

Government Expenditure, Foreign Direct Investment and Economic Growth in Nigeria

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Abstract

Government expenditure and Foreign Direct Investment (FDI) are vital macroeconomic variables of any economy as they are strong propellant of economic growth. The need to control and monitoring government spending and the FDI so as to achieve a steady economic growth necessitated this study. The study seeks to determine the impact of government expenditure and FDI on the Nigeria economic growth. A multiple regression analysis was used to test the relationship between government expenditure (capital and recurrent expenditure) and FDI as the explanatory variables on GDP (proxy for economic growth) as the dependent variable. Our result revealed that the explanatory variables: CEXP, REXP and FDI had significant relationship with economic growth. However CEXP did not conform to expectation. Some recommendations such as a thorough and accountable management of capital and recurrent expenditures in Nigeria, adequate planning, an effective macroeconomic framework and conducive economic environment to encourage foreign direct investment is required

1. Introduction

It is a standard presumption that government expenditure and foreign direct investment (FDI) support the growth objectives of all economies worldwide. Ke-Young and Hermming (1991) posited that government expenditure is one of many interventional strategies by the government to compensate for failed competitive market and secure equity in distribution. In Nigeria it thus becomes imperative to study government expenditure and FDI flow in order to ascertain the extent to which allocation of expenditure to sectors and the FDI inflow in the country contributes to increased output and aggregate demand as the size and structure of government expenditure will determine the pattern and form of growth in output of the economy.

The role of government expenditure in determining income level and distribution is now well recognised. Keynes posited the use of government expenditures in maintaining macroeconomic stability. He suggested that government expenditure can be used to raise aggregate demand and thereby get the economy out of recession (Ahuja 2013). According to him, an increase in government expenditures will have a multiplier effect on the national income leading to a more than proportionate increase in the national income. The variation in government expenditures also, does not only ensure economic stability, but also generate and accelerate economic growth and promote employment opportunities thereby alleviating poverty (Ahuja 2013). However, excessive government expenditures in most developing countries have led to high budget deficit and cases of debt problems.

The relationship between government expenditures (capital and recurrent expenditure) such as wages, salaries, interest on loans, roads, education, agriculture, industry, transport, electricity etc, and economic growth in developing countries is important an analysis as they ought to contribute to growth (World Bank 1994). Public expenditure on social and economic infrastructural like education, health, transport, communication, water disposal, electricity, water and sanitation etc., can contribute to the performance of the economy in the following ways;

- Promotion of infant industries in the economy.
- Reduction in the unemployment rate.
- Stabilization of the general prices in the economy.
- Reduction in the poverty rate and increase the standard of living of the people.
- Promotes economic growth by attracting foreign investment.
- Promotes higher productivity.

Government expenditures have far reaching effect on the overall economic activities of any nation. As identified by Jhingan (1997), government expenditure on production depends on three factors; the ability to work, save and invest; the willingness to work, save and invest and the diversion of economic activities between different uses and localities. Government expenditure in the form of grants and subsidies to farmers, firms and industries is highly productive as it minimizes cost of production which leads to a fall in prices while expenditures on education and health has direct welfare effect on the society. Expenditure on education and health seen as investment in human capital improves skill formation and raises the ability to produce which has

the effect of raising disposable income and in turn increases consumption and investment.

The importance of FDI to developing countries cannot be overemphasized. Many scholars posited that FDI is significant boosters to kick start the economy. According to Odozi (1995), foreign investment appears to be the most crucial component of capital inflows. He further posited that FDI involves the transfer of resources including capital, technology and management and marketing expertise. Such resources usually extend the production capabilities of the recipient country.

The role of FDI to a host nation have been posited as

- Technology transfer
- Employment creation
- Skill and Management technique
- Contribution to capital formation
- Increase production diversity and productivity
- Facilitate local resource and productivity more efficiently
- Create a linkage-effect in the economy

However as FDI is seen as a stimulant for productivity growth, capital formation, technology transfer, employment creation, export promotion, some school of thought such as the Marxist have laid emphasis on such benefit in the host economy. They posited that FDI hindered total freedom and economic growth of the host nation. To them, FDI is linked to the perpetual dependence on developed countries by poor countries; local industries are outcompeted, their productive activities in most cases depend on imported raw material thus the multiplier effect is lower than desired and it also implies increased income remittance abroad leading to capital flight (Ezirim 1996).

