

Government Capital Spending on Administration and Life Expectancy in Nigeria

Alex Onyeji Igwe ¹,

Department of Accountancy, Enugu State University of Science and Technology, Agbani.
Enugu State.

Benjamin Chibuzo Ndu

International Tax Department, Federal Inland Revenue Service, Nigeria.

Elizabeth Ifeyinwa Nnajeze³.

Enugu State University of Science and Technology, Agbani. Enugu State

doi: <https://doi.org/10.37745/ijbmr.2013/vol13n8112>

Published September 28, 2025

Citation: Igwe A.O., Ndu B.C., and Nnajeze E.I. (2025) Government Capital Spending on Administration and Life Expectancy in Nigeria, *International Journal of Business and Management Review*, 13(8), 1-12

ABSTRACT: *This study examined the effect of government capital spending on administration on life expectancy in Nigeria. It adopted an ex-post facto research design and utilized secondary data spanning from 1981 to 2024, sourced from the Central Bank of Nigeria Statistical Bulletin and World Development Indicators. Ordinary Least Squares (OLS) regression analysis was applied to assess the effect of administrative capital expenditure on life expectancy. The results revealed that government spending on administration had no significant influence on life expectancy, suggesting that investments in administrative infrastructure, such as government offices and training programs, do not directly contribute to improving health outcomes. The study concludes that to enhance life expectancy, policymakers should focus on improving the efficiency and governance of administrative spending to better support health-related service delivery. It recommends that resources be strategically allocated to ensure administrative investments effectively contribute to human well-being.*

Keywords: government capital spending, life expectancy, administration, Nigeria, public expenditure.

INTRODUCTION

Government spending is a critical tool for improving the quality of life and well-being of citizens. In Nigeria, a significant portion of government expenditure is allocated to administration, which includes capital investments in infrastructure and systems that support public institutions, such as constructing government offices, training civil servants, and

implementing administrative technologies. These investments are essential for efficient governance, enabling effective planning, implementation, and monitoring of public programs, including those related to health. When administrative capital spending is well-executed, it can enhance the delivery of essential services, potentially improving health outcomes and life expectancy. According to the World Bank (2023), Nigeria's public spending must prioritize areas that directly impact citizens' well-being, yet administrative efficiency remains a critical challenge in achieving these outcomes.

Nigeria faces significant challenges with one of the lowest life expectancy rates globally. According to the World Health Organization (2022), life expectancy in Nigeria was approximately 53 years for men and 56 years for women in 2022, well below the global average of over 70 years. This low life expectancy is driven by factors such as inadequate healthcare infrastructure, poor governance, and limited access to basic services like clean water and sanitation. Efficient administrative systems are crucial for coordinating health policies, managing public resources, and ensuring effective service delivery, all of which can influence health outcomes. However, it remains unclear whether Nigeria's capital spending on administration directly contributes to improving life expectancy, as much of the focus in public expenditure has traditionally been on recurrent costs rather than strategic capital investments (Osakede, 2020).

This study aims to investigate the effect of government capital expenditure on administration on life expectancy in Nigeria. By analyzing data from 1981 to 2024, sourced from the Central Bank of Nigeria Statistical Bulletin and World Development Indicators, the study seeks to determine whether investments in administrative infrastructure and systems have a measurable impact on how long Nigerians live. The findings will provide insights into whether administrative capital spending is an effective tool for enhancing health outcomes and guide policymakers in optimizing resource allocation.

Nigeria's low life expectancy, averaging around 54 years in recent years, reflects significant challenges in health and governance. While government capital expenditure on administration is intended to strengthen institutional frameworks and improve service delivery, its direct impact on life expectancy remains underexplored. Administrative capital spending, which includes investments in government offices, training programs, and technological systems, is critical for coordinating health campaigns, managing public funds, and ensuring efficient governance. However, inefficiencies, corruption, and a focus on recurrent rather than capital spending have limited the effectiveness of administrative investments in Nigeria (Osakede, 2020). For instance, poor administrative capacity has hindered the implementation of health policies, such as the National Health Insurance Scheme, which achieved only 4% coverage due to coordination challenges (Abubakar et al., 2022).

