# CONTRIBUTION OF GOVERNMENT CAPITAL EXPENDITURE TOTRANSPORT INFRASTRUCTURAL DEVELOPMENT IN NIGERIA (1999-2021)

**[1]AYODEJI EMMANUEL .A, [2]AJALA ROSEMARY BUKOLA**

[1]Professor, Executive Director, ABUAD Business School, Ibadan, Oyo-State, Lecturer at the Department of Banking Finance, Afe Babalola University (ABUAD), Ado-Ekiti, Ekiti State, Nigeria
[2]PhD, Department of Banking and Finance, The Federal Polytechnic Ado Ekiti, Ekiti-State
E-mail: [1]dremmaniel.ayodeji@gmail.com, [2]ajala_rb@fedpolyado.edu.ng

**Abstract** - Transport infrastructural development promotes economic growth and development. It aids trade, other sectors and physical cross-border dealings. It, also, fosters ease of doing business and movement of people and commodities. Government expenditure is one of the major sources of financing infrastructural development. In Nigeria, government allocation to infrastructure is rising at an increasing rate yet visible infrastructure development is inadequate. Much more, empirical studies on government expenditure did not focus on infrastructural development, which is the intermediate goal, but focused on economic growth, which is the ultimate goal. Therefore, this study investigated the effects of government expenditure on transport infrastructural development in Nigeria within the temporal scope 1999-2021. The study was anchored on unbalanced growth theory. Transport composite index was the proxy for transport infrastructural development. Transport capital expenditure and Transport current expenditure represented government expenditure. Transport growth and consumer price index were the control variables. The study sourced secondary data from the various editions of Central Bank of Nigeria statistical bulletin and African Infrastructural Development reports. The estimation technique was autoregressive distributed lag model. The study found that, transport capital expenditure, transport output and inflation exhibited insignificant positive short-run effects on transport infrastructural development. Their respective coefficients were 0.008455, 0.000226 and 0.003027; and p-values were 0.9143, 0.7165 and 0.5719 at 0.05, that is, 5% level of significance (LOS). Transport recurrent expenditure exhibited insignificant short-run effect on transport infrastructural development with a co-efficient of -0.010881 and p-value of 0.7232 at 0.05 LOS. The study concluded that, government capital expenditure exerts positive effects on infrastructural development and recurrent expenditure exerts negative effect on it. The study recommends, government should increase its capital expenditure on transport infrastructure to foster significant development of the sector. It should also employ private-public partnership as a means of financing transport projects like road networks, railways and mass transit scheme in Nigeria.

**Keywords** - Government Expenditure, Transportation, Infrastructure, Economic Growth

## I. INTRODUCTION

The significance of infrastructure within an economy is paramount, drawing attention from researchers, governments, and the private sector alike. Infrastructure plays a pivotal role in enhancing productivity and economic growth. Research by Agbigbe (2016), Njoh (2012), and Fasaranti (2013) underscores that robust infrastructure empowers a nation to compete favourably globally, particularly transport infrastructure, which bolsters the movement of people and goods domestically and internationally. This type of infrastructure fuels economic activities, broadens markets, curtails expenses, encourages business innovation, influences the pricing of goods, and, notably, generates employment and attracts investments, elevating citizens' quality of life.

In Nigeria, the government bears the responsibility of providing public goods, including transportation networks. The Federal Government oversees the construction and maintenance of transport systems like roads, railways, airways, and waterways, while state governments manage road networks within their respective states. However, studies repeatedly highlight the insufficiency of the transport system in Nigeria. Inadequacies have led to numerous accidents and fatalities, including over 18,320 individuals and 4,059 vehicles involved in road accidents in 2018 alone. Existing infrastructure from the 1970s has deteriorated, with railways and waterways neglected. The railway system is largely inoperative due to a lack of maintenance and parts, while waterways are obstructed by debris.

