Public – Private Investment Nexus in Developing Economies: Does Financial Sector Development Matter for Nigeria?

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ABSTRACT

Much of the social and economic infrastructural deficits in Africa have been attributed to inadequate investment levels in many countries of Africa. Although Nigeria is not lacking in foreign private investments, the present level of total investment is adjudged sub-optimal, and the public sector is perceived to be large, inefficient and also dominant. The question arising is whether the composition of investment matters for the overall investment behaviour in Nigeria. The main objectives of the paper are to investigate the complementarity or substitutability of public and private investment, as well as examine whether financial sector development drive private investment in Nigeria. The paper employed annual data covering the period of 1981 to 2015 and ARDL estimation. The bounds test results revealed that there exists a long-run relationship among the variables. The study found that public investment crowds out private investment in Nigeria. In other words, the complementarity effect between private investment and public investment is not justified in the study; rather, there exists a substitution effect between private and public investments in Nigeria. More so, the result suggested that the effect of financial development on private – public investment nexus is positive and significant ($P < 0.05$) in both the long and short runs. These findings provided an understanding on the ability of financial development indicator as a policy instrument in the design and implementation of private investment policies in Nigeria.

Keywords: Nigeria, private investment, public investment, financial development, ARDL

JEL Classification: E2, E62

1. Introduction

There are claims that investment in Africa is below the required amount to generate a desired economic growth rate, which may further reduce poverty. This narrative also holds for Nigeria – one of top two largest economies of Africa. But why has investment level remained insufficient in African countries, in spite of existence of large public sector? Also, it is pertinent to re-examine if there has been crowding out of private investment by public investment overtime in these economies, but focus is given to Nigeria. While attempts have been made to answer these questions, they remain open as the findings are still inconclusive.

The private investment is as important as public investment in generating sufficient growth rate for poverty reduction following Solow's model (see Solow, 1956). But whether or not private investment is supported by public investment is a matter of empirical research. There is therefore need for understanding the causal relationship between private and public investments to enhance the formulation of appropriate public policy for growth and development in Africa. It is also vital to know if private investment has positive or negative direction to public investment - if it is crowded out, all effort by governments to stimulate overall investment through spending may be ineffective in spurring growth. This is against the backdrop that most African economies are dominated by the public sector, yet infrastructural deficit is pervasive. Hence, an understanding of the relationship between private and public investments is critical and important for public economic policy in Nigeria.

Although, theoretical and empirical literature have shown that public and private investments, as well as the relationship between them, are critical for economic growth, the extent and implications of fiscal deficit financing motivates various test on crowding-out hypothesis. In Africa, most of the socio-economic challenges are noted to be partly linked to the insufficient level of participation of organised or formal private sector in the economy. Meanwhile, the efficient utilisation of resources entrenched in the private economy, which could lead to employment creation; output growth and productivity enhancement are needed for sustainable growth. Empirical findings such as reported in Tchouassi & Ngangue (2014) shows that government spending tends to discourage private investment in Africa. The authors suggest that the composition of investment or the kind of public expenditure variables used may matter in any empirical analysis. Therefore if the relatively dominant findings in literature are anything to go by, investment would have for long been optimal and adequate to spur high, rapid and sustained growth, and consequently reduce poverty.

In many African countries, deficits in socio-economic infrastructure have been attributed to the inadequate level of investments on long-term projects or simply growth-enhancing infrastructure. A report by United Nations in 2014 states that an investment threshold of 25 per cent (or above) of gross domestic product (GDP) would be required to spur economic growth in Africa, in order to

adequately reduce poverty (Clarke, 2013). So far and more recently, 18 per cent investment level has been achieved, suggesting a reason for pervasive level of poverty. While Africa ranks high among continents of the World as a choice destination for foreign investments, domestic investment cannot be said to have performed quite well. It therefore suggests the importance of examining the composition of aggregate investments in African economies

A number of time-series study exists. For instance, Ramirez (1994); Erengurg & Wohar (1995); Nazmi & Ramirez, (1997); Kollamparambill & Nicolaou (2011) and Xu & Yan (2014). These studies use either a flexible accelerator model or an informal model of private investment. These studies show that in some important ways, different factors explain variations in developed economies and developing economies. Naravan (2004) study on Fiji shows that the relationship between government and private investment has been unstable over time. The result showed an existence of a weak long run relationship. But Eden & Hocombe (2005) argue that public investment could complement private ones in developing economies, but tend to substitute in industrial ones. This finding was in line with Bello (2009) who found in Nigeria that various functional classification of government spending could cause crowd-in or crowd-out effects on private investment.

