

# IMPLICATIONS OF BOND FINANCING ON INFRASTRUCTURAL DEVELOPMENT IN NIGERIA

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#### **ABSTRACT**

This study investigated the implications of bond financing on infrastructural development in Nigeria. The objectives of the study were to ascertain the impacts of federal government bonds, private sector credit and inflation rate on infrastructural development in Nigeria. Ex-post facto research design was adopted while data obtained for the period (2003-2015) were analyzed using Ordinary Least Square estimation techniques. The study found that federal government bonds has insignificant negative impact on infrastructural development in Nigeria, private sector credit has significant positive impact on infrastructural development in Nigeria while inflation rate has negative and insignificant effect on infrastructural development in Nigeria. The implications of the finding is that increase in federal government bonds leads to decrease in infrastructural development in Nigeria; increase in private sector credit supply leads to increase in infrastructural development in Nigeria and that increase in inflation rate leads to decrease in infrastructural development in Nigeria. The study recommended that the huge infrastructural deficit in Nigeria should be tackled through policies that will encourage intensified funding of infrastructural projects with federal government bonds. Government should also ensure that it maintains the policy environment that guarantee increased fund flows of private sector credit into infrastructural development projects of government in Nigeria.

**Keywords:** Bonds finance, Infrastructure development, Private sector credit, Inflation rate.

#### INTRODUCTION

Successive governments in Nigeria usually have visions and missions which they put together into policies and programmes aimed at meeting up with the campaign promises made to the electorate or at least the expectations and aspirations of the electorates. Top most on the electioneering promises is infrastructural development across different sectors of the economy.Infrastructural development is measured as the ratio of federal government capital expenditure to gross domestic product in Nigeria. This ratio captures the total expenditure of federal government on capital expenditures. It is expected that capital expenditures of the

government are to be financed with bonds issued by federal government. The establishment of the DMO in 2000 facilitated a resuscitation of the moribund bond market by the Federal Government through mobilization of funds by issuing FGN bonds in 2003 worth N72.56 billion to finance various capital projects. Infrastructural facilities like roads, electricity, building of schools, health facilities, pipe born water, seaport, airport, bridges etc are expected to be provided on sustainable basis by the government. These infrastructures are of common use and provide the structure essential for sustainable growth and development of the economy and that is why government undertakes to provide them in the most

responsible manner. Without the basic infrastructural projects, business organizations will find it difficult to survive because they constitute the driving force of economic growth and development in an economy (Harley, Joseph and Olaleye, 2014). This underscores the importance of infrastructural facilities to sustainable development and socioeconomic wellbeing of the people. Infrastructural development at all tiers of government (Federal, State and Local Government Area) requires the availability of appropriate mix of financial resources and the commitment of those in positions of authority to deliver on their mandate. However, funds available to governments atall tiers and at any point in time to pursue infrastructural development projects are seemingly perceived insufficient (Adams, 2002; Nzotta, 2004). Sources of funds available to government to execute her projects are not limited to statutory allocations, internally generated revenues, grants and aids from international institutions and donor agencies as governments can as well raise long-term funds for infrastructural development from both individual and institutional investors through bond financing from the bond market which is a segment of the capital market.

A bond is a debt security instrument issued usually by government or corporate organization to investors or bond holders at a specified rate of interest (coupon) over the life of the bond. In Nigeria, four types of bond are issued and they include federal government bonds (FGN bonds), subnational bonds (State/Local Government Bonds), agency bonds and corporate bonds. The DMO (2008) identifies some of the common reasons for issuing bonds in Nigeria to include restructuring of treasury bills into FGN bonds of longer maturities; financing government budget deficit, redemption of maturity bonds and exercise of call options on the local contractors and funding of government's special needs. According to Ebulu (2010) the Federal and some State Governments in Nigeria are resorting to the option of using the bond

market to raise funds to enable them finance conceived developmental projects. Bond market in Nigeria is still at developmental stage (Williams, Joseph and Olaleye, 2014). The low level of development of the bond market is evidenced by the predominance of over the counter trading and low participation of the private sector in the issuance of bonds.

