Manufacturing Output and Foreign Direct Investment in Nigeria: A New Evidence

Anthony Orji[1], Onyinye I. Anthony-Orji, Johnson E. Nchege
Department of Economics, University of Nigeria, Nsukka, Nigeria
Email: anthony.orji@unn.edu.ng, onyinye.anthony-orji@unn.edu.ng,
johnson.nchege@unn.edu.ng

Joan Okafor
Department of Business Administration, Abia State Polytechnic, Aba
Email: nonyjoan@yahoo.com

Abstract
The study examined the impact of foreign direct investment on the Nigerian manufacturing sector over the period of 1970 to 2010. In evaluating the objectives, the study employed the classical linear regression model and discovered that within the period under review, FDI impacted negatively on the manufacturing sector. Although the paper found FDI to be negatively related to manufacturing output in Nigeria, this unhealthy relationship can be reversed if the country receives increased FDI inflows into critical sectors that support the necessary inputs and raw materials needed by the local industries. The study therefore recommends that competitive policies should be enacted by the government that will ensure proper functioning of the markets necessary to attract well targeted foreign investors in Nigeria. Also, foreign companies that kill local productive and manufacturing efforts should not be allowed to operate in Nigeria's local business environment.
Keywords: FDI, Manufacturing Sector, Output, Nigeria, Evidence

Introduction
During the past two decades, foreign direct investment (FDI) has become increasingly important in the developing world, with a growing number of developing countries succeeding in attracting substantial and rising amounts of inward FDI. Economic theory has identified a number of channels through which FDI inflows may be beneficial to the host economy. Yet, the empirical literature has lagged behind and has had more trouble identifying these advantages in practice. Most prominently, a large number of applied papers have looked at the FDI-GDP growth nexus, but their results have been far from conclusive. Notwithstanding this absence of any robust conclusions, and somewhat surprisingly, most countries continue to vigorously pursue policies aimed at encouraging more FDI inflows.

---

[1] Corresponding Author

Through FDI, foreign investors benefit from utilizing their assets and resources efficiently, while FDI recipients benefit from acquiring technologies and from getting involved in international production and trade networks. However, FDI provides much needed resources to developing countries such as capital, technology, managerial skills, entrepreneurial ability, brands, and access to markets. These are essential for developing countries to industrialize, develop, and create jobs attacking the poverty situation in their countries. As a result, most developing countries recognize the potential value of FDI and have liberalized their investment regimes and engaged in investment promotion activities to attract various countries.

The success stories of India and China's economic development has highlighted the benefits that accrue to a country that optimally utilizes every strategy that will attract and gain value from foreign investment. While it has been echoed from many quarters that Nigerian has the largest economy in sub-Saharan because of its rich human and natural resources, it (Nigeria) has been considered one of the 20 poorest countries of the world; about 70% of her population live below poverty line and with an investment rate of barely 10% of her GDP, thus is below the minimum investment rate of about 30% of GDP required to reduce poverty (World Bank 2011).

The impact of FDI on development of Recipient Country has been at the core of macroeconomic as well as development literature over the past two decades. Apart from its contribution to manufacturing output through technological transfer and human capital development, it has other spillover effects. The Neo- liberal economists argued that international capital flows alleviate the financial constraints of less developed economies by providing access to the superior managerial techniques and business practices (Anyanwu, 1999 and Oilson 2007). It is therefore evident that Foreign Direct Investment is one of the basic requirements necessary for achieving greater manufacturing output in developing economies.

