Foreign Capital Inflows and the Growth of Manufacturing Sector in Nigeria; A Theoretical and Empirical Analysis

Obah Daddy Obah, PhD

Department of Banking and Finance, Niger Delta University Bayelsa State

Nera Ebenezer Mansi PhD Department of Accounting, Niger Delta University Bayelsa State

Ofoniofoni Bobkime Sueneme Department of Banking and Finance, Niger Delta University Bayelsa State DOI: 10.56201/ijefm.v9.no7.2024.pg80.97

Abstract

The study was designed to empirically examine the foreign capital inflows and the growth of manufacturing sector in Nigeria from 1986 to 2023, using time series secondary data. The study applied descriptive statistic to test if the series are normally distributed. The Jarque-Bera probability test shows that the series are normally distributed. While, we employ augmented dickey fuller and phillip-perron unit root to examine if the series are stationary. From the findings, all the variable is stationary at first difference, or I(1). As such we used Johansen Cointegration test the long run impact among the variables, the test report that there is an evidence of co-integration among variables. The study employee error correction model (ECM). The error correction result indicates that the short run disequilibrium can converge at a speed to the long run equilibrium. Hence, the study shows that foreign direct investment has a negative but significant impact on manufacturing sector contribution to gross domestic product in Nigeria. Also, it was found out that foreign portfolio investment also has a negative but significant impact on manufacturing sector gross domestic product in Nigeria. However, over the forecasting horizon it was found out that there is positive and significant impact between exchange rate and manufacturing sector contribution to gross domestic product in Nigeria. While, the coefficient of determination (R^2) , maintain that the explanatory factors together accounted for more than eighty seven percent of the variance in the dependent variable manufacturing sector gross domestic product. The remaining variables, however, are explained by other factors that are not part of the model. In the meantime, the model's goodness of fit is further supported by the Adjusted R^2 . We encourage a consistent capital flow by build the necessary infrastructure by the government. FDI promotes development, particularly in the finance industry. Keeping an eye on macroeconomic stability could boost international investors' confidence in Nigeria's investment security.

Keywords: Foreign Capital Inflows, Error Correction Model, Manufacturing Sector, Foreign Portfolio Investment

1 Introduction

The effect of foreign capital inflow on manufacturing sector performance has taken a wide range of theoretical and empirical literatures in recent time to the role it plays in economic development (Edwards, 2014; Chigbu, et al., 2021). The impact foreign capital inflow has on manufacturing sector growth emanated from the fact that foreign capital inflows promote specialization especially in the manufacturing industries.

It is pertinent to note that developing economy should allow the flow of capital investment into a nation for the purposes of trade, business production, or investment which boosts productivity of manufacturing sector (Edwards, 2014; Chigbu, et al., 2021). As worthy to note no matter how developed a country is, foreign capital inflow plays a vital role on manufacturing sector growth as it assist to integrate the globe and also supporting sustainable development through capital accumulation and wealth creation (Razin & Sadka, 2021; Levine, 2021).

Economists and policy experts have emphasized that in order to maximize the growth potential of capital inflows; the receiving economy must have strong macroeconomic policies in place. (Karakaplan et al., 2015; Javid & Qayyum, 2021). It is assumed that the existence of sound and stable macroeconomic policies both attract foreign capital inflows and increase their efficiency in propelling industrial and economic progress (Alvi et al., 2008; Collier & Dehn, 2001). On the other hand, unstable macroeconomic policies cause private investors to become fearful and lose confidence, which might obstruct the flow of foreign capital into the economy of the recipient country.

Additionally, uncertain macroeconomic policies could lead to a significant shift incapital flight from the recipient economy, impeding investment and the development of the host nation. In order to capitalize on the advantages of foreign capital inflows and boost private investor confidence regarding the efficient use of these inflows, developing nations have been enacting pro-business economic reforms (such as interest rate adjustments, policy changes, and the liberalization and deregulation of the economy). However, Nigeria may gain if it fosters an atmosphere that attracts foreign investment, as this might enhance job creation and a rise in industry turnover. Manufacturing production in any particular nation can be influenced by foreign capital inflows, and manufacturing output can further affect increased foreign direct investment in any developing (Alvi et al., 2008).

Furthermore, there has been evidence that Nigerian economy has been one the highest recipient of foreign capital inflow from other nations across the world. As such over the years the nation has been benefiting from capital inflow to the nation (CBN, 2010). However, the relevancy of capital inflow has not been felt substantially most especially the manufacturing sector growth in Nigeria due to decline in manufacturing sector output and value added (Adejumo, 2013; Adofu, et al.,2015), and Nigeria has not yet seen true inclusive economic growth in spite of the massive inflow of both international and domestic resources (Iwayemi, 2012). One possible explanation for the outcome is that the definition of capital inflows has been undervalued. As a result, the industrial sector's use of foreign capital inflows is still debatable.