Available statistics from SEC (2014) showed that the volume of the different types of bonds traded in the Nigerian bond market were as follows: Federal Government bonds - N4,59119 billion, Subnational bonds (State/Local Government Bonds) - N483.24 billion and Corporate bonds - 141.62 billion.Part of the Federal Government bonds raised was expected to be used to fund budget deficits. Available evidence indicates that the Federal Government budget deficit between 2003 and 2013 ran into trillions of naira. According to Nkwede, Uguru and Nkwegu (2016)the Nigerian fiscal deficit stood at N202.72 billion in 2003; N172.6 billion in 2004;N161.86 billion in 2005; N341.86 in 2006; N580.19 billion in 2007; N537.95 billion in 2008; N836.6 billion in 2009; N1.993 trillion in 2010; N1.136 trillion in 2011 and N1.135 trillion in 2012. The rising level of budget deficits points to the fact that bond as an alternative source of financing budget deficit of government may not have been adequately utilized in Nigeria.

Bonds are equally expected to be utilized in financing government long-term infrastructural project development. Private sector credit is expected to compliment federal government bond finances. Private sector credit (PSC) is a variable that shows the volume of bank credit that flows from the banks to the non-financial private sector (Onwumere, Imo, Frank and Oge, 2012).PSC as a percentage of gross domestic product(GDP) is used as a measure of private sector credit supply (Koivu, 2002). A low percentage of private sector credit to GDP is an indication that the private sectors contribution to the gross domestic product is small. Credit supply to the private sector for investmentis expected to boost infrastructural development. No doubt, government at various levels has at one point or the other embarked on infrastructural development of various magnitudes across different sectors of the economy. However, the growing level of infrastructural deficit is worrisome and it raises the pertinent question as to the implication of bond financing on infrastructural development in Nigeria.

#### Statement of the Problem

Infrastructure as an input to a wide range of businesses play important role in driving long-term economic growth especially in developing countries like Nigeria where infrastructural deficit appear to hold back economic growth and development. Despite the enormous benefits of infrastructure and the abundant funds available in the bond market at low long-term interest rates, infrastructural development in Nigeria seems to be grossly inadequate as a greater part of it is shouldered by the banks which are known to have short-term liabilities and might not be well placed to hold long-term assets so as to successfully handle long-term projects.

With the falling oil prices and economic recession biting harder in Nigeria, it has become apparently obvious that relying on statutory allocations, internally generated revenues, grants and aids from international and donor agencies and borrowing from commercial banks alike to fund long-term developmental projects might no longer be sustainable both at state and federal government level. Therefore, mobilizing funds from the private sector to meet up with the growing demand for infrastructural development requires bond financing. Although bonds have been used by federal and state governments to raise huge funds from the capital market to finance long-term projects, the level of infrastructural decay and deficits suggest that bond financing may not have achieved the desired results for which it was intended. The implication might be that policies, procedures and models of bond financing and infrastructural development may not have been motivated by valid scientific evidence

or at best may have been predicated on foreign empirical evidence. It might as well suggest that private sector participation in bond financing is low in Nigeria.

The dearth of infrastructure has watered down the profit margin and costs of doing businesses in Nigeria and this situation invariably might as well hinder sustainable development of micro, small, medium and large scale businesses. Bonds have been used by governments in Nigeria to raise funds to finance different infrastructural development but it seems that such funds are grossly inadequate considering the infrastructural deficit in the economy. It is therefore surprising thatdespite the growing relevance of bond financing to the growth and development of nations, this area of study to the best of our knowledge has remained less investigated. This study will therefore add to the few existing literature on bond financing and infrastructural development in Nigeria.

#### **Objectives of the Study**

The broad objective of the study is to investigate the implications of bond financing on infrastructural development in Nigeria. The specific objectives are as follows:

- To determine the impact of federal government bonds issued on infrastructural development in Nigeria.
- ii. To ascertain the impact of private sector credit delivery on infrastructural development in Nigeria.

### Review of Related Literature Conceptual Review

Bond simply refers to a corporate or government certificate acknowledging that a person has lent money to the company or government. Pandian (2003) stated that a bond is a formal contract torepay borrowed money with interest at fixed interval. A k u j u o b i (2006) explained that governmentbond is a firm contract of indebtedness entered by the government of a state with investors (bond holders) that have subscribed to or lent money to the state. A bond could equally be defined as a

certificate of indebtedness issued by a borrower to a lender. More so, a bond refers to a non-collateralized debtdebt instrument bearing a value, documenting and evidencing a commitment to redeem the debt at a particular coupon rate, upon maturity. A bond therefore is an interestbearing debt security/instrument issued by corporate bodies, governments and government agencies for the financing of infrastructure or for expansion purposes. Repayment of bond is usually in a steady and regular stream of payments which is done by means of a sinking fund. Bond investment belongs to the unit with surplus funds and would include insurance companies, investment and fund managers, pension fund administers, etc.). According to NSE (2016), bonds are used to finance capital projects with long gestation period, to re-establish a more rational strategy for financing the local currency portion of government budget deficits and other long - term programmes and to reduce local and external debt stocks.

