theories and models of economic growth with linkage to FDI and financial development.

### 2.2.1. Theories and Models of Economic Growth

Different economic theories and models proposed different sources of economic growth, which have been subjected to empirical investigations to ascertain their relevance (Iyoha, 2004).

The Schumpeterian growth theory evolved in the 20<sup>th</sup> century and can be traced to Austrian economist Joseph Alios Schumpeter. Schumpeter opined that the economy is a dynamic system and growth is caused by a structural change brought about by innovation as a result of the quest for new products (Schumpeter, 1954). That entrepreneurial innovations result in new opportunities to invest which eventually leads to economic growth and employment of idle resources. The Harrod-Domar (Harrod 1939 and Domar 1946) model sees growth in an economy as determined by the level of savings and capital productivity. The model opined that the major stimulus for economic growth is the accumulation of savings which is directed into investment.

The Solow growth model of 1956 likewise provides the basis for analysing economic growth. The model holds that, in the long run growth in an economy will be attained through accumulation of factor inputs such as capital (K) and labour (L) with the provision for technical progress (T). The Solow growth model of economic growth is also based on the assumption of aggregate production function with some unique features such as constant return to scale in labour, reproductive capital and one composite commodity output. Others include payment of marginal productivity to labour and capital prices and wages flexibility, full employment of capital and diminishing returns (Solow, 1956). The model holds that with technical progress, there is the tendency of capital-labour ratio to converge towards equilibrium ratio over time. This means that the long-run per capita growth rate depends entirely on the exogenous rate of technical progress. The model further holds that savings has no impact on long-run per capita output growth rate, rather it has impact on long-run level of per capita output (Ogujiuba and Adeniyi, 2005).

The endogenous growth theory holds that economic growth emanates from endogenous factors, which is against the view of the neoclassical and Harrod-Domar growth models. Romer (1986) and Lucus (1988) who are among the contributors to the endogenous growth theory hold the view that growth is as a result of physical and human capital accumulation. The endogenous growth theory also holds that capital inflows in form of foreign direct investment to less developed countries help in the advancement of research and technology thereby results in economic growth (Mallick & Moore, 2006). Foreign direct investment improves domestic financial market development through transfer of technology, greater competitive pressure on financial intermediaries, movement towards international best practices in accounting, supervisions and risk-management techniques or help stabilise domestic financial institutions and intermediaries, which eventually lead to economic growth (Aziakpono, 2011).

The forgoing expositions are relevant to growth in the emerging markets.

## **2.3.Empirical Literature**

There are some empirical studies conducted focusing on the impact of FDI on economic growth contingent on the influence of financial development. For example, Sirag, Sidahmed and Ali (2018) investigated financial development, FDI and economic growth in Sudan using the fully modified and dynamic ordinary least squares techniques on annual data set running from 1970 to 2014. The results showed that financial development and FDI were positive and significant in explaining economic growth in Sudan. Financial development was found to be more beneficial to economic growth than FDI. Moreover, the findings revealed that FDI led to better economic performance through financial development. Waliu (2017) investigated foreign direct investment (FDI), financial development and economic growth in Nigeria using multiple regression technique on annual data ranging 1982 and 2014. The empirical results showed that individual effects of FDI and financial development to be negative while a joint effect showed positive and significant.

Sghaier and Abida (2013) investigated foreign direct investment, financial development and economic growth in Northern African countries using generalized method of moment (GMM) panel data analysis. The empirical result showed a strong evidence of a positive relationship between FDI and economic growth. It further showed that the development of the domestic financial system was an important prerequisite for FDI to have a positive effect on economic growth. It was recommended that efforts need to be driven by local-level reforms to ensure the development of domestic financial system in order to maximize the benefits of the presence of FDI. By way of buttressing the empirical investigations, Lee and Chang (2009) investigated the effects of foreign direct investment and financial development on economic growth in thirty-seven selected countries. Using cointegration and panel error correction models on a set of panel data running from 1970 to 2002, the findings underscored the potential gains associated with FDI when coupled with financial development in an increasingly global economy.

