



# Government Expenditure on Infrastructure as a Driver for Economic Growth in Nigeria

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	<b>ABSTRACT</b>
<p>2016 Research Leap/Inovatus Services Ltd. All rights reserved.</p> <p><b>DOI:</b> <a href="https://doi.org/10.18775/jibrm.1849-8558.2015.52.3004">10.18775/jibrm.1849-8558.2015.52.3004</a> <b>URL:</b> <a href="http://dx.doi.org/10.18775/jibrm.1849-8558.2015.52.3004">http://dx.doi.org/10.18775/jibrm.1849-8558.2015.52.3004</a></p>	<p>This study primary examines the effects of government infrastructural expenditure on economic development in Nigeria. Secondary data sourced from reported annual spending on selected infrastructure and annual Gross Domestic Products were statistically analyzed. The data treatments used for the secondary data were unit root and co- integration tests using Augmented Dickey–Fuller and Phillip–Perron model. Weighted least square was also used to test the sample of 37-year annual time series using vector error correction model. The data analysis was done with descriptive statistics. Findings from the study revealed that government spending on transport, communication, education and health infrastructure have significant effects on economic growth; spending on agriculture and natural resources infrastructure recorded a significant inverse effect on economic growth in Nigeria. An element of fiscal illusion was observed in the government spending on agriculture and natural resources indicating that government is not contributing as much as the private sector in spending on agriculture and natural resources infrastructure in Nigeria.</p>
<p><b>Keywords:</b> Economic Growth, Government Spending, Infrastructure, Agriculture</p>	

## 1. Introduction

Infrastructure are those socio-economic amenities that promote or facilitate economic growth. The need for infrastructural development cannot be over emphasized. Infrastructure can bring about even development. Its potentials are numerous; it serves as a catalyst for public development in the entire government agenda. Infrastructure such as road, communication, transportation and education are amongst the basic requirement for economic development. Infrastructure level affects the developmental ratings of a nation. Infrastructure contributes to the score of Nigeria’s economic growth. Government expenditure on infrastructure is enormous because it is capital-intensive. Infrastructure expenditure grows the economy because it affects most human endeavors in various fields of life such as production, construction, technology and procurements. Countries such as Britain, America, France, Japan got to the level of economic development based on the level of socio-economic amenities.

The fact remains that goods produced in the rural areas are transported to the urban areas. This is made possible as a result of provision of road communication etc. Similarly, those in the rural and urban areas communicate when situation arises. A

good communication network therefore triggers business activities that can spur economic development.

However, Nigeria government seems to be wasting fund over the years because there is no remarkable achievement on the level of infrastructural development. This is because despite all the money spent on infrastructure, Nigeria still remains backward in infrastructural development. There is still darkness in the land, poor road network, no portable drinking water, the resultant effect are high level of poverty rate and unemployment situation. This is because of the fact that adequate infrastructure can bring about increase in industries as well as employment opportunities and therefore reduce poverty.

There are divergent views as to whether or not government spending affects economic growth (Chan, et al., 2017). Government spending efficiency on economic growth: Roles of value-added tax. Perspectives on East Asian Economies and Industries, 46(2), 162–188, find that the value added tax (V.A.T.) system enhances the effect of efficient government spending on economic growth, through the provision of socio-economic amenities. An increase in public social expenditure

has a significant adverse effect on economic development (Babalola, 2015). Iheanacho (2016) investigated the contribution of government expenditure in Nigeria and found a positive impact and significant long-term relationship between economic development and recurrent expenditure.

Nigeria is currently experiencing an economic downturn due to dwindling oil revenue, upon which the country relies for its sustenance. Though high level of mismanagement affects the development. Governments continue to increase spending on infrastructure with a view toward economic growth to ease the burden of citizens. Specifically, efficient transportation and communication should be available, people should enjoy basic healthcare delivery with minimal effort and there should be food security; but, ironically, this is not the case in Nigeria. The problem is that the economic growth recorded has not translated into improved welfare as expected in some nations (Babatunde, 2015).