Bonds can be classified according to their issuer. There are four different classes of bonds issued in the capital market and they are namely federal government (sovereign) bonds, government agency bonds, state and local governments bonds, and corporate bonds.

Federal Government (Sovereign) Bonds are issued by the federal government. This is regarded as the safest bond investment because they are backed by the full faith and credit of the federal government. Federal government bonds are medium/long-term debt instruments issued by federal government to raise funds to finance infrastructure development, social amenities and other expenditure requirements such as Roads, River Canals, Water Projects, Drainage systems, etc. They are usually used as benchmark by other bond issuers in determining the interest rates and maturity of their bonds.

Government Agency Bonds are bonds issued by government agencies or privately owned corporations that are sponsored by government agencies. They are also seen as safe bond investments and it have higher yields than sovereign bonds. Examples of such bonds are mortgage backed bonds.

State and Local Government Bonds are the type of bonds issued by state and local governments. They are also known as municipal bonds. State and local governments bonds can be grouped into general obligation or revenue bonds. General obligation bonds are issued to finance the various projects of the government, and backed by the income of the specific project for which it was issued. Revenue bonds are issued to finance projects of the government and such project is expected to generate revenue that will be used to pay for the bonds. Revenue bond is secured by the revenue to be generated from the projects (Akujuboi, 2006). Revenue bonds are medium/longterm debt instruments issued by state governments to raise funds to finance infrastructural projects such as Quarry, Tourism related projects including Amusement Parks, Electric Power Generating Projects, etc.

Corporate Bonds are the type of bonds issued by limited liability companies listed on the Nigerian Stock Exchange (NSE). Corporate bonds also known as debentures(if not secured) are the riskiest of fixed income securities because of the possibility that the issuing company might delay or default in payment of the interests and principal due to unforeseen economic/financial downturn. Due to the risky nature of corporate bonds it offer the highest returns on investments compared to the other types of bonds. Companies therefore adopt the option of issuing debt instrument to raise funds to finance their various projects in other to avoid dilution of their ownership base. These various classes of bonds are expected to be used mainly for infrastructural development of the government.

Private sector credit is expected to compliment federal government bond finances. Private sector credit is a variable that shows the volume of bank credit that flows from the banks to the non-financial

private sector (Onwumere, Imo, Frank and Oge, 2012). Private sector credit (PSC) as a percentage of gross domestic product(GDP) is used as a measure of private sector credit supply (Koivu, 2002). Private sector credit is expected to compliment federal government bond finances.

Infrastructural development is measured as the ratio of federal government capital expenditure to gross domestic product in Nigeria. This ratio captures the total expenditure of federal government on capital expenditures.Infrastructure which may be social or economic in nature refers to those physical assets and services which are fundamental to the growth and development of an economy. The Millennium Developmental Goals and the Vision 2020 agenda of the Federal Government are centered on provision of infrastructure thereby emphasizing the importance to the growth and development of Nigeria. Presently, Nigeria is faced with huge deficits in many sectors of the economy and these infrastructural gaps cannot be met through public resources alone hence, private sector involvement is also very important. As a developing economy, Nigeria needs a sound and effective capital market that is properly regulated and supervised to bridge the huge infrastructure financing gap that exists. The implication of the increasing infrastructural deficit in Nigeria might result to limited access to social services, significant increases in the cost of doing business and dwindling economic growth. In a recent survey, the Global Competitive Index (2010-2011) places Nigeria on the 127th position out of 139 countries in terms of conducive business environment. This same index placed Nigeria on the 45th position in terms of investor protection and this is an indication that the situation can and must be reversed to regain the confidence investors.

