
The Impact of Domestic Private Investment on Nigeria's Economic Growth: 1986-2013

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Abstract: The objective of this paper is to find out to what extent domestic private investment has impacted on the economic growth of Nigeria. Harrod-Domar model was used to analyze the relationship between real GDP and its most important determinants as described in Harrod-Domar model (i.e. RGDP, DPI, SVNSR and INTR). The study runs from 1980 to 2013. Being a time series data, the trend analysis is first conducted to determine the presence of trend factor responsible for spuriousity in regression result, next the ADF test is used to determine the order of integration of the model and finally Ordinary Least Square method is used to establish the nature of relationship between the explanatory variables and Real GDP. We found out that DPI and INTR are statistically significant in influencing RGDP while SVNSR is statistically insignificant. While DPI and INTR have direct impact, SVNSR has negative impact on RGDP, thereby questioning the efficacy of SVNSR in contributing to RGDP. For Nigeria to expect improved economic growth through domestic private investment, the paper recommended a change in the objective and focus of government financial, monetary policies and other institutional structures, through encouraging domestic savings, conducive investment climate, FDI and DPI linkages etc.

Keywords: Domestic Private Investment, Economic Growth, Nigeria

1. Introduction

In contemporary times there has been a worldwide shift towards a growth strategy emphasizing market forces and private sector led growth, in many countries of the world, to a reduction of the public sector from production and also redefining its role in development process, under the guiding principle that the public sector should devote its resources in areas where it supports, rather than replacing the activity of the private sector. It is generally believed that the long-term economic growth of a country will lead to a significant improvement in the standard of living of its citizens, thus, a sustainable increase in domestic private investment will go a long way to reduce widespread poverty in Nigeria, as a result of its impact on economic growth (Akanbi, 2010).

A closer look at the pattern of domestic investment in Nigeria becomes imperative in order to achieve desirable macroeconomic objectives – over the years, high macroeconomic volatility has become a key determinant of poor economic management overall, the economy has been characterized by low savings–investment equilibrium at 20% growth rate. With an average annual investment rate of barely 16% of GDP, Nigeria is too far behind the minimum investment rate of about 30% of GDP to unleash a poverty reducing economic growth rate of about 7.8% per annum (Bakare, 2011).

Undoubtedly despite the structural reform carried out by the government, Nigeria is still saddled with a number of economic Maladies. Among these problems are low level of savings and investment, high rate of inflation, widespread poverty and high level of unemployment (Globerman & Shapiro, 2002). These situations as increase so many researchers who have described the reforms woes rather than a blessing. Instead of the economy adjusting into recovery, the situation is continuing to deteriorate. The expected role of the private sector as an engine of growth never materialized. The major expansion in private investment needed to sustain economic growth is yet to be achieved. The macroeconomic indicators in Nigeria reflect this poor performance between 1970 through 2008. For example, private investment declined from 32.2% before 1970 to 6.5% in 1976. The ratio also declined to 5.8% in 1995 but experienced an increase to 8.3% in 2003 and also resulted to a decline to 6.3% in 2008. The perceptible slide in the ratio of private sector investment to GDP despite the emphasis on private sector following the initiation of public sector reform is worrisome.

The findings on public investment contradict the earlier studies that there is a “crowding out” effect of public investment on private “domestic” investment in Nigeria; rather it suggests a “crowding in” effect of public investment over private domestic investment in Nigeria. The external reserve result suggests that a unit increase in external reserve will bring about the average 2% increase in domestic private investment in Nigeria which is actually consistent with similar result obtained by Chibber and Mansoor (1990) in the case of Mexico. Conclusively, the GDP result suggests that a unit increase in gross domestic product will produce on the average about 22.6% increase in domestic private investment which is inconsistent with the one obtained in the case of Cote d'Ivoire, Kouassy and Bohoun (2010).