Nigeria as one of the economies with great demand for goods and services and has attracted some FDI over the years. The Foreign direct investment; net inflows (% of GDP) in Nigeria was reported at 3.07 in 2010, according to a World Bank report published in 2012. Foreign direct investment are the net inflows of investment to acquire a lasting management interest (10 percent or more of voting stock) in an enterprise operating in an economy other than that of the investor. It is the sum of equity capital, reinvestment of earnings, other long-term capital, and short-term capital as shown in the balance of payments. Figure 1 below shows net inflows (new investment inflows less disinvestment) in Nigeria from foreign investors, and is divided by GDP.
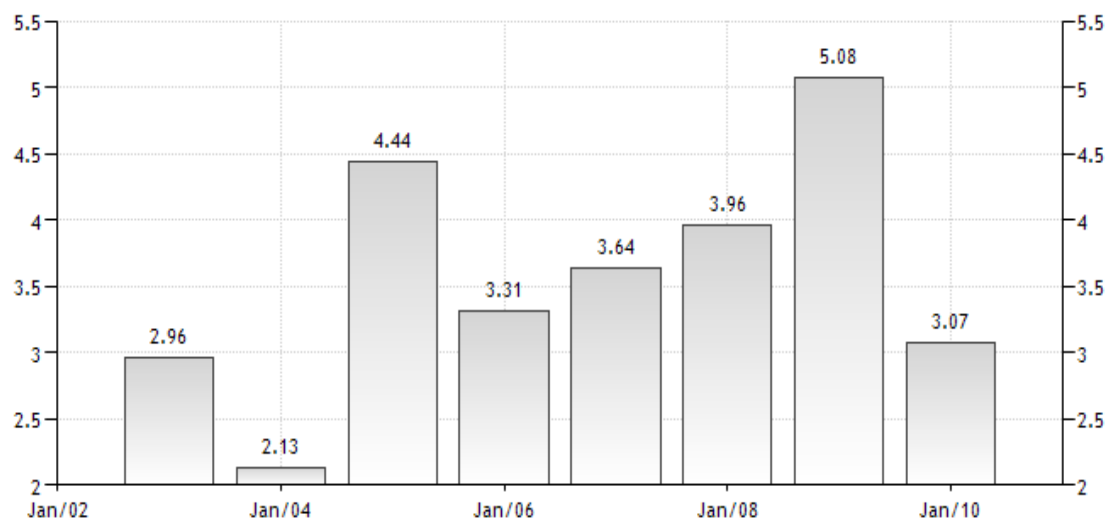
Fig. 1: A bar chat illustrating the flow of fdi from 2002 to 2010 in $billions

From the diagram above, the x-axis is the annual FDI inflow in Nigeria and the y-axis measures the value of these inflows in billions of U.S. dollars.

The amount of FDI inflow into Nigeria reached US$2.96 billion in 2003 and it rose to US$4.44 billion in 2004 and this figure rose again to US$ 5.08 billion in 2009 (World Bank, 2012). The question that comes to mind is, do these FDI's actually contribute to manufacturing output as well as economic growth in Nigeria? If FDI actually contributes, then the sustainability of FDI is a worthwhile activity and a way of achieving its sustainability is by identifying the factors contributing to its growth with a view to ensuring their enhancement.

To some observers, the capacity of developing countries to attract foreign investment is a function of the presence of natural resources, their market sizes, the level of political tranquility and other macroeconomic motivation (Ahmed 2003). Thus, developing countries have labored tirelessly to create requisite environment to woo foreign investors but there still exists a question regarding their success. The African continent has remained the least recipient of global foreign investment shares. The Nigeria situation is a paradox. This is because, in spite of the enormous strategies put in place to attract the inflow of FDI into the country, the expected surge has not been realized. A cross Examination of the behavioral pattern in Nigeria shows that aggregate investment which was 31.5% in 1975 declined to less than 9% in 1985. Although it rose to 14% in 1996, from 1997 till date, out of a whopping 93% of global capital flows assigned to developing countries as observed by Bouoyiour (2003), Nigeria got just 1-6% of that fraction. In addition to this, manufacturing sector contribution to GDP has hovered between 3% and 4% within this period. Thus, carefully observing the trend discussed above, it is obvious that the relationship between FDI and Manufacturing Output is ambiguous. Thus, this study aims at investigating the impact of FDI on manufacturing output in Nigeria. The rest of the paper is structured as follows: Section 2 reviews the literature, while the methodology is discussed in section 3. The empirical results are presented in section 4 while section 5 concludes the paper.

Literature Review
Theoretical Literature
The Traditional (Classical) Theory
Most of the literature on FDI were based on classical assumptions. Classical theory assumption is based on perfect competitive markets, perfect knowledge and certainty. Classical trade theory and classical theory of foreign investment emphasizes that cost of production is preeminent to international competitiveness. Low cost factors or natural resources are one of the more important factors. Each country is different in capital and labor; there is mobility of products across frontiers.

Comparative Advantage (Ricardian Theory)
The Classical theory of trade determination is based on Comparative Advantage theory. The theory of comparative advantage is perhaps the most important concept in international trade theory. Ricardo formulated and explained that a country will export those goods, which it can produce relatively cheaply and import those goods in the production of which foreign countries have comparative advantage.

