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Full Length Research Paper

Macroeconomic Determinants of Private Sector Investment - An Ardl Approach: Evidence from Nigeria

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Over the years, it has been understood that the Nigerian economy will require amongst other things an increase in private sector investment in order to attain meaningful, efficient, and sustainable growth. However, this study investigated the determinants of private investment in Nigeria for past decades. The ARDL (Autoregressive Distributed Lag) Co- integration approach is employed to check the existence of a long run relationship as well as a short run dynamics of private investment in Nigeria. The result suggests that the determinants of private investment used in this study i.e. Aggregate Demand Condition in the economy (GDP), Real Interest Rate, Real Exchange Rate, Inflation Rate, and Credit to Private Sector has not been able to contribute effectively or boost private investment in Nigeria. However the study therefore suggests that the government, while improving the macroeconomic conditions conducive to boost investment, should also create a conducive political environment to boost private sector investment.

Keywords: Private Investment, Aggregate demand, Credit to Private Sector, ARDL

INTRODUCTION

The private sector contributes more meaningfully to economic growth than the public sector. The reason for this statement as given by Seruvatu and Jayaraman (2001) is that corruption seems to be less in the private sector investment compared to the public sector investment.

Therefore, to this end, measures are taken by the government of Nigeria to encourage private sector investment in order to boost high productivity, innovation, employment level, and standard of living, reduce poverty and ultimately accelerate economic growth.

However recent theoretical and empirical studies tend to suggest that reviving private investment may prove difficult unless efforts are made towards restoring consistency and stability in macroeconomic policy environment of business (see Pindyck 1991). Fluctuations in private sector investment in Nigeria have been a serious concern because in spite of the measures adopted by the Nigerian government, private sector investment trends remained low which tend to impede economic growth in the country. It has however been found that a major problem is that the government is so

much concerned about policies to boost private investment without much knowledge or investigations into the main determinants of private investment in Nigeria.

Therefore, this study gives a clear understanding of the major determinants of private sector investment in Nigeria. And also gives policy makers a clearer picture on how to control private investment in the desired direction to foster economic growth and development in Nigeria.

The study is divided into five sections: section 1 introduces the study, section 2 reviews the relevant literatures, section 3 discusses the research methodology, and section 4 dwells on the discussions of estimated results and policy implications.

Theoretical and Empirical Review

This study is based on the acceleration theory; a theory in economics that explains the link between aggregate demand (output) and capital investment. It states that an increase or decrease in the demand for consumer goods will cause a greater increase or decrease in the demand for machines required to make those goods. In other words, there is a direct relationship between the rate of output of an economy and the level of investment in capital goods.

Clarke postulated that the (change in) stock of capital ($K_t - K_{t-1}$) which business sector, in aggregate will desire to have is proportional to the level of (change in) output (ΔY_t) he desires to produce. This he represented as $K_t - K_{t-1} = \beta \Delta Y_t$. This is the simple acceleration principle.

However Hollis Chenery later argued that that business firms' reaction to the changes in output may not be instantaneous but follows a partial adjustment process to close the gap between the actual and desired change in capital stock. He concluded by proving that in the long run the desired capital change (K_t^*) is also a function of sales level (S_t). By this he was able to distinguish between the short run accelerator ($\delta\beta$) and long run accelerator (β), with the latter greater than the former. He therefore represented the short run acceleration equation as $K_t^* = \alpha\delta + \delta\beta S_t - (1 - \delta)K_{t-1}$

Evaluating the determinants of private investment Husain et al, (2006) used the Johansen multiple co integration and error correction model to estimate long run and short run relationships between private investment and aggregate demand. The study found that credit to private sector, growth rate of per capita income, have a positive relationship with household investment while inflation rate negatively influences it. Both in the long run and short run.

Verma and Wilson (2005) blended co integration, vector autoregressive (VAR) and error correction techniques to estimate the long run and short run impact of macroeconomic policies on private investment. Devaluation policies also contributed to discouraging private sector capital expansion. However, in Sudan, increasing interest rate has been impacting negatively on private investment.