Efforts to improve the situation have been made, including the launch of Infracredit and permission for investment in infrastructure projects by the Pension Commission. Nevertheless, corruption, embezzlement, poor work quality, and abandonment of projects have hindered progress. Government financing alone is insufficient for necessary capital projects due to limited resources. Although road infrastructure received the highest allocation in recent years, railways came next, and aviation infrastructure received the lowest budget allocation, there has been minimal observable improvement even with increased budget allocation.

Capital projects, including transportation systems, rely on government capital expenditures. In Nigeria, a significant portion of the government's income is directed towards recurrent expenditures, leaving a small fraction for capital projects. Despite aspirations

to become Africa's largest nation, Nigeria's capital expenditure has fluctuated and declined since the advent of democratic governance, averaging only 27% of total government expenditure. This discrepancy is concerning given Nigeria's vision and the substantial infrastructure deficit it faces.

As a result, the study focuses on the contribution of government expenditure to infrastructure development, specifically transportation, in Nigeria. This area has received limited attention in previous research. Notable existing studies have explored taxes' impact on infrastructure, such as Oladipupo and Ibadian, (2016), industrial development's effect on industrial growth, such as Shobande and Etukomeni, (2017), and the connection between government revenue and infrastructure, such as Inyama, Chinedu, and Nnemm, (2017) Olayinka and Phebe, (2019), Onwuka and Chirstian, (2019). To address this gap, the current study aims to assess how government capital expenditure between 1999 and 2021 has influenced transportation infrastructure in Nigeria.

## II. LITERATURE REVIEW

### Government Expenditure

Government expenditure is defined as government spending on the collective needs of the country or the collective social wants of the people (federal, state, and local). It refers to the expenses that the government incurs in the performance of its operations. Although, with increasing state activities, it may be difficult to judge what portion of public expenditure can be attributed to the maintenance of government itself and what portion is for the benefit of society and the economy as a whole. According to Bhatia (1976), public expenditure refers to the expenses that the government incurs for its maintenance and also for society and the economy as a whole. In other words, government expenditures are the expenses incurred by the government for the maintenance of itself, the economy, and society. It serves as a mechanism that the government can use to have significant effects on people's lives in terms of their standard of living and better opportunities. However, in any economy, government expenditures may be classified into two categories: recurrent expenditures and capital expenditures. Recurrent expenditure is an expense carried out by the government on day-to day activities, i.e., general spending on services and maintaining the existing facilities in the economy. These include spending on wages and salaries, maintenance of social services, rent and rates, etc. Recurrent expenditures are generally consumables year by year. On the other hand, capital expenditures refer to government expenses on goods and services whose services are rendered over a long period of time. It can also be referred to as the expenditure on capital projects. This includes the construction of houses, roads, schools, and hospitals; human capital development (expenditures on education and health); the purchase of official vehicles; the construction of boreholes and electrification projects, etc. The benefits of capital expenditures are more durable and last for years than those of recurrent expenditures.

### Infrastructural Development

The term infrastructure refers to the structures and facilities that are necessary for the functioning of the economy and society as they support economic activities and social services (Chong & Poole 2013). From the perspective of Salisu (2016) "infrastructure is the basic facilities that are necessary for the development of a nation". Bottini, Coelho, and Kao (2012) refer to infrastructure as a heterogeneous term that can be viewed from many directions. They said this includes physical structures of various types used by many industries as inputs to the production of goods and services. Nurre (2012), as cited by Salisu (2016), refers to infrastructure as a set of interconnected structural elements that provide a framework supporting an entire structure of development and serve as an important term for judging a country's or region's development. Tule, Okafor, Obioma, Okorie, Oduyemi, Muhammed, and Laoye (2015) described infrastructure as purely public goods, built and maintained by public funds. From this assertion, it means public goods are goods made available by the government through which all citizens can benefit, and they can also pose a risk or cause discomfort to some other people. From different concepts given by different authors, it can be said that infrastructure is an important structure needed for economic prosperity as it serves as one of the indicators of economic development.

