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Accelerating Economic Growth in Nigeria, The Role of Foregn Direct Investment

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Abstract: The study examines the impact of Foreign Direct Investment (FDI) on Economic Growth in Nigeria. Using foreign direct investment, exchange rate and total domestic savings as the explanatory variables, we examine the effect of Foreign Direct Investment (FDI) on Gross Domestic product, our proxy for economic growth and the dependent variable. Employing the OLS regression technique, our result showed that Foreign Direct Investment (FDI) has significant impact on Economic Growth in Nigeria during the period under study. We therefore conclude that Foreign Direct Investment (FDI) performs a role in accelerating economic growth in Nigeria. Although the relationship between FDI and economic growth was found to be statistically insignificant, but there still exist a positive relationship. Government should strive to create conducive environment for foreign direct investment in Nigeria through appropriate fiscal, monetary and general economic policies and stable political environment.

Key words: Accelerating, capital accumulation, economic growth and foreign investment

INTRODUCTION

The most and strategic factor influencing economic growth in any country is investment. It is characterized as the main key to increased level of productivity. A strong correlation between investment and economic growth has been revealed by both theoretical and empirical studies by development economists in both developing and developed economics of the world. With the knowledge of the required rates of income growth needed to overcome underdevelopment as well as an Assumed Incremental Capital Output Ratio (ICOR), economist at regular interval calculate the required investment ratio needed to achieve the target growth?

The traditional model of economic growth assumes labour to be in unlimited supply and the only constraint on output growth is capital accumulation. Consequently, the most strategic a factor affecting investment is capital accumulation. Capital accumulation is made possible Majorly through savings. Economic agent (deficit spending unit) borrows the accumulated savings for investment purposes.

In countries where there exists poor savings habit, what is evident is that, realized savings fall short of desired investment and hence there will be disequilibrium in the product market which in turn slow down the rate of economic growth.

There has been deficiency in the capital accumulation needed for increase level of investment in Less Developed Countries (LDC), Nigeria in particular. This is due to the fact that there exist low level of savings which is caused by factors such as high level of poverty, weak financial system which cannot properly mobilized funds internally, low level of entrepreneurial spirit among local entrepreneurs, among others.

Nigeria is a monoculture economy, over depending on the oil sector. This has also been seen to be responsible for deficiency in investment capital in the country. Amadi (2002) opined, “With oil as the main source of foreign exchange, a one-product monocultural economy must be continuously deficient in investment capital. Oil is subject to the vagaries of international capitalism. Therefore, revenue from it must be subject to serious fluctuations”.

The above situation in the country has created savings and foreign exchange gap. This culminates to a wide gap between the actual domestic investment fund and the required investment for accelerating economic growth. So foreign capital has been regarded as an alternative to bridge the gap.

Consequently, for any country, like Nigeria, with this investment gap to achieve a desired rate of economic growth, FDI has to be given due consideration. This is because FDI provides funds from other parts of the world to bridge the investment gap.

In Nigeria, FDI has been given prominence by past and present administrations. This is because they see it as an antidote for slow rate of economic growth, which has been experienced in the country. The federal government of Nigeria has, since 1986, embarked on sustained effort to encourage FDI. The most significant of those policy measures was the introduction of the Structural Adjustment Programme (SAP), which provided the basis for deregulation of the economy (CBN, 2001).

The country has witnessed high inflow of FDI as a result of investment in the Global System of Mobil (GSM) telecommunication. The oil sector of the economy has also witnessed an increased level of FDI as evidenced by the increasing numbers and operations of oil Multinationals Corporation in the country. However,

there have been a lot of controversies in the country over the effectiveness of foreign investment in stimulating the rate of economic growth. It is this controversy that the study intends to settle.

MATERIALS AND METHODS

Conceptual framework: Tadaro, (1999), defined FDI as investment by large multinational corporations with headquarters in the developed nations. Amadi (2002) sees FDI as a distinctive feature of multinational enterprises. According to him, FDI is not simply an international transfer of capital but rather, the extension of enterprise from its home country which according to Root (1984), involves flows of capital, technology and entrepreneurial skills to the host economy where they are combined with local factors in the production of goods for local and for export markets.