Verma (2007) analyzed the endogenous impact of investment. The main objectives of the study were to conduct unit root test which endogenously determines a break in the time senses. ARDL (Autoregressive Distributed Lag) approach was used to analyze long run relationship and error correction mechanism (ECM) for short run relationship. The study took each variable as dependent and the rest of the variables as independent then it examined relationship amongst them. The analysis concluded that GDP and gross domestic savings have a positive and significant relationship with private investment.

Sajid and Sarfraz (2008) investigated causal relationship between private investment and exchange rate. The study used co integration technique and vector error correction model to examine causality between investment and exchange rate. The result showed that there is long run as well as a short run equilibrium relationship between them.

Green and Villanueva (2006) using the double logarithmic form of OLS (Ordinary Least Square) investigated the determinants of private sector for investment over a period of 1975-2005. The result indicated that both the availability of credit and foreign exchange exerts significantly positive effects on private investments, confirming the result in most empirical studies. A negative impact of exchange rate depreciation investment was also crowded in private investment, contrasting the result of Ojo (2005). Where crowding out was found to be irrelevant in determining the private investment level within that period of time.

Verma et al (2005) explored inter-dependency between private investment sectoral savings and real GDP. They used "time series data applying Johansen co integration approach to examine the long run relationship and VECM (vector error correction mechanism) to check the short run dynamics amongst variables. The research concluded that private investment sectoral savings and gross domestic product (GDP) are positively related.

On the basis of empirical consideration, De Gregorio (2009) suggests that in developing countries, private investment is determined mainly by the level of domestic output, real interest rate, public investment, credit available for investment and exchange rate. (Jordan Morris (2009).

Mouawiya Al-Awad (2005) examines the linkage between inflation rate and private investment using panel Co integration approach and a variance decomposition.

The result of the study was a negative relationship between inflation rate and private investment.

Also using Nigeria data, Ikhida (2004) did empirical studies on external shocks, savings and investment. The econometric result indicated that growth of real income, increase in public expenditure and exchange rate, openness of the economy and high savings have positive effect on private investment sector, rising inflation and high lending rates impedes private investment in Nigeria.

Anfofun (2005) investigated on the macroeconomic determinants of private investment in Nigeria. He discovered that external debt burden, inflation, exchange rate and political crises and coup d'état negatively affect private investment. The negative relationship attest to the major reason why investors do not have confidence in Nigeria, investment climate as such, potential investors are scared away.

However, most empirical studies in the literature on the determinants of private investment provides support for the claim that higher uncertainty is associated with lower levels of private investment.

RESEARCH METHODS

The design of this research is of the causal type. That is to measure what impacts specific changes on selected macroeconomic variables will have on existing norms and assumptions on private investments. Causal effect (nomothetic perspective) occurs when variation in one phenomenon, an independent variable, leads to or results, on average, in variation in another phenomenon, the dependent variable.

This study makes use of annual time series data spanning 1979 through 2012. Five determinants of private investment were identified to estimate the private investment model.

The data was obtained from the Central Bank of Nigeria (CBN) Statistical Bulletin 2009, 2012 edition and Central Bank of Nigeria (CBN) Annual Reports, Various Issues.

The theoretical framework of the model was based on the accelerator model with little modifications. This is because according to Oshikoya (1994); Ghura and Goodwin (2000), investment function for developing countries like Nigeria is difficult to estimate due to the lack of unrealistic data on capital stock and returns on capital. Therefore, we use some version of the accelerator model. However in specifying our model, private investment (PI) is made a function of five other explanatory variables selected to proxy the following macroeconomic conditions: Aggregate demand, competitive condition, liquidity constraint, uncertainty/instability

$$PI = f(RGDP, RIR, RER, INFR, CRPS).....1.0$$

Where

PI= Private Investment (change in capital stock)

RGDP= Real Gross Domestic Product (proxy for the demand condition in the economy)

RIR= Real Interest Rate

RER= Real Exchange Rate

INFR= Inflation Rate

CRPS= Credit to Private Sector

The model is written in an explicit estimable econometric model in log form as follows:

$$\ln PI = \alpha_0 + \alpha_1 \ln RGDP + \alpha_2 \ln RIR + \alpha_3 \ln RER + \alpha_4 \ln INFR + \alpha_5 \ln CRPS + \varepsilon_t, \dots, 1.1$$

Log transformation is necessary to reduce the problem of heteroskedasticity because it compresses the scale in which the variables are measured, thereby reducing a tenfold difference between two values to a twofold difference (Gujarati, 2007).