Under perfect competition, many firms produce output in each industry such that each firm is too small for its output decisions to affect the market price. Goods from different firms are perfect substitutes for all consumers. Free entry and exit of firms respond to profits. Positive profit sends a signal to the rest of the economy and new firms enter the industry. On the other hand, negative profit (losses) leads existing firms to exit out of the industry. Moreover, the information is perfect. All firms have the necessary information to maximize profit, to identify the positive profit and negative profit industries. The case of two countries is used to simplify the model analysis. The two countries are assumed to differ only with respect to the production technology.

The Ricardian Model assumes that there are two countries which are producing two goods by using one factor of production which is labor (other inputs such as capital are embodied in the labor productivity). This means that labor is the one factor of production used to produce each of the goods. The factor is homogeneous and can freely move between industries. The productivity of labor is assumed to vary across countries, which implies a difference in technology between nations. The difference in comparative labor productivity is induced motivated advantageous international trade in the model.

Location Theory
Generally, location theory is concerned with territorial allocation of resources within a country. The location theory explains FDI in the context of the location specific factor differentials. Location theory explains about supply (cost factors) and demand (market factor) variables that affect the distribution processes of firms. The comparative advantage, the availability of raw materials and transportation cost are main determinants in this theory. The location theory's explanation for foreign direct investment can be discussed by the following factors.

Firstly, availability and cost of inputs can explain the existence of FDI. A firm considers the source of input and cost of production in order to choose the location. Therefore, a firm investing abroad may be attracted by the availability in another country of some inputs, which are scarce at home, or by the lower cost of inputs abroad such as lower labor cost. The lower labor costs can be the main reasons for direct investment in developing countries.

Secondly, marketing factors are the main factors that stimulate foreign firms to invest abroad. A firm can get many advantages by locating a production plant near the market. Firms can conduct business smoothly due to locating the firm abroad, because the firm can better exploit the local market, tariff barriers can be avoided and transportation cost can be reduced. Moreover, the production via the setting up of subsidiaries in a host country may be more accepted by the local people than direct exporting.

Thirdly, direct investment is stimulated by the existence of trade barriers. Subsidiaries of foreign firms are often set up in another country that is not yet subject to trade restrictions. Then the products are exported to those markets that have imposed restrictions on the exports of the investing country. Finally, the factor of government of host countries has an effect on FDI, such as lower tax rates, better infrastructure, and greater political stability. These create a favorable investment climate. A firm is often attracted to invest abroad because another country offers advantages.

Currency Area Theory

Aliber (1970) proposed a model based on the existence of different currency areas. He argues that firms from countries with strong currencies can borrow at lower cost, which enables them to engage in risky investments in weak-currency areas. Aliber did not try to create a general theory of FDI. His model can be seen as the suggestion that firms internalise imperfections in the capital and exchange rate markets, as they do with any other market failure.

Aliber sought to explain MNEs through financial market relations, namely "exchange risk" and "the market's preferences for holding assets denominated in selected currencies". More specifically he hypothesized that it is the financial market which enables firms to have advantages over host country firms and applicable to all firms whose assets and borrowing are based in selected currencies. In one of his later writings, he summarized his rather complex argument as follows:

"this advantage derived from the preference that investors in the US and abroad had for dollar-denominated debt. The evidence was that interest rates on dollar denominated debt were lower relative to interest rates on debt denominated in various foreign currencies after adjustment for any anticipated changes in exchange rates. The derived argument was that investors would pay a higher price for a $1 of equity income of US headquartered firms than for the equivalent equity income of the prevailing exchange rates of firms headquartered in most of the countries. In effect US firms bid away foreign income stream from foreign firms"

In simplified language Aliber reasoned that MNEs tend to flow from strong currency areas to weak currency areas.