Support institutions in the private sector have declined in their programme services. Chambers of commerce, professional associations and research institutions all play an important role in supporting the private sector investment in Nigeria. Some key institutions have suspended operations during Abacha's era and Nigeria's international contacts and domestic private investment was at its lowest ebb. Today, the sector is being revitalized by institutions like the Nigeria Economic Summit Group, Nigeria Association of Chambers and Commerce Industries, Mines, and Agriculture (NACCIMA), The Manufacturer Association of Nigeria (NAN) And Employers Consultative Association. Generally, the performance of the economy has been largely influenced by integration of monetary, fiscal and exchange rate policy. These policies also have been a determinant factor in the growth of private sector in the economy and subsequent investment patterns (Ndikumana, 2000). The domestic private sector have maintained and expanded their capacity to articulate their interest with respect to pending policy decision by the federal and state government. More so, there is a direct function in terms of policy initiative and of the need for a constant effort at this, given the steadily changing policy environment.

However, in the future there will be clear need for more sustained and more productive dialogue in order to improve policy formulation and generate a higher degree of consensus on economic policy. In the current environment, it is more akin to a lobbying effort revolving around what each interest group can get for itself which in the end undermines serious effort at dialogue which will be needed; such a forum would be broad to represent the domestic private sector. Without effective forum for reaching a broad consensus on strategic objectives, initiative such as opening the economy private sector investment and public expenditure reform are likely to be stalled by narrow-minded interest groups.

1.1 Statement of the Problem

This study focuses on the impact of domestic private investment on Nigeria economic growth. A number of reforms such as SAP, Deregulation and sector reform, Public sector reforms, Vision 20:2020, Private Public Partnership reform have been pursued by previous and current governments to create a private sector led growth economy. It was expected that the policy shift should put the Nigerian economy on the path of recovery and sustainable development. In spite of these reforms, Nigeria continues to be confronted with a number of economic challenges. These economic woes are: Low level of savings and investment, High rate of inflation, High level of unemployment and poverty.

The major expansion in private investment needed to sustain economic growth is yet to be achieved. Nigeria's macroeconomic indicators highlight these poor performances of private investment in Nigeria between 1986 and 2013. The failure of these reforms to actually propel the economy on the path of sustained growth and development has raised concern to researchers who have described the reforms as woes rather than a blessing. Rather than for the economy to adjust into recovery, it continues to deteriorate. This prompted the researcher to empirically investigate the impact of Domestic private investment in the Nigeria economy.

2. Literature Review

2.1 Nigerian Private Sector in Nigeria

The second national development plan (NDP) (1970) distinguished between two types of participants in the Nigerian private sector. They include the incorporate business normally referred to as organized private sector and the households called the unorganized private sector which include manufacturing, mining, constructing, commerce, finance and the incorporated part of the road transportation. The activities of these groups are co-ordinated by institutions like the Manufacturers Association of Nigeria

(MAN), the Nigerian Association of Chambers of Commerce and Industries, Mines and Agriculture, (NACCIMA) and the Nigeria Employers Consultative Associations, Agriculture, housing distribution (excluding departmental stores), road transport and small scale activities of individuals. While majority of this informal sub sectors operate informally, a small amount of them operate formally. This unorganized sub sector in Nigeria contains millions of individual proprietors, petty traders, unit transport operators and self-employed craftsmen and artisans.

This sector accounts for about 7.5% of our GNP during the colonial period and the decade after independence and about 50% of the GDP before the introduction of SAP. It is a major source of general employment in the pre SAP era. The contributions were 75% (1970), 86.5% (1971), and 50.9% (1981). There was a remarkable decline in the data in the 1980's failing to 18.3% (1982), 11.2% (1987) and 20.4% (1991). From 1992 there was a sharp rise in the contributions of the private sector. In the contribution to gross investment ranging from 20.4% (1991) to 32.5% (1992) and 49.5% (1993) the private sector dominates the consumption components in Nigeria from average of 85% (in the late 1970s). The sector distribution of private economic activities in Nigeria reflects the fact that Nigerian private sector is still heavily natural resources based. Agriculture which is mainly dominated by small holder production is the most vital sector in terms of employment, while industry accounts for most exports (over 90% of which are fuel and minerals) manufacturing still accounts for as little as less than 10% of GDP and less than 5% of exports. It contributes to less than 20% of employment. It (manufacturing) is yet to make remarkable impact on real sector in Nigeria. The manufacturing enterprise in the country is mainly the light assembly type and is mainly dependent on imported raw materials and components. The bulk of industrial output is in final consumer goods. In addition inter-industries are weak, thus undermining the possibility for a multiplier effect on the economy and there is little transfer of technology.