The transport system is one of the economic infrastructures needed in an economy for easy connections between regions and countries. It covers air, water, and land transport, which are common in Nigeria. Mostly, financing of this type of infrastructure rests with the government from the revenue generated annually. The government allocates funds to transport infrastructure by building roads, constructing bridges, and creating more roads to interconnect regions. Although some private individuals can collaborate with the government to fast-track the provision of facilities for the use of the citizens, especially when the government is overburdened by other needs of the economy, However, the quality of this transport system is inadequate due to a lack of maintenance, which contributes to the deterioration of the transport infrastructure of the country.

### Theoretical Framework

This study adopted as its framework Samuelsson's pure theory of public expenditure, which was

propounded by Samuelson in 1954, and unbalanced growth theory. First, Samuelson's theory centred on public goods, which are non-rival and non-excludable goods acquired through public expenditure. This theory argues that public goods cannot be provided by individuals, and the individual preference does not prevail or supersede that of the collective preference, but they can be provided by the government through public expenditure, and the basis of such expenditure must reveal the preference of the collective needs of the public goods. This theory emphasised that the provision of infrastructure, such as transport systems, is the sole responsibility of the government, and resources must be earmarked for its provision.

**Empirical Review**

Ekpung, Udunde, and Dave (2014) investigated the growth of public expenditure on infrastructure in Nigeria from 1970 to 2006. The study employed various variables, including public expenditure as the dependent variable, government revenue, population density, external reserves, openness, urbanisation rate, lagged public expenditure value, and a dummy variable. Time series data were collected from sources such as the CBN Statistical Bulletin and International Financial Statistics. Analytical methods like Johansen co-integration and the vector error correction mechanism were used. The findings indicated that the increase in public expenditure on infrastructure did not yield positive outcomes for Nigeria's infrastructural development.

In a study by Amadi, Amadi, and Nyenke (2013), the relationship between public spending on transport infrastructure and economic growth in Nigeria from 1970 to 2008 was explored. GDP-based economic growth was the dependent variable, and the independent variables were public spending on things like transportation and communication, road building, education, health care, and other economic services. Secondary data were collected and analysed using ordinary least squares. The study revealed an insignificant and negative connection between public spending on transport infrastructure and economic growth. Molapo (2015) delved into the analysis of public expenditure on infrastructure in Lesotho from 1980 to 2014. Government expenditure growth on infrastructure served as a proxy for infrastructure, with various proxies like government revenue, external reserves, grants received, public debt, and recurrent expenditure used for public spending. Time series data were sourced from the Central Bank of Lesotho and the IMF database, and error correction methods were employed for estimation. The study's results indicated the absence of any conclusive evidence of a relationship between the growth of government spending on infrastructure and external reserves, both in the long and short run. Okpala and Olabisi (2015) conducted a study focusing on the relationship between the budget size for capital expenditure and power infrastructural development in Nigeria. The research utilised a cross-sectional survey research design and administered questionnaires to 569 top management staff from various institutions. These institutions included the Federal Ministry of Finance, PHCN, NERC, CBN, and PHCN transmission staff as of April 2014. The data were analysed using analysis of variance. The study's findings demonstrated that there was no significant relationship between the size of the capital expenditure budget and power infrastructure development. Moreover, the correlation between capital expenditure budget size and power infrastructure was weak, implying that power infrastructure development was not associated with the size of the capital expenditure budget.

Okolo, Edeme, and Emmanuel (2018) conducted an examination into the correlation between capital expenditure and the advancement of infrastructure in Nigeria, employing time series data spanning the years 1970 to 2017. In this research, infrastructural development was considered the dependent variable, while the federal government's capital expenditure served as the independent variable. Additionally, non-oil revenue, external debt, recurrent expenditures, and expenses related to construction were integrated as control variables. By utilising time series data obtained from the CBN Statistical Bulletin and applying the auto-regressive distributed lag methodology for estimation, the study discovered that although capital expenditure, construction spending, and non-oil revenue might have positively impacted infrastructural development in the long term, these effects were constrained by the substantial external debt burden carried by the country.