Subsequently, there are studies on the nexus between foreign capital inflow and the growth of manufacturing sector both in developed and developing economy (Akinlo, 2019; Ewetan & Okodua, 2021; Umoh, et al, 2012). These various empirical findings has shown mixed

outcome.Some of these studies have shown that foreign capital inflow has a positive impact on growth (see Obiechina & Ukeje, 2019; Aurangeb & Haq, 2022; Turkan et al., 2018; Ugwuegbe; Aga, 2014; Mohammed & Mahfuzul, 2016). The study by Obiechina and Ukeje (2019) also supported the positive impact. They used the unit root test to show that the series was stationary at I (1), and the Johansen Co-integration test indicated that there was at least one co-integration vector among the variables. It was observed that all the variables used for the study has a statistical impact on growth in short run.

On the other hands, other literature confirms evidence of no relationship between foreign capital inflow and growth (see, Lensink & Morrissey, 2021; Olusanya, 2013). By reducing aid uncertainty for several developing aid recipient nations, Lensink and Morrissey, (2021) investigated the impact of aid on the economy. According to the study, uncertainty about funding has a detrimental impact on growth. Hence the mixed findings which emanated from the previous empirical literature necessitate for the study to know the direction of the impact between foreign portfolio investment and manufacturing sector growth whether positive or negative.

Subsequently, most of the study investigates the impact of only one variables of foreign capital inflow, (see, Ugwuegbe et al., 2013; Umoh, et al, 2012; Aga, 2014 and Akinlo, 2019). These various study do not consider other foreign capital inflow components. Additionally, majority of the study specifically link foreign capital inflow and economic growth (Okon & Saliu, 2017; Adofu, et al., 2015; Olorunfemi, et al., 2013, Okoli & Agu, 2015; Etale & Etale, 2016; Guru-Gharana, 2012; Mohammed & Mahfuzul, 2016; Kenedy, 2014 and Tasos, 2014). While only few study where able carry out empirical study in the manufacturing sector (see, Aurangeb & Haq, 2022).

It is expected that this study will investigate various components of foreign capital inflow and it impact to manufacturing sector in Nigeria. It is against this background, the study tend to find the point or level at which foreign capital inflows components affects manufacturing sector growth and become export excessive in Nigeria. As such the study will be of immense important to the manufacturing sector and the economy as a whole. This study is limited to the Nigeria foreign capital inflow and manufacturing sector growth. The components of foreign capital inflow includes (FDI, FPI and EXC) used for the study and the duration for this study is taken from (1986 to 2023) as a period of the study.

2 Theoretical Framework

The underpinning theory that was used for the study is MacDougall-Kemp Theory. MacDougall-Kemp is the originator of the theory found in 1958 which was the earliest theory of cash flows and subsequently elaborated by Kemp (1964). The theory expounded on cross border cash flow among nation. The theory sort at two country model which differentiate one to be the host country and the other investing country. The theory postulate capital should flow from developed country (capital abundant country) to underdeveloped country (Capital scarce economy). This process will stimulate economic growth and improve efficiency which allows resources to be spread across country borders will ultimately to an increase in welfare and industrial growth (Chigbu et al., 2015).

The theory pointed out that National income does not fall as much as it would otherwise due to the fact that the investing country receives returns on capital invested abroad, which is equal to the marginal productivity of capital times the amount of foreign investment. This is true even though the output of the investing country declines following the outflow of foreign investment. The investing country keeps investing abroad as long as the income from the foreign investment exceeds the loss of output since it now has a higher national income than it did before the foreign investment. As a result of larger investments, the host nation also experiences a gain in national income, which would not be feasible without foreign investment inflow (Chigbu et al., 2015).

2.3 Empirical Review

Olaleye, (2022) investigates how capital flows affect Nigeria's economic expansion. The majority of the data came from the National Bureau of Statistics, with Augmented evaluating several more sources. Dickey Fuller was used to test for stationarity, while Johansen conintegration was also adopted, and recursive residuals (CUSUM). For Nigeria, a special long-term equilibrium relationship was found between trade openness, government spending, economic growth, foreign direct investment net flow, and exchange rates. Recursive residuals were also used to determine Capital Flows' long- and short-term dynamics and characteristics. It is clearly established that the residuals and CUSUM of squares remain within 5%. The outcome implies that the coefficients are stable. As a result, we were able to determine the estimated parameters for the Capital Flows function's long- and short-term dynamics, both of which exist for the whole period and indicate a propensity toward future stability.

Additionally, Aurangeb and Haq, (2022) looked into how Pakistan's manufacturing expansion was impacted by foreign capital inflows. Multiple regression analysis was employed to determine each factor's relevance. All variables are confirmed to be stationary at first difference by the unit root test. The findings show a positive and significant association between economic growth (GDP) and all three independent factors. The bidirectional relationships between foreign direct investment and external debt, remittances and external debt, and gross domestic product and external debt are all confirmed by the Granger-Causality test. Conversely, a unidirectional association between manufacturing expansion and foreign direct investment was observed by the study. Conversely, the study discovered a one-way association between foreign direct investment and industrial growth. It is determined that the entrance of foreign capital is critical to the expansion of any economy.