Consequent to the structural adjustment programme, within the manufacturing sector, while forms in the domestic resource based industries like wood products and furniture, industrial-rubber, non-metallic minerals, soap and castellan food and beverage products are expanding, embellished import intensive low domestic value added manufacturing sector centred on secondary sector activities like food processing, cosmetics, footwear's and garment and tertiary activities like transport and mechanic repairs, retail trade, food preparation and distribution is large and growing. The urban informal sector accounts for over half of employment in manufacturing firms operating in its sector including household firms as well as enterprises with many employers providing various inputs and services to the rural and urban committees. Most of these enterprises were a product of personnel savings or financed through informal saving schemes. Bank finance plays a very minor role in the operations, The Multinational Corporations (MCN's) play a vital and dominant role in Nigeria's private sector. The implications of this include the marginalization of indigenous enterprise in the share of directly productive economic activities. The foreign enterprise dominates in the vital parts of the economy like the oil sector while the indigenous private enterprise are concentrated in the soft areas of the economy (commerce, service, low technology industries etc.). The Nigerian Enterprise decree (1997) was particularly intended to significantly reduce the foreign domination of economic activities and promote indigenous private sector involvement in the economy, but this was later amended again in the 1989 and 1995.

The Nigerian government has done much over the past years to promote the growth and development of the private sector. However, there are many factors that have hindered the development of the sector, this range from civil disturbances through government harassment and interference to uncertain exchange rate, civil service bottlenecks, power failure amongst others.

2.2 Relationship between Government and Private Sector in Nigeria.

In Nigeria, 1980 has been described as a lost decade for majority of Africa Nigeria inclusive. This is despite modest economic records in growth. In the 1970's the slump in commodity prices, the main source of foreign exchange, and increased debt burden predicated a decline from which the country is just starting to emerge; this generally will have to face the stark realities of a hostile international economic environment. The advent of the single market in Europe and development in Eastern Europe are events of deep concern in view of Africa's excessive dependence on the European communities for her exports. In the midst of such harsh realities, the basic aim of every sub-Saharan country is to bring about the economic

growth that could provide better earnings for the average African. It is obvious that Nigeria must attain self-reliance through the most productive and efficient use of her scarce resources. Nigeria has human resources; her farmlands, minerals, forest, water and other resources have to be brought into effective use to produce the best output for a continuous increase in the income of per-head and the quality of life of every person.

The emerging trend in the world economy today is to view and also relate to the private sector as the engine of growth. The role of the government have been refined as being limited to; Providing for justice, law and order and domestic securities which are vital to the achievement of individual and corporate goals. In this context, strengthening the legislative and judicial institutions and guaranteeing their dependence should form a critical part of any reform, as well as formulating and implementing broad macro-economic policies to guide the directions of the economy, establishing the regulatory framework to support an enabling environment for sustaining development. This reduces compliance costs and makes it possible for all economies to play by the role of the game and Providing public goods and services (health care, basic education, basic infrastructure) that the private sector will not provide efficiently and with equity.

It is clear that at present Nigeria does not have a patriotic and viable private sector. The private sector is weak and does not seem to have its own momentum for generating growth and development. The sector is highly dependent on government policies and programmes for its survival. The weakness indicates that Nigeria does not have a viable private enterprise sector and real economic growth within the framework of a free enterprise system. Thus, explains why SAP is yet to make the desired impact on certain areas. Among the many reasons for the country's dismal development performance, the quality of public sector management is a critical one. The quality of public service delivery including basic infrastructural service, remain appealing, this undermines Nigeria's competitiveness. Much federal government spending remains outside the budget process as the control mechanisms have been incapable of halting unauthorized extra-budgetary spending. Public enterprises are badly managed and private investors are still subject to government reshuffles and have characterized the development of the country since independence and have had substantial impact on the character and management of the public sector.