Overtime, Nigeria has witnessed a tremendous increase in her revenue profile through oil exports and cycles of oil boom with the government harnessing the resources to execute its budget plan. Also the nation's expenditure has increased overtime. Paradoxically, it does not appear as if the increase in capital expenditures has translated into increased capital formation and consequent economic growth and development.

An overview of government expenditure showed that between 1970 and 1975, public expenditure rose from N903.9 million to N5,942.6 million (CBN 2006). However with the rise in global crude oil price rising from an average of 24.47 dollar between 1970-1975 to 63.15 dollar between 1975 and 1980, public expenditure increased reaching N14,968.5 million in 1980 but dropped to N9,927.6 in 1984. This could be attributed to the slump in oil price and the economic crisis. This led to the implementation of administrative controls such as tightening of import controls, imposition of exchange restrictions on current international transactions, substantial increases in customs tariffs, introduction of an advance import deposit scheme, and ceilings on total central bank foreign exchange disbursements through the introduction of the Economic Stabilization Act 1982. The need for agricultural-based self reliance economy was re-emphasized; however it suffered from lack of foreign exchange leading to scarcity of commodities and high food cost. This led to the formation of the Structural Adjustment Programme in 1986 with the objectives being to partner with the private sector towards achieving economic growth through the liberalization of the economy. Government expenditure again rose with recurrent expenditure rising above capital expenditure almost all year and reached 701,059.40, 3,452,990.80 and 4,605,319.72 in 2000, 2009 and 2012 respectively (CBN 2012).

Nigeria expenditure goals have been quite ambitious and resulted in high spending. This calls for thorough recasting of priorities in the federal expenditure programme. Government expenditure has consistently exceeded revenue for quite some time now and the symptom of such fiscal imbalance is budget deficits. While deficit is not new in the country's history, the size of the deficit has become a cause of concern. It is however pertinent to note that much of the debates over the deficits has been more related to the effect of unacceptable large deficits rather than the cause of deficits. Also faced with social and political unrest in recent years in the country and the continuously high insecurity situation in the country, and with the contrasting views of scholars on the position of FDI in a developing economy, it thus becomes important to investigate government expenditure in Nigeria and to evaluate the standpoint of FDI in the country. This necessitated the study.

The study would be guided by the research hypothesis and would study the trends in government expenditure and foreign direct investment in the Nigeria between the periods 1981 to 2013.

H₀: There exist no relationship between government expenditure, FDI and economic growth in Nigeria.

2.1 Theoretical Framework

Various economists have put forth theories trying to explain movements in public expenditure.

The Keynesian theory posited that there exists a multiplier effect of a change in expenditure on the national income. Hence an increase in the government expenditure would lead to increased employment and investment which would improve aggregate output (Ahuja 2013).

The law of increasing state spending was propounded by German economist Adolph Wagner (1835-

1917). He posited that the development of an industrial economy will be accompanied by an increased share of public expenditure in gross national product. With the development of an economy, new functions and activities spring up and are undertaken by the government while the old activities of the economy are performed more thorough. The Wagner's law implies that there is a functional relationship between economic growth and the growth of government sectors which has the tendency of increasing public expenditure (Anyanwu 1993). Wagner highlighted certain forms of government activities that lead to increasing public expenditure;

- Keeping law and order
- Participation in production of economic goods including provision of certain social products.
- Increase in demand for public goods
- Urbanisation and pressure on social amenities
- Social security
- Provision of welfare etc. (Nnamocha 2001).

Wiseman and Peacock put forward a hypothesis about the growth of public expenditure in their study of public expenditure of UK between 1891 and 1955. They posited that government expenditure increases in a jerk and step-like manner rather than in a steady continuous rate.

However, the approach of the hypotheses is made of three separate concepts.