Theoretical "a priori" Expectations

The Real Gross Domestic Product which captures the aggregate demand conditions in the economy is expected to exert a positive effect on private investment. This goes to say that the coefficient of RGDP is expected to be positive, i.e as the aggregate demand condition in the Nigerian economy is increasing, private sector investment should increase as well.

The expected relationship between real interest rate and private sector investment is inverse. Increase in interest rate will push cost of capital upward, volume of activities will reduce and private sector investment will fall. But in a developing country like Nigeria, the effect of real interest rate on private investment is ambiguous, because there is also the argument that a higher real interest rate increases the flow of bank credits, which complements the private sector savings and enhances private capital formation and hence private sector investment.

The effect of real exchange rate on private investment is also ambiguous. This is so because on one hand a higher level of real exchange rate reduces private investment in the sense that the devaluation of a nation's currency means a fall in the real income of the economy as a whole, thus reducing productive capacity, increase the real cost of purchasing imported capital goods, which will eventually lead to a decline in the profitability of the private sector and ultimately a fall in private investment. Conversely, real exchange rate can also have a positive relationship with private investment. This occurs when currency devaluation in an economy enhances its competitiveness with the rest of the world and also expands its exports volumes. This type of scenario makes a country looks inward, relies majorly on its

Table 1. Results of the Unit Root Tests at Level and First Difference

Variables	ADF Stat	Integration	PP Stat	Integration
<i>LnPI</i>	-1.593512	NS	-1.604718	NS
<i>LnRGDP</i>	0.156453	NS	0.059824	NS
<i>LNRI</i>	-2.471299	NS	-2.394839	NS
<i>LnRER</i>	-1.055665	NS	-1.052086	NS
<i>LnINFR</i>	-3.746235***	I(0)	-3.20052**	I(0)
<i>LnCRPS</i>	-3.161288**	I(0)	-3.122906**	I(0)
<i>DLnPI</i>	-3.64906**	I(1)	-3.633263**	I(1)
<i>DLnRGDP</i>	-4.120950***	I(1)	-4.126825***	I(1)
<i>DLnRI</i>	-7.746265***	I(1)	-7.746041***	I(1)
<i>DLnRER</i>	-4.781884***	I(1)	-4.768347***	I(1)
<i>DLnINFR</i>	-5.948056***	I(1)	-5.972345***	I(1)

***significant at 1%, **significant at 5%, *significant at 10%; NS=Nonstationary

Table 2. Result of the Johansen Cointegration Rank Test (Trace Test)

Hypothesized of CE(s)	No.	Eigen Value	Trace Statistics	0.05 Value	Critical	Probability
None *		0.782512	129.2919	95.75366		0.0000
At most 1*		0.682638	85.04913	69.81889		0.0019
At most 2*		0.520118	51.76546	47.85613		0.0205
At most 3*		0.441011	30.47325	29.79707		0.0417
At most 4		0.308519	13.60610	15.49471		0.0944
At most 5		0.095395	2.907442	3.841466		0.882

Trace test indicates 4 Co integrating equations at 0.05 levels.

* denotes rejection of the hypothesis at the 0.05 level.

Table 3. Result of the Johansen Cointegration Rank Test (Maximum Eigenvalue Test)

Hypothesized of CE(s)	No.	Eigen Value	Trace Statistics	0.05 Value	Critical	Probability**
None *		0.782512	44.24273	40.07757		0.0160
At most 1		0.682638	33.28367	33.87687		0.0587
At most 2		0.520118	21.29221	27.58434		0.2589
At most 3		0.441011	16.86715	21.13162		0.1784
At most 4		0.308519	10.69866	14.26460		0.1700
At most 5		0.095395	2.907442	3.841466		0.0882

Max-eigen value test indicates 1 Co integrating eqn(s) at he 0.05 levels

* denotes rejection of the hypothesis at the 0.05 level

internal resources and industries thereby boosting private sector investment in the country.