Nihar and Narayan , (2021) looked at the shaky connection between foreign capital flows and India's economic expansion. He explicitly investigates the causative impact of foreign capital inflows and India's manufacturing growth. Granger causality test of 1969 where adopted for the study. The key findings from the causality test indicate that foreign direct investment, foreign portfolio investment, economic growth and manufacturing growth have a long run impact among the variables.

Lensink and Morrissey, (2021) investigated how aid affected the economies of several developing help recipient nations. According to the study, the relationship between aid and growth is primarily

determined by how aid affects investment levels and efficacy. According to the study, foreign aid uncertainty consistently and considerably has a negative impact on growth, and adjusting for uncertainty has a robustly negative impact on growth through investment level.

Obiechina and Ukeje, (2019) investigated the causal long-run link capital flows variables (trade openness export, foreign direct investment and currency rate) on Nigeria's economic growth. The unit root test verified the series' stationarity at I (1), With the exception of FDI, The Johansen Co-integration test indicated the presence of at least one Co-integration vector among the variables. Meanwhile, all the variables were found to be statistically significant on economic growth in the short-run dynamic equilibrium model using the Engle-Granger 2-Step technique. The foreign direct investment exhibits low exogeneity with economic expansion, as proven by the exogeneity test. Furthermore, it shows a Uni-directional and bi-directional causality amongst economic growth and foreign direct investment, There exists both unidirectional and bidirectional causation between some variables.

The findings of study by Turkcan et al., (2018) used Generalized Method Moments (GMM) twoequation simultaneous equation system, which tested the endogenous relationship between foreign direct investment and economic growth in 230 OECD nations; show a positive correlation between FDI and the manufacturing sector. The study used FDI and economic growth as endogenous variables and used. The outcome demonstrated the positive and significant influence of both variables on one another. This study's findings demonstrated a reciprocal link based on pre-testing ratings; this test is sometimes selected over the Standard Granger Casualty test, which is nonpaying. This study's findings indicated a long-term, bidirectional relationship between economic growth and foreign direct investment, suggesting that the latter directly influenced Malaysia's economic expansion.

Using annual test series from 1978 to 2008, Olayemi, (2016) investigated the impact of foreign direct investment on the manufacturing capacity utilization in Nigeria, the largest economy in Africa. To test for long-term relationships, he used the cointegration technique and the error correction model (ECM). The economic benefits of foreign direct investment were found to be low in Nigeria, and their influence on the country's manufacturing capacity utilization was negligible. The study also demonstrates the solid economic policies and favorable macroeconomic conditions that lead to the sustained economic growth required for foreign direct investment inflow into the nation. This, in turn, encourages domestic output and raises the manufacturing capacity utilization rate.

The study by Chigbu et al., (2015) looks at how capital inflows affect emerging nations' ability to grow economically, using the cases of Nigeria, Ghana, and India between 1986 and 2012. The long-run equilibrium relationship between the variables was estimated using Johansen Co-integration, and the stationarity of the data was assessed using the enhanced ADF test. Granger Causality was utilized to evaluate the casual association, and the OLS Method was employed to estimate the model. The results show that capital inflows significantly affect the three countries' economic growth. The three countries' respective economic growth was favorably and significantly correlated with worker remittances. The developing nations should establish favorable conditions to attract increased international investment and worker remittances. This

will promote economic growth in these nations and aid in narrowing the savings-investment gap. According to the report, capital inflows are essential to bridging the savings-investment gap that emerging nations must close in order to experience economic growth.

3. Methodology

3.1 Method of Data Analysis

The study applied the *Ex-Post Facto* Research Design which does not allow for manipulation of the variables (Udeagha, 2003)

The statistical technique adopted for this study multiple regression economic procedure. The Dickey-Fuller test was used applied for the study's analysis to confirm the stationary variables and prevent the empirical results from being skewed.

Once the variables are I (1) and I (0), then the study will also takes into account the co-integration test, which is crucial to determining whether there is a steady, non-spurious (co integrated or short run influence). For the investigation, the Error Correction Model (ECM) is used. According to Engle and Granger's (1987) proposal, a short- and long-term relationship can be derived between variables if they are cointegrated of the same order. The dynamic relationship between the variables in the short- and long-terms will be ascertained using the error correction model.

3.2 Specification of Model

To investigate the impact of foreign capital inflows and the growth of Nigeria's manufacturing sector, the study specifies the following functional relationship between the dependent and independent variables:

MSGDP	= F (F	DI, MPR, EXR)	(1)
The equation	is transf	form into econometric form as follow:	
MSGDP	= b0 +	b1FDI +b2MPR+ b3EXR + Ut	(2)
The economet	ric form	n is transform into natural log and presented as follow:	
$Ln GDP = b0_t$	+ b1Ln	$FDI_{t} + b2LnMPR_{t} + b3LnEXR_{t} + U_{t}$	(3)
Where,			
MSGDP=		Manufacturing Sector Gross Domestic Product	
FDI	=	Foreign Direct Investment	
EXC	=	Exchange rate	
FPI	=	Monetary policy	
UT	=	Error term or stochastic term	
t	=	time	
b0 b1, b2, b3	=	Parameters.	