Tadaro (1999) sees Multinational Corporation as enterprises that conduct and control productive activities in more than one country. Tadaro position clearly approximate Jhingan (2002), who view multinational corporation as a firm or enterprises with its headquarters in another country such as the United States, Britain, Germany, Japan etc. and also operates in other countries both developed and developing. Economic growth according to Lipsey (1986) is the positive trend in the nations total output over long term. This implies a sustained increase in Gross Domestic Product (GDP) for a long time.

According to Dolan *et al.* (1991) economic growth is most frequently expressed in terms of increase in Gross Domestic Product (GDP), a measure of the economy's total output of goods an services. This GDP as a measure of economic growth, like any other economic quantities, must be expressed in real terms. That is, it must be adjusted for the effects of inflation so as for it to provide a meaningful measure of growth overtime.

Literature review: Empirical results on the complex series of connection between foreign direct investment and economic growth have been a recurring subject of debate. One of the earlier studies was Voivodas (1973), who investigated the relationship between exports, foreign Capital Inflow and the rate of growth in domestic product. Using a simplified version of the two-gap model, he observed that for a number of LDC's on the post world war II era, there is a strong relationship between export growth and growth of domestic product, but there was no significant relationship between the inflow of foreign capital and the rate of growth of domestic product which he attributed to the violations of the underlying assumptions of the two – gap model.

Blejer and Khan (1984), in their empirical studies of foreign capital flow to developing countries, indicated that changes in output are the most important determinations of private foreign capital flow. However, Serven, (1992), recognized the sensitive of investment to cyclical variations in output, suggesting that a short-term recession may have long-term effects by causing a deep investment slump that permanently traps the economy in a low – growth, low-investment equilibrium.

In order to investigate the potential relationship between FDI and dispersion of technology, Borenztein *et al.* (1998), employed a data set of FDI flow from the Organization for Economic Co-Operation and Development (OECD) member countries to 69 LDC's. Hence, the data set was specifically focused on FDI flows from developed countries to LDCs, which would allow adequate technology gaps diffusions to occur. The results indicate that FDI is an effective conductor for technology diffusion to LDCs when there is a sufficient amount of human capital. Borenztein *et al.* (1998) concluded that FDI positively correlates with growth.

Similarly, Campus (2000) investigated the effects of FDI on 25 transitional economies of the former Soviet Block. Focusing on these LDCs the study uses aggregate FDI flows. The authors argue that the level of human capital and infrastructure in the transitional economies is similar to those in developed countries, that their data set provides a more informative assessment of FDI as an engine for the diffusion of technology. Their result approximate Borenztein *et al.* (1998) that FDI is a significant factor in economic growth.

Hadiji *et al.* (1995) examined the impact of foreign capital inflows on economic growth in a cross sample of 33 developing countries between 1986 to 1992. The results indicated that foreign capital inflows stimulates growth initially beyond a certain threshold, however, the impact on growth appeared negative. The study concluded that too much foreign capital inflows could retard growth.

Oyaide (1977) study the role of direct foreign private investment (DFPI) in the economic development of Nigeria. Using indexes of dependence and development as parameters of Nigeria's economic dependence and development, he suggested that studies on the role of foreign investment in host countries should entail time series analysis of specific features of the host countries and of technology by which (DFPI) reveals it's most important effects as a means of delineating the need and proper use of foreign investment in economic growth. He concluded that DFPI caused both economic dependence and development.

Eke *et al.* (2003) in their study used causality test to analyze the impact of FDI on economic growth in Nigeria. They investigated the causal test from foreign private investment to GDP and causality test from GDP to foreign private investment. The results indicate that causality runs in both directions. They concluded that foreign direct investment is relevant and also a significant determinant of real development in Nigeria, however, foreign capital inflow is growth – path dependent.

Table 1: Trends of gross Domestic Product and Foreign Direct Investment (at 1984 constant factor cost) (Nmillion)

Year	Cross Domestic Product	Foreign Direct Investment
1986	71095.9	735.8
1987	70741.4	2452.8
1988	77752.5	1718.2
1989	83495.2	13877.4
1990	90342.1	4686.0
1991	94614.1	6916.6
1992	97431.1	14463.9
1993	100015.2	29675.9
1994	101330.0	22292.2
1995	103510.0	75940.6
1996	107020.0	111295.5
1997	110400.0	110456.2
1998	112950.0	80751.2
1999	11640.0	92795.3
2000	120640.0	115955.7
2001	125350.0	132433.7
2002	131489.8	166631.6
2003	136470.0	178478.6
2004	145380.0	249220.6

Sources: CBN Statistical Bulletin (2004)

It is obvious from the above review that foreign direct investment and economic growth are positively related, but the data employed in measuring the value of Gross Domestic product was not expressed in real term the gap this present study intend to cover (Table 1).