In a study on complementarity, Lutfi and Randall (2005) applying several pooled specifications of a standard investment model to a panel of developing economies for 1980 to 1997 found that public investment complements private investment, and that, on average, a 10 percent increase in public investment is associated with 2 percent increase in private investment. In addition, they also found that private investment is constrained by the availability of bank credit in developing economies, but this was not the case in developed economies. Thus, public investment crowds out private investment in developed economies.

But while assessing the impact of gross domestic product, external debts stocks and domestic credit policy on private investment through their effects on public investment in Africa, Tchouassi & Ngangue (2014) employed panel data over 1980–2010 using Fixed Effect estimation to examine cross-specific effect of the correlation between private and public investment, and found that public investment negatively affects private investment. They established that public investment crowds-out private investment; that is, there exists a substitution effect between private and public investments, and therefore an increased level of public expenditures may not directly raise private investment.

From the foregoing, there is evidence of movement in both directions, that is, public investment may have either crowd-out or crowd-in effects. Thus, most studies carried out to investigate the relationship between public investment and private investment have largely delivered inconclusive results, as regards the net impact of public policies on economic growth and as such its direction on private

investment effectiveness or otherwise. It has also been shown that most empirical results on the effectiveness of public investment on private sector has paid less attention to African countries including Nigeria. In the literature, empirical findings have been found to be based mainly on the comparative analysis of developed economies and underdeveloped economies. Importantly, the only study found to have fully focused on Africa, investigating the relationship between private and public investment in Africa is Tchouassi & Ngangue (2014)

Furthermore, it has been discovered that there have been application of different approaches and methods of analysis in investigating the impact of public investment on private sector in the literature. Inconsistent results have also been obtained in various empirical studies. Consequently, there is a gap between different perspectives; and as such, no consensus could be found to have been established, thereby posing serious challenge to policymakers in determining the net impact of public spending on public investment. Therefore, the current study shall mainly investigate the substitutability or otherwise of investment components flow, and further distinguish the direction of causal relationship between public and private investment focusing majorly in Nigeria .

The rest of the paper is organised as follows: following the introduction is Section 2 which contains data and method; while Section 3 is the empirical results and discussion of findings. Concluding remark is presented in section 4.

2. Methodology

Model Specification and Data Description

Following models of Sundararajan & Thakur (1980), Ram (1993), and Erden and Holcombe (2006), which are modifications of the neoclassical model that incorporates the effects of public investment and uncertainty on private investment, this study adopted and estimated model specified as follows;

$$PIN = (GIN, CPS, X) \qquad (1.)$$

Where *PIN* is private investment, *GIN* is government investment, *CPS* as a measured of financial sector development and *X* captures the control variables suggested in literature. The study sets out to establish the complementarity or substitutability effect of public investment on private investment and examine the role of financial sector development in Nigeria. Private investment (PIN) model is set up with the gross fixed capital formation (share of GDP) as the dependent variable. The independent variables include public sector investment (GIN)

measured as total government capital expenditure, and a variable representing financial sector development and some other variables controlling for other factors.

The indicator of financial development employed is private sector credit by deposit money banks to GDP (CPS). This private-sector credit is important because it reflects, to a greater extent, the efficacy of financial institutions in giving loans to the private sector. A rise in private sector credit is seen as a positive development due to its efficient investment decisions (Serven and Solimano, 1990; Coutinho and Gallo, 1991; Khan, 2008). It also measures the importance of the financial sector in allocating credit to the private sector and has been used in studies such as King and Levine (1993), Moshi and Kilindo (1999), Levine, Loayza and Beck (2000), Frimpong and Adam (2010) and Eshun et al. (2014) as a measure of financial development. The control variables are prime lending rate (PLR), real GDP per capita (RGDP) and foreign direct investment (FDI). The arguments advanced in favour or otherwise of these variables in relation to private investment are articulated in the literature (see e.g., World Bank, 1989]; Serven, 2002; Chee-Keog, Siong-Hook and Chuen-Khee, 2015).