Inflation rate is expected theoretically to be negatively related to private investment. This is due to the fact that as inflation increases, the value of real money falls, cost of production increases volume of economic activity reduces, profit falls, performance drops and ultimately, private sector investment reduces.

The effect of the credit to private sector on private investment is expected to be positive. This is because credit by the banking sector to the private sector is expected to boost private sector investment.

EMPIRICAL FINDINGS AND DISCUSSIONS

To examine the time series properties of the variables in the model the Augmented Dickey Fuller (ADF) and the Phillips-Perron (PP) unit root test were conducted. The results are presented in [Table 1](#)

Both the ADF and Phillips-Perron unit root test result show that all the variables i.e Log of private investment (LnPI), Log of Real Gross Domestic Product (LnRGDP), Log of Real Interest Rate (LnRI), Log of Real Exchange Rate (LnRER) are stationary at first difference except the Log of Credit to Private Sector (LnCRPS) and Log of

Table 4. Normalized Cointegrating Coefficient One (1) Co Integrating Equation

LNPI	LNRGDP	LNRIR	LNRER	LNINFR	LNCRPS
1.00000	-2.098462 (0.33063)	-3553.34 (0.96747)	1.545393 (0.47387)	-2.126402 (0.24366)	-0.223394 (0.17863)

Log likelihood: -67.48914; *Standard errors in parenthesis*

Table 5. Estimated Long-Run Coefficients Using the ARDL Approach

ARDL (1,1,1,1,0) Selected based on AIC			Dependent Variable LNPI
Regressor	Coefficient	Standard Error	T-Ratio
Constant	-14.36353	4.033770	-3.560821***
LNGDP	1.695577	0.249670	6.791265***
LNRIR	1.134863	0.599643	1.892566
LNRER	-0.490250	0.327157	-1.498516
LNINFR	-0.174124	0.164887	-1.056016
LNCRPS	-0.036472	0.136328	-0.267535

Note: *** denotes significance at 1% level

Table 6. Result of the Short Run Error Correction Model Using the ARDL Approach

ARDL (1,1,1,1,0) Selected based on AIC			
Regressor	Coefficient	Standard Error	t-ratio
Constant	-0.284437	0.333328	-0.853325
D LNRGDP	2.605817	1.301757	2.001769**
D LNRIR	-1.172779	0.970701	1.208177
D LNRER	-0.554885	0.687704	-0.806867
D LNINFR	-0.358686	0.250912	-1.42953
D LNCRPS	0.04836	0.165123	0.292872
ECM (-1)	-1.053242	0.436553	-2.412631**
R ²	0.870114	F-Statistics	7.473754
AIC	3.113101	Prob (F-Stat)	0.006782
DW-STATISTIC	1.88586	Schwarz Criterion	3.490286

** significant at 5% levels.

Inflation Rate (LnINFR) which are stationary at levels, that is integrated of order zero.

Johansen Co-Integration Test

As earlier stated, the Johansen Co integration test is carried out to determine the long run relationship amongst the variables in the model. The result of the Johansen Co integration analysis between Private Investment and its determinants are presented in **Table 2**.

Tables 2 and 3 above present the summary of the results of Cointegration analysis using the Johansen test. It is therefore evident that a long run relationship existed amongst Private Investment (PI), Gross Domestic

Product (GDP), Real Interest Rate (RIR), Real Exchange Rate (RER), Inflation Rate (INFR) and Credit to Private Sector (CRPS). Having ascertained a Co integrating relationship amongst the series, the long run relationship will therefore be determined by the normalized Co integrating Coefficient (s) with the longest log Likelihood in absolute term. The result is presented in the **table** below.

The co integrating equation is therefore specified thus:

$$\ln PI = -2.09846 \ln RGD P - 3.55314 \ln RIR + 1.54539 \ln RER + -2.12640 \ln INFR - 0.2233 \ln CRPS$$

(0.33063) (0.9674) (0.4738) (0.24366) (0.1786)

From the Co integrating equation above, Real Gross Domestic Product, Real Interest Rate, Inflation Rate and Credit to Private Sector have a long run negative relationship with Private Investment in Nigeria. The result implies that a 1 percent increase in LNRGDP, LNRIR, LNINFR, and LNCRPS will lead to a respective 2.10%,

3.55%, 2.13% and 0.22% reduction in private investment in Nigeria. A look at their standard error indicates that all the variables are statistically significant except the credit to private sector.