This problem is the central theme of this study. This is against the backdrop of the extent of Nigeria government spending on public projects, with little evidence of improvement in the socio-economic parameters. Therefore, this study based its objectives on identifying situational factors responsible for the backwardness in infrastructural development. Dierx and Ilzkovitz (2008), Michelle (2005), Haheem (2014) Samuelson (1995), Udoka (2015), Babatunde (2014), Blinder (2008), Chingoiro (2016), and Babalola (2015) have carried out studies on infrastructural development and suggested that there should be further improvement in the efficiency and effectiveness of public spending. Nonetheless, their studies do not cover developing nations where there is a shortage of such research. Based on different studies on the government spending, there is no consensus on how to improve or actualize the purpose for which government spending is carried out in Nigeria. It is on this premise that this paper is focus on the actualization of government policies through government spending on infrastructure that could promote economic sectors which could also lead to improvement in socio-economic well-being of the citizen.

The paper fills the gap in knowledge by carrying out a critical analysis of the level of infrastructure development in Nigeria, relative to government expenditure. Furthermore, various economic theories will be used to buttress and support the arguments emanating from this study. Specifically, the study seeks to analyze government spending on infrastructure for communication, transports, education, health, agriculture and natural resources and their effects on economic growth in Nigeria.

## 2. Literature Review

This is the study of related literature on the insight of government spending on infrastructure and its impact on economic growth. The literature is from various schools of

thought that are interested in government spending and its effect on economic growth. It is believed that for a country to progress in its sustainable development goals, as advanced by the United Nations Development Programme (U.N.D.P., 2015). There is need for strong growth in national income. Improvements in infrastructure quality and economic growth are necessary because, clearly, economic growth will affect citizens' lives positively, such as in the area of poverty reduction.

Government spending on infrastructure is critical. However, some academic research has established that government spending is harmful to economic growth because large public sectors increase inflation as a result of too much money in circulation that could cause increase in price of goods and services Collins (2008). Johnson (2010) opined that government spending on infrastructure and other economic activities improve the economy which is capable of providing employment opportunities as well as increase GDP. While other studies find that government spending improves production and economic growth (Aregbeyeni & Kolawole, 2015).

The inconsistencies in research findings call for concern, especially in matters of this nature which affect citizens' welfare. Hence, this study attempts to probe into the relationship between government spending and economic growth.

Edame and Fonta (2014) as well as Mitchell (2005). examined the impact of government expenditure on infrastructure in Nigeria. The study analysed the results but failed to give an interpretation of the implication of the results, which is necessary for policy formulation and decision-making. The present study discusses the implication of its research findings. The literature does not cover developing economies such as Nigeria, where there is a dearth of such studies. Although Iheanacho, (2016) investigates government expenditure and economic growth from 1986 to 2014, the study did not describe the variables. Also, the study did not link its findings to the principles in the theoretical framework which underscore the study. The current study describes the research variables and goes further to argue the findings based on some applicable theories.

Studies by Abu and Abdullahi (2010) examine government expenditure and economic growth in Nigeria, 1970–2008. John Peters (2008) analysed the effect of government expenditure on infrastructure on the growth of the Nigerian economy, using data covering 1977 to 2009. A more current study by Chingoiro and Mbulawa (2016) analyzed data from 1980 to 2016, covering both pre- and post-millennium periods are investigated. This study utilizes secondary data as an innovation to contribute to the existing body of knowledge. It goes a step further to discuss the findings based on some core

public sector theories with Keynesian economic theories, the stakeholder's theory, expenditure theory and fiscal illusion theories.

### 3. Conceptual Framework

The paper is based on the various literature and theories that support the concept of government spending. Consequently, a critical review of related literature was carried out for proper understanding of the study under review. The study of related literature is carried out to identify the gap so as to justify the purpose for the study. Research objectives were established, and the methodological approach data analysis resulted to the contribution of the existing knowledge in public spending.