These data are sourced from Annual *Statistical Bulletin*, published by Central Bank of Nigeria (CBN) and World Development indicators (WDI). All variables are in ratios (measured as a ratio of GDP) except prime lending rate and real GDP per capita (which is expressed in logarithm term) covering the period 1981 to 2015.

Estimation Techniques

This study applies the Autoregressive Distributed lag (ARDL) modelling approach popularised by Pesaran, Shin and Smith (2001). The ARDL modelling approach is advantageous since it can be used irrespective of whether the variables are I(0) or I(1). Unlike the Johansen approach, the ARDL approach to cointegration does not require pre-testing of the variables for unit roots. However, the variables must be tested for unit root to ensure that they are not integrated of higher order than 1, such as I(2). According to Fosu and Magnus (2006), the ARDL approach starts with conducting the bounds test for the null hypothesis of no cointegration. Thus we construct a vector autoregression of order p, VAR(p), for the following function:

$$y_t = \varphi + \sum_{i=1}^{p} \beta_i y_{t-1} + \varepsilon_t \quad (1a)$$

where y_t is a vector of both the dependent variable and exogenous variables (x_t), β_i is a matrix of VAR parameters to be estimated and ε_t is a white noise error term. According to Pesaran et al. (2001), the dependent variable must be I(1),

while the exogenous variables can be either I(1) or I(0). Based on equation (1 a), we can develop a vector error correction model (VECM) as:

$$\Delta y_t = \varphi + ct + \delta y_{t-1} + \eta x_{t-1} + \sum_{i=1}^{p-1} \sigma_i \Delta y_{t-1} + \sum_{i=0}^{p-1} \theta_i \Delta x_{t-1} + \varepsilon_t \quad (2)$$

On the basis of equation (2), the VECM of interest in this study can be specified as:

$$\Delta PIN_t = \gamma_0 + \gamma_1 PIN_{t-1} + \gamma_2 GIN_{t-1} + \gamma_3 CPS_{t-1} + \gamma_4 FDI_{t-1} + \gamma_5 PLR_{t-1} + \gamma_6 RGDP_{t-1} + \sum_{i=1}^{p} \Psi_i \Delta PIN_{t-i} + \sum_{j=1}^{q} \tau_j \Delta GIN_{t-j} + \sum_{j=1}^{q} \Phi_j \Delta CPS_{t-j} + \sum_{j=1}^{q} \delta_j \Delta FDI_{t-j} + \sum_{j=1}^{q} \alpha_j \Delta PLR_{t-j} + \sum_{j=1}^{q} \beta_j \Delta RGDP_{t-j} + \varepsilon_t \quad (3)$$

Where γ_i are the long run multipliers and ε is the error term. Except real GDP per capita, which is expressed in logarithm terms, all other variables are in ratios. On the other hand, the short-run adjustments are captured by the coefficients on the differenced (Δ) variables. The null and alternative hypotheses tested are:

H_0: $\gamma_1 = \gamma_2 = \gamma_3 = \gamma_4 = \gamma_5 = \gamma_6 = 0$ (no long-run relationship)

H_1: $\gamma_1 \neq \gamma_2 \neq \gamma_3 \neq \gamma_4 \neq \gamma_5 \neq \gamma_6 \neq 0$ (long-run relationship exist)

Bounds testing was done by estimating equation (3) and then testing the null hypothesis (H_0) of no long run relationship against the alternative hypothesis (H_1) that there is a long-run relationship. The calculated F-statistics are then compared against the critical values given in Pesaran et al (2001). The lower bound critical values assume that the explanatory variables are integrated of order zero (i.e I(0)), while the upper critical values assume that the explanatory variables are integrated of order one (i.e. I(1)). If the calculated F-statistic is lower than the lower bound, the null is accepted. If it is greater than the lower bound but less than the upper bound a decision cannot be made as to the long run relationship in which case we say it is inconclusive. Lastly, if it is greater than the upper bound, the null hypothesis of no cointegration is rejected in favour of existence of a long-run relationship between the variables.