However, the real exchange rate (LNRER) have a positive relationship with Private Investment and significant at 5 percent level. That is a 1% increase in Real Exchange Rate will bring about 2.13% significant rise in Private Investment in Nigeria. This result is therefore attributed to the fact that devaluation of the naira can be a stimulant to Private Investment in Nigeria. Because it will make Nigerian goods attractive (low priced) to foreign countries while other countries goods (Imported goods) will be expensive and less attractive to Nigerians, thereby boosting private investment in Nigeria.

Results of the Long Run ARDL Model of Private Investment In Nigeria

The second model measures the long-run dynamics of the relationship between real economic growth and its determinant. The model used the ARDL approach of cointegration regression, following the fact that all the variables are not integrated of the same order, the Long run parameters of the Auto-Regressive Distributed Lag (ARDL) are estimated and the result is presented in the **Table 5**. The estimation was done based on the Akaike Information Criterion (AIC).

From the result of the long run ARDL in **table 5**, the Real Exchange Rate (RER), Inflation Rate (INFR) and Credit to Private Sector (CRPS) are statistically insignificant and negatively related to Private Investment in Nigeria. That is, in the long run, if Real Exchange Rate, Inflation Rate and Credit to Private Sector were to increase by 1 percent, there will be a respective 49%, 17% and 3% decrease in Private Investment in Nigeria.

The Real Gross Domestic Product (RGDP) and Real Interest Rate (RIR) are found to be positively related to Private Investment in Nigeria meaning that a 1 percent increase in GDP and RIR will bring about a respective 1.69% and 1.13% increase in Private Investment. The Coefficient of the Real Gross Domestic Product (GDP) is statistically significance at 1 percent level of significance while the Real Interest Rate is not statistically significant.

From the foregoing analysis, the result of the long run ARDL model shows that in the long run, the Real Gross Domestic Product (RGDP) which is a proxy for the aggregate demand condition in Nigeria stimulates private investment and it is also found to be significant. This implies that increase in aggregate demand condition in Nigeria brings about a resultant expansion of capital stock which conforms with the accelerator theory of investment. The increase in capital stock brings about increase in output, giving rise to more profit and invariably expanding private investment in Nigeria.

This result conforms to most findings in the empirical literature; such as Verma (2007), Ibrahim (2000), Ouattara (2005) amongst other studies. However, contrary to the neoclassical theory of the user cost of capital, the real interest rate in Nigeria was found to have a positive impact on private investment in the long run. The coefficient was found to be insignificant. The implication is that a higher interest rate in Nigeria in the long run will bring about higher domestic savings resulting in the increase in investable funds for the private sector. However, this is therefore insignificant in the sense that in Nigeria, per capita income is very low and most of an average Nigerian's income is spent on consumption.

Therefore, like John Maynard Keynes said, interest rate is not enough determinant of savings and investment but income should always be considered first. In Nigeria except income increases, savings will not increase not even as a result of an increase in interest rate, not to talk of it increasing the investible funds for private investment. This findings is in line with Outtara (2005)

Furthermore, the long run result reveals that the real exchange rate has a negative and insignificant relationship with private investment in Nigeria. The negative relationship implies that industries or private sector businesses will find it difficult to operate at a reasonable capacity as a result of the continuous depreciation of the naira which makes importation of inputs more expensive. Some companies / industries might have to reduce their production levels while some will have to go out of business because of the low level of productive capacity and low profit which reduces private investment. The relationship is found to be insignificant because in Nigeria, no matter how devalued the naira is, the level of importation is still high. This is due to the fact that other factors that inhibit private investment are much more complex than the real exchange rate in Nigeria. This result is in conformity with Sajid and Sarfraz (2008)

In conformity with the theoretical preposition that high inflation rate creates an environment of macroeconomic instability and therefore deters private investment in an economy, the long run result however shows a negative and insignificant relationship between private investment and inflation rate (INFR) in Nigeria. The implication of the insignificant coefficient implies that most private enterprises in Nigeria responds to higher prices of goods and services by increasing output in other to take advantage of the soaring prices and profitability in the Nigerian economy. This result is however in line with Acosta (2005)