### 4. Theoretical Framework

This study is based on the appropriate literature and theories. A critical review of the literature was completed, looking for possible gaps in the existing body of research knowledge. Research objectives have been set. Hence, this paper is supported by the following theories:

#### 4.1 Stakeholder Theory

Stakeholder theory is based on the assumptions that morals and values in managing an organization, originally is the premise for which stakeholders provide infrastructure. Freeman (1984), the uses and abuses of stakeholders theory. Stakeholder theory recognizes that there are parties involved in management, such as employees, customers, contractors, financiers, communities, public agencies, political groups, trade associations, competitors and trade unions, who sometimes scrutinize government spending. Stakeholder theory is used in this study as a critical-diagnostic tool to identify the points at which stakeholders are vulnerable to breakdowns in the spending process in the absence of moral constraints on the part of government spenders. For instance, stakeholders such as electorates, taxpayers or simply citizens who are interested to know how the government officers spend taxpayers' money. They expect a business-like approach to governance in the areas of utmost good faith, transparency and accountability, as enshrined in new public management law.

#### 4.2 Public Expenditure Theory

The public sector has a role to play in the society to ensure the smooth running of economic activities. Also, the goals of government are sometimes numerous and have several stakeholders involved. Therefore, to avoid chaos, efficiency and equity should guide public spending (Hindrizia and Myles, 2005). Theories of the public sector explain that efficiency concerns the smooth running of public activities. Efficiency has to do with the coordination, collection and monitoring of government revenue and expenditure towards the provision of services to the stakeholders. Equity is about the fair sharing of public gains among stakeholders. The applicable public expenditure theory in this study is based on Wagner's law, known as the law of increasing state spending. Wagner's law

was formulated by Adolph Wagner (1835–1917). The theory states that in any country, public expenditure constantly rises as income growth expands.

The law is based on the promise of four principles, that growth results in increased complexity because there are increases in public expenditure; that public expenditure increase as a result of urbanization and externalities; that the goods supplied by the public sector should have a huge income elasticity of demand; and that growth results in an increase in demand with a resultant increase in public expenditure. This study expects that if growth in expenditure matches economic growth, it should also translate into economic development. However, this has not been the case in reality in developing nation like Nigeria because sometimes there are elements of fiscal illusion in government activities.

#### 4.3 Economic Growth Theory

The ideology of economic growth has had a long history, since the eighteenth century when Adam Smith published his *Wealth of Nations*, which centers on the pursuit of growth. Economic growth is an increase in the monetary value of goods and services of a country over a given period, as indicated by G.D.P.

However, since the 1980s, the growth critique was gradually replaced by the view of 'decoupling' of economic growth from environmental deterioration. Such a 'decoupling' view was emphasized by the World Commission on Environment and Development as a key strategy of sustainable development. In recent years, the possibility of such decoupling has been increasingly questioned by critics, and they instead propose zero-growth or even de-growth. Thus far, the defenders of growth still stand in the dominant position. The scope of the opponents' arguments has expanded from its initial focus on resource limits and environmental degradation to a broader range of issues. Xue (2010). *Arguments for and against economic growth*. explains that economic growth is the increase in services produced in a nation over a long time period. It is measured by an increase in G.D.P. adjusted for inflation, and a nation is expected to continually improve its G.D.P. for sustainability.

There are three types of economic growth theory: classical; neo-classical; and the Solo-Swan modern-day theories. This study attempts to investigate the Solo-Swan modern day theory, which focuses on three factors that affect economic growth, including labour, capital and technology, with particular focus on technology regarding infrastructure advancement and economic growth regarding G.D.P.

Solo-Swan theory argues that it is technological advancement that grows an economy because labour and capital adjust according to the advance recorded in technology. The study argues that when government spending is zero, there is little economic growth because enforcing contracts, protecting life

and property and infrastructure development would be complicated. Hence, government spending is necessary because it can promote technology development.