Once the existence of a long run cointegration relationship has been established, the conditional ARDL (p1,q1, q2, q3 q4 q5) long run model for GDP can be estimated as:

$$PIN_t = \alpha_0 + \sum_{i=1}^{p} \lambda_1 PIN_{t-i} + \sum_{i=1}^{q1} \lambda_2 GIN_{t-i} + \sum_{i=1}^{q2} \lambda_3 CPS_{t-i} + \sum_{i=1}^{p} \lambda_4 FDI_{t-i} + \sum_{i=1}^{q1} \lambda_5 PLR_{t-i} + \sum_{i=1}^{q2} \lambda_6 RGDP_{t-i} + \varepsilon_t \quad (4)$$

Finally, we obtain the short run dynamic parameters by estimating an error correction model associated with the long run estimates. This is specified as follows:

$$\Delta PIN_t = \sum_{i=1}^{p} \Psi_i \Delta PIN_{t-i} + \sum_{j=0}^{q} \tau_j \Delta GIN_{t-j} + \sum_{j=0}^{q} \Phi_j \Delta CPS_{t-j} + \sum_{j=0}^{q} \delta_j \Delta FDI_{t-j} + \sum_{j=0}^{q} \alpha_j \Delta PLR_{t-j} + \sum_{j=0}^{q} \beta_j \Delta RGDP_{t-j} + \mu ecm_t \quad (5)$$

where μ is the speed of adjustment

Once the error correction models have been estimated, Pesaran (1997) suggest applying the cumulative sum of recursive residuals (CUSUM) and the CUSUM of square (CUSUMSQ) tests to assess the parameter constancy.

Most of the macroeconomic series contain a unit root in their data generating process, hence econometric analysis of times series data begins with the verification of the stationarity or otherwise of the underlying series individually. In order to examine the integrating level of variables, standard tests like Augmented Dickey-Fuller (ADF), Dickey-Fuller Generalized Least Square (DF-GLS), and Kwiatkowski-Phillips-Schmidt-Shin (KPSS), 1992 are employed. Mostly in the literature to find out the order of integration. (Dickey & Fuller, 1979) and PP (Philip & Perron, 1988) tests have been used extensively. Due to their poor size and power properties, both tests are not reliable for small sample data set (Dejong et al, 1992 and Harris, 2003). These tests seem to over-reject the null hypotheses when it is true and accept it when it is false. While other proposed tests such as DF-GLS de-trending test developed by Elliot et al. (1996) seem to solve this arising problem, the choice of KPSS test, for which the null hypothesis is stationarity, is to have a cross-check. Though unit root test is not a pre-requisite for the ARDL approach to cointegration, the absence of I(2) variable should be guaranteed to avoid spurious results.

3. Empirical Results and Discussions

Table 1: Results of Unit Root Tests

Variable	ADF		DF-GLS		KPSS	
	Level	First Difference	Level	First Difference	Level	First Difference
PIN	-4.7530**	-4.4598**	-1.3561	-2.7256**	0.3631**	0.4394
GIN	-1.8368	-7.7050**	-1.5785	-7.8188**	0.5665**	0.1006
CPS	-2.0407	-5.8696**	-2.0734	-5.5009**	0.2208**	0.0620
PLR	-3.3743**	-5.7116**	-1.2088	-8.7499**	0.1812**	0.1810
RGDP	0.5437	-3.5538**	0.1045	-2.8839**	0.6694**	0.4294
FDI	-3.6548**	-7.9458**	-3.3620**	-8.0530**	0.1578**	0.2656

Note: The null hypothesis is that the series is non-stationary, or contains a unit root. The rejection of null hypothesis for both ADF and DF-GLS tests are based on the MacKinnon critical values.

** indicates the rejection of the null hypothesis of non-stationary at 5% significance level.

The unit root results reported in Table 1 shows that all the series, except foreign direct investment (FDI) are non-stationary at 5% significance level but become stationary after taking their first difference i.e. I(1). None of the variables is of I(2) or higher order. Thus we apply ARDL bounds testing approach to cointegration to test long run relationship between the variables. ARDL cointegration test reported in Table 2 showed that the calculated F-statistics is found to be higher than the upper critical bound values of Narayan (2005) at 90% level of confidence for model 1 and at 99% level of confidence for model 2 (with inclusion of financial sector variable). This suggests that there exists a long-run cointegration relation among the variables.