Omran and Bolbol (2003) examined foreign direct investment, financial development, and economic growth in the Arab countries using panel regression analysis on a set of data covering 1975 to 1999. The study found that Arab FDI would have a favourable effect on growth if interacted with financial variables at a given threshold level of development. The conclusions that emerged from the paper were that domestic financial reforms should precede policies promoting FDI and liberal economic policies should be designed as initial measures to attract FDI. Hermis and Lensick (2003) investigated foreign direct invest, financial development and economic growth in sixty-seven less developed countries using panel data regression analysis on annual data running from 1970 to 1995. The empirical investigation revealed that 37 countries out of the 67 in the data set had sufficiently developed their financial system in order to let FDI contribute positively to economic growth.

In summarizing the empirical findings, it is found that foreign direct investment (FDI) plays positive and significant role in promoting economic growth in various economies. Only in the study of Waliu (2017) foreign direct investment is found to have negative effect on growth. Financial development when interacted with foreign direct investment greatly influences the performance of foreign direct investment on growth. However, we could not find any studies investigating FDI, financial development and growth focusing on emerging markets, and this warrants the current research.

## 3. Model specification, Methodology and data

# **3.1.Model specification**

In order to investigate the link between FDI, financial development and economic growth, the empirical model for this study is specified based on the endogenous growth models.

 $GDPPCGR_{t} = b0 + b_{1}FD_{t} + b_{2}FDI_{t} + b_{3}X_{t} + \xi_{t} - - - - - (1)$ 

where GDPPGR refers to the growth rate of gross domestic product per capita; FD is domestic credit to the private sector as a proxy for financial development; FDI is foreign direct investment inflows as a percentage of GDP; X is a vector of growth determinants such as gross capital formation (K) as a percentage of GDP, general government expenditure (GE) as percentage of GDP, trade openness (TO) as a percentage of GDP, Inflation (IFR); and  $\varepsilon$  is the error term.

In Equation (1), the direct effects of FDI and financial development on economic growth are shown by b 1 and b 2, respectively. The effect of a certain variable on economic growth is subject to the specification of the growth model. Theoretically, economic growth is demonstrated to be driven by factors such as physical capital, investment, government expenditure and inflation rate. Therefore, the model is specified in such manner to accurately estimate the effect of financial development and FDI on economic growth in emerging markets. Various economic growth literature emphasises that the FDI–growth nexus relies on the quality of the financial system (Choong & Lim, 2009; Li & Liu, 2005). These hypotheses are testable through the following multiplicative interaction model:

 $GDPPCGR_{t} = b0 + b_{1}FD_{t} + b_{2}FDI_{t} + b_{3}X_{t} + b_{4}FD^{*}FDI + \xi_{t} - - - - (2)$ 

Where FD\*FDI refers to the interaction term between financial development and foreign direct investment to measure the effect of FDI on economic growth contingent on the level of financial development (FD). The multiplicative interaction model, as shown in Equation (2), estimates the effect of FDI with respect to financial development (FD) on economic growth.

#### 3.2. Estimation Technique and model Selection Procedure

The fixed and random effects models were estimated in the study. The two techniques are applicable to the estimation of non-stationary I(1) and stationary series and are appropriate in estimating series where cross sectional dimension is small and cointegration of the variables is less relevant. The Hausman test technique was used in the selection process between random effects (RE) model and fixed effects (FE) models. Following the rejection of the hypothesis that the random effects (RE) model was appropriate, the study relied on the results of the fixed effects model in making recommendations for economic policy purposes.

#### **3.3.Data**

A panel data set was used to evaluate the effect of foreign direct investment (FDI) contingent on financial development on economic growth in 24 emerging markets from 1990 to 2018. The number (24) of emerging markets selected for this study was based on data availability for all the variables used in this study. The twenty-four emerging markets include Argentina, Bangladesh, Brazil, Bulgaria, Chile, China, Colombia, Hungary, India, Indonesia, Malaysia, Mexico, Morocco, Pakistan, Peru, Philippines, Poland, Romania, Russian Federation, South Africa, Thailand, Turkey, Ukraine and Venezuela. We used GDP per capita growth rate in US\$ constant price as a dependent variable. Domestic credit to private sector as a share of GDP as a proxy for financial development was used (see Sirag, Sidahmed and Ali, 2018). Also, foreign direct investment (FDI) as a share of GDP was used as one of the primary explanatory variables. The source of all variables included in this study is the World Bank Development Indicators (2020).