#### 4.4 Keynesian Theory

The theories forming the basis of Keynesian economics were first presented by the British economist John Maynard Keynes (1936). He argued that through tax government revenue is increased as well as increase in government spending which lead to promotion of infrastructure. The study states that the Keynesian mindset is still alive among politicians and journalists, who often advocate the need to raise spending to enhance growth. However, in practical terms it is possible to promote economic advancement through tax concessions to attract investors and grow foreign direct investments; this has helped in some United Arab Emirates states like Dubai. However, the importance of tax cannot be over emphasized. This is because it is through tax that government of all levels generate revenue that could be used to implement the budget. Hence, provision of infrastructure is backed up with the ability to generate funds to be used for the provision of basic necessities of the citizens by the government. It is on this premise that this study is centered on the Keynesian theory which advocates the use of tax to generate revenue as well as provision of infrastructure that could promote economic development.

#### 5. Methodology

In carrying out this study, data was sourced through secondary means. It was also analyzed through which result was got and recommendations were made, based on the result from the statistical tools used.

#### 6. Data Analysis and Tests

In this study, the secondary data are analyzed and tested by establishing two variables: dependent and independent variables. The dependent variable is economic development with G.D.P. as a proxy; the independent variables are government spending on infrastructure like transportation, communication, education, health, agriculture and natural resources.

##### 6.1 Variables Description and Measurement for Secondary Data

The variables for this study are described in the data treatment model. The model explains economic growth as a function of some components of infrastructure spending like transport and communication, education, health, agriculture and natural resources. The data treatment method used constitutes a unit root test using the augmented Dickey-Fuller and Phillips Perron model. The hypothesized economic growth and the government spending on infrastructure that affects it are expressed via regression equation.

$$GDP_t = \delta_0 + \delta_1 SAGRICNR + \delta_2 STRANSCOM + \delta_3 SEDU + \delta_4 c + \mu_t, GDP_t = \delta_0 + \delta_1 SAGRICNR + \delta_2 STRANSCOM + \delta_3 SEDU + \delta_4 c + \mu_t,$$

Where,

- GDP = Gross Domestic Product which represents economic growth
- SAGRICNR = spending on agriculture and natural resources
- STRANSCOM = spending on transport and communication
- SEDU = spending on education
- SHEALTH = spending on healthcare delivery
- $\mu_t$  = stochastic white noise error term with zero mean and constant variance
- $\delta_s$  = parameters to be estimated.

This implies that economic growth proxied by G.D.P. is influenced basically by capital spending on agriculture and natural resources (SAGRICNR), transport and communication (STRANSCOM), capital spending on education (SEDU), and spending on healthcare (SHEALTH). The  $\mu_t$  is a stochastic white noise error term with zero mean and constant variance, while  $\delta_s$  are parameters to be estimated.

##### 6.2 Unit Root Test

This study uses the unit root test to test for the stationarity of the times series data collected for the research to avoid the danger of bias that stationarity of data may pose to the study if they are not checked. The unit root test is employed because in the literature most time series variables are non-stationary and using non-stationary variables in the model might lead to a spurious regression. Also, a collinearity test was carried out to ascertain the reliability of the data collected.

##### 6.3 Co-Integration Test

The purpose of the co-integration test is to determine whether or not a group of non-stationary time series is co-integrated to reduce bias. Thus, in this study, Johansen tests for cointegration analysis is employed to investigate the long-term relationship between disaggregated government capital expenditure and economic growth in Nigeria.