The Neo-Classical Theory

In the neo-classical growth literature, FDI is associated positively with output growth because it either increases the volume of investment and/or its efficiency or thus puts the economy on a higher long-term growth path. Thus, FDI can have a level effect and apart from the potential efficiency increase, there is no qualitative difference to domestic capital in these models. Turning towards endogenous growth model, the potential role for FDI is much greater. FDI may influence each argument in the production function and have additional

indirect and thus permanent effects on the growth rate. Again, FDI can impact on the stock of capital available in the country. However, by raising for instance the number of varieties for intermediate goods or capital equipment, FDI can increase productivity (Borensztein et al., 1998). In addition, FDI can permanently increase the growth rate through spillovers and the transfer and diffusion of technologies, ideas, management and production processes, etc. These are basically the four channels which allow for technological spillovers from FDI on the host economy (Kinoshita, 2001, Halpern et al, 2005).

Empirical Review

Bouoyiour (2003) conducted a study on the determinants of FDI over the period of 1990-1999 using the time series data. The result shows that labour cost, human capital and infrastructure of the economy were paramount factors responsible for inflow of FDI in that country. The result further reveals that there is a significant relationship between FDI and variables such as real exchange rate, inflation rate, the market size (proxied by GDP) and trade performance.

Similarly, Marwah and Tavakoli (2004) tested the effect of FDI on economic growth in Indonesia, Malaysia, Philippines, and Thailand. Using time series annual data over the period 1970-1998, they find that FDI has positive correlation with economic growth for all four countries. Vu et al (2006) studied sector-specific FDI inflows for both China over the period 1985-2002 and Vietnam over the period 1990-2002. Using an augmented production function specification and regression methodology, they conclude that FDI has positive and direct impact on economic growth as well as an indirect effect through its impact on labor productivity. They also find that the manufacturing sector appears to gain more than other sectors from sector-specific FDI.

Li and Liu (2005) applied both single equation and simultaneous equation system techniques to investigate endogenous relationship between FDI and economic growth. Based on a panel of data for 84 countries over the period 1970-1999, they find positive effect of FDI on economic growth through its interaction with human capital in developing countries, but a negative effect of FDI on economic growth via its interaction with the technology gap.

Castejón and Woerz (2005) employed the Nair-Reichert and Weinhold (NRW) model to check whether an increase in FDI will lead to an increase in the growth rate of output, controlling for time-invariant country-specific characteristics and for other dynamic control variables in Vienna for the period of 1987-2002. Empirical evidences from this study shows that a significant and positive relationship emerges when FDI interacts with investment or export orientation.

Tang et al (2008) explored the causal link between FDI, domestic investment and economic growth in China between 1988-2003 using the multivariate VAR and ECM. Their results indicate that there is a bi-directional causality between domestic investment and economic growth, while there is a single-directional causality from FDI to domestic investment and to economic growth. They concluded that there is a higher level of complementarity between FDI and domestic resources. Similarly, Chandran et al (2008) explored the short and long run dynamics of Foreign Direct Investment (FDI) over the manufacturing growth in Malaysia for the period of 1970-2003 using the autoregressive distributed lag (ARDL) model. The result shows that FDI has played an important role in stimulating the growth of the manufacturing sectors in Malaysia. In addition, the results also showed that labour and technological progress has positively contributed to the growth. As a whole, since FDI have become increasingly important, the policy direction focusing on human

capital, improving productivity and innovative capabilities of the manufacturing sectors and strengthening the supporting industries and institutions are proposed. This in turn will promote and make Malaysia an attractive destination for FDI.

Rehman et al (2011) analyzed the role of infrastructure for and in ascertaining captivations of foreign direct investment (FDI). This work investigated the effects of host country's infrastructure availability along with exchange rate and market size on inflows of FDI towards Pakistan for the period 1975-2008. This study employed autoregressive distributed lag (ARDL) approach to Co-integration and an error correction model based on ARDL approach using time series data. The results reveal a strong positive impact of infrastructure in attracting foreign direct investment, in short and in long run.

Akinlo (2004) investigated the impact of FDI on economic growth in Nigeria using data for the period 1970 to 2001. The error correction model (ECM) results show that both private capital and lagged foreign capital have small and insignificant impact on economic growth. The study also established the positive and significant impact of export on growth. Financial development which he measured as M2/GDP has significant negative impact on growth.

Methodology

This research work is conducted using econometric analysis. Ordinary Least Squares (OLS) estimation technique was used in carrying out the analysis.

Considering the fact that the manufacturing output of an economy is not determined by FDI alone, thus we include in the model such independent variables that are germane to manufacturing output subject to availability of data.

Model Specification

The model is specified on a priori economic theory and on the available information which are related to the impact of FDI on manufacturing output.