#### 4. Empirical Results and Discussion

This section presents the empirical results of data analysis and discussion.

Table 1. Descriptive Statistics of the Variables

4.1. Descriptive Statistics

Variable	Mean	Max	Min.	Std. Dev	Skewnes	Kurtosis	J.B	Prob.	Observ.
					S				
GDPPCGR	2.855	16.262	-22.551	4.155	-1.199	7.0399	608.71	0.0000	662
FDI/GDP	10824		-14537.4	20039.52	3.84152	3.841521	9898.58	0.0000	662
		138305			1				
FD	45.521	166.50	1.38394	32.53321	1.34786	4.397937	254.353	0.0000	662
		3	1		9				
FD*FDI	75976	218258	-512609	2394216.	6.27909	46.74338	57130.4	0.0000	662
	2				0				
TOPN/GD		220.40	13.7530	38.68398	1.56001	5.423695	430.543	0.0000	662
Р	64.089	7	5		0				
GFCF/GDP	23.016	44.518	4.45220	6.164005	1.15498	4.757028	232.336	0.0000	662
		8	3		0				

GEX/GDP	13.928	27.727	2.97553	4.385266	0.00759	2.569700	5.11363	0.077	662
		1	8		3			6	
INFL	46.410	7481.6	-1.54479	383.8127	14.8896	254.2867	176621	0.0000	662
		6			9				

Source: Authors' Computation using Eviews 11

Looking at Table 1, economic growth rates of the selected emerging markets ranged between -22.551 and 16.262. The standard deviation was 4.155 and the average growth rate was 2.855 from 1990 to 2018. The coefficient of skewness, kurtosis and the Jarque-Bera statistic with a probability of 0.0000 indicates that the variable does not follow a normal distribution. The same explanations for the other variables except the ratio of government expenditure to gross domestic product (GEX/GDP) which showed normal distribution with a probability of 0.0776. Majority of the variables considered for this study are not normally distributed based on the coefficient of skewness, kurtosis and the Jarque-Bera statistic probability values which are less than 5 per cent.

#### **4.2.Panel Unit Root Tests**

Table 2.	Summary	of Panel	Unit Root	Tests
----------	---------	----------	-----------	-------

Variable	LLC Test/	IPS Test/	ADF Fisher/	PP Fisher	Remarks
	(probability)	(Probability)	(Probability)	(Probability)	
GDPPCGR	-5.76984	-8.00206	156.434	273.089	Stationary
	(0.0000)	(0.0000)	(0.0000)	(0.0000)	I(0)
FDI/GDP	-0.67272	-0.46806	59.8540	81.5348	Not
	( 0.2506)	(0.3199)	(0.1172)	( 0.0018)	Stationary
					I(1)
FD	-0.44499	-0.05962	46.2877	23.5362	Not
	( 0.3282)	(0.4762)	( 0.5432)	( 0.9989)	Stationary
					I(1)
FD*FDI	1.97483	1.12569	57.6594	62.2649	Not
	(0.9759)	( 0.8699)	(0.1602)	( 0.0809)	Stationary
					I(1)
TOPN/GDP	-2.03567	-1.90094	80.5332	76.4030	Stationary
	( 0.0209)	( 0.0287)	( 0.0023)	( 0.0056)	I(0)
GFCF/GDP	-2.32874	-3.22856	78.9278	63.0623	Stationary
	( 0.0099)	( 0.0006)	(0.0033)	(0.0712)	I(0)
GEX/GDP	-2.94173	-2.85751	75.2826	72.7729	Stationary
	(0.0016)	(0.0021)	( 0.0072)	( 0.0120)	I(0)
INFL	-7.19694	-7.06525	143.939	179.758	Stationary
	( 0.0000)	(0.0000)	(0.0000)	(0.0000)	I(0)

Note: Probabilities in parenthesis

Source: Authors' Computations using Eviews 11

Looking at Table 2, the variables considered for the study were not integrated in same order. The various panel unit root tests (LLC, IPS, ADF Fisher and PP Fisher tests) employed showed that some of the variables were stationary at level while others were not. Following the differences in the order of integration found in the variables, it appeared unnecessary to proceed with panel cointegration tests and panel cointegration estimations (Eagle and Granger, 1987; Maddala and Kim, 1998; Stock and Watson, 1993). Also, the Generalized Method of Moments (GMM) estimation technique was not employed since the time dimension of our sample was greater that the cross sectional dimension (Roodman, 2009). Considering the features of our variables and the objective of the study, both the fixed and random effects models were estimated.