Previous studies, such as Nzeribe et al. (2022), have shown that health-focused spending can reduce mortality and improve life expectancy, but there is a lack of research specifically examining the role of administrative capital expenditure. Most studies focus on economic growth, poverty reduction, or health sector budgets, leaving a gap in understanding how administrative investments influence health outcomes. Without this knowledge, resources may be misallocated, failing to address critical health challenges. This study addresses this gap by

examining whether government capital spending on administration significantly affects life expectancy in Nigeria, using time-series data from 1981 to 2024. The findings will help policymakers understand whether current administrative spending strategies are effective or if reforms are needed to better support health and longevity.

REVIEW OF RELATED LITERATURE

Government Capital Spending

Nigeria, as Africa's most populous nation, faces significant challenges in improving the health and longevity of its population. Life expectancy, a critical indicator of a country's health status, is influenced by various factors, including government investments in public infrastructure and services. Capital spending, which involves long-term investments in physical and institutional assets, plays a pivotal role in shaping health outcomes. This report examines how capital spending on administration, economic services, and social and community services impacts life expectancy in Nigeria, drawing on recent studies and data to highlight the connections and challenges.

Capital Spending on Administration

Capital spending on administration involves government investments in the infrastructure and systems that support public institutions, such as constructing government offices, training civil servants, and implementing administrative technologies. These investments are crucial for efficient service delivery, enabling government agencies to effectively plan, implement, and monitor public programs, including those related to health. For example, well-equipped administrative bodies can streamline health campaigns, manage public funds efficiently, and coordinate emergency responses, all of which contribute to better health outcomes and potentially increased life expectancy. In Nigeria, however, administrative capital spending is often overshadowed by recurrent expenditures, such as salaries and operational costs, leading to underdeveloped institutional frameworks. This underinvestment limits the government's ability to deliver essential services effectively, which can hinder health improvements. A study by Osakede (2020) emphasizes that governance quality, which can be enhanced through administrative investments, significantly influences the effectiveness of public health spending on health outcomes (Osakede, 2020). For instance, poor governance has been linked to the ineffective implementation of health policies, such as the National Health Insurance Scheme, which achieved only 4% coverage due to coordination challenges and inadequate administrative capacity. Strengthening administrative systems through targeted capital investments is thus essential for improving service delivery and supporting health initiatives that can enhance life expectancy.

Life Expectancy

Life expectancy at birth, defined as the average number of years a newborn is expected to live based on current mortality rates, serves as a key indicator of a country's health status and healthcare system effectiveness. In Nigeria, life expectancy has seen modest improvements over recent decades but remains below the global average. According to the World Bank (2023), Nigeria's life expectancy was 52.68 years in 2021, reflecting challenges such as high infant and maternal mortality rates, prevalent infectious diseases like malaria and HIV/AIDS,

and limited access to quality healthcare services (World Bank, 2023). For comparison, some sources report higher estimates, such as 61.79 years in 2023 (Statista) or 62.6 years in 2020 (WHO), highlighting data inconsistencies due to varying estimation methods and incomplete mortality data in Nigeria. Factors contributing to low life expectancy include a high burden of communicable diseases, inadequate healthcare infrastructure, and socioeconomic challenges like poverty and low education levels. Studies, such as Edeme et al. (2017), suggest that increasing government expenditure on health and related sectors can significantly improve life expectancy by addressing these issues (Edeme et al., 2017). For example, increased health spending has been shown to reduce mortality rates, with a 1% increase in health expenditure potentially increasing life expectancy by a measurable margin. Strategic investments in healthcare, education, and infrastructure are thus essential for enhancing the longevity and quality of life of Nigerians, though further research is needed to quantify the precise impacts in the Nigerian context.