Similarly, Onwuka and Christian (2019) explored the role of revenue generation in promoting infrastructural development in Nigeria, spanning the time frame from 1981 to 2018. In this research, infrastructural development was approximated using capital expenditure, while revenue generation was represented by the total revenue generated. Additionally, gross domestic product (GDP) was employed as a proxy for economic growth. The study collected secondary data from sources such as the Central Bank of Nigeria's (CBN) statistical bulletin and the National Bureau of Statistics (NBS). Multiple regression analysis was applied for the analysis. The findings revealed a significant correlation, indicating that the revenue generated had a noteworthy impact on infrastructural development in Nigeria.

## III. METHODOLOGY

The study adopted ex-post facto research design and as such, employed secondary data. Upon the theoretical framework of this study which is based on Samuelson Pure Theory of Public Expenditure which

implies that, public goods can only be provided by government but not by individuals. As a result of this, the model for the study in line with this theory is stated as public expenditure is a function of public goods. Therefore, this study proxied public expenditure by federal government capital and recurrent expenditure, the control variables such as money supply and inflation were included in the explanatory variables to be used while infrastructural development is proxied by infrastructural development index. Hence, the model for this study is stated in a functional form as;

INFD = f (TCEX, TREX) ----------1

In order to enhance the performance of these variables, inflation proxied by consumer price index and transport output were introduced. However, infrastructure development is proxied by transport infrastructure growth. The whole model is therefore stated as

INFDT = f (TCEX, TREX, TOUT, INF) ----------2

In a linearized form, the model is stated as;

$INFDT = \delta o + \delta_1 TCEX_{t-1} + \delta_2 TREX_t + \delta_3 TOUT_{t-1} + \delta_4 CPI_{t-1} + U_t$----------3

Specifying an Auto-regressive distributed model, the model is re-specified thus

$$\nabla INFDT_t = \delta_0 + \sum_{t-1}^{p} \nabla \delta_1 TCEX_{t-1} + \sum_{t-1}^{p} \nabla \delta_2 TREX_{t-1} \sum_{t-1}^{p} \nabla \delta_3 TOUT_{t-1} + \sum_{t-1}^{p} \nabla \delta_4 CPI_{t-1} + U_t ----------3$$

Where, δo =constant or intercept, INFDT= Infrastructural development of Transport sectorTCEX= Transport sector capital expenditure, TREX= Transport sector recurrent expenditure, TOUT= Transport Output, CPI= Consumer Price Index, U= Stochastic error term, $\delta_1\delta_2\delta_3\delta_4$ are coefficients of the parameters

**Method of Data Collection and Estimation Technique**

The study used time series data spanning 1999 to 2021. These data were sourced from African development Bank reports and CBN Statistical Bulletin of various editions.To achieve objective of this study, Augmented Dickey Fuller test and Auto regressive distributed lag short run techniques were used. In addition, the study subjected the data to pre and post diagnostic tests such as Breusch pagan and serial correlation LM test.

**Analysis and Interpretation**

Testing the stationarity of the variables, the study employed Augmented Dickey Fuller test. The variables were transformed into logarithms except infrastructural development index and consumer price index. The result as presented in Table 1 revealed that only CPI became stationary at level I (0), while LINFDT, LTCEX, LREX and TOUT were non-stationary at level. They were further tested at first difference and they were found to be stationary at first difference I (1). The study therefore concluded that variables were integrated of differentorders, that is, at first difference I (1), and at level I (0)

| Variable | Test Prob | @Level | 1st Diff | Integration |
|---|---|---|---|---|
| LINFDT | Test | -1.2491 | -4.0293 | I(1) |
| | Prob | 0.6273 | 0.0081 | |
| LTCEX | Test | -1.4296 | -6.5014 | I(1) |
| | Prob | 0.5472 | 0 | |
| LTREX | Test | -2.8625 | -5.288 | I(1) |
| | Prob | 0.0696 | 0.0005 | |
| LTOUT | Test | -1.8361 | -5.3726 | I(1) |
| | Prob | 0.3529 | 0.005 | |
| CPI | Test | -5.0896 | N/A | I(0) |
| | Prob | 0.0006 | | |