#### **4.3.Empirical Results**

The estimation results of the fixed effects (FE) and random effects (RE) models are presented in Tables 3 and 4 respectively. Table 5 shows the Hausman test results that aided in the selection between fixed effects and random effects models for discussion and recommendation purposes.

Table 3: Estimation Result of the Fixed Effects Model

Dependent Variable: GDPPCGR

Dependent Variable: GDPPCGR							
Variable	Coefficient	Std. Error	t-statistics	Prob.			
С	2.023985	1.533927	1.319480	0.1875			
FDI/GDP	0.204933	0.094263	2.174048	0.0301**			
FD	-0.040510	0.011469	-3.532133	$0.0004^{***}$			
FD*FDI	-0.003540	0.001937	-1.827708	0.0681*			
GCFC/GDP	0.278853	0.039210	7.111789	0.0000 ***			
TPN/GDP	0.030292	0.010047	3.014848	0.0027***			
INFL	-0.002373	0.002377	-6.301644	0.0000 ***			
<b>GEX/GDP</b>	-0.405341	0.082613	-4.906513	0.0000 * * *			
Summary Measures							
	R-squared: 0.31						
Adjusted R-squared: 0.27							
F-statistic: 9.252820							
Prob.(F-statistic): 0.000000							
Durbin-Watson Stat.: 1.6039							

Note: Three Asterisks (\*\*\*) represent 1 per cent level of significance. Two Asterisks represent 5 percent level of significance. One Asterisk represents 10 per cent level of significance.

Source: Authors' computations using Eviews 11

Dependent Variable: GDPPCGR							
Variable	Coefficient	Std. Error	t-statistics	Prob.			
С	-1.134536	0.992578	-1.143019	0.2534			
FDI/GDP	0.160426	0.091845	1.746699	0.0812*			
FD	-0.008723	0.008855	-0.985090	0.3249			
FD*FDI	-0.002354	0.001888	-1.247001	0.2128			
GCFC/GDP	0.258943	0.032489	7.970130	0.0000***			
TPN/GDP	0.007296	0.005713	1.277020	0.2020			
INFL	-0.002221	0.000367	-6.058328	0.0000***			
GEX/GDP	-0.146439	0.045379	-3.227029	0.0013***			
Summary Measures							
	R-squared: 0.162973						
Adjusted R-squared: 0.154014							
F-statistic: 18.19091							
Prob.(F-statistic): 0.000000							
Durbin-Watson Stat.: 1.471018							

Table 4: Estimation Result of the Random Effects Model

Note: Three Asterisks (\*\*\*) represent 1 per cent level of significance. Two Asterisks represent 5 percent level of significance. One Asterisk represents 10 per cent level of significance.

Source: Authors' computations using Eviews 11

Table 5: Hausman Test Result

Test Summary	Chi-Sq Statistic	ChiSq c	ChiSq d.f	
Cross-Section random	42.248398	7		0.0000
	Cross-Section random	effects test Cor	nparisons	
Variable	Fixed	Random	Var(Diff)	Prob.
FDI/GDP	0.204933	0.160426	0.000450	0.0359
FD	-0.040510	-0.008723	0.000053	0.0000
FD*FDI	-0.003540	-0.002354	0.000000	0.0062
GFCF/GDP	0.278853	0.258943	0.000482	0.3644
TPN/GDP	0.030292	0.007296	0.000068	0.0054
INFL	-0.002373	-0.002221	0.000000	0.1773
GEX/GDP	-0.405341	-0.146439	0.004766	0.0002

Source: Authors' Compilation using Eview 11

#### 4.4. Discussion of Empirical Results

The study estimated the fixed and random effects models as shown in Tables 3 and 4 above on the assumption that the biases in the pooled data could either come from cross-sectional heterogeneity or time series (periodic) variations. The Hausman test was carried out in order to determine the appropriateness of either of the two models. The null hypothesis "random effects model is appropriate" against the alternative hypothesis "fixed effects model is appropriate" was tested. The null hypothesis was rejected based on the probability value which stood at 0.0000; the test result was highly statistically significant. As a result of the above, the study used the results of the fixed effects model in its discussions and recommendations.