ARDL Bound Test and Long Run Results

Table 2: Result of ARDL Cointegration Bound Test

Model		**F-statistic**	**K**	**Critical values**		
1	PIN =f(GIN, PLR, RGDP, FDI)	3.5590	4	%	I(0)	I(1)
				10	2.26	3.35
2	PIN =f(GIN, CPS, PLR, RGDP, FDI)	9.9825	5	5	2.62	3.79
				1	3.41	4.68

Based on the existence of cointegration relationship for models of study, the conditional ARDL long run model for private sector investment was estimated. The long run results are presented in Table 3.

Table 3: Estimated Long Run Coefficients Using the ARDL Approach

(Dependent Variable = PIN)

Regressor	**Model 1** ARDL (3, 0, 0, 0, 0)	**Model 2** ARDL (1, 3, 0, 1, 1, 0)

	Coefficient	t-statistic [Prob.]	Coefficient	t-statistic [Prob.]
GIN	-1.6194	-0.4870 [0.6307]	-2.6203***	-3.0578 [0.0065]
CPS			0.5266***	9.1160 [0.0000]
PLR	0.2605	0.6709 [0.5087]	0.5378***	4.1009 [0.0006]
RGDP	5.1510	1.5763 [0.1280]	0.9588	1.1027 [0.2839]
FDI	-0.1510	-0.2880 [0.7758]	-0.2683*	-1.9361 [0.0679]

In model 1, none of the explanatory variables – public investment, prime lending rate, real GDP and foreign direct investment had a statistically significant coefficient. Unlike model 2, with introduction of the financial development variable, it is only the coefficient of real GDP factor that is not statistically significant. The sign of the relationship between the dependent variable, private sector investment and the explanatory variables for the two models is the same. For instance, public sector investment and foreign direct investment has negative effects on the level of private sector investment while other had positive effect in Nigeria.

The coefficient of public investment is significant at 1 percent level of significance and negatively correlated to private investment, which implies that an increase in public sector investment would crowd-out private investment. This suggested that a 1 per cent increase in public investment was associated with 3.05 per cent decrease in private investment. In other words, the capital expenditure of government may not enhance the productivity of private investment, thus discouraging private firms from increasing their investment. This is because government expenditure involves using limited economic resources either physical or financial, and this will increase the competitiveness between public and private sectors in using these resources. Therefore, private investment may be reduced due to this competition in terms of reduction in limited economic resources or higher opportunity costs (Namzi and Ramirez, 1997). The study thus concluded that public investment crowds out private investment in Nigeria i.e. there exists a substitution effect between private and public investments which corroborated the findings of Tchouassi and Ngangue (2014).

Thus, credit provided to the private sector is expected to ease financing constraints, which increases private sector capital formation as supported in the studies of Ucan and Ozturk (2011) and Eshun et al. (2014). Contrary to the findings of Frimpong and Marbuah (2010) and Sakyi, Boachie and Immurana (2016) which found that credit to private sector has no significant effect on private investment, this study showed that private investment increases by 9.11

per cent following 1 per cent increase in the ratio of credit to private sector. Hence, the study surmised that measuring financial sector development by private sector credit to GDP ratio in Nigeria, during the period 1981 – 2015, has positive and significant effect on private investment.

A critical look at the control variables showed that only prime lending rate and foreign direct investment variables were statistically significant in influencing private investment in Nigeria during the study period. As suggested by a priori, there exists a negative relationship between private investment and interest rate (cost of borrowing). This suggests that a high level of borrowing cost will discourage private investment activity in the economy. However, the finding of the study deviated from the theoretical position, as the estimated coefficient is positive (4.10).

The coefficient of FDI (t= -1.936) suggested that rise in foreign direct investment will stimulate private investment. From theoretical point of view, there exists a negative relationship between private investment and FDI if multinational corporations (MNCs) are competing with the domestic firms in gathering the limited resources in the product and financial markets. In the competition of utilising the limited resources, it is expected that MNCs will replace domestic firms as they have some strength in terms of advanced technology level, venture capital, management skills and expertise, as well as that MNCs are more productive than domestic firms (Borensztein, *et al*., 1998). Contrast to the finding of this study, Zhang (2001) posited that FDI stimulate more private investment and this positive effect of FDI results from technological changes and efficiency spillovers in the economy of the host country.