**Table 1: Summary of Augmented Dickey Fuller Test**
**Source: Author's Computation from EViews 10, 2023**

**Auto Regressive Distributed Lag Bound Test**

The long run relationship between government expenditure and infrastructural development was conducted using Auto regressive distributed lag bound test. This is justified based on the ADF result which showed that variables are integrated of different orders. Hence the result as presented in Table 2 revealed that, the F-statistics of 1.8349 is lesser than the lower bound of 2.86 at 5% level of significance. According to Nasaran (2005), when F-statistics is below the lower bound, there is an evidence of no long run co-integration between the variables. Hence, from the result, the study accepts the rejects the alternate hypothesis and accept the null hypothesis which says, no long run relationship between government expenditure and infrastructural development.

| F-Bounds Test | | Null Hypothesis: No levels relationship | | |
|---|---|---|---|---|
| Test Statistic | Value | Signif. | I(0) | I(1) |
| F-statistic | 1.834904 | 10% | 2.45 | 3.52 |
| k | 4 | 5% | 2.86 | 4.01 |
| | | 2.50% | 3.25 | 4.49 |
| | | 1% | 3.74 | 5.06 |

**Table 2: ARDL Bound test to Co-integration**
**Source: Author's Computation's from Eviews 10, 2023**

Arising from the ARDL bound test result, non-existence of long run relationship between government expenditure and infrastructural development calls for the estimation of short run relationship, the result is presented in Table 3. It was found that in the short run transport infrastructure capital expenditure of 0.0084, transport output of 0.0002 and consumer price index of 0.00302 positively impacted on infrastructural development while transport infrastructure recurrent expenditure of -0.0108 have negative impact on it. Further findings revealed that, none of the variables is significant in the short long run. This implies that, a unit increase in transport capital expenditure, transport output and consumer price index would have a 0.8%, 0.02% and 1% increase in infrastructural output while a unit increase in transport recurrent expenditure would has 1% reduction in the infrastructural development.

The coefficient of determination $R^2$ of 0.5149 showed that about 51.49% of the dependent variables is explained by the explanatory variables such as TCEX, TREX, TOUT and CPI while 48.51% is explained by variables not included in the model. This shows that explanatory variable is a good predictor of dependent variable. The Adjusted $R^{2\ of}$ 49.69% further confirmed the relationship between government expenditure and infrastructural development based on the number of variables in the model. Checking the overall significance of the model, it was revealed that F-statistics of 4.3142 and the p-value of 0.0509 showed no significant relationship between government expenditure and infrastructural development in Nigeria. Durbin Watson of 2.0794 revealed that the model is not suffering from problem of auto-correlation.

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| C | -0.068448 | 0.09182 | -0.745461 | 0.475 |
| D(LTCEXP(-1)) | -0.005266 | 0.065623 | -0.080242 | 0.9378 |
| D(LTCEXP(-2)) | 0.008455 | 0.076359 | 0.110727 | 0.9143 |
| D(LTREXP(-1)) | -0.020814 | 0.035349 | -0.588822 | 0.5705 |
| D(LTREXP(-2)) | -0.010881 | 0.029773 | -0.365475 | 0.7232 |
| D(LTOUT(-1)) | 0.247558 | 0.660448 | 0.374833 | 0.7165 |
| D(TOUT(-2)) | 0.000226 | 0.000323 | 0.701625 | 0.5007 |
| D(CPI(-1)) | 0.004712 | 0.005467 | 0.861918 | 0.4111 |
| D(CPI(-2)) | 0.003027 | 0.00516 | 0.586636 | 0.5719 |
| $R^2$=0.5149 | Adj-$R^2$=0.4969 | F-Stat=4.3142 | Prob=0.0509 | D.W= 2.0790 |

**Table 3: ARDL Short Run Estimate**
**Source: Author's Computation from EViews 10, 2023**

**Residual Checks on Residuals**

The study employed Breusch Godfrey Serial Correlation and Pagan test to whether the series are suffering from serial correlation and heteroskedasticity problems, the result is presented in Table 4. Findings revealed that series are free from

auto correlation and heteroskedasticity problems as the values are greater than 5% of significant, hence they are within the expected range.