- **Displacement Effect;** During the time of war, the government further increases the tax rates and enlarges the tax structure to generate more funds to meet the increase in the defence expenditure. The new tax rate or tax structures may remain the same after the war, as the people get used to them. Therefore the increase in revenue results in rise in government expenditure.
- **Inspection Effect;** In the situation of kinky movement of public expenditure, the government's existing revenue earning falls much short and so this requires an upward revision of revenue mobilization and a review of the situation is made both by the government and the taxpaying public. Such review is referred to as inspection effect.
- **Concentration Effect;** With the kinky rise in the public expenditure it is the central government that comes to fulfill larger and larger state activities leaving lesser responsibilities to the regional and local public authorities. This has been referred to as concentration effect of increasing state activities.

Foreign direct investment (FDI) facilitates growth, it is hinged on the traditional neo-classical growth models and the modern growth theories. The traditional growth model is credited to Solow's growth model (1956) which posited that FDI promotes economic growth by directly increasing the volume of investment (Jhingan 2013). It facilitates the process through technological innovation and efficient deployment of resources, to achieve lower unit cost of production thereby increasing global wealth, enhance living standard, ensure poverty reduction and improved welfare for individuals.

The endogenous growth model theory however, explains the long run growth rate on an economy on the basis of endogenous factors as against exogenous factors of the neoclassical growth theory. The theory holds that economic growth is the result of endogenous forces (Jhingan 2013). The long run growth rate of an economy depends on policy measure such as investment/expenditure in human capital, innovation, technical progress etc. The role of technological progress as a key driver of long-run economic growth has been put in scrutiny by more recent studies, which accept constant and increasing returns to capital. These theories propose that the introduction of new accumulation factors, such as knowledge, innovation, etc, will induce self-maintained economic growth. Works within this framework led by works of Romer (1986) and Lucas (1988), highlighted three significant sources of growth; new knowledge, innovation and public infrastructure. Romer (1986) posited creation of knowledge as a side product of investment. Knowledge to him is an input in the production function (Jhingan 2013). In his production function model, three elements were key; increasing returns in the production output, externalities and diminishing returns in production of new knowledge. New knowledge he posited is the ultimate determinant of long run growth which is determined by investment. Lucas (1988) pointed out that investment in education leads to human capital production essential in determining economic growth process. This is so because investment in human capital rather than investment in physical capital has a spill over effect that increases technological level.

2.2 Empirical Review

Bleaney et al (2001) using panels of annual and period-averaged data for 22 Organizations for OECD countries during 1970 to 1995 and applying OLS and GLS methods, studied the impact of government spending on economic growth. They concluded that productive public expenditures enhance economic growth, but non-productive public spending does not.

Mitchell (2005) evaluated the impact of government spending on economic performance in developed countries and concluded that a large and growing government is not conducive for better economic performance. He further argued that reducing the size of government would lead to higher incomes and improve American's

competitiveness.

Olorunfemi, (2008) studied the relationship between public investment and economic growth in Nigeria from 1975 to 2004 found that there was no link between gross fixed capital formation and Gross Domestic Product. Also he revealed that public expenditure impacted positively on economic growth and that only 37.1% of government expenditure is devoted to capital expenditure while 62.9% share is to current expenditure.

Bose et al (2003) examined the impact of government expenditure for a panel of thirty developing countries over the decades of the 1970s and 1980s, focussing on sectoral expenditures. They found that the share of government capital expenditure in GDP is positively and significantly correlated with economic growth, but current expenditure is insignificant. Also, the only outlays that are significantly associated with growth once the budget constraint and omitted variables are taken into consideration are at the sectoral level, government investment and total expenditures in education.

Vuale and Suruga (2005) studied the effect of FDI and public expenditure on economic growth rate, they found there is evidence that excessive spending in public expenditures can hinder the beneficial impact of FDI, they examined also some other potential relationships between FDI and public expenditure and proposed that more efforts should be contributed in building a theoretical model which presents the interrelationship between these factors which contribute in determining the long-term economic growth rate.

Josaphat and Oliver (2000), using time series data and a simple growth accounting model, investigated the impact of government spending on economic growth in Tanzania over 32 years between 1965 and 1996. They disaggregated expenditure into physical investment, consumption spending and human capital investment. They found that increased productive expenditure in physical investment had a negative impact on growth and consumption expenditure relates positively to growth, while expenditure on human capital investment was insignificant in their regression and as such, concluded that public investment in Tanzania has not been productive, as at when the research was conducted.