Theoretical Framework

The present study is anchored on the Human Capital Theory, which emphasizes the importance of investing in people's skills, knowledge, and health to promote national development. According to Schultz (1961) and Becker (1964), human capital encompasses the abilities and well-being of individuals, which enhance their productivity and life outcomes. In the context of this study, the theory suggests that government capital expenditure on administration—such as investments in government offices, training programs for civil servants, and administrative technologies can strengthen institutional frameworks, leading to more efficient delivery of public services, including health-related programs. Efficient administrative systems enable better coordination of health policies, resource management, and service delivery, which can indirectly improve health outcomes and life expectancy by ensuring that public resources are effectively utilized to support the population's well-being.

This theory is particularly relevant for understanding how administrative capital expenditure can influence life expectancy in Nigeria. By investing in robust administrative structures, such as health ministries and regulatory agencies, the government can enhance the planning, implementation, and monitoring of health initiatives. For example, well-funded administrative systems can streamline health campaigns, improve the management of public hospitals, and ensure timely delivery of medical supplies, all of which contribute to better health outcomes and potentially longer life expectancy. As Bloom, Canning, and Sevilla (2004) note, investments in systems that support human capital development have a ripple effect on population health, particularly in developing countries like Nigeria, where governance challenges often hinder service delivery.

The study is also supported by Wagner's Law of Increasing State Activity, which posits that as an economy grows, government expenditure rises, particularly on services that promote welfare and development (Musgrave & Musgrave, 1989). This theory explains the increasing role of government in funding administrative structures to meet rising population demands. In Nigeria, capital spending on administration (such as modernizing government agencies or improving service delivery systems) can enhance the efficiency and reach of health-related programs. When administrative spending is well-managed, it supports the smooth functioning of public

institutions, which are critical for implementing policies that improve health outcomes and life expectancy. Wagner's Law complements the Human Capital Theory by highlighting the natural expansion of government responsibilities in public welfare as nations develop, emphasizing the need for effective administrative investments to support human development.

Together, the Human Capital Theory and Wagner's Law provide a robust framework for examining how government capital expenditure on administration affects life expectancy in Nigeria. The Human Capital Theory links administrative investments to improved service delivery and health outcomes, while Wagner's Law explains the increasing role of government spending in meeting societal needs, offering a comprehensive lens to analyze the impact of administrative capital expenditure on the longevity of Nigerians.

Empirical Review

The body of empirical literature presents diverse perspectives on how government expenditure influences economic growth, poverty reduction, and infrastructure development across different countries and contexts. Aluthge et al. (2021) examined Nigerian government spending, breaking it down into capital and recurrent components. Using the ARDL model, they found that only capital expenditure had a positive and significant effect on economic growth in both the short and long run. In contrast, recurrent expenditure was insignificant. Similarly, Jidefor et al. (2021) employed ARDL to assess the impact of capital expenditure on poverty reduction in Nigeria, revealing that capital spending significantly reduces poverty levels. Zomatic (2021), focusing on Liberia, found a long-run but not a short-run link between government expenditure and growth, emphasizing the importance of sustained budget performance for macroeconomic stability.

Expanding the analysis to Sub-Saharan Africa, Wandeda et al. (2021) adopted a dynamic panel approach using GMM for 35 countries. Their findings suggest that education and health expenditures are vital to income growth, particularly in low-income nations, while military spending appears more impactful in middle-income countries. In Aceh, Indonesia, Yusri (2021) used the Synthetic Control Method to evaluate the Special Autonomy Fund, finding that it improved poverty, sanitation, and education, although no clear link was found with access to safe water. Dahliah (2021) also reported positive effects of government and private investment on economic growth in Makassar City using multiple linear regression, showing localized effectiveness of public spending in fostering development.

Further emphasizing sectoral spending, Ogundipe and Adesola (2022) found that government expenditure on education, agriculture, and health significantly improves the standard of living in Nigeria. Their findings advocate for more budget allocation to these sectors. Similarly, Awoyemi et al. (2023) used ARDL to explore the impact of health expenditure on life expectancy and mortality, confirming that increased spending reduces mortality and enhances longevity. In the same vein, Nzeribe et al. (2022) revealed that public and private health expenditures, along with corruption and economic growth, significantly influence poverty levels in Nigeria. They found that while health spending worsens poverty, improved human capital and institutions mitigate it.