2.3.1 Theoretical Review

There exists a large theoretical and empirical literature on the impact of domestic private sector investment on economic growth in developing countries like Nigeria. Jhingan (2002:63) defines economic growth "as the process whereby the real per capita income of a country increases over a long period of time". He states that economic growth is measured by increase in the amount of goods and services in successive time period. Thus, growth occurs when an economy's productive capacity increases which in turn is used to produce more goods and services. It is in view of this that we shall look into some theories on growth.

2.3.1 The Harrod-Domar Models of Growth

Both Harrod (1939) and Domar (1946) are interested in discovering the rate of income growth necessary for a smooth and uninterrupted working of the economy. Though their models differ in details, yet they arrive at similar conclusions. Harrod and Domar assign a key role to investment in the process of economic growth, but they lay emphasis on the dual character of investment. Firstly it creates income, and secondly, it augments the productive capacity of the economy by increasing its capital stock. Hence, so long as net investment is taking place, real income and output will continue to expand.

2.3.2 Kaldor's Model of Growth

Kaldor (1967) in his model of economic growth follows the Harrodian dynamic approach and the Keynesian techniques of analysis. Kaldor attempts to provide a framework for relating the genesis of technical progress to capital accumulations.

2.3.3 The Endogenous Growth Model

The endogenous growth models emphasize technical progress resulting from the rate of investment, the size of capital stock, the stock of human capital. The endogenous growth theory is a new theory which explains the long-run growth rate of an economy on the basis of endogenous factors as against exogenous factors of the neoclassical growth theory. The theory has been developed by Arrow, Romer and Lucas, among other economists.

2.3.4 Acceleration Theory of Growth

This theory states that investment is a function of the changes in output or income. The acceleration principle explains the process by which an increase (or decrease) in the demand for consumption goods leads to an increase or decrease in investment on capital goods. According to Kurihara, "The acceleration co-efficient is the ratio between induced investment and an initial change in consumption expenditure.

Symbolically, $\beta = \Delta I / \Delta c$ or $\Delta I = \beta \Delta c$

Where:

β is the acceleration co-efficient

ΔI is net change in investment and

Δc is the net change in consumption expenditure

2.4 Empirical Review

The role of domestic private sector in Nigeria economy is a new topic because most students have centred on the impact of foreign direct investment on Nigeria's economy. The World Bank regional program study shows that the critical point economic growth and developmental objectives cannot take place in African (Nigeria inclusive) without igniting the domestic private sector investment. According to Akpokodje (1998) domestic private sector investment in Nigeria has a major problem of interest rate. The report has it that domestic private sector investment in Nigeria has a problem of interest rate. That the interest rates on short-term loans are similar to those on overdrafts, because short-term loans are usually rolled between them and overdraft and firms often confuse the two. The average level of collateral for those firms in the sample reported was 151% of the value of the loan. This can take up statistical capital and raise the cost of loans. In addition there are various fees associated with requesting and processing loans. Long-term finance is very rare. Less than 16% of the samples reported are having loans with a term more than one year. Medium firms and large firms tend to have long term loans. Very large firms tend to have enough internal resources of funds and smaller firms are often viewed as less credit worthy.

According to World Trade Organization database, normal protection is yet another challenge standing in front of the domestic private sector investment impact on the economy. In Nigeria, trade policy mainly consisted of translating a strategy of import substitution into tariffs even if the broad aim of overall protection has reached the extent that tariff in Nigeria remain well above global average. A pre-set tariff schedule introduced in 1995 and valid until 2001 was introduced to further decrease existing tariff, reduce uncertainty. Firms import liberation was persuaded in order to significantly reduce the reliance in qualitative restrictions ad valorem tariff were used in the pre-set schedule. Import duties consisted of a basic rate of custom duty modified by an annually set rebate plus 7% surcharge. The 1995 to 2001 tariff structure was designed to stimulate competition and efficiency by reducing tariff on raw materials intervene rate on capital goods. The reduction of tariffs on final consumption goods was to expose domestic manufacturers to import competition with the relatively higher tariffs on raw materials and intermediate goods production (WTO 1998). In the course of reform program all excise duties levied on domestically produced goods were removed in January 1998. Finally most banks were abolished.