The variable real GDP (an indicator of economic growth) indirectly represents the domestic market size for the private sectors in promoting their commodities (Branson, 1989; Ang, 2008). It is therefore, a potentially significant variable in affecting private investment. However, the study found a positive but insignificant effect of economic growth on private investment.

The next stage of analysis is the estimation of Error Correction Model (ECM) of ARDL for the private investment variable. After examining long run relationship among variables, the short-run dynamics of these variables can be determined by Error Correction Representation of ARDL model based on equation 5. The results of Error Correction Representations of ARDL Model were presented in Table 4. The behaviour of the control variables did not change much in the short run especially in terms of the significance of their coefficients. For instance for model (1), model without financial development variable, all the control variables are not statistically significant with the same relationship sign as in the long run. This suggests that the variables were statistically insignificant in influencing private investment. The short run results reported for model 2 remain robust.

The speed of adjustment to restore equilibrium following a disturbance was statistically significant at 5% level in model 1 and at 5% level in model 2. The ECM_{t-1} carries an expected negative sign in model 2, indicating that private investment, public investment, financial development, prime lending rate and real GDP are cointegrated. The absolute value of the coefficient of the error-correction term indicates that about 81.92 per cent of the disequilibrium in the private sector investment is offset by short-run adjustment in each year. That is, adjustment to restore long-run equilibrium is reasonably high. Whereas the adjustment is relatively low in model without financial development variable, i.e about 33.22% of shocks is adjusted annually.

Table 4. Error Correction Representations of ARDL Model

	Model 1		**Model 2**	
Regressor	**Coefficient**	**Prob.**	**Coefficient**	**Prob.**
ΔPIN(-1)	0.2785**	0.0630	0.1686*	0.0538
ΔPIN(-2)	-0.3836**	0.0308	-0.4994***	0.0001
ΔGIN	-0.5381	0.6611	-2.1466**	0.0193
ΔCPS	-		0.2898***	0.0001
ΔCPS(-1)	-		-0.1207**	0.0480
ΔPLR	0.0865	0.4557	0.2566***	0.0029
ΔRGDP	1.7116	0.1145	-19.1020***	0.0076
ΔFDI	-0.0501	0.7774	-0.2198*	0.0714
ECT(-1)	-0.3322**	0.0123	-0.8192***	0.0000
Ajusted R-squared	0.6276			
F-statistic, Prob (F-statistic)	8.4656 (0.0000)		21.3566 (0.0000)	
DW-statistic	1.7453		2.1732	
Diagnostic Test				
$\chi^2_{Auto(2)}$	0.9658 [0.3962]		0.8004 [0.4653]	
$\chi^2_{Norm(2)}$	0.0594 [0.9707]		3.8347 [0.1469]	
$\chi^2_{BPG(12)}$	0.1692 [0.9892]		0.4796 [0.9026]	
$\chi^2_{RESET(2)}$	1.3033 [0.2918]		1.0308 [0.3780]	

$\chi^2_{Auto(2)}$ is the Breusch–Godfrey LM test for autocorrelation
$\chi^2_{Norm(2)}$ is the Jarque–Bera normality test
$\chi^2_{BPG(12)}$ is the Breusch–Pagan–Godfrey test for heteroscedasticity
$\chi^2_{RESET(2)}$ is the Ramsey test for omitted variables/functional

The diagnostic tests show that the models are well specified as they did not suffer from autocorrelation, heteroscedasticity, and functional form; and the residuals were normally distributed as shown in the lower part of Table 4. Furthermore, all graphs for the "CUSUM and CUSUMQ" of the residuals presented in Figures 1 and 2, showed that the model (Model 2) is well fitted.