In agricultural-focused studies, Megbowon et al. (2022) and Ngoben and Muchopa (2022) analyzed the effectiveness of government spending in boosting agriculture. While Megbowon et al. found agricultural spending insufficient for growth in Lesotho, Ngoben and Muchopa discovered that spending, when combined with favorable factors like rainfall and population growth, can raise agricultural output. However, food imports and rising prices hinder progress. Nugroho et al. (2022), in a panel study of Indonesian provinces, identified roads and irrigation infrastructure as significant long-term drivers of growth, emphasizing the importance of investing in physical capital to promote regional development. This reinforces the critical role of infrastructure in sustaining economic advancement.

Lastly, Dankumo et al. (2023) offered insights into how governance mediates the impact of public spending on poverty in Sub-Saharan Africa. Using GMM, they discovered that poor governance (characterized by corruption and political instability) exacerbates poverty and weakens the benefits of government expenditure. On a related note, Ibrahim et al. (2023) analyzed the influence of government spending on infrastructure in Nigeria using OLS. Their results support the view that public investment in health, education, and transport infrastructure positively affects national development.

Gap in Empirical Review

Despite numerous studies exploring the effects of government spending on various economic and social outcomes, there remains a significant gap in understanding how government capital spending on administration impacts life expectancy in Nigeria. Most prior research, such as Aluthge (2021) and Zomatic (2021), has focused on the relationship between government expenditure and economic growth, while others, like Jidefor (2021) and Dankumo (2023), have examined its role in poverty reduction. Studies addressing infrastructure development, such as Ibrahim (2023), typically focus on broad economic impacts rather than specific health outcomes. Although some research, including Awoyemi (2023) and Nzeribe (2022), has investigated public spending on health, these studies often combine recurrent and capital expenditures or focus on general health indicators, such as mortality rates, without isolating the effect on life expectancy.

Notably, there is a lack of detailed analysis on how capital spending on administration, encompassing investments in government offices, administrative technologies, and training for civil servants affects life expectancy in Nigeria. These investments are critical for enhancing governance efficiency, which supports the coordination and delivery of health-related programs that could improve health outcomes. The failure to disaggregate capital spending on administration from other expenditure types limits the understanding of its specific contribution to health and longevity. This study addresses this gap by focusing exclusively on the effect of government capital spending on administration on life expectancy in Nigeria, using time-series data from 1981 to 2024. By doing so, it provides a clearer understanding of how long-term administrative investments influence the health and lifespan of Nigerians.

METHODOLOGY

This study employed an ex-post facto research design to examine the effect of government capital spending on administration on life expectancy in Nigeria. The analysis focused specifically on the Nigerian context and utilized secondary data sourced from the Central Bank of Nigeria Statistical Bulletin and the World Bank's World Development Indicators, covering the period from 1981 to 2024. Drawing inspiration from the works of Inyama and Ezeugwu (2016), this study adopted a regression model to assess the impact of administrative capital expenditure on life expectancy. The regression model was specified as follows:

$$LER_{ti} = \beta_0 + \beta_1 GSA_{ti} + \beta_2 GSE_{ti} + \beta_3 GSSCS_{ti} + \epsilon_{ti}$$

Where;

LER	Life Expectancy Ratio
GSA	Government Spending on Administration
GSE	Government Spending on Economic Services
GSSCS	Government Spending on Social and Community Services
ϵ	Stochastic Disturbance (Error) Term
β_0	Coefficient (constant) to be estimated
$\beta_1 - \beta_3$	Parameters of the independent variables to be estimated
t	Current period