Biggs (2002) compiled statistical data bordering on investment in Nigeria. The report shows that the cost of electricity is a large setback to business in Nigeria. The domestic private sector investment complains about increasing complex from imported goods and commonly place blame on high cost of manufacturing. They reported that the most serious business problem is the state of the infrastructure, and the biggest infrastructure problem is electricity. In considering the cost of electricity, one has to bear in mind that the power holding company high cost of 11 U.S. cents 1KWH. The company is allowed to charge only 3.5 cents KWH and is supposed to receive the rest as government subsidy yet, PHCN accounts receivable run into billions of naira. Private and public consumers fail to pay due to frustration with poor services and frequently inaccurate billing. In the case of privately provided electricity the government subsidizes the cost of fuel (which represents 75% of the cost electricity).

According to Adamu (2002) "the domestic private sector investment is known to be directly related to economic growth in both advanced and developing countries". Previous empirical studies have found that

the factor that determines private sector investment in Nigeria include inconsistency in macroeconomic policies, foreign exchange rate volatility on private sector investment in Nigeria over the period (1973-2002). The study employed co-integration and error techniques to determine the relationship between exchange rate volatility and domestic private sector investment.

2.5 Theoretical Framework

The model that captures the main objective of this study is Harrod-Domar model. Harrod-Domar model describes the economic mechanism by which more investment leads to more growth. For a country to develop and grow, it must divert part of its resources from current consumption needs and invest them in capital formation. Diversion of resources from current consumption is called saving. While saving is not the only determinant of growth, the Harrod-Domar model suggests that it is an important ingredient for growth. Its argument is that every economy must save a certain proportion of its national income if only to replace worn-out of capital goods. The model shows mathematically that growth is directly related to saving and indirectly related capital output ratio. Suppose we define national income as Y, growth as G incremental capital output ratio is K, then we can construct the following simple model of economic growth:

$$S = sY \dots\dots\dots (1)$$

i.e. saving (s) is some proportion of (s) of national income (Y)

$$I = \Delta Y \dots\dots\dots (2)$$

i.e. investment (I) is defined as the change in capital

$$G = \frac{\Delta Y}{Y} \dots\dots\dots (3)$$

i.e investment growth is defined as change in national income ΔY divided by the value of the national income, or output Y, as expressed by the capital/output ratio K, then it follows that.

$$\frac{K}{\Delta} = K \dots\dots\dots 4$$

$$\text{Or} \\ \frac{\Delta K}{\Delta} = K$$

Finally, since total national saving, S, must grow equal total investment, I we can write this equality as

$$S = I \dots\dots\dots 5$$

But from equation (1) above we know that $S = sY$ and from equations (2) and (3) we know that $I = \Delta K = K \Delta Y$

It therefore follows that we can write the; identity; of saving equalling investment shown by equation

$$(6) \text{ as } S = sY = \Delta \Delta Y = \Delta K = I \dots\dots\dots 6$$

$$\text{Or simple as } S.Y = K \Delta Y \dots\dots\dots 7$$

$$\frac{\Delta Y}{\Delta} = G \frac{S}{K} \dots\dots\dots 8$$

Now by dividing both side of equation (8) by Y and later by K, we derive the growth model $\frac{\Delta Y}{Y}$ which represents the rate of change of Y national income or rate of GNP (i.e. it is the percentage change in (GNP).