From the Table 1, both GDP and FDI in Nigeria have been increasing since 1986. In 1986, GDP was N71, 075.9 Million while FDI was N735.8 Million. In 1990 GDP stood at N90, 342.1 Million and FDI N686.0 Million.

In 1995, GDP was N103, 50.0 Million and FDI was N95, 940.0 Million. Again, the figure rose to N120, 640.0 Million for GDP and N115, 955.7 Million in 2000.

The terminal date of this study 2004 still recorded an increase in both GDP and FDI over the previous years. GDP was N145, 380.0 Million and FDI was N249, 220.6 million.

One fact that have become clear from the trend is that, both GDP and FDI has been on the increase since 1986 to 2004. From the work of Eke *et al*. (2003), one may conclude that causality runs in both directions.

Method of analysis: The method of study adopted both descriptive and analytical. The descriptive tools consist of the use of Table 1, 2 and percentages. The analytical tool used is the ordinary least square regression analysis

Sources of data: The study relied basically on secondary data sourced from the CBN publications, Journals, reports related textbooks and FOS review of the economy for various years.

Model specification: For this study, our model was developed to access the role of FDI in accelerating economic growth in Nigeria between 1986–2004. But they are other variables that affect the gross domestic product our proxy for economic growth, which will be given consideration. The regression model is hereby specified thus

$$GDP = b_o + b_1 FDI + b_2 EXR + b_3 TDS + U_2$$

Where

GDP = Real Gross Domestic Product
FDI = Private Foreign Direct Investment
EXR = Exchange Rate
TDS = Total Domestic Savings
U = Stochastic error term

RESULTS AND DISCUSSION

$$GDP = 86004.274 + 0.280\ FDI + 0.308\ EXR + 0.391\ TDS$$
$$(28.509) \quad (1.677) \quad (0.870) \quad (0.962)$$

R2 = 0.86
DW = 0.48
T – Values in Parenthesis

In the estimated regression line above, b_o (the constant term) is 86004.274. This means that holding the value of FDI and all another variables used in this regression constant, the value of GDP will be about N86004.274.00 billion.

The regression coefficient of FDI in the estimated regression line is 0.280 which implies that 28% of the increase in GDP within the period under study was accounted for by the inflow of FDI. The calculated t-statistics for the parameter estimates of foreign direct investment is 1.677. The tabulated t-statistics is 2.13. In the regression the value of the calculated t-statistics for foreign direct investment is less than the value of the tabulated t-statistics. This finding indicates that, the relationship between GDP and FDI is not statistically significant.

The regression coefficient of Exchange rate in the estimate regression lines is 0.308, which implies that 30.8% of the increase in Gross domestic product within the period under study, was accounted for by the exchange rate policing. The calculated t-statistics for exchange rate is 0.870. The tabulated t-statistics is 2.13. The value of the calculated t-statistics for exchange rate is less than the value of the tabulated t-statistics. This finding indicates that the relationship between Gross domestic product and exchange rate policy is not statistically significant.

In the estimated regression line above, the regression coefficient of total domestic savings is 0.391 which implies that 39.1% of the changes in Gross domestic product within the period under study was accounted for by the total domestic savings in the economy. The calculated t-statistics for total domestic savings is 0.962 and the tabulated t-statistics is 2.13. The value of the calculated t-statistics for total domestic savings is less than the value of the tabulate t-statistics. This finding

Table 2: Trends of gross Domestic Product, Foreign Direct Investment, exchange rate and total domestic savings in Nigeria

Years	GDP	FDI	Exchange Rate	Total Domestic Savings
1986	71075.9	735.8	3.3166	11,487.7
1987	70741.4	2452.8	4.1916	15,088.7
1988	77752.5	1718.2	5.353	18,397.2
1989	83495.2	13877.4	7.65	17,83.3
1990	90342.1	4686.0	9.0001	23,137.1
1991	94614.1	6916.6	9.7545	30,359.7
1992	97431.1	14463.9	19.6609	42,439.8
1993	100015.2	29675.9	22.6309	60,895.9
1994	101330.0	22292.2	21.8861	76,127.8
1995	103510.0	75940.6	21.8861	93,327.8
1996	107020.0	111295.5	21.8861	134,503.2
1997	110400.0	110456.2	21.8861	177,648.7
1998	112950.0	80751.2	21.8861	200,065.1
1999	116400.0	92795.3	92.6934	277,667.5
2000	120640.0	115955.7	102.1052	385,190.9
2001	125350.0	132433.7	111.9433	488,045.4
2002	131489.8	16663.6	120.9702	592,094.0
2003	136470.0	178478.6	129.3565	695,739.7
2004	145380.0	249220.6	133.5004	797,517.2

Sources: CBN Statistical Bulletin (2004).

indicates that the relationship between gross domestic product and total domestic savings is not statistically significant.