**Table 1:** Parsimonious error correction mechanism (E.C.M.): weighted least square (W.L.S.).

Dependent variable: D(GDP,2)				
Method: Least squares				
Included observations: 10 after adjustments				
Weighting series: DGDGP				
Weight type: Inverse variance (average scaling)				
White heteroscedasticity-consistent standard errors & covariance				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-481.454**	163.3141	-2.948027	0.0421
D(AGRICNR,1)	-0.02287*	0.006293	-3.634965	0.0221
D(TRANSCOM,1)	0.18002*	0.007624	23.61144	0.0000
EDU	0.02961*	0.002227	13.30008	0.0002
D(HEALTH,1)	0.0722**	0.028271	2.554072	0.0630
ECM(-1)	-0.82484*	0.156601	-5.267204	0.0062
	Weighted Statistics			
R-squared	0.998545	Mean dependent var		626.6763
Adjusted R-squared	0.996727	S.D. dependent var		847.1905
S.E. of regression	25.68505	Akaike info criterion		9.613404
Sum squared resid	2638.886	Schwarz criterion		9.794955
Log likelihood	-42.06702	Hannan-Quinn criterion		9.414243
F-statistic	549.1441	Durbin-Watson stat		1.848741
Prob(F-statistic)	0.000009	Weighted mean dep.		925.8924
	Unweighted Statistics			
R-squared	0.987528	Mean dependent var		457.3420
Adjusted R-squared	0.971938	S.D. dependent var		487.9524
S.E. of regression	81.73986	Sum squared resid		26,725.62
Durbin-Watson stat	1.342887			

Note: \*, \*\* indicate significant at 1% and \*\*5% level others at \* 10%.

## 7. Analysis of Regression Result

Table 1 shows the result of the weighted least squares regression. From the result, the value of adjusted R-square is 0.996; this implies that there is about 99.6% of the variation in the dependent variable. Hence, the G.D.P. is explained by the explanatory variables. This shows that the model is perfect and of good fit. The F-statistics value of 549 with its zero p-value explains the overall analysis of variance of the model. It indicates that all explanatory variables are fundamental in explaining the variation in the dependent variable. Its probability value indicates its significance. More so, the test

for first-order serial correlation implies that the model is free from auto or serial correlation considering the value of the Durbin-Watson (D.W.) stat of 1.84, which is within the acceptable range of 1.5 to 2.5. Thus, the result is in line with the assumption of insistence independence, which makes the utilized data reliable.

## 8. Regression Result

The regression result in Table 1 shows that government spending on agriculture and natural resources has a significant inverse effect on economic growth at the 5% level of significance. It therefore implies that the success recorded in the agricultural sector in Nigeria is largely contributed by the private sector. This is why food is not guaranteed in an average home as it comes from a profit-oriented sector and is expensive because of the pursuit of profit for which the private sector is characterized.

The result further shows direct effects of transport and communication (TRANSCOM) on economic growth with a coefficient of .18002 at the 10% level of significance. It can thus be interpreted that a million naira in government spending on transport and communication infrastructure brings about an N0.18 m rise in G.D.P. A cursory examination of this finding shows that the mobile phone revolution in Nigeria might have added value to the economic growth.

Government spending on education and health infrastructure has direct effects on economic growth at the 1% and 5% levels of significance, respectively. Co-integration is revealed in the model. It shows that there is a long-term relationship between the dependent variable and its explanatory variables. The speed of adjustment to equilibrium in its current period is 82.4%. This result justifies the use of an E.C.M. for the specification of the model. The result is statistically robust and significant at the 1% level.

## 9. Conclusion

This paper concludes that government spending on transportation and communication, education and health has significant effects on economic growth in Nigeria, while spending on agriculture and natural resources infrastructure has an opposite effect on economic growth in Nigeria. This study has mostly achieved its aim and objectives. It has provided empirical evidence in support of the fact that government spending on infrastructure can affect economic growth to some extent. Also, government spending on infrastructure should be guided by sound governance toward a business-like approach to spending in line with public expenditure theories.

## Recommendations

Considering the outcome of the date analyzed, it becomes pertinent to say that government spending on the independent variables studied influence economic growth as it increases the

GPD. Therefore, the government of Nigeria should adhere to the recommendation from this study so as to facilitate economic growth.