From the empirical results obtained from the fixed effects model, the value of the adjusted coefficient of determination (adjusted R squared) stood at 0.31; indicating that only 31 percent of the systematic variations in GDP per capita growth rate in emerging markets was captured by all the variables in the model. The low R squared value is however not a major issue in the result as Iyoha (2004) noted; the coefficient of determination for panel data studies are sometimes low due to heterogeneity effects. The F-statistic (9.2528) and corresponding p-value (0.0000) indicated that a significant relationship existed between GDP per capita growth rate (economic growth) and all the independent variables combined. The Durbin-Watson statistic of 1.6039 suggests there was no likelihood of autocorrelation.

The individual effect of the explanatory variables on the dependent variable was determined based on the coefficients and p-values of the variables. From the results, the three variables of interest were foreign direct investment as percent of gross domestic product(FDI/GDP), financial development (FD) and interaction variable between foreign direct investment and financial development (FDI\*FD). The empirical result obtained from the fixed effects model showed that foreign direct investment as percent of GDP (FDI/GDP) had a positive and significant impact on economic growth in emerging markets. Thus, the result indicated that FDI was a major driver of economic growth in the emerging markets. The result validated the hypothesis that FDI had a strong positive impact on economic growth in the emerging markets. The result was in agreement with Ogbebor and Ohiomu (2018). The result also showed that financial development had negative and significant relationship with economic growth in emerging markets. The evidence of a negative impact of financial development on economic growth in the emerging markets was in consonant with the results obtained by Waliu (2017). The negative impact of financial development on economic growth in the emerging markets invalidate the hypothesis that financial development has a positive impact on growth in the emerging markets and it is in disharmony with the postulation of Bhole (2004). The joint effect of FDI and foreign direct investment was negative but not statistically significant at both 1% and 5% levels. This confirmed that the impact of FDI on economic growth in the emerging markets was not contingent on financial development. In addition, gross fixed capital formation and trade openness as percent of GDP used as first and second control variables vividly passed the significance test at the 1 percent level and both had positive coefficients. This was an indication that gross fixed capital formation and trade openness had positive and significant relationship with economic growth in the emerging markets. These results were in agreement with Iyoha and Okim, 2017, Adamu, Ighodaro and Iyoha, 2012, Oaikhanan & Udegbunam, 2008 and Aigheyisi, 2017. On the contrary, inflation and total government expenditure were highly statistically significant but,

negatively signed. The explanation was that both inflation and government expenditure were negatively related with economic growth in the emerging markets. These results were in agreement with Adeyele and Ouedraogo, 2019; Lawanson, 2014; Mobosi and Madueme, 2016 and Ogbuabor, Agu, Odo and Nchege, 2017.

### 5. Conclusion and Recommendations

This study investigated the impact of foreign direct investment on economic growth in the emerging markets contingent on the role of financial development. The study used panel data set collected on twenty-four emerging markets – Argentina, Bangladesh, Brazil, Bulgaria, Chile, China, Colombia, Hungary, India, Indonesia, Malaysia, Mexico, Morocco, Pakistan, Peru, Philippines, Poland, Romania, Russian Federation, South Africa, Thailand, Turkey, Ukraine and Venezuela based on data availability for the period of the study which stretched from 1990 to 2018. Panel data analysis approaches such as fixed effects and random effects models were employed for comparison purposes and robustness tests. The Hausman test of heterogeneity was used in determining the more appropriate model for the study. Based on the result of the Hausman test, the fixed effects model was preferred to the random effects model.