## An overview of Federal Government Bonds in Nigeria

Federal Government of Nigeria (FGN) bonds dates back to the 1970s with

issuance considered to be - illiquid and redeemable only to the Central Bank of Nigeria (CBN) upon maturity (Adyorough, 2010). Trading in federal government bonds in Nigeria was resuscitated after 18 years of discontinuation following the establishment of the Debt Management Office (DMO) in 2000, and the creation of the DMO Act in 2003. The establishment of the DMO in 2000 facilitated a resuscitation of the moribund bond market by the Federal Government through mobilization of funds by issuing FGN bonds in 2003 worth N72.56 billion to finance various capital projects. This partly contributed to the increase in the total domestic debt to N1.3 trillion in 2003 up from N897.95 billion in 2000. Since then, there had been a consistent increase in the total Nigerian domestic debt. In 2008, the domestic debt of Nigeria hit the N2.3trillion mark, increased to N4.0 trillion in 2010 (Adyorough, 2010) and was about N5.3 trillion in 2011. FGN bonds have phased out development stocks and become dominant accounting for 61% of the total bonds, while treasury bills have been minimized to 34%, and treasury bonds, 5% of the total federal government bonds (George, 2013). The Nigerian bond market as at 2012 was dominated by FGN bonds to the tune of 86.0%, states bonds 10.6% and corporate bonds 3.4% (George, 2013). The inclusion of the FGN bonds in the JP Morgan's and Barclays EM Bond Index has brought the country's government bond market to international limelight.

#### **Empirical Review**

Harley, Joseph and Olaleye (2014) investigated the impact of bonds on public utility in Nigeria using Ordinary least square (OLS) estimation techniques. The study found that bonds have no significant impact on public utilities in Nigeria. The implication of the finding is that the volume of government total bonds does not measure up with public utilities available. The study concluded that there is a linear relationship between bonds and public utilities.

Appah and Soreh (2012) examined the implications of bond financing on

public utility in Nigeria using content analysis techniques to review existing studies. The study found that appropriation of future income for present utilization constitutes a problem if, government records waste in managing such funds realized for project financing. The implication of the finding is that government policy should not be a source of problem to infrastructural development in the future. The study recommended that there should be accountability and transparency in managing bond issuing and project financing in Nigeria.

Mailafia (2014) examined bond market development and infrastructural development in Nigeria for the period 1980-2011 using Vector Error Correction Model (VECM). The study found that the level of economic development, budget deficit and bank size significantly affect government bond market development. The study recommended that substantial part of the existing pension funds should be invested in bonds for the purpose of raising funds for infrastructural projects.

Torsen (2014) carried out a study on infrastructural finance in developing countries. The study used content analysis technique to review existing literature on bonds and syndicated project loan. The result indicated that the challenges to infrastructure finance include lack of investable projects, improper projects design and contractual arrangement which creates wrong incentive for infrastructure financing. The study recommended that a greater variety of financial instrument for infrastructural finance should be evolved which ofcourse would give room for diversification of risks.

Oteh (2010) carried out a study bond market development and infrastructural finance in Nigeria. The study reviewed existing literature over the period 2001-2010. The study found that federal government bond dominated infrastructural development finance in Nigeria. The study equally identified the challenges of infrastructural development in Nigeria to include multiple taxation, volatile depositor base, low level of credit

provision to the private sector, limited capital market penetration, regulatory inadequacy and political risks. It was recommended increased awareness of capital market operations and adequate regulatory environment to safeguard investors and other capital market participants.

Nkwede, Uguru and Nkwegu (2016) investigated bond market development in Nigeria for the period 1980-2013 using OLS regression techniques. The study essentially sought to ascertain whether macroeconomic factors influence bond market development in Nigeria. The study revealed that the fundamental macroeconomic factors such as inflation rate, exchange rate, interest rate, banking sector development, fiscal balance, bond vield and foreign direct investments significantly influence bond market development in Nigeria. The implication of the finding is that macroeconomic factors matters a lot and also drives bond market development in Nigeria.

#### **Theoretical Framework**

The theories adopted for the study isinformation asymmetry theory. Information asymmetry theory was propounded by Akerlof (1970). The theory assumes that financial markets are not perfect and financial intermediaries primarily exist to reduce information and transaction costs that arise from market imperfection between borrowers and lenders. Information asymmetry theory states that it may be complex to differentiate between honest and dishonest borrowers. Information asymmetry arises because borrowers generally know more about their investment projects and the willingness to repay than the lenders. Information asymmetry also arises if the lenders are not certain in terms of the integrity of the borrowers and the expected return of the projects that they have financed.Information asymmetry therefore describes the situation in which relevant information is not known to all the parties involved in an undertaking. Information asymmetry leads to adverse selection and moral hazard problems.