- i. There should be increase in investment on the infrastructure that concern agriculture to increase food production.
- ii. Private sector should complement government in the provision of infrastructure that will facilitate the extraction of national resources, considering the importance of natural resources utilization.
- iii. There should be public enlightenment campaign on the need to protect and maintain infrastructure provided by government and private sector so that the purpose for which the infrastructure is provided is achieved.

## References

- Abu, N., & Abdullahi, U. (2010). Government expenditure and economic growth in Nigeria, 1970–2008: A disaggregated analysis. *Business and Economics Journal*, 4, 1–11.
- Afonso, W. B. (2014). Fiscal illusion in state and local finance- A hindrance to transparency. *Sage Journals*, 46(3), 219–228. [Crossref](#)
- Aregbeyeni, O., & Kolawole, B. O. (2015). Oil revenue, public spending and economic growth relationships in Nigeria. *Journal of Sustainable Development*, 8(3), 114–123. [Crossref](#)
- Babalola, A. I. (2015). Fiscal policy and economic development in Nigeria. *Journal of Economic and Sustainable Development*, 6(7), 150–160. [Crossref](#)
- Babatunde, S. A., & Dandago, K. I. (2014). Internal control system deficiency and capital project mismanagement in the Nigerian public sector. *Procedia - Social and Behavioral Sciences*, 164, 208–221. [Crossref](#)
- Babatunde. (2015). Effects of internal control system deficiency on contractors' infrastructural development capability in the Nigerian public sector. *Chinese Business Review*, 14(12), 573–582. [Crossref](#)
- Blinder, A. S. (2008). "Keynesian economics". *Concise encyclopedia of economics*. Retrieved from <http://www.econlib.org/library/Enc/KeynesianEconomics.html>
- Buchanan, J. M. (1967). Cooperation and conflict in public goods interaction. *Economic Inquiry*, 5(2), 109–121. [Crossref](#)
- Chan, S., Ramly, Z., & AbdKarim, M. (2017). Government spending efficiency on economic growth: Roles of value-added tax. *Perspectives on East Asian Economies and Industries*, 46(2), 162–188. [Crossref](#)
- Chingoiro, S., & Mbulawa, S. (2016). Economic growth and infrastructure expenditure in Kenya: A Granger-Causality approach. *International Journal of Social Science Studies*, 4(9), 1–9. [Crossref](#)
- Connolly, M., & Li, C. (2016). Government spending and economic growth in the OECD countries. *Journal of Economic Policy Reform*, 19(4), 386–395. [Crossref](#)
- Cosimo, M., Lorenzo, G., & Marco, M. (2015). Wagner's law and Peacock and Wiseman's displacement effect in European union countries: A panel data study. *International Journal of Economics and Financial Issues*, 5(3), 812–819.
- Darma. (2014). Federal capital expenditure and its impact on economic growth in Nigeria; 1980–2010. *Developing Country Studies*, 4(4), 24–33.
- Edame, G. E., & Fonta, W. M. (2014). The impact of government expenditure on infrastructure in Nigeria: A cointegration & error correction specification. *International Journal of African and Asian Studies*, 3, 50–63.
- Engle, R. F., & Granger, C. W. J. (1987). Cointegration and error correction: Representation, estimation and testing. *Econometrica*, 55, 251–276. [Crossref](#)
- Fasoranti, M. M. (2016). The effect of government expenditure on infrastructure on the growth of the Nigerian economy, 1977–2009. *International Journal of Economics and Financial Issues*, 2(4), 513–518.
- Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Boston Massachusetts, MA: Pitman.
- Gabriel, C. N., & Johnson, I. O. (2015). Capital expenditure at disaggregated level and economic growth in Nigeria: An empirical analysis. *International Journal of Science and Research*, 4(6), 729–737.
- Gruening, G. (2001). Origin and theoretical basis of new public management. *International Public Management Journal*, 4, 1–25. [Crossref](#)
- Heath, J. (2009). The uses and abuses of stakeholder's theory. *Business Ethics Quarterly*, 19(04), 497–528. [Crossref](#)
- Hindrizia, J., & Myles, G.D. (2005). Theories of the public sector. *Intermediate Public Economics* (pp. 69–87). Cambridge: MIT Press.
- Iheanacho, E. (2016). The contribution of government expenditure on economic growth of Nigeria Disaggregated Approach. *International Journal of Economics & management sciences*, 5(5), 1–9. [Crossref](#)
- Jahan, S., Mahmud, A. S., & Papageorgiou, C. (2014, September). What is Keynesian economics? *Finance & Development*, 51(3), 53–54.
- Keeble, B. R. (1987). The Brudent report: Our common future. *Journal of Medicine and War*, 4(1), 17–25. [Crossref](#)
- Keynes, J. M. (1936). *The general theory of employment, interest and money*.
- Magazzino, C., Giolli, L., & Mele, M. (2015). Wagner's Law and Peacock and Wiseman's displacement effect in European Union countries: A panel data study. *International Journal of Economics and Financial Issues*, 5(3), 812–819.