The Model

Modeling the impact of FDI on manufacturing output in Nigeria.

The econometric specification for model is:

$$LOGMO_t = \beta_0 + \beta_1 LOGFDI_t + \beta_2 LOGPSC_t + \beta_3 LOGDMS_t + \beta_4 EXR_t + U_t$$

where; β_0 = is the intercept term for the regression.

U_t = stochastic Error term.

LOG = Logarithm Operator

MO= Manufacturing output

FDI= Foreign Direct Investment

PSC = Private sector credit

DMS= Domestic savings

EXR= Exchange rate

Justification of Variables

The choice of the variables employed in this research is a function of the evidence provided by literature and the economic relationship that exists between the dependent and the independent variables. Previous and recent empirical studies such as; Nguyen(2007), Haruna (2013); Hanson (1996); Ahmed (1979) etc have in their respective studies shown that inflation rate, FDI, exchange rate, interest rate and private sector credit have impacts on manufacturing output.

FDI: Foreign Direct investment (FDI) represents Investment involving a long-term relationship and reflecting a lasting interest and control of a resident entity in one economy (foreign direct investor or parent enterprise) in an enterprise resident in an economy other than that of the foreign direct investor. Opaluwa et al (2012) examined the effect of Foreign Direct Investment (FDI) on the Nigerian manufacturing sector. According to Opaluwa et al (2012), most countries strive to attract Foreign Direct Investment (FDI) in the manufacturing sector because of its acknowledged advantages as a tool of economic development. For the purpose of this study, we expect FDI to be positively related to manufacturing output.

PSC: Private sector credit refers to the financial resources provided to the private sector such as bank loans, purchases of non-equity securities and trade credits and other accounts receivable that establish a claim for repayment. Ernest (2013) empirically investigated the impact of macroeconomic factors on manufacturing productivity in Nigeria. The results from this study shows that credit to the manufacturing sector in the form of loans and advances have the capacity to sharply increase the level of manufacturing productivity in Nigeria. He therefore advocates a cut in margin between lending and deposit rates. For a resounding performance, the establishment of Microfinance Banks, Small and Medium Industries Equity Investment Scheme and Small and Medium Enterprises Development Agencies of Nigeria, Bank of Industry should be overhauled for development and improvement in the local production. For the purpose of this study, we expect private sector credit to bepositively related to manufacturing output.

DMS: Saving is income not spent or deferred consumption. Domestic savings include both savings from the private and public sectors in a country. Samuel and Andrew (2012) investigated the relationship between Inflation, Savings and Output in Nigeria employing VectorAutoregression (VAR) approach, using Time series data from 1970 to 2010. The result from their research shows thatwhile Inflation tends to reduce output, savings actually stimulates Output. Essentially, the Granger causality test shows that changes in Inflation may not have stimulated nor sufficiently responded to Output growth or savings in Nigeria over the period of analysis. On the other hand, changes in Savings effectively stimulate Output and Output also critically cause movements in Savings in Nigeria.For the purpose of this study, we expect domestic savings to have a positive relationship with manufacturing output.

EXR: An exchange rate is the rate at which one currency exchanges for another. It is also regarded as the value of one country's currency in terms of another currency. Opaluwa et al (2010) in their work "The effect of exchange rate fluctuations on the Nigerian manufacturing sector" examined the impact of exchange rate fluctuations on the Nigerian manufacturing sector. The argument is that fluctuations in exchange rate adversely affect output of the manufacturing sector. This is because Nigerian manufacturing is highly dependent on import of inputs and capital goods. These are paid for in foreign exchange whose rate of exchange is unstable. Thus, this apparent fluctuation is bound to adversely affect activities in the sector that is dependent on external sources for its productive inputs. The result from their regression analysis shows that coefficients of the variables carried both positive and negative signs. For the purpose of this study, we expect exchange rate to have positive or negative relationship with manufacturing output.

Presentation and Analysis of Regression Result

The estimates from the regression carried out are presented and analysed in this section.The results of the ordinary least square (OLS) are presented below.

Presentation of Ordinary Least Square (OLS) Regression Results

The impact of FDI on manufacturing output in Nigeria.