3. Methodology

This paper is on the government expenditure, foreign direct investment and economic growth from 1981-2013. Data were obtained from the CBN statistical bulletin of 2006 and 2013. The data would be analyzed, interpreted and tested in order to facilitate a valued conclusion on the impact of government expenditure, (Recurrent Expenditure and Capital Expenditure) and flow FDI on economic growth in Nigeria. The major statistical tool used in the study is the multiple regression statistical technique. The model formulated for the study is given as $GDP = f(REXP, CEXP, FDI)$

To make the equation easily testable, we specify it econometrically as

$$GDP = b_0 + b_1REXP + b_2CEXP + b_3 FDI + \mu$$

GDP = Gross Domestic Product (Proxy for Economic growth)

REXP = Recurrent Expenditure

CEXP = Capital Expenditure

FDI = Foreign Direct Investment

μ = Disturbance or Stochastic term.

b_0 = Intercept

$b_1, b_2,$ and b_3 are all coefficients of the explanatory variables

The apriori signs expected are: $b_1, b_2,$ and $b_3 > 0$.

4.0. Data Analysis and Interpretation of Result

$$RGDP = 10.79342 + 0.227431\log REXP - 0.017897\log CEXP + 0.040904\log FDI$$

T-Stat (92.68746) (6.667358) (-0.433305) (2.594190)

T Prob. (0.0000) (0.0000) (0.6681) (0.0149)

$R^2 = 0.94,$ Adjusted $R^2 = 0.93,$ F-statistic =156.2785, Prob(F-statistic) = 0.000000

Durbin Watson = 0.712366

Source: Author's computation Eview 3.1

The analysis was estimated both in linear form and log-linear form. The linear estimation was adopted and analyzed as it gave us a better result based on the goodness of fit of the regression model.

From our result, the coefficient of the Independent variables recurrent expenditure and foreign direct investment appeared with the expected sign; however, capital expenditure appeared with a negative sign.

Our result also showed that the coefficient of multiple regression (R^2) is 0.94, meaning that 94% of variation in the dependent variable (GDP) is explained by the independent variables (REXP,CEXP and FDI), while the other 6% is explained by factors not included in the model, but are captured by the error term for the period.

The test of significance from our result showed that REXP and FDI were statistically significant for

the period under review at 5% level of significance. This is due to the fact that their T probability values of 0.0000 and 0.0149 are less than 0.05 (5% level of significance).

The F Stat test, which shows the significance of the entire regression model from our result, was significant. This is due to the fact that the Prob(F-statistic) value of 0.000000 is less than 0.05 (5% level of significance) which further confirms the value of the R^2 .

4.1 Discussion of Finding

The coefficient of recurrent expenditure and foreign direct investment are positive and confirm with a priori expectation, this conforms to the theory of Wagner of increasing state spending meaning that as the economy grows, there is the tendency of increment in recurrent expenditure as more spending will be required for production of economic goods and services, to meet up with the increase demand for public goods, urbanisation and provision of social amenities, welfare etc. Foreign Direct Investment was positive and should be encouraged as an increase in FDI tends to improve economic growth of the country.

The coefficient of CEXP appeared with negative signs and does not conform to expectations. Capital expenditure in Nigeria from our findings, have been on the increase over the year; however it has not had the expected influence on the economy. This could stem from the fact that the spending patterns over the years have reflected inadequate and biased planning within ministries, ineffective monitoring, inadequate checks and balances and insufficient accountability. This has led to infrastructural decay as the country is still bedeviled by bad roads, electricity outages, lack of clean water, poor health and educational system.

5. Conclusion and Recommendations

This work investigated government expenditure, foreign direct investment and its impact on economic growth in Nigeria from 1981 – 2013. The study revealed that the explanatory variables: CEXP, REXP and FDI had significant relationship with economic growth. However CEXP did not conform to expectation.

The following recommendations were made based on our finding

- Capital and Recurrent expenditures in Nigeria should properly managed and directed mainly to productive economic activities that will promote endogenous growth such as education, trainings, health, road constructions, etc. This will stimulate economic activities in the country.
- The spending pattern of government should reflect adequate planning within and between ministries, good policy coordination, accountability and check balances should be ensured.
- An effective macroeconomic framework and conducive economic environment should be made to encourage foreign direct investment.
- Corruption and embezzlement of public fund should be severely tackled.

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