Considering the results from the fixed effects model, the study found that foreign direct investment was a major driver of economic growth in the emerging markets as the coefficient of FDI was positive and passed the significance test at the 1 % level. Financial development and interaction term between FDI and financial development appeared to have negative effects on economic growth in the emerging markets passing the significance test as 1 % and 10% respectively. Gross fixed capital formation and trade which served as first and second control variables showed positive relation with economic growth in the emerging markets. While inflation and government expenditure; the third and fourth control variables had negative influence on economic growth in the emerging markets may not have been productively spent. The current study recommended that the emerging markets should implement policies that attracts foreign direct investment and strive to develop the financial sector to position their countries for greater economic growth and development.

#### References

- Adamu, P. A., Ighodaro, C. A. & Iyoha, M.A. (2012). Trade, Foreign Direct Investment and Economic Growth: Evidence from the Countries of the West African Monetary Zone. *The West African Economic Review*, 1(2), 9-32.
- Adeyele, I. T. & Ouedraogo, I. (2019). Effect of Regional Financial Integration and Governance Quality on Economic Growth in ECOWAS (2001-2016). *Journal of Economics and Allied Research*, 3(2), 1-17.
- Agosin, M. R. (2007). Export Diversification and Growth in Emerging Economies. *CEPAL Review*, 97, 115-131.
- Agrawal, G. & Khan, M. A. (2011). Impact of FDI on GDP: A Comparative Study of China and India. *International Journal of Business and Management*, 6(10), 34-58.
- Aigheyisi, O. S. (2017). Does Corruption Affect the Effect of Foreign Aid on Economic Growth in Nigeria? An Empirical Evidence. *Journal of Economics and Allied Research*, 2(1), 1-11.
- Ajayi, S. I. (2006). The determinants of foreign direct investment in Africa: A survey of the evidence from Africa. 11-32.
- Barro, R. J. & Lee, J. W. (1994). Sources of Economic Growth. *Carnegie Rochester Conference Series on Public Policy*, 40, 1-46.
- Barro, R. (1996). Determinants of economic growth. A cross-country empirical study. *NBER Working Paper*, *56*(98), 22-29.
- Bhole, L.M. (2004). *Financial institutions and Markets. Structure, Growth, and Innovations*. Tata McGraw-Hill Publishing Company Limited, New Delhi. India.
- Domar, E. D.(1946). Capital Expansion, Rate of Growth and Employment. *Econometrica*, *14*(2), 137-147.

- Driffield, N. & Jones, C.(2013). Impact of FDI and Migrant Remittances on Economic Growth in Developing Countries: A Systems Approach. *The European Journal of Development Research*, 25, 173-196.
- Engle, R. F. & C. W. J. Granger (1987). Co-Integration and Error Correction: Representation, Estimation, and Testing. *Econometrica*, 55(2), 251-276.
- Haller, A. (2012). Concepts of Economic Growth and Development. Challenges of Crisis and of Knowledge. *Economy Transdisciplinarity Cognition*, 15(1), 66-71
- Hamed, K., Hadi, D. & Hossein, K.(2012). Export Diversification and Economic Growth in Some Selected Developing Countries. *African Journal of Business Management*, 8(17), 700-704
- Hausman J. A., (1978). Specification Tests in Econometrics. Econometrica, 46,1251–1271
- Harrod, R. F. (1939). An Essay in Dynamic Theory. Economic Journal, 49,14-33.
- Hermes, N. & Lensink, R. (2003). Foreign direct investment, financial development and economic growth. *Journal of Development Studies*, 40, 142-163.
- Iyoha, M. A. (2004). *Macroeconomics: Theory and Policy*. Benin City: Mindex Publishing.
- Iyoha, M. A. & Okim, A. (2017). The Impact of Trade on Economic Growth in ECOWAS Countries: Evidence from Panel Data. CBN Journal of Applied Statistics, 8(1), 23-49.
- Lawanson, A.O. (2014). Impact of External Debt Accumulation and Capital Flight on Economic Growth of West African Countries. AERC Research Paper 279, 1-40.
- Lee, C. & Chang, C. (2009). FDI, Financial Development and Economic Growth: International Evidence. *Journal of Applied Economics*, 7(2), 249-271.
- Lensink, R. & Morrissey, O. (2006). Foreign Direct Investmemt: Flow, Volatity and Impact on Growth. *Review of International Economics*, 14(3), 478-493
- Lucas, R. E., (1988). On the Mechanics of Economic Development. *Journal of Monetary Economics*, 22 (1), 3-42.
- Mallick, S. & Moore, T. (2006). Foreign Capital in a Growth Model. *Review of Development Economics*, 12(1), 143-159.
- Maddala, G.S. & Kim, I.M. (1998). *Unit Roots, Cointegration and Structural Change*. Oxford University Press, Oxford.