Equation (9), which is a simplified version of the famous Harrod -Domar equation in the theory of economic growth, implies that the rate of growth of GNP ($\Delta Y/Y$) is determined jointly by the national saving ratio, S, and national capital/output ratio, K. more specifically, it says that the growth rate of national income will be directly or positively related to saving ratio (i.e. the more an e conomy is able to save and invest -out of given GNP, the greater will be the growth of that GNP and inversely or negatively; relate to the economy's capital/output ratio (i.e. the higher the K, the lower will be the rate of GNP growth). The economy logic equation (9) is very simple. In order to grow, an economy must save and, therefore invest, a certain proportion of their GNP. The more an economy can save, the more it can grow for any level of the rate of growth depends on how productive the investment is.

3. Methodology and Model Specification

3.1 Methodology

The research instrument adopted in this study is the Augmented Dickey Fuller (ADF) test and the Ordinary Least Square (OLS) method. The time series properties of the variables are examined using Augmented Dickey-fuller (ADF) unit root test. The data for this research are secondary data and were obtained from several sources. These included the Central Bank of Nigeria (CBN) Statistical Bulletin, National Planning Commission (NPC) and National Bureau of Statistics (NBS) Abstract of Statistics. The secondary data used for the study were processed using E-view (Econometric Package).

3.2 Model Specification

This section specifies the theoretical relationship between domestic private investment and the growth of Nigerian economy based on the theoretical framework. The specified model adopts the original version of Harrod - Domar model which has been extended to incorporate other variables that determine economic growth. The original version of Harrod -Domar model is usually stated in its raw form as:

$$G = \Delta Y/y = s \dots\dots\dots 3.4.1$$

Putting the Harrod -Domar model in functional form with the incorporated variables, we rewrite equation 1 as:

$$RGDP = f(DPI, INTR, SVNSR) \dots\dots\dots 3.4.2$$

Where:

RGDP = Real Gross Domestic Product (proxy for economic growth)

DPI = Domestic Private Investment (Gross Capital formation)

INTR = Interest Rate

SAVNS = Total Savings

Thus, expressing the specified model in a linear econometric form:

$$RGDP_t = \beta_0 + \beta_1 DPI_t + \beta_2 SAVNS_t + \beta_3 INTR_t + \mu_t \dots\dots\dots 3.4.3$$

μ : Stochastic term (captures all other factors that are not included in the model)

4. Data Presentation and Analysis of Results

In order to empirically determine the impact of private domestic investment on the economic growth of Nigeria, model estimation was carried out using annual time series data covering the period 1980 to 2013. Annual time series data on RGDP (RGDP_t), domestic private investment (DPI_t), savings rate (SVNSR) and interest rate (INTR_t) in Nigeria forms the basis for our test and analysis.

Table 4.1: ADF Test Result

Variable	Levels	First Difference	Second Difference	Order of integration
RGDP	0.580177	-1.706100	-18.00579	I(2)
DPI	-11.91014	-	-	I(0)
SAVNS	7.344	-	-	I(0)
INTR	-2.438813	-5.028910	-	I(1)

Source: Authors computation, 2015

Note: the 5% critical value for the ADF statistics is approximately -2.96, computed from Mckinnon (1996) Regression Result Equation 3.4.3

Table 4.2 Dependent Variable (RGDP)

Variable	Co-efficient	Standard Error	t-Statistic	Probability
Constant	214.5597	49.86860	4.30	0.0002
DPI	0.24	0.06	3.78	0.0008
SAVNS	-0.04	0.04	-1.08	0.2579
INTR (1)	6.79	2.59	2.61	0.0145
R²	0.86			
Adj. R²	0.84			
F-statistic	53.54			
Prob. (F-stat.)	0.00			
Durbin-Watson	0.77			

Source: Authors computation, 2015

The estimated equation is stated below:

$$RGDP_t = 214.56 + 0.24DPI_t - 0.04SAVNS_t + 6.79INTR_t$$

Table 4.2 shows the result of regressing RGDP on DPI, SVNSR and INTR.