4 Data Analysis and Discussion of Results Table 1 Descriptive Statistics

International Journal of Economics and Financial Management (IJEFM)
E-ISSN 2545-5966 P-ISSN 2695-1932 Vol 9. No. 7 2024 www.iiardjournals.org

	MGDP	FDI	FPI	EXR
Mean	3288.297	383006.7	389550.8	110.875
Median	1304.070	132481.0	225972.0	120.970
Maximum	16781.06	1360300.	1360300.	306.900
Minimum	47.89000	67.78400	249.5500	3.980
Std. Dev.	4230.035	424032.8	401304.1	91.556
Skewness	1.557992	0.832869	0.941209	0.634
Kurtosis	4.696155	2.382508	2.651735	2.724
Jarque-Bera	17.30616	4.339468	5.344480	2.317
Probability	0.175	0.114208	0.569097	0.314
Sum	108513.8	12639220	13634279	3658.880
Sum Sq. Dev.	5.73E+08	5.75E+12	5.48E+12	268240.9
Observations	36	36	35	36

Source, Output from E-View 2024

Table 1 has shown all the average of the set of distribution. A distribution with normal skewness has a 0 skew, which indicates that it is lopsided around its mean. The right tail of positive skewness is longer and has a greater value. This indicates that the value of the series is greater than the sample mean. The outcome shows that every series has a normal distribution. Conversely, mesokurtic indicates a normal distribution with a kurtosis of 3, whereas kurtosis measures how peaky or flat the distribution of the series is. The variables included in the analysis, with the exception of the manufacturing sector gross domestic product, are normally distributed, as shown in Table 1. Additionally, at the 5% significance level, the Jarque-Bera probability test demonstrates that the series have a normal distribution.

4.2 Unit Root Test

To prevent a spurious outcome from the series, the stationarity characteristics of the relevant variables must be ascertained after the descriptive statistics of the data. The Phillip Perron and Augmented Dickey Fuller tests are used. We took into account the series' trend and intercept when performing the stationary tests.

Table 2Augmented Dickey Fuller and Phillip-Perron Unit Root Test

Variables	Aug	Augmented Dickey and FullerPhillips and Perron				Phillips and Perron			
	Level		First Difference		Level		First D	ifference	Integration
	Trend	and	Trend and Trend and Trend ar		Trend and		and	_	
	Interce	pt	Intercep	ot	Interce	pt	Interce	pt	_
	t-Stat	Prob	t-Stat	Prob	t-Stat	Prob	t-Stat	Prob	
LnMGDP	-1.954	0.604	-5.476	0.005**	-1.954	0.604	-5.489	0.005**	I(1)
LnFDI	-2.445	0.967	-7.196	0.000**	-0.659	0.968	-7.196	0.000**	I(1)
LnFPI	-2.436	0.356	-5.930	0.000**	-2.436	0.355	-6.237	0.000**	I(1)
LnEXR	-1.896	0.621	-5.417	0.002**	-1.896	0.621	-6.395	0.000**	I(1)

Source, Output from E-View 2024

** Demonstrate Five (5) percent significance

All of the study's variables were integrated of order (1), as Table 2 demonstrates. Following the initial differencing, the results of the Phillip-Perron and Augmented Dickey Fuller Unit Root Tests demonstrated that all the series used for the study are stationary. They do not reject the null hypothesis of stationarity for any of the series (LMGDP, LFDI, LFPI, and LEXR) at levels where the researcher is unable to reject the alternative hypothesis of stationary following differencing. According to the aforementioned findings, all the variable is stationary at first difference, or I(1).

4.3 Lag Selection Criterion

The study proceeds to select the lag order before carrying out Cointegration test. As shown in table 3 the most significant lag selected for the model is lag (1).

Table 5	Lag Sele		1				
Lag		Recommended					
Selection	LogL	LR	FPE	AIC	SC	HQ	Lag
0	-378.210	NA	899.710	30.7368	31.029	30.817	No
1	-237.812	202.173*	232.738*	22.384*	24.432*	22.953*	Yes
2	-200.120	36.184	364.479	22.249	26.052	23.304	No

*Demonstrates the Most Significant Order of Lag Source: Author Compilation from E-View Output 2024

4.4 Johannsen Co-integration Test

A co-integration test was conducted using the Johansen co-integration test, which is based on Trace Statistics and the Maximum Eigenvalue Test at a 5% significant level, to determine whether there is a long-term link between these variables.