DATA PRESENTATION AND ANALYSIS

Table 4.2.1: Descriptive Statistics for the Variables

	LER	LOG(GSA)	LOG(GSE)	LOG(GSSCS)
Mean	49.00914	3.641602	4.358268	3.095758
Median	48.31900	4.387604	5.465969	3.728422
Maximum	54.78930	7.046076	7.603946	6.322319
Minimum	45.48300	-1.336743	-0.421137	-1.437167
Std. Dev.	3.090784	2.515626	2.449716	2.208723
Skewness	0.332203	-0.591355	-0.654083	-0.379822
Kurtosis	1.571001	2.064550	1.938446	1.795622
Jarque-Bera	4.553038	4.168759	5.203363	3.717238
Probability	0.102641	0.124384	0.074149	0.155888
Sum	2156.402	160.2305	191.7638	136.2134
Sum Sq. Dev.	410.7767	272.1200	258.0478	209.7737
Observations	44	44	44	44

Source: Eviews 10.0 Software, 2025

The normality of the distribution of the variables in Table 4.2.1 can be assessed using the values of skewness, kurtosis, and the Jarque-Bera probability. Life Expectancy Ratio (LER) has a skewness of 0.33, indicating a slight positive skew, meaning the distribution has a longer tail on the right side. The kurtosis value for LER is 1.57, which is below the normal value of 3, suggesting that the distribution is relatively flat or platykurtic. The Jarque-Bera test statistic for LER is 4.55 with a probability of 0.10. Since the probability is greater than the common significance level of 0.05, we do not reject the null hypothesis of normality. This means the distribution of LER can be considered approximately normal. Additionally, the mean

(49.00914) and median (48.31900) values of LER are close, further supporting the assumption that the variable is symmetrically distributed.

For the independent variable, government spending on administration (LOG(GSA)), expressed in logarithmic form, the results also indicate an approximately normal distribution. The skewness value for LOG(GSA) is -0.59, suggesting mild left skewness. Its kurtosis value is 2.06, which is below 3, indicating that the distribution is not sharply peaked. The Jarque-Bera probability for LOG(GSA) is 0.12, which is above the 0.05 threshold, meaning the distribution does not significantly deviate from normality. Therefore, based on the skewness, kurtosis, and Jarque-Bera statistics, both LER and LOG(GSA) are approximately normally distributed, making them suitable for further statistical analysis.

Table 4.2.2: Panel Ordinary Least Square Multiple Regression Analysis (LER)

Variable	Coefficient	Standard Error	t-Stat	p-Value
LOG(GSA)	0.075294	0.455923	0.165146	0.8697
LOG(GSE)	-1.012068	0.365237	-2.770989	0.0084
LOG(GSSCS)	2.250671	0.467582	4.813423	0.0000
C	46.17828	0.482779	95.65092	0.0000
$R^2 = 0.836982$, Adjusted $R^2 = 0.824756$, F-Stat 68.45730, Prob(F-stat) = 0.000000, DW = 2.29				

Source: Eviews 10.0 Output, 2025

The results from the panel ordinary least squares regression in Table 4.2.2 show how government capital spending affects life expectancy in Nigeria. Starting with the coefficient of LOG(GSA), which represents government spending on administration, the result is 0.075294. This means a 1 percent increase in administrative spending leads to only a very small increase in life expectancy. However, the p-value is 0.8697, which is much higher than 0.05. This shows that the effect is not statistically significant, so we cannot be confident that administrative spending really influences life expectancy in this study. For LOG(GSE), which stands for government spending on economic services, the coefficient is -1.012068. This means a 1 percent increase in spending on economic services leads to a decrease in life expectancy by about 1.01 units. The p-value is 0.0084, which is below 0.05, indicating that the result is statistically significant. This suggests that increasing spending on economic services has a negative effect on life expectancy within the period studied.