A direct and significant relationship exist between RGDP and DPI, the estimated parameter of DPI (i.e. 0.24) shows that a unit increase in DPI will on the average bring about 0.17 unit increase in RGDP while holding SAVNS and INTR constant. This results supported the Harrod-Domar model which proved that the growth rate of national income will directly or positively be related to capital formation (i.e. the more an economy is able to invest-out of given GNP, the greater will be the growth of that GDP).

SAVNS has a negative and an insignificant relationship with RGDP, the estimated parameter of SAVNS (i.e. -0.04) shows that one unit increase in SAVNS will on the average bring about 0.04 unit decrease in RGDP. This implies that savings rate has no contribution in growth rate of the Nigeria economy. This could be attributed to the fact that domestic savings are not properly channelled to the real sector but made available to investment houses for portfolio investment, politicians, and non-productive sectors. It could also be attributed to the concept of paradox of thrift.

INTR has a significant and direct relationship with RGDP, the estimated parameter of INTR (i.e. 6.79) shows that a unit increase in INTR will on the average bring about 6.79 unit increases in RGDP. The positive sign of rate of interest is in consonance with the a priori expectation. It shows in simple terms that increase in interest rate mobilizes savings and increases capital formation in Nigeria and consequently increases domestic output.

The R^2 and Adj. R^2 value of 0.86 and 0.84 respectively show that the model has a high goodness of fit, that 86% of the variation in the explained variable (RGDP) is captured by the explanatory variables. The f-calculated value (53.64) exceed f-critical value (3.14) at 5% significant level showing that the estimated parameters of the explanatory variables RGDP, DPI, SVNSR and INTR are jointly statistically significant. The Prob. (f-stat.) Value (0.0000), affirms the above statement. This implies that the model is fit for forecasting and prediction. The D-W statistic value of 0.77 indicates the presence of positive autocorrelation, implying that the error terms of the adopted econometric model are correlated.

4.2 Major Findings

In summary, since all the econometric tests applied in the first model (i.e. $RGDP = f(DPI, SAVNS, INTR)$) show statistically significant relationship between the dependent and independent variables excluding Rate of Savings (SAVNS), thus, we reject the null hypotheses (H_0) which states that: Domestic Private Investment has no impact on economic growth of Nigeria and accept the alternative hypotheses (H_1) which states that: Domestic Private Investment has significant impact on economic growth of Nigeria.

5. Conclusion and Recommendations

5.1 Conclusion

The study seeks to empirically investigate the impact of domestic private investment on the economic growth of Nigeria. In the light of the above, we have been able to establish based on the research questions and objectives that domestic private investment and interest rate have significant impact on economic growth in Nigeria. The study used secondary data sourced from the NBS and CBN statistical bulletin. Time series data employed for this study is analysed using ADF test statistic and OLS. The ADF test shows that the variables under investigation DPI and SVNSR are stationary at levels, while RGDP and INTR are stationary at first difference implying that they are integrated of order one i.e. $I(1)$. The obtained OLS result revealed that DPI and INTR are statistically significant implying that they have impact on economic growth (output), while SAVNS is not. DPI and INTR directly influence economic growth (RGDP), while SAVNS shows negative relationship to economic growth (RGDP).

5.2 Recommendations

For an increased domestic private investment and improved growth to be achieved in the Nigerian economy, there is an urgent need to refocus on the following critical areas of the economy:

1. Government institutions need to be more strengthened by improving coordination within government structures.
2. If domestic private investment is to be the engine of growth, then policy makers should encourage private domestic savings by enhancing interest rate. For policies to cause a sustainable development, all components—the saving rate, the lending rate, the exchange rate the inflation rate, the private domestic investment, public domestic investment etc. must be addressed simultaneously.
3. Among others, there is the need for the government to continue to create conducive investment climate and improve the infrastructural base of the economy to boost domestic private investment.
4. The political environment should be more secure in order to attract higher levels of domestic private investment, by maintenance of public order, the assurance of property rights, a sound regulatory structure and the creation of a framework that will increase the provision of public goods and services.