Adverse selection theory was propounded by Akerlof (1970), and Rostchild and Stiglitz (1976). The theory assumes that lenders are not certain in selecting creditworthy borrowers from a pool of borrowers with different credit risk exposures ex-ante. An ex-ante information asymmetry arises when lenders cannot differentiate between borrowers with different credit risks before extending credits to them. Adverse selection refers to the situation in which the probability of loan default increases with rising interest rate and quality of pool of borrowers worsens as the cost of borrowing rises (Musara and Olawale, 2012). Adverse selection theory offers useful explanation on the problem of getting borrowers to share hidden information honestly since it is assumed that only the borrowers know better the level of risk associated with their business.

Moral Hazard Theory: Stiglitz and Weiss (1983) proposed the moral hazard theory. The theory assumes that the likelihood that borrowers will engage in activities that will guarantee repayment of credit extended to them cannot be determined ex-post by lenders. Moral hazard refers to the situation where the borrower of credit facility takes action that adversely affects the returns to the lender (Musara and Olawale, 2012). Moral hazard arises if the borrower/lender has diverging interest and the lender cannot effectively monitor the borrowers and her projects implementation ex-post. Moral hazard problem arises from the difficulty which lenders have in assessing the capacity of borrowers to repay their debt obligation in future at the time of loan application and disbursement.

#### Methodology Research Design

This study adopted the *Ex-Post Facto* research design because the study relied on historic accounting data. According to Agbadudu (2002), the justification for adopting *Ex-Post Facto* research design is that it is a realistic approach to solving business and social science problems

which involves gathering records of past events, analyzing the records and using the outcome of the analysis to predict future events.

#### **Sources of Data**

Data for this study were sourced from secondary sources namely the Central Bank of Nigeria (CBN) Statistical Bulletin and the Nigerian Securities and Exchange Commission (SEC) Bulletin. The data are classified into dependent variable (infrastructural development) and a set of independent variables (federal government bonds, private sector credit and inflation rate).

#### **Description of Model Variables**

Infrastructural development (InfDev) (Dependent Variable): Infrastructural development is measured as the ratio of federal government capital expenditure to gross domestic product in Nigeria. This ratio captures the total expenditure of federal government on capital expenditures. Recall that capital expenditures of the government are expected to be financed with bonds issued by federal government. William etal (2014) used the same measure infrastructural development in a related study.

Federal Government Bonds (FGB/GDP) (Independent Variable): This is captured as the ratio of federal government bonds to gross domestic product. It also indicates the total bonds realized from the capital market for the purpose of financing infrastructural development projects of the government.

Private Sector Credit (PSC/GDP) (Independent Variable): This isproxied as the ratio of private sector credit to gross domestic product. It equally indicates the volume of bank credit that flows from the banks to the non-financial private sector (Onwumere, Imo, Frank and Oge, 2012). There are indications that substantial parts of government infrastructural development projects are funded by credit borrowed from the banks.

Inflation Rate (INF) (Control Variable): It is a macroeconomic variable that is introduced to control for uncertainties in the model. Inflation rate is considered the

most appropriate control variable because its effect has a far reaching effect in the economy.

#### **Model Specification**

This study adopts the multiple regression model and the justification is that the study has more than one independent variable in the regression equation. The multiple regression model is expressed as:

$$Y = \alpha_1 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 \dots \beta_n X_n \dots$$

#### Where.

Y= Dependent variable;  $X_{1,}$   $X_{2,}$   $X_{3}$  ... $X_{n}=$  Independent variables;  $\alpha_{i}$  Intercept;  $\beta_{1,}$   $\beta_{2,}$   $\beta_{3...}$   $\beta_{n}$  = Coefficients of the parameter obe estimated.

Based on equation 1, our model therefore specifies that:

InfDev<sub>t</sub> = 
$$\alpha_i + \beta_1$$
FGB/GDP<sub>t</sub> +  $\beta_2$ PSC/GDP<sub>t</sub> +  $\beta_3$ INF<sub>t</sub> +  $\mu_{i...}$  2  
Where;

InfDev = Infrastructural Development FGB/GDP = the ratio of federal government bonds to gross domestic product.

PSC/GDP = the ratio of private sector credit to gross domestic product.

INF = Inflation rate. (control variable)  $\alpha_{i-}$  Intercept.

 $\beta_{1}$  ...  $\beta_{3}$  = Coefficients of the parameter to be estimated.

 $\mu_{i}$  Error term.

t = time variant component.