Finally, the credit to private sector (CRPS) is negatively related to private investment in Nigeria in the long run, although not significant. This shows that most times in Nigeria, credit is scarcely given to potential viable enterprises. Also, banks / financial institutions prefer to lend money to the bourgeoisie of the society who on the

other hand do not spend or invest in the domestic environment but outside Nigeria. This of course has accounted for the widening gap between the rich and the poor in Nigeria. As a result, a persistent occurrence of this creates a fall in private investment in the long run. The result is insignificant because Nigeria as a country is all together not investment friendly. This is due to the nature of infrastructures. Therefore, even if credit are granted for investment purposes, firms will still not be operating efficiently, thereby reducing profit and private investment in Nigeria.

Error Correction Model (ECM)

The error correction model (ECM) is a short run dynamic model; it depicts the speed of convergence to equilibrium once the equation is shocked. Since the long run co integrating model has been estimated, the next step is to model the short run dynamic parameters within the ARDL Framework. Thus, the lagged valued of all level variables (a linear combination is denoted by the error-correction term, ECM_{t-1}) is retained in the ARDL model. Table 5 presents the result of the estimated Error correction model of private investment in Nigeria using the ARDL technique.

The table above presents the Parsimonious result of the Error Correction Model using the ARDL approach. The result shows an ECM value of -1.053242 which is otherwise referred to as the speed of adjustment. The speed of adjustment is significant at 5 percent level considering its standard error. Also, the ECM is correctly signed and statistically significant with the speed of convergence to equilibrium at 10.5 percent. That is 10.5 percent of the short run inconsistencies are being corrected and incorporated into the long run relationship. The implication is that the present value of private investment (PI) will adjust to changes in the GDP, RIR, RER, INFR and CRPS.

Also, the result shows that Real Interest Rate (RIR), real Exchange Rate (RER) and Inflation Rate (INFR) have negative relationships with private investment in Nigeria in the short-run. This indicates that a 1% increase in RIR, RER and INFR will lead to about 1.17%, 0.55% and 0.36% decrease in private investment respectively. Although, all three are not significant.

Also, Gross Domestic Product (GDP) and credit to private sector have positive relationship with private investment in Nigeria. Implying that a 1% increase in GDP and CRPS will bring about a respective 2.61% and 0.5% increase in private investment. The GDP is significant at 5 percent level while the CRPS is not. From the above analysis, it is evident that the result of the short run dynamic model shows that in the short run, Real Gross Domestic Product (RGDP) in Nigeria is positively related to private investment. This implies that the real

output or aggregate demand condition will stimulate private investment in Nigeria. And the coefficient of real GDP (proxy for demand condition in Nigeria) is statistically significant.

The interpretation is that increase in aggregate demand in Nigeria brings about a resultant expansion of Capital Stock which conforms with the accelerator theory of investment. The increase in capital stock brings about increase in output giving rise to more profit and invariably expanding private investment in Nigeria.

However, in the short run, the negative relationship of interest rate and private investment in Nigeria can be attributed to the fact that a low interest rate reduces the cost of borrowing which automatically leads to a boost in private investment. This result conforms with most empirical findings like that of Hanson (2005). The insignificant nature of the coefficient of interest rate in the short run is in line with De Gregorio (2009) empirical findings and can be explained by the fact that, in Nigeria, interest rate is often manipulated and imposed on the creditors. In other words, interest rate in Nigeria is highly regulated. The double digit rate favours mostly buying and selling rather than investment in real assets.

The short run result for Real Exchange Rate reveals that there is a negative association between private investment and real exchange rate (RER), although not significant. The negative relationship implies that in the short run, industries or private sector businesses will find it difficult to operate at full capacity as a result of the continuous depreciation of the naira which makes imported inputs more expensive. Some companies/industries might have to reduce their production level while some will have to go out of business. Thereby reducing private investment in Nigeria.

In the short run, the coefficient of credit to private sector is positive and in line with most empirical findings, but not significant. The unavailability of credit has been found in empirical literature and in Nigeria to be a major constraint facing the private sector. But the insignificant coefficient implies that credit is scarcely given to potentially viable enterprises in Nigeria over the years. Therefore, credit to private sector is not a significant determinant of private sector investment in Nigeria.