Table 1
For Model 1

VARIABLE	COEFFICIENT	STANDARD ERROR	T-VALUE	PROB
CONSTANT	1.449367	0.958702	1.511801	0.1396
LOGFDI	-0.259502	0.075740	-3.426240	0.0016
LOGPSC	-0.516939	0.195335	-2.646423	0.0121
LOGDMS	1.494597	0.264934	5.641383	0.0000
EXR	-0.018485	0.003733	-4.952242	0.0000
R^2=0.910206 F-STAT=70.95659		$\bar{R}^2$=0.897379		

Evaluation of Results

Based on the theoretical assumptions, we hereby evaluate the above result to verify if they conform to the principles of economic theory. From the estimations, the coefficient of foreign direct investment is -0.259502 which shows a negative relationship between foreign direct investment (FDI) and manufacturing output (MO). Thus, holding other variables constant, a percentage increase in foreign direct investment will on the average decrease local manufacturing output (MO) by 0.26% in Nigeria. This is not in conformity with a priori expectation. Also, the coefficient of private sector credit (PSC) is (-0.516939) which implies a negative relationship between private sector credit and manufacturing output (MO). Therefore, holding other variables constant, a percentage (1%) increase in private sector credit will on the average bring about a decrease in manufacturing output (MO) by 0.52% in Nigeria. This is not in conformity with a priori expectation. However, this could be explained by the misallocation and misappropriation of credit facilities by some operators in the monetary sectors. Available statistics has shown that some cronies of bank managers who collect loans and credit facilities do not invest it into serious manufacturing activities, rather they use such loans to fund consumption expenditures, thus, reducing manufacturing output and productivity in Nigeria. Therefore, policies should be formulated to check-mate the use of method of advancing loans to applicant and how such loans and trade credit are utilized to increase manufacturing productivity. Furthermore, the coefficient of domestic savings (DMS) is (1.494597) which implies that domestic savings has a positive relationship with manufacturing output (MO). Thus, holding other variables constant, a percentage increase in domestic savings would on the average lead to a 1.49% increase in manufacturing output (MO) in Nigeria. This result conforms to economic a prior expectation which posits a positive relationship between domestic savings and manufacturing output. Again, the coefficient of the exchange rate is (-0.018485) which implies a negative relationship between exchange rate

and manufacturing output (MO) and holding other variables constant, a unit increase in exchange rate would on the average decrease manufacturing output (MO) by 0.02 units in Nigeria. This is in conformity with a prior expectation, because the manufacturing output can be adversely by the rise of dollar against the naira. Therefore, government should adopt policy instruments that will help in checking the exchange rate problems in Nigeria.

Coefficient of Determination (R^2)

The coefficient of determination (R^2) measures the proportion of the variation in MO explained by LOGFDI, LOGPSC, LOGDMS, and EXR. It measures the goodness of fit of the estimated model. The R^2 of this study is 0.910206. This implies that the explanatory variables (LOGFDI, LOGPSC, LOGDMS, EXR, and MKS) explained about 91.02% of the total variations in the dependent variable (MO).This signifies that the model is a good fit.

Policy Recommendations

Policies matter for reaping the full benefits of FDI. Foreign investors are influenced by the overall quality of the host country's enabling environment. Some important parameters that may limit expected profitability (e.g. geographical location) are largely outside the influence of policy makers. Moreover, in many cases the profitability of individual investment projects in developing countries may be at least as high as elsewhere. Important factors such as the host country's infrastructure, its integration into the world trade systems and the availability of relevant national competences are all priority areas. To this end we therefore, recommend that

1. Although we found FDI to be negatively related to manufacturing output in Nigeria, this unhealthy relationship can be reversed if the country receives increased FDI inflows into critical sectors that support the necessary inputs and raw materials needed by the local industries.
2. Security of lives and property, political stability, and the provision of critical infrastructure should be the priority of the government in order to enhance the inflow the right composition of FDI that enhances manufacturing output.
3. Credit to the private sector should be well targeted to ensure that those receive the credit are those who really need it to invest in profitable manufacturing ventures and also enhance their industrial productivity.
4. Competitive policies should be enacted by the government that will be geared towards ensuring proper functioning of the markets necessary to attract well targeted foreign investors in Nigeria. Foreign companies that kill local productive and manufacturing efforts should not be allowed to operate in the local business environment.
5. The government should also provide enabling macroeconomic environment which should be characterized by stability and credibility of economic policies for the engineering of foreign direct investment inflows to augment domestic production; this will bring desirable positive changes in manufacturing sectors in Nigeria.
6. From our analysis, since domestic savings have positive impact on the manufacturing sector, the government should give incentives to encourage more savings by Nigerians. This will consequently be borrowed by business owners that will invest it into manufacturing ventures.