| | | | |
|---|---|---|---|
| Breusch-Godfrey Serial Correlation LM Test: | | | |
| F-statistic | 0.5499 | Prob. F(2,7) | 0.6000 |
| Heteroskedasticity Test: Breusch-Pagan-Godfrey | | | |
| F-statistic | 0.6839 | Prob. F(8,9) | 0.6983 |

**Table 4: Diagnostics Checks on the Residuals**
**Source: Author's Computation from Eviews 10, 2023**

## IV. SUMMARY AND DISCUSSION OF FINDINGS

The study analyses the contribution of government capital expenditure on infrastructural development in Nigeria between 1999 and 2021, focusing on the transport sector due to its underdevelopment. The research employed an infrastructural development index, measured through a transport composite index, and regressed it against several variables: government expenditure in the transport sector, represented by capital expenditure, controlled by the consumer price index; recurrent expenditure in the transport sector; and transport output. using autoregressive, distributed lag.

The outcomes indicated the absence of a long-run connection between government capital expenditure and transport infrastructure. Moreover, the study revealed that while capital expenditure, transport output, and inflation had an insignificant positive effect on infrastructural development, recurrent expenditure in the transport sector had an insignificant negative influence.

The apriori expectation was that government capital expenditure would boost the growth of transport infrastructure, especially with investments in roads, airways, railways, and airport networks, but with the findings of the study, which revealed that capital expenditure and transport output contributed positively, their effect was not significant, possibly due to corruption, inept contractors, extended project timelines, ineffective governance, and poor contract monitoring.

Recall that recurrent expenditure on transport infrastructure was expected to yield a positive and significant effect. Unfortunately, the study's findings contradicted this expectation, showing a negative and insignificant impact. This mirrors the current situation in Nigeria, where the country's transport networks are in a state of disrepair, posing dangers to citizens and hindering investment opportunities. This deterioration stems from corruption, a lack of competent leadership, insincerity among the government and contractors, and strained relations between private investors and the government.

The study's findings align with previous research by Amadi et al. (2013), Ekpung et al. (2014), and Amaefula and Umeaka (2016), all of which indicate that public expenditure has had an insignificant influence on infrastructural development in Nigeria. Similarly, the results support Molapo's (2015) findings that there is no long-term relationship between public spending and infrastructural development. The study also concurs with Okolo et al. (2018), showcasing an insignificant positive impact of capital expenditure on infrastructural development. Although limited empirical studies have directly explored the effects of government expenditure on transport infrastructure development in Nigeria, those that have examined aggregate government expenditure have yielded similar outcomes, suggesting that the Nigerian government needs to do more to stimulate the growth of transport infrastructure.

## V. CONCLUSION AND RECOMMENDATIONS

The study concludes that government capital expenditure to transport infrastructure in Nigeria is inadequate as it impacted insignificantly on transport infrastructural development in Nigeria The study, therefore, recommends that;

1. Since transport infrastructure is capital intensive, there should be increased in government expenditure earmarked for transport infrastructure, and this can be achieved shedding some recurrent expenditure for capital expenditure to enhance the development of transport infrastructure in Nigeria, and attract more investors into the country so that more projects in transport sector could be achieved.
2. The government should partner with private sectors to build necessary transport networks needed to develop the economy, such as road, railways, airways and airport and ensure they were of standard. This will, in the long run, enhance the infrastructural development in

Nigeria, and attract more investment in the country.

3. The government should be sincere in their duties by ensuring that subsidy savings are utilized to build adequate infrastructure in Nigeria especiallytransport infrastructure. This can be achieved by awarding certified and reputable engineers the contract to build, construct, and maintain the transport network. They should also ensure that there is monitoring team assigned to make sure that the projects in the transport sector are of standard and completing are within the stipulated period.