The coefficient of determination (R2) is 0.86. It shows that 86% of variation in gross domestic product (our proxy for economic growth) is caused by variations in the explanatory variables (foreign direct investment, exchange rate and total domestic savings). The Durbin-Watson statistics is 0.48 which shows hat autocorrelation exist in the regression equation.

The study set out initially to settle the controversies concerning the effectiveness of stimulating the rate of economic growth in Nigeria. The regression coefficient of 0.280 for FDI as shown in the result above indicates that up to 28% of the increase in GDP within the period under study is actually accounted for FDI. The t – statistics shows that the relationship between FDI and GDP is not statistically significant to warrant the undue emphasis that FDI can actually fill the investment gap that will give the desired rate of economic growth in Nigeria.

From the work of campus (2000), Borenztein *et al.* (1998), Oyaide (1977) and Eke *et al.* (2003), a strong and significant relationship was established between FDI and economic growth, but this present study has established an insignificant relationship between FDI and economic growth in Nigeria. These contradict the conclusion of already existing studies reported in our literature. The reason for the non-conformity with existing study could be as a result of unfavoraurable macroeconomic environment in Nigeria like the general price level, interest rate, exchange rate etc. It may also be as a result of the data employed. The previous works reported in our study did not adjust the figures for GDP to take care of inflationary influence, but our study does.

Summary: The major determinant of economic growth in any economy is investment, which is determined by accumulated capital realized from savings and foreign exchange earning. These are usually lacking in less developed countries thereby impeding on the growth of their economy.

In Nigeria, the level of domestic savings and foreign exchange earnings have not been sufficient to meet-up with the required level of investment needed to achieve desired rate of economic growth. This has created saving/investment and foreign exchange earning gap. Foreign direct investment is therefore needed to bridge the gaps.

Nigeria had both in the past and recent years embarked on policy measures to encourage inflow of capital, such as structural adjustment programme SAP, verbal pronouncement of assurance etc.

The empirical result from this research work have been tested and have proved that foreign direct investment exerts positive impact on economic growth in Nigeria within the period under study, even though insignificant statistically as the t – statistics suggest.

CONCLUSION AND RECOMMENDATION

The study has revealed that though there is a positive relationship between FDI and economic growth as 28% increase in GDP was accounted for by FDI, the relationship was found to be statistically insignificant. It therefore become necessary to advice then, that, for FDI to have the desired impact on economic growth in Nigeria, there is the need for the government to improve the macroeconomic environment. Macroeconomic indices such as price level, interest rate and exchange rate have to be closely monitored.

The study also suggest the need for proper management of foreign exchange market and the reduction of inflationary pressure on the economy as exchange rate accounted for about 28% of variation in GDP within the period understudy.

Monetary and fiscal policies directed at improving the performance of the economy need to be vigorously pursued. The government should be consistent with policy

pronouncement and implementation as this will increase the level of confidence foreigners or foreign investor will have on our economy.

Foreign Direct Investment should be tailored towards the productive sector of the economy and should be directed more to production of capital goods against the production of consumer goods in order to enhance more domestic capital formation. Care must be taken not to allow foreign direct investment displace indigenous industrial development. In this regard, the N25 billion recapitalization of the banking industry achieved by this CBN should be properly harnessed to achieve indigenous industrial revolution.

Domestic saving should be mobilized by the government through tax reduction, creation of employment opportunities and improvement of the financial system in order to increase the level of capital accumulation. Our study shows that Domestic saving contributed more to the growth in GDP than foreign direct investment. In conclusion, the findings of this research are consistent with economic theory that foreign direct investments stimulate economic growth in les developed countries. Therefore, foreign direct investment plays a very important role in the growth of Nigeria economy. As long as it's inflow is encouraged, the economy will continue to witness growth in domestic product.

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