- Mandl, U., Dierx, A., & Ilzkovitz, F. (2008). *The effectiveness and efficiency of public spending*. Retrieved from [http://ec.europa.eu/economy\\_finance/publications](http://ec.europa.eu/economy_finance/publications).
- Mitchell, D. J. (2005). The impact of government spending on economic growth. *Heritage Foundation, 1831*, 1–18.
- Mourao, P. R. (2008). *Towards a fiscal illusion index*.
- Nwachukwu, C. C., & Emoh, F. (2011). Building construction project management success as a critical issue in real estate development and investment. *American Journal of Social and Management Sciences, 2*(1), 56–75.10. [Crossref](#)
- Oates, W. E. (1985). *On the nature and measurement of Fiscal Illusion: A Survey*. Retrieved from <https://books.google.com-ng/books>
- Odior, E. S. O. (2011). Government spending on education, economic growth and long waves in a CGE micro-simulation analysis: The case of Nigeria. *British Journal of Economics, Finance and Management Sciences, 1*(2), 74–87.
- Okezie, A. I., Nwosu, C., & Njoku, A. C. (2013). An assessment of Nigeria expenditure on the agricultural sector: Its relationship with agricultural output (1980–2011). *Journal of Economics and International Finance, 5*(5), 177–186. [Crossref](#)
- Raheem, S., Ayana, J. O., & Fashedemi, A. O. (2014). Easing the “Disease” of poverty in Nigeria. *Developing Country Studies, 4*(19), 55–66.
- Raheem, S., Ayeni, J. O., & Fashedemi, A. O. (2014). Easing the “Disease” of poverty in Nigeria. *Developing Country Studies, 4*(19), 55–66.
- Samuelson, P. A. (1995). Diagrammatic exposition of a theory of public expenditure. *The Review of Economics and Statistics, 37*(4) [Crossref](#)
- Trading Economics (2016). *GDP growth rate*. Retrieved from <http://www.tradingeconomics.com/country>
- Transparency International (2016). *Corruption by country/territory*. Retrieved from <http://www.transparencyinternational.com>
- Udoka, C., & Anyingang, R. A. (2015). The effect of public expenditure on the growth and development of Nigerian economy (1980–2012). *International Review of Management and Business Research, 4*(3), 824–835.
- United Nations Development Programme (UNDP). (2015). *Sustainable development goals*. Retrieved from <http://www.undp.com>
- Wells, K. (2015). *What is economic growth? - Definition, theory & impact*. Retrieved from <http://www.study.com/academy>
- Xue, J. (2010). *Arguments for and against economic growth*. Retrieved from <http://www.barcelona.degrowth.org>
- Yamane, T. (1967). *Statistics: An introductory analysis* (2nd ed.). New York, NY: Harper and Row.