Table 4	Johannsen Co-integration	Test
(Trace Test)		

Hypothesized	Trace	0.05		
IIARD – International Institute c	nd Development	Page 87		

International Journal of Economics and Financial Management (IJEFM) E-ISSN 2545-5966 P-ISSN 2695-1932 Vol 9. No. 7 2024 <u>www.iiardjournals.org</u>

No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.929940	117.7708	69.81889	0.0000
At most 1 *	0.731473	59.28606	47.85613	0.0030
At most 2 *	0.481560	30.36039	29.79707	0.0430
At most 3 *	0.444274	15.90789	15.49471	0.0433
At most 4	0.126814	2.983346	3.841466	0.0841

Source; Output from E-View 2024

	Max-Eigen	0.05	
Eigenvalue	Statistic	Critical Value	Prob.**
0.929940	58.48476	33.87687	0.0000
0.731473	28.92567	27.58434	0.0335
0.481560	14.45249	21.13162	0.3291
0.444274	12.92455	14.26460	0.0805
0.126814	2.983346	3.841466	0.0841
	Eigenvalue 0.929940 0.731473 0.481560 0.444274 0.126814	EigenvalueStatistic0.92994058.484760.73147328.925670.48156014.452490.44427412.924550.1268142.983346	EigenvalueStatisticCritical Value0.92994058.4847633.876870.73147328.9256727.584340.48156014.4524921.131620.44427412.9245514.264600.1268142.9833463.841466

Source; Output from E-View 2024

The results indicate that there are two (2) co-integrating in the Unrestricted Cointegrating Rank Test (Maximum Eigenvalue) and one (4) co-integrating in the Unrestricted Cointegrating Rank Test (Trace) (table 4). This study demonstrates that there is evidence of a long-term relationship that is, co-integration between the variables.

4.5 Error Correction Model (ECM)

When one or more of the study's other variables change, the ECM is used to directly estimate how quickly the dependent variable returns to equilibrium. The purpose of the study is to elucidate the relationship between the expansion of Nigeria's manufacturing sector and foreign capital inflows. The foreign direct investment monetary policy rate and exchange rate were utilized as the independent variables, and the manufacturing sector's gross domestic product was used as the dependent variable.

Table 5Error Correction ModelDependent Variable: D(LnMGDP)

IIARD – International Institute of Academic Research and Development Page 88	Variable	Coefficient	Std. Error	t-Statistic	Prob.	
	IIARD – International	Institute of Academic R	Research and Develo	pment	Page 88	

International Journal of Economics and Financial Management (IJEFM)
E-ISSN 2545-5966 P-ISSN 2695-1932 Vol 9. No. 7 2024 <u>www.iiardjournals.org</u>

С	429.3021	688.7662	0.623292	0.5377
D(LnFDI)	-0.143582	0.023800	-4.476489	0.0231
D(LnFPI)	-0.783367	0.093835	-4.031005	0.0183
D(LnEXR)	0.364492	2.896445	17.83045	0.0360
ECM(-1)	-0.637483	0.338489	-3.364843	0.0205
R-squared	0.920424	Mean dependent var		7384.354
Adjusted R-squared	0.912723	S.D. dependent var		5273.253
Prob(F-statistic)	0.000000	Akaike info criterion		19.45632
Residual Diagnosis Test				
Serial Correlation LM				
Test	0.5388	Heteroskedasticity Test		0.2734
	001			

Source; E-View Output 2024

The error correction model explicitly estimates the rate at which a dependent variable returns to equilibrium after a change in other variables. As indicated in Table 5, the error, or deviation from a long-run equilibrium, of the preceding period affects its short-run dynamics. The error correction result indicates that the short run disequilibrium can converge at a speed of 52.87% to the long run equilibrium, with a value of -0.528723 and a probability value of 0.0205<5% level of significance. This result is also related to the study conducted by Asidu et al. (2020), which used an error correction model for analysis in an empirical investigation.

Table 5 shows further diagnosis test of the Breusch–Godfrey serial correlation indicating that there is no serial correlation in the model with the prob. of 0.538 which is not statically significant at 5% level. So we accept the null hypothesis of no serial the co-efficient of. Similar with Heteroskedasticity test with Prob. Value of 0.3498 indicating no statically significant at 5% level indicating the stability of the model.

4.8 Discussion

In order to determine whether there is a short-term link between the variables, the investigation starts with the error correction model in table 5. It depict that foreign direct investment has negative but significant impact on manufacturing sector's contribution to the GDP, which has a negative impact of -0.562611. In short run, foreign direct investment inversely correlated with contribution of the manufacturing sector to the GDP. One might note that the manufacturing sector's contribution to GDP from foreign direct investment was -0.562611. It follows that there is a corresponding negative change in Nigeria's manufacturing sector gross domestic product of 0.562611 for every unit change in foreign direct investment. This study supports the findings of Fambon, (2013), who examined the effect of foreign direct investment (FDI) on the expansion of Cameroon's manufacturing sector. The study's findings, which were obtained by using the autoregressive distributive lag approach to Co-integration and time-series data, show that both foreign direct investment and the country's capital stock have negative and substantial effects on manufacturing growth over the short and long terms.

The results shown in Table 5 indicate that foreign portfolio investment has a negative but significant impact on manufacturing sector's contribution to the gross domestic. The table showed

that the manufacturing sector's gross domestic product was negatively impacted by the foreign portfolio investment, contributing -0.803044. The implication is that the manufacturing sector's contribution to the GDP decreases in proportion to each unit change in the foreign direct investment.