References

- Adamu, P. A. 2002: "The Impact of Human Capital on economic Growth in Nigeria: An Error Correction Approach", in Human Capital Formation and Economic Development in Nigeria, *NES, 2002 Annual Conference Paper*, pp.53-77.
- Akanbi, O. A., & Du Toit, C. B. 2010: *Macro-econometric Modelling for the Nigerian Economy: Growth-Poverty Gap Analysis*. Retrieved from upetd.up.ac.za/thesis/available/etd-9252010-135832/.../00front.pdf

- Akpokodje, G. 1998: Macroeconomic Policies and Private Investment in Nigeria in Rekindling Investment for Economic Development in Nigeria by Ben E. Aigbokhan (ed). Selected papers for the 1998 Annual Conference; *The Nigerian Economic Society*
- Atoyebi, K.O., Akinde, J.O., Adekenjo, F.O. and Femi, E. 2012: Foreign Trade and Economic Growth in Nigeria: An Empirical Analysis. *American Academic and Scholarly Research Journal*, Vol.4, No. 5
- Bakare A. S., 2011: A Theoretical Analysis of Capital Formation and Growth in Nigeria. *Far East Journal of Psychology & Business*, 3(1), pp.12-24
- Bayraktar, Bahar. 2003: "The Role of Private Sector Investments in the Economic Performance of OIC Member Countries," *Journal of Economic Cooperation and Development*, 24(1), 63-110.
- Bayraktar, N., and Fofack, H. 2007: Specification of investment functions in Sub-Saharan Africa. *World Bank Policy Research Working Paper*, No.4171
- Chibber, A. and D. Mansoor 1990: Fiscal policy and private investment in developing countries *Recherche Economique*, XLIV, Numero 2-3.
- Dormar, E. 1946: "Capital Expansion rate of growth and Employment: *Econometrical*" 14(2)
- Dickey D. A. & Fuller W. A. 1981: Likelihood Ratio Statistics for Autoregressive Time Series with a Unit Root. *Econometrica* 49 (9) Pp.1057-1072
- Ezeoha, Abel, et al 2009: Stock Market Development and Private Investment Growth in Nigeria. *Journal of Sustainable Development in Africa*, 11(2), 20-35.
- Globerman, S., and Shapiro, D. 2002: Global foreign direct investment flows: the role of governance infrastructure. *World Development*, Vol.30, No.11, pp.1899-1919
- Harrod, R 1939: "An essay in Dynamic theory" *the Economic Journal*
- Gujarati D.N. & Porter D.C. 2009: *Basic Econometrics*, 5TH Edition, Singapore: Mc Graw-Hill.
- Jhingan, M.L. 2002: "Macroeconomics Theory" 10th Edition, Vrinda Delhi pp. 603.
- Kouassy, O. and B. Bohoun, 2010: Consequences and limitations of recent fiscal policy in Côte d'Ivoire *Report on Research sponsored by AERC*, Nairobi, Kenya
- Kurihara, Y., 2006: "The relationship between exchange rate and stock prices during the quantitative easing policy in Japan," *International Journal of Business*, Vol.11, No4, pp.375-86.
- Kaldo, N. 1967: "Strategic factors in Economic Development in New York (NY), Ithaca
- Linda Cotton and Vijaya Ramachandran 2001: Foreign Direct Investment in Emerging Economies Lessons from sub-Saharan Africa, *World Institute for Development Economic Research*, Discussion Paper No. 2001/82
- Ndikumana, L. 2000: Financial determinants of domestic investment in Sub-Saharan Africa: evidence from panel data. *World Development*, Vol.28, No.2, pp.381-400
- Ndikumana, Léonce; Verick, Sher 2008: The linkages between FDI and domestic investment: unravelling the developmental impact of foreign investment in Sub-Saharan Africa, *IZA Discussion Papers*, No. 3296
- OECD, 2001: *The well-being of nation: the role of human and social capital*. OECD Paris.
- World Bank 2002: *Structure and Performance of Manufacturing Enterprises in Nigeria: Results of the RPED 2001 Nigeria Firm Survey*, World Bank: Washington D.C.