- Mobosi, I. A. & Madueme, S. 1. (2016). The Impact of Macroeconomic Uncertainty on Foreign Investment Inflows in Nigeria. *Journal of Economics and Allied Research*, *1*(1), 19-41
- Mundell, R. (1957). International Trade and Factor Mobility. *The American Economic Review*, 47, 321-335.
- Njoku C., Okuruti F.N. & Bakwena, M.(2011). Factors Influencing Foreign Direct Investment in ECOWAS State. *International Economics and Finance Journal*, 16 (2), 187-207.
- Oaikhanan, H.E. & Udegbunam, R.I. (2008). Openness, Capital Flows and Economic Growth in Nigeria: Empirical evidence. *The Nigerian Journal of Economic and Social Studies*, 50(2), 257 281.
- Ogbebor, T. O. & Ohiomu, S. (2018). Foreign Direct Investment, Trade Openness and Economic Growth in ECOWAS. *Amity Journal of Economics 3* (2), 63-75.
- Ogbuabora, J. E., Agub, C.C., Odoc, C.O. & Nchege, J. E. (2017). Does Foreign Aid Impact on Growth in Nigeria. *Journal of Economic and Allied Research*, 2(1), 12-23.
- Omran, M. & Bolbol, A. (2003). Foreign Direct Investment, Financial Development and Economic Growth: Evidence from the Arab Countries. *Review of Middle East Economics and Finance*, 1(3), 231-249.
- Ozekhome, H.O. (2017). Foreign Aid, Foreign Direct Investment and Economic Growth in ECOWAS Countries: Are there Diminishing Returns in the Aid Growth Nexus? *West African Journal of Monetary and Economic Integration*, 17(1), 61-83.
- Ozturk, I. (2007). Foreign Direct Investment Growth Nexus: A Review of The Recent Literature. International Journal of Applied Econometrics and Quantitative Studies, 4(2), 79-98.
- Rajan, R. G. & Zingales, L. (1998). Financial Dependence and Growth. The American Economic Review, 88(3), 559-586.
- Romer, P. M. (1986). Increasing Returns and Long-run Growth. *The Journal of Political Economy*, 94(5), 1002-1037.
- Roodman, D. (2009). How to do xtabond2: An introduction to difference and system GMM in Stata. *The Stata Journal* 9(1), 86–136.
- Schumpeter, J.A. (1934). *The Theory of Economic Development*. Oxford University Press, London, 102.

- Sghaier, I. M. & Abida, Z. (2013). Foreign Direct Investment, Financial Development and Economic Growth: Empirical Evidence from North African Countries. *Journal of International and Global Economic Studies*, 6(1), 1-13.
- Sirag, A, Sidahmed, S. & Ali, H.S. (2018). Financial Development, FDI and Economic Growth. Evidence from Sudan. *International Journal of Social Economics*, 45(8), 1236-1249
- Solow, R. (1956). A contribution to the Theory of Economic Growth. *Quarterly Journal of Economics*. 70(1), 65-94.
- Stock, J.H. & Watson, M.W. (1993). A Simple Estimator of Cointegrating Vectors in Higher Order Integrated Systems. *Econometrica*, 61(4), 783-820.
- Waliu, O.T. (2017). Foreign Direct Investment (FDI), Financial Development and Economic Growth in Nigeria: Evidence of Causal Relationships. *International Journal of Humanities Social Sciences and Education*, 4(7). 1-9.
- World Bank (2020). Global Development Finance Report (Washington, D.C.: World Bank).