Conclusion

This study has added a fresh knowledge into the protracted issue of FDI and the manufacturing sector. From our findings it is obvious that FDI did not support manufacturing output in Nigeria within the period under review. Although we found FDI to be negatively related to manufacturing output in Nigeria, this unhealthy relationship can be reversed if the country receives increased FDI inflows into critical sectors that support the necessary inputs and raw materials needed by the local industries. We therefore conclude that competitive policies should be enacted by the government that will be geared towards ensuring proper functioning of the markets necessary to attract well targeted foreign investors in Nigeria. Also, foreign companies that kill local productive and manufacturing efforts should not be allowed to operate in the local business environment.

References

Akinlo, F. (2004), "Foreign Direct Investment and Growth in Nigeria: An Empirical investigation". Journal of policy modeling, Vol. 26 No. 5 pp 627-   639.

Anyanwu, C. (1999), "Productivity in the Nigerian Manufacturing Industry". Research Department: Central Bank of Nigeria, pp 124-129.

Borensztein, E, (1998), "How does Foreign Direct Investment affect Economic Growth?" Journal of International Economics, Vol. 45 No. 1 pp 115   -135.

Buckley, P. and Casson, M. (1976), "The Future of Multinational Enterprise". London: The Macmillan Press.

Central Bank of Nigeria Statistical Bulletin: Various Issues.

Chandran, V. and Krishnan, G. (2008), "Foreign Direct Investment and Manufacturing Growth: The Malaysian Experience". International Business Research Journal, Vol. 1 No. 3.

Ernest, S. (2013), "Macroeconomic Variables and the Productivity of The Manufacturing sector in Nigeria: A Static Analysis Approach". Journal of Emerging issues in Economics, Finance and Banking, Vol. 1 No. 5.

Ishola, S. (2012), "Government Expenditure in the Manufacturing Sector and Economic Growth in Nigeria". International Journal of Scientific & Engineering Research, Vol. 3 Issue 11.

Kinoshita, Y. (2001), "R&D and technology spillovers through FDI, innovation and absorptive capacity". CEPR Discussion Paper, 2275.

Kumar, N. (2001),, "Infrastructure Availability, Foreign Direct Investment inflows and their Export-Orientation: A cross-country exploration". Research and Information system for Developing countries, New Delhi.

Li, X. and Liu, X. (2005), "Foreign Direct Investment and Economic Growth: An Increasingly Endogenous Relationship". World Development Report, Vol. 33 No. 3 pp 393-407.

Marwah, K. and Tavakoli, A. (2004), "The Effect of Foreign Capital and Imports on Economic Growth". Journal of Asian Economics, Vol. 15 pp 399-413.

Nguyen, T. and Seiichi, F. (2007), "The impact of Real Exchange Rate on Output   and Inflation in Vietnam : A VAR Approach. Discussion paper No. 0625.

Obwona, M. (2001), "Determinants of FDI and their impact on Economic Growth in Uganda. African Development Review, Vol. 13 pp 46-81

Samuel, I. and Andrew, O. (2012), "Inflation, Savings and Output in Nigeria: A VAR Approach". Journal of Emerging Trend in Economics and Management Sciences, Vol. 3 No. 5 pp 447-453.

Sunday, O. (1984), "The impact of Foreign Direct Investment on the development of Manufacturing industries in the Nigerian economy", Durham theses, Durham University.

UNCTAD (2001).Trade and Investment Report. New York: The United Nations.

UNCTAD (2001), "World Investment Report: Promoting Linkages Overview." Transnational Corporations, Vol. 11 No. 1 pp 77-113.

Vernon, R. (1966), "International Investment and International Trade in the Product cycle". Quarterly Journal of Economics, Vol. 80 pp 190-207.

Vu, T. and Noy, I. (2006), "Is Foreign Direct Investment Good for Growth? Answers Using Sectoral Data from China and Vietnam."Unpublished.

Yoshino, N. and Nakahigashi, M. (2000), "The role of Infrastructure in Economic Development. Keio University, Japan.