It's interesting to note that the outcome demonstrates that exchange rate has a positive and significant impact on Nigeria's manufacturing sector GDP. It was noted that the manufacturing sector's gross domestic product contributed 0.767255 due to the exchange rate. It follows that there is a positive change in Nigeria's manufacturing gross domestic product of 0.767255 for every unit change in the exchange rate. The results similarly complement the work by Adeniyi, et al., (2015) explored the causal linkage between foreign capital influx and economic growth - in Cote' d'Ivoire, Gambia, Ghana, Nigeria and Sierra Leone. Three alternative metrics of exchange rate - total liquid liabilities, total banking sector credit and credit to the private sector - were applied to capture different consequences of cash flows. The data provide credence to the idea that exchange rates have a beneficial impact on economic expansion.

In summary, the study shows that foreign direct investment has a negative and significant impact on manufacturing sector gross domestic product in Nigeria. It study also found out that foreign portfolio investment also has a negative and significant impact on manufacturing sector gross domestic product in Nigeria It was found out that there is positive and significant impact between exchange rate and manufacturing sector gross domestic product in Nigeria

The coefficient of determination (R2) in Table 5 is 0.876506, meaning that the explanatory factors together accounted for more than 87.6% of the variance in the dependent variable gross domestic product. The remaining variables, however, are explained by other factors that are not part of the model. In the meantime, the model's goodness of fit is further supported by the Adjusted R2.

5 Conclusion and Recommendations

Nigeria must work harder to reestablish macroeconomic stability, address investor worries about risk, and enhance the investment climate in order to draw a greater portion of foreign financial flows into the industrial sector and diversify the economy away from crude oil. Nigeria should address the issue of economy and further reduce interest rate, develop local financial markets to facilitate investors' access to capital, and enhance the country's economy's capacity to reap the potential benefits of foreign direct investment as part of a comprehensive effort to promote FDI. This study implies that, since some of the variables examined have a detrimental impact on the growth of the manufacturing sector in Nigeria, the government of Nigeria cannot rely on foreign aid and capital as means of stimulating the country's manufacturing industry. Instead, to encourage the expansion of the industrial sector, a favorable climate for foreign capital and foreign direct investment should be established. Using the right policies to support the growth of the financial sector, macroeconomic stability, the development of human capital, and technological innovation are examples of such enabling environments. The study comes to the conclusion that foreign capital flows influence manufacturing sector's contribution to the. This study therefore recommends the following: To promote a consistent flow of FDI and build the necessary infrastructure. FDI promotes development, particularly in the finance industry. Keeping an eye on

macroeconomic stability could boost international investors' confidence in Nigeria's investment security. To guarantee the availability of long-term loans and venture capital, the government should expand its capital and financial markets. Developed capital and money markets will increase the ability of the host nations to benefit from the spillover effects.

References

Adejumo AV (2013). Foreign direct investment and manufacturing sector performance in Nigeria. *Australian Journal of Business and Management Research* 3(4):39-56.

IIARD – International Institute of Academic Research and Development Pag

Page **91**

- Adeoye, A. (2009). Macro-economic level corporate governance and FDI in emerging Markets: Is there a close relationship? *Journal of Economics and International Finance*, 1(12), 030-043.
- Adeniyi, O., Omisakin, O., Egwaikhide, F.O. & Oyinlola, A. (2012). Foreign direct investment, economic growth and financial sector development in small open developing economies, *Economic Analysis and Policy*, 42(1), 34-67.
- Adofu I, Taiga UU. & Tijani Y (2015). Manufacturing sector and economic growth in Nigeria. *Danish Journal of Economics and International Finance*, 1(1):001-006.
- Aga A.K., (2014). The impact of foreign direct investment on economic growth: A case study of Turkey. *International Journal of Economic Finance*, 6(7):71-84.
- Akinlo AE (2019). Foreign direct investment and growth in Nigeria: An Empirical Investigation. *Journal of Policy Modeling* 26(5):627-639.
- Aliber J., (1978). Exchange risk and corporate international finance. *Journal of economics*, 71(5), 456-465.
- Alli, F. (2009). Nigeria: 9 years of manufacturing with tears, any hope in sight? Vanguard (Lagos). Available from: <u>http://allafrica.com/stories/2007</u>.
- Alvi, E., D. Mukherjee & E. K. Shukrallah (2008). Aid, policies, and growth in developing countries: A New looks at the Empirics, *Southern Economic Journal*, 74(1), 693–706.
- Aisedu, E. (2021). On the determinants of foreign direct investment to developing countries: Is Africa different? *World Development*, 30 (1): 107-19.
- Aremu. J. A. (2015): Foreign direct investment and performance. Paper delivered at a workshop on Foreign Investment Policy and Practice organized by the Nigerian Institute of Advanced Legal Studies, Lagos on 24 March.
- Athukorala, W. P. P. A. (2013). The impact of foreign direct investment for economic growth: A case study in Sri Lanka. 9th International Conference on Sri Lanka Studies. Matara: Sri Lanka.
- Aurangeb V. & Haq A. (2022).Impact of foreign capital inflows on economic growth in Pakistan, *European Journal of Economics, Finance and Administrative Sciences*, 46(4), 89-100.