#### **Analytical Method**

The study analyzed and interpreted the data generated using Ordinary Least Square (OLS) estimation techniques. Descriptive test was carried out to determine the descriptive statistics of the variables under investigation. The OLS regression result was also carried out to determine the statistical significance or otherwise of the result obtained. The sign and size of t-statistics and the arising pvalues were used to test the significance of the results obtained for each of the research objectives. The decision rule was to accept the alternate hypothesis if the pvalue is less or equal to 0.05 and to accordingly reject the null hypothesis if the p-value is greater than 0.05. The statistical package used in data analyses was E-view 9.0 version.

### Descriptive and Empirical Results Descriptive Results

The descriptive results explain the characteristics of the dependent and independent variables. The descriptive result is presented in table 1.

Table 1: Descriptive Statistics

	InfDev	FGB/GDP	PSC/GDP	INF
Mean	2.439231	0.045346	18.95385	10.57769
Median	2.440000	0.053800	18.60000	10.30000
Maximum	4.650000	0.079700	36.90000	15.10000
Minimum	0.860000	0.006400	11.10000	6.600000
Std. Dev.	1.289615	0.022208	7.142550	2.461904

### Source: Author's Computation 2016 from E-view 9.0 Version

Table 1 shows the descriptive statistical analysis between the dependent and independent variables. Infrastructural development (InfDev) and federal government bonds (FGB/GDP) within the period under review on average stood at 2.439 and 0.0453 respectively. It implies that the contribution of federal government bonds to infrastructural development is low. The volume of private sector credit (PSC/GDP) averaged 18.953. The implication is that greater part of infrastructural projects is financed with the private sector credit. The inflation rate (Inf) stood at 3.51% on average. It means that inflation rate exert strong influence on infrastructure development in Nigeria.

### Discussion of Result Table 2: OLS Regression Result

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C FGB/GDP PSC/GDP INF	2.002263 -64.22489 0.229954 -0.095407	1.751815 31.88562 0.102337 0.174417	1.142964 -2.014227 2.247019 -0.547009	0.2825 0.0748 0.0413 0.5977
R-squared Adjusted R- squared	0.415868 0.221157			

### Source: Author's Computation 2016 from E-view 9.0 Version

Table 2 showsthe OLS regression result. The study found that federal government bonds have insignificant and negative impact on infrastructural development in Nigeria. This is confirmed by the t-value of -2.0142 and p-value of

0.0748 as indicated in table 2. The implication of this result is that increase in federal government bonds leads to decrease in infrastructural development. It therefore suggests that the volume of federal government bondsrealized from bond issues over the years may not have measured up with infrastructural development in Nigeria. This result is in conformity with Harley, Joseph and Olaleye (2014) who found that bonds have insignificant impact on infrastructural development in Nigeria.

The study also showed that private sector credit has significant and positive impact on infrastructural development in Nigeria. The result is confirmed by the t-value of 2.2470 and p-value of 0.0413 as indicated in table 2. The implication is that increase in private sector credit delivery leads to increase in infrastructural development in Nigeria.

The study further showed that inflation rate has insignificant negative impact on infrastructural development in Nigeria. This is confirmed by the t-value of -0.547009 and p-value of 0.5977 as indicated in table 2.It implies that increase in inflation rate leads to decrease in infrastructural development in Nigeria. Inflation rate as a macroeconomic variable has no significant influence on infrastructural development in Nigeria.

The R2 value 0.415868 indicates that only 41.59% of changes in infrastructural development can be explained by the variables in the model. This implies that 58.01% change infrastructural development can be explained by other variables not included in the model.

#### Conclusion

Based on the result obtained in table 2, the study concluded that federal government bonds has insignificant negative impact on infrastructural development in Nigeria and the implication is that the funds so far realized from federal government bonds issued over the years is grossly inadequate as to influence the huge infrastructural deficit in Nigeria. The study also concluded that private sector credit has significant positive impact on

infrastructural development in Nigeria and the implication is that greater part of infrastructural projects in Nigeria are funded from private sector credit that flows from domestic/foreign financial and nonfinancial institutions. Finally the study concluded that inflation rate has negative and insignificant effect on infrastructural development in Nigeria.

#### **Recommendations**

The study recommends as follows:

- i. That the huge infrastructural deficit in Nigeria which has far reaching consequences on economic growth and development should be tackled through policies that will encourage intensified funding of infrastructural projects with federal government bonds.
- ii. That government should ensure that it maintains the policy environment that guarantee increased fund flows of private sector credit into infrastructural development projects of government in Nigeria.
- iii. That the government should implement monetary policies that would lower the inflation rate to a single digit so as to lower the cost doing business and enhance domestic investments in infrastructural projects.

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