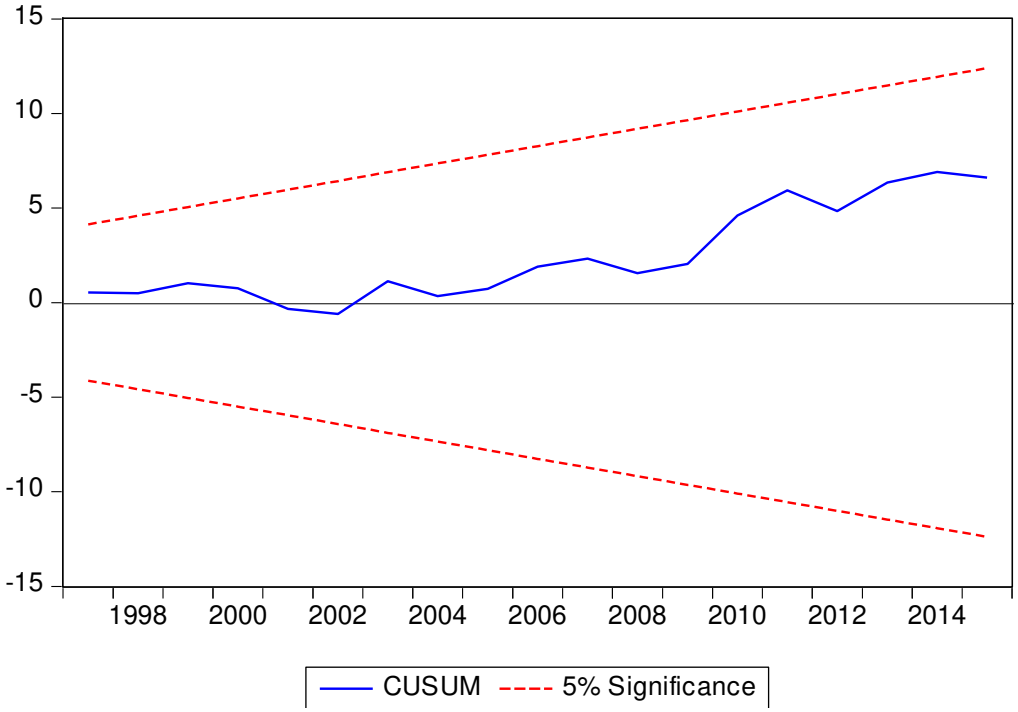

Figure 1: CUSUM Model Stability Test Result

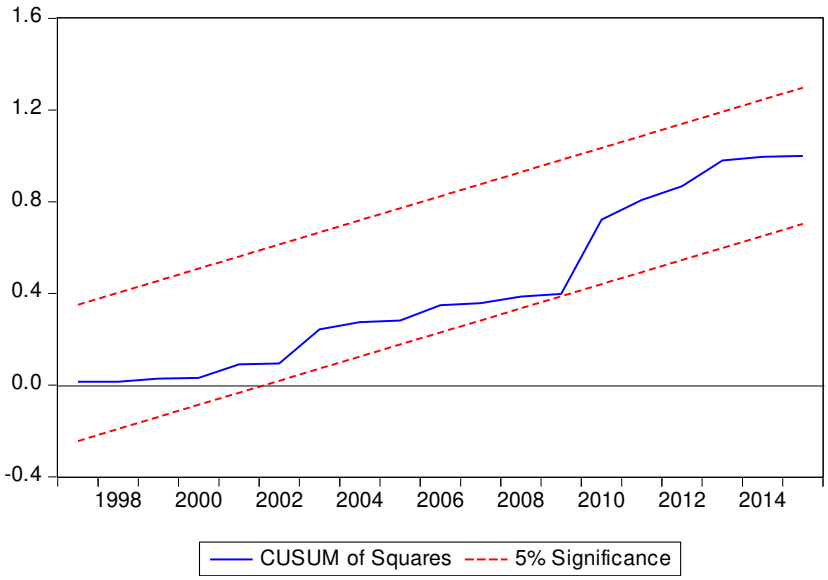

Figure 2: CUSUMQ Model Stability Test Result

4. Summary and Concluding Remarks

The effect of financial development on private investment remains an empirical matter in economic literature. Thus, the main objectives of the paper are to investigate the complementarity or substitutability of public and private investments and also examine whether financial sector development drive private investment in Nigeria. The paper employed annual data covering the period of 1981 to 2015 and ARDL estimation was applied. The bounds test results revealed that there exists a long-run relation among the variables of interest. The study found that public investment crowds out private investment in Nigeria. The findings support the idea that private investment is a substitute for public investment, hence that government expenditures do not encourage more private investment in Nigeria. More so, the result suggested that the effect of financial development on private investment – public investment nexus is positive and significant both in the long and short run. The findings provided an understanding on the ability of financial development indicator as a policy instrument in the design and implementation of private investment policies in Nigeria.

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