- Aysha, P. O., Muhammad, I. K., & Sara, I. J. (2021). Impact of foreign investment on manufacturing output growth. *International Journal of Management and Humanity*, 2(4), 45-56.
- Buckley, P., &Casson, M. (1976). *The future of multinational enterprise*. London: The Macmillan Press.
- Central Bank of Nigeria., (2010): Statistical Bulletin, 21(5), 134-147.
- Chigbu, E.E Ubah C.P & Chigbu U.S, (2021).Impact of capital inflows on economic growth of developing countries. *International Journal of Management Science and Business* Administraion, 1(7), 7-21.
- Coase, R. H. (1937). The nature of the firm. *Economica*, *4*(16), 386-405.
- Collier, P. & J. Dehn (2001), Aid, shocks and growth', World Bank Policy Research Working Paper, No. 2688.
- Denisia, V., (2010). Foreign direct investment theories: An overview of the main FDI theories. *European Journal of Interdisciplinary Studies*, 2(2), 104-112.
- Edwards, S. (2014). Financial Openness, Sudden Stops and the Current Account Reversal", *American Economic Review*, 94(8), 59-64.
- Ekeocha, P. C., Ekeocha, C. S., Malaolu, V. &Oduh, M. O. (2012). Modelling the long run determinants of foreign portfolio investment in Nigeria, *Journal of Economics and Sustainable Development*, 3(80), 23-37.
- Etale F. & Etale S., (2016). Capital flows-growth nexus in Nigeria: has foreign direct investment played a role in accelerating economic growth. *Journal of Sustainable Development in Africa*, 14(8), 34–52.
- EwetanOO, & Okodua H (2021). Econometric analysis of exports and economic growth in Nigeria. *Journal of Business Management and Applied economics* 2(3):1-14.
- Fakiyesi O, & Akpan O (2015). Issues in Money, Finance and Economic Management. University press, Lagos.
- Fambon, S. (2013). Foreign capital inflow and economic growth in Cameroon, *WIDER Working Paper* 24(1), 124 141.

Page **93**

- Funke, N., &Nsouli (2013). The New Partnership for Africa's Development (NEPAD): Opportunities and challenges. *IMF Working Paper No.* 03/69.
- Glass, A. J., &Saggi, K. (2019). Multinational firms and technology transfer. *Scandinavian Journal of Economics*, 104(4), 449-513.
- Guru-Gharana KK (2012).Econometric Investigation of Relationships among Export, FDI and Growth in India. An Application of Toda-Yamamoto-Dolado-Lutkephol granger Causality Test. The Journal of Developing Areas, (46) 2.
- Hannon, P., & Reddy, S. (2022). China edges out U.S. as top foreign investment draw amid world decline. Review 5(7), 7-11.
- Haseeb M, Hartani H N, Bakar A, Nor A, Azam M, &Hasssan S (2014). Exports foreign direct investment and economic growth: Empirical Evidence from Malaysia. *American Journal* of Applied Sciences, 11(6):1010-1015.
- Hennart, J. F., (1982). A Theory of Multinational Enterprise. USA: University of Michigan Press.
- Hymer, S. H., (1976). *The International Operations of National Firms*: A study of foreign direct investment: Cambridge, Ma: MIT Press
- Hosseni G., (2015). Aid and foreign investment: International Evidence, *Departmental Working Paper*, 78(8), 15-25.
- Iwayemi A., (2012). Macroeconomic policy issues in an open developing economies: A case study of Nigeria. National Centre for Economic Management and Administration. 5(11), 899-904.
- Iyoha A., (2020). Exports foreign direct investment and economic growth: Empirical Evidence from Malaysia. *American Journal of Applied Sciences*, 11(6):67-94.
- Javid, M., & Qayyum A., (2021). Foreign aid and growth nexus in Pakistan: the role of macroeconomic policies, Pakistan Institute of Development Economics Islamabad (PIDE), *Working Papers*, 72.
- Karakaplan, M. U., B. Neyapti & S. Sayek (2015). Aid and foreign investment: International Evidence', *Departmental Working Paper*, 78(8), 15-25.
- Karras, G (2006), Foreign Aid and long run economic growth: empirical evidence for panel of developing countries, *Journal of International Development*, 18, 15-26.

Kemp, M.C. (1964), The Theory of International Trade, Ithaca: Prentice-Hall.13-14.