## REFERENCES


[1] Amadi, C., Amadi, N.N., &Nyenke C.U. (2013). Public spending on transport infrastructure and economic growth in Nigeria, 1981-2010. Journal of Sociological Research, 4(2), 438-446.

[2] Amaefule, L.I., & Umeaka, E.C. (2016). Effects of government's borrowing on Nigerian infrastructural development. European Asian Journal of Economics finance, 4(4), 93- 112.

[3] Bhatia, T. K., & Ritchie, W.C. (Eds.). (2006). The Handbook of Bilingualism. Oxford: Black well Publishing Ltd.

[4] Bottini, N., Coelho, M., & Kao, J. (2012). Infrastructure and growth. Background research papers for the Growth Commission report. Growth Commission

[5] Chong, S.,& Poole, E. (2013). Financing infrastructure: A Spectrum of Country Approaches. Reserves bank of Australia. Retrieved on 16th April, 2023 on https://www.rba.gov.au/publications/bulletin/2013/sep/pdf/bu-0913-8.pdf

[6] Ekpung, E.G., Udude, C.C., & Dave, U.U. (2014). An analysis of public expenditure growth on infrastructure in Nigeria. International Journal of Humanities Social Sciences and Education, 1(12), 18-36.

[7] Fasaranti, M.M. (2012). The Effect of government expenditure on infrastructure on the growth of the Nigerian economy, 1977-2009. International Journal of Economics and FinancialIssues, 2(4), 513-518.

[8] Hirschman A.O. (1958). The strategy of Economic development. New Heaven.

[9] Inyiama, O.I., Chinedu, E.A., & Nnenna, C.V. (2017). Relevance of tax revenue resources to infrastructural development of Nigeria. International Journal of Managerial Studies and Research, 5(10), 74-81.

[10] Molapo, S.S.(2015). Analysis of public expenditure growth on infrastructure in Lesotho. 1-19. Retrieved from http://mefmi.org/wp-content/uploads/2017/06/Effect-of-Public-Expenditure-Growth-on-Infrastructure-in-L.pdf on 05072023

[11] Nurre,S.G. (2012). Restoring infrastructure system: An integrated network design and scheduling problem.European Journal of Research, 223 (4),794-806.

[12] Okolo, C.V., Edeme, R.K., & Emmanuel, C. (2018). Economic analysis of capital expenditure and infrastructural development in Nigeria. Journal of Infrastructure Development, 10(1–2), 1–11.

[13] Okpala, K.E., & Olabisi, J. (2013). Capital expenditure budget size and power infrastructural development in Nigeria. Journal of Humanities, Social Sciences and Creative Arts, 8, 39-52.

[14] Oladipupo, A.O., &Ibadin, P.O. (2016). Indirect taxes and infrastructural development in Nigeria. Igbinedion University Journal of Accounting, 2, 332-359.

[15] Olayinka, O.M., & Phebe, I. (2019).Internally generated revenue and infrastructural development: Of what relevance to Lagos? Journal of Economics and Finance, 10(4), 58-74.

[16] Onwuka, O.O., & Christian, C. (2019). Revenue generation as a tool for infrastructural development in Nigeria. Journal of Accounting and Financial Management, 5(2), 59- 72

[17] Samuelson, P.A. (1954). The pure theory of public expenditure. The Review of Economics and Statistics, 36(4), 387-389.

[18] Salisu, A.K. (2016). Socio-economic infrastructure and national development: An Analytical Assessment from Nigerian Perspective. Journal of Humanities and Social Science, 21(10), 40-46.

[19] Shobande, A.O., & Etukomeni, C.C. (2017). Infrastructural investment and industrial growth: A Private Investment Led Approach.Ethiopian Journal of Business and Economics, 6(2), 160-183.

[20] Tule, M.K., Okafor, P.N., Obioma, E.C., Okorie, G., Oduyemi, A.O., Muhammad, A.A. &Olaoye, O.J.(2015). Leveraging pension funds for financing infrastructural development in Nigeria. CBN Working Paper Series, CBN/WPS/01/2015/04


★★★