CONCLUSION AND POLICY IMPLICATIONS

It is very important for Nigerian Government to review its policies on Private Investment and pay more attention to its determinants i.e Real Interest Rate (RIR), Real Exchange Rate (RER), Real Gross Domestic Product (GDP), Inflation Rate (INFR) and Credit to Private Sector (CRPS) as they are the essential ingredients for boosting Private Investment in Nigeria

Government need to focus on the overall institutional framework of private investment in Nigeria in order to

facilitate growth and development in the country. Additionally, curbing inflation will go a long way through the increase in output which depends majorly on infrastructures is also recommended. i.e. Government should invest some of its available resources in the provision of infrastructures which will increase output, reduce inflation, interest rate, and increase private investment ultimately.

Real interest rate should not be left in the hands of the forces of demand and supply but should be fixed at a very reasonable rate in order to encourage private investment in Nigeria.

More so, government should direct its effort in assisting private sector on the issue of credit availability which will go a long way in boosting private investment in Nigeria.

Bottom line is that, it is strongly recommended that government should make Nigerian economy a conducive environment for private investment as a matter of high national priority by putting in place policies through practical strategies that will ensure consistent, moderate and acceptable levels of inflation rate, interest rate, exchange rate and credit to private sector in the Nigeria economy.

REFERENCES

- Acosta P, Loza A (2004). "Short and Long-run Determinants of Private Investment in Argentina", University of Illinois at Urbana-Champaign, pp 1-23
- CBN (2009). Annual Report and Statement of Account, Central Bank of Nigeria Publication. 31st December, 2009.
- De Gregorio J, and Borensztein E (1998). "How Does Foreign Direct Investment Affects Economic Growth?" *Journal of International Economics*, vol. 45, pp 115-135
- De Gregorio J (2009). "Global Confidence Crisis – the value of waiting and the coordination failure revisited", *Keynote speech, Governor, Central Bank of Chile*, Santiago, 4th June
- Ghura D, and Godwin B (2000). "Determinant of Private Investment: A Cross Regional Empirical Investigation," *Applied Economics*, vol 32 (14). Pp 1819-1829
- Gujarati DN, and Sangeetha (2007). *Basic Econometrics*, New Delhi, Tata McGraw-Hill Publisher,
- Hanson N, and Thirlwal AP (2005). "The mobilization of Savings for Growth and Development in Developing Countries", *Department de Programacion, Monetaria Investigacion Economica Document du Trabajo* 2004/2
- Hassan AS (1998). "Volatility and the Investment Response in Nigeria", *Journal Economic Growth*.
- Mouawiya Al-Awad (2005). " Inflation and Investment in Developing Countries" *Journal of Economic Literature Classification*.
- Oshikoya TW (1994). "Macroeconomic Determinants of Domestic Private Investment in Africa: An Empirical Analysis", *Economic Development and Cultural Change*, vol 42 (3), pp 573-595
- Ouattara B (2005). "Modelling the Long Run Developments of Private Investment in Senegal." *School of Economics Studies*, The University of Manchester, Oxford, No. 04.
- Sajid GM, and Sarfraz M (2008). "Saving and Economic Growth in Pakistan: An Issue of Causality", *Pakistan Economic and Social Review*, vol. 46 (1), pp 17-36
- Seruvatu E, and Jayaraman TK (2001). "Determinants of Private Investment in Fiji", *Working Paper, 2001/02, Economics Department, Reserve Bank of Fiji*, pp 1-39
- Soyinbo A (2000). "The Savings Private Investment Process in Nigeria: An Empirical Study of the Supply Side" *Research Paper No 16. African Economic Research Consortium*, vol.3, (27), pp.1-16
- Verma R (2007). "Savings, Investment and Growth in India: An Application of ARDL Bound Testing Approach", *South Asia Economic Journal*, vol. 8 (1), pp 87-98
- Verma R, and Wilson EJ (2005), "A Multivariate Analysis of Saving, Investment and Growth in India", *Economic Working Papers*, 05-24, University of Wollongong Research Online, pp 1-23.