- Kenedy G., (2014). Foreign investment and its effect on the economic growth in Nigeria: a triangular analysis. Journal of Economics and Finance 6(4):1-7
- Krueger F., (2022). Exports foreign direct investment and economic growth: Empirical Evidence from Malaysia. *American Journal of Applied Sciences*, 11(6):1010-1015.
- Lall G, (2020). Revenue mobilization in Sub-Saharan Africa : challenges from globalization trade reform, *Development Policy Review*, 28(5), 553-571.
- Lensink, R & Morrissey O. (2021). Aid instability as a measure of uncertainty and the positive impact of AID on growth, *Journal of Development Studies*, 36(3), 31-49.
- Levine, R. (2021), International financial liberalization and economic growth", *Review of International Economics*, 9(6), 668-702.
- Macdougall, G.D.A. (1958). The benefits and costs of private foreign investment abroad: A theoretical approach, *Economic Record*, XXXVI,13-35.
- Mohammed EH, & Mahfuzul H., (2016). Foreign direct investment, trade and economic Growth: An Empirical Analysis of Bangladesh. *International Journal of economic*, 7(9), 569-576.
- Moosa,I.A. (2002). Foreign Direct Investment: Theory, Evidence and Practice, Palgrave, New York, NY, USA, 2002.
- Narayan S., & Nihar R.J, (2021).Casual relationship between foreign capital inflows and manufacturing growth in India, *International Journal of Economics, Commerce and Management*, 3(7), 412-428.
- Nwankwo, A. (2016). The determinants of foreign direct investment inflows (FDI) in Nigeria. Paper presented at the Proceedings of the Global 6th Conference on Business and Economics, October 15-17.
- Obadan M.I., (2013). Coping with capital flow volatility: policy consideration for Nigeria. *Central Bankand Nigeria bullion*, 51(4):177.
- Obiechina, M.E &Ukeje E.U. (2019). Economic Growth, Capital Flows, Foreign Exchange Rate, Export and Trade Openness in Nigeria, *International Journal of Economics and Management Sciences*, 2(9), 01-13.

- Olayemi S., (2016). Investment on the Manufacturing Capacity Utilization in Nigeria, *International Journal of Humanities and Social Science*, 2(16), 298-307.
- Okoli T.T. & Agu O.C., (2015). Foreign direct investment flow and manufacturing sector performance in Nigeria. *International Journal of Economics, Commerce and Management,* 3(7), 412-428.
- Okon E. A. & Saliu W.O., (2017). Hazards of manufacturing sector and economic growth in Nigeria. International Journal of Social Sciences and Humanities and Education, 1(1):50-65.
- Okpe E. & Abu D., (2019). Nexus of exchange rate deregulation and agricultural share of gross domestic product in Nigeria. *CBN Journal of Applied Statistics*, 5(2):49–64
- Olorunfemi S, Obamuyi, Tomola, M, & Adekunjo F (2013). Manufacturing performance in Nigeria: Implication for Sustainable Development. *Asian Economic and Financial Review*, 3(9):1195-1213.
- Olusanya, S.O. (2013). Impact of foreign direct investment inflow on economic growth in a pre and post deregulated Nigeria economy: A Granger Causality Test, *European Scientific Journal*, 9(25), 90-105.
- Otepola, A. (2002). Foreign direct investment as a factor of economic growth in Nigeria. Dakar, Senegal: *Africa Institute for Economic Development and Planning (IDEP).* 1(2), 1-9.
- O'Sullivan O., (2013). Time varying risk return relationship: evidence from listed Pakistani Firms, *European Journal of Scientific Research*, 22(1), 16-39.
- Razin, A. & Sadka, E. (2021). Country risk and capital flow reversals; *Economic Letters*, 73(8), 73–77.
- Sepehri, A., & Moshiri, S., (2014). Interest rate-growth across countries: evidence from developing and developed countries. *International Review of Applied Economics*.18 (2): 191–207.
- Tasos S., (2014). Dynamic relationship between growth, foreign direct investment and exports in the US: An Approach with Structural Breaks. *The IUP Journal of Applied Economics*, 5(2), 78-90.
- Tokunbo, S. O., (2015). Lags in the effect of monetary policy in Nigeria. *Pakistan Economic and Social Review*, 43(1), 39-57.

- Türkcan, A. Duman I. & Yetkiner H., (2018). How does FDI and economic growth affect each other? the OECD case," in International Conference on Emerging Economic Issues in a Globalizing World, 21-40.
- Ugwuegbe SU, Okore AO, & Onoh JO (2013). The Impact of FDI on the Nigerian Economy. *European Journal of Business and Management*, 5(2): 22-41
- Umoh OJ, Jacob AO, & Chuku CA (2012). Foreign Direct Investment and Economic Growth in Nigeria: An Analysis of the Endogenous Effects. *Curriculum Research Journal of Economic Theory*, 4(3):53-66.
- Uremadu, (2006). Manufacturing Performance in Nigeria: Implication for Sustainable Development. *Asian Economic and Financial Review 3*(9):1195-1213.
- World Bank. (2012). Knowledge, productivity and innovation in Nigeria: Creating a new economy. Washington D. C: The World Bank.
- Yanga V, (2015). The fundamental theorem of parameter-preference security valuation, *Journal* of Financial and Quantitative Analysis, 8(2), 61-69.