On the other hand, LOG(GSSCS), which refers to government spending on social and community services, has a positive coefficient of 2.250671. This means that a 1 percent rise in this type of spending leads to a 2.25-unit increase in life expectancy. The p-value is 0.0000, showing the result is highly significant. This clearly suggests that spending on social and community services strongly improves life expectancy in Nigeria. The constant term C is also significant and positive, meaning other factors not included in the model also contribute positively to life expectancy. The R-squared value of 0.837 indicates that about 84 percent of the variation in life expectancy is explained by the three independent variables in the model. The adjusted R-squared, which accounts for the number of variables, is also very strong at

0.825. The F-statistic is 68.4573 with a p-value of 0.000000, meaning the overall model is statistically significant. Lastly, the Durbin-Watson value is 2.29, which is close to 2 and suggests there is no serious autocorrelation in the model.

Test of Hypotheses

Based on the regression results in Table 4.2.2, we can formulate and test the hypotheses of the study on the effect of government capital spending on life expectancy in Nigeria. The three independent variables are government capital spending on administration (LOG(GSA)), economic services (LOG(GSE)), and social and community services (LOG(GSSCS)). The dependent variable is life expectancy ratio (LER). The hypotheses are formulated as follows:

H₀₁: Government capital spending on administration has no significant effect on life expectancy in Nigeria.

H₁₁: Government capital spending on administration has a significant effect on life expectancy in Nigeria.

Decision Rule: If the p-value is less than 0.05, reject the null hypothesis. The p-value for LOG(GSA) is 0.8697, which is greater than 0.05. Fail to reject the null hypothesis. Therefore, government capital spending on administration does not have a significant effect on life expectancy in Nigeria.

DISCUSSION OF FINDINGS

The findings of the current study reveal that government capital spending on administration has no significant effect on life expectancy in Nigeria. This lack of a meaningful relationship is not surprising, as administrative capital spending typically involves investments in government offices, administrative technologies, and training for civil servants, which may not directly translate to improved health outcomes or access to essential services for the general population. This finding aligns with Aluthge et al. (2021), who demonstrated that recurrent spending, which often includes administrative costs, had no significant impact on economic growth in Nigeria. Similarly, the results suggest that unless administrative capital spending is tied to governance reforms or improvements in service delivery systems, it is unlikely to influence life expectancy or broader welfare outcomes.

The absence of a significant effect from administrative spending on life expectancy could be attributed to inefficiencies, such as poor implementation, corruption, or a focus on bureaucratic infrastructure that does not directly address health needs. As highlighted by Dankumo et al. (2023), corruption, weak institutions, and political instability can diminish the effectiveness of government expenditure. If administrative capital investments are not transparent or are mismanaged, they fail to benefit the wider population. This is further supported by Osakede (2020), who noted that poor governance limits the impact of public spending on health outcomes in Nigeria, as seen in the low coverage of initiatives like the National Health Insurance Scheme due to coordination challenges.

The results also resonate with regional findings by Wandeda et al. (2021), who emphasized that in low-income countries like Nigeria, spending on sectors directly tied to human development, such as health and education, tends to be more effective than generalized administrative investments. This suggests that administrative capital spending may need to be restructured to prioritize systems that enhance health service delivery, such as modernizing health ministries or improving data management for health programs. The findings underscore the importance of governance quality, as noted by Nzeribe et al. (2022), who argued that public spending must be supported by strong institutions to achieve meaningful improvements in welfare. Therefore, this study highlights the need for better management and strategic alignment of administrative capital spending to ensure it contributes to human development and life expectancy in Nigeria.

CONCLUSION AND RECOMMENDATIONS

This study examined the effect of government capital spending on administration on life expectancy in Nigeria. The findings revealed that spending on administration does not have a significant impact on life expectancy. This suggests that investments in administrative infrastructure, such as government offices, training programs, and technologies, do not directly contribute to improving health outcomes or longevity in Nigeria. Based on these results, it is recommended that the Nigerian government re-evaluate its administrative capital spending to ensure it is strategically aligned with governance reforms that enhance the efficiency of health-related service delivery. Reducing inefficiencies, such as mismanagement or corruption in administrative expenditure, could free up resources for sectors that more directly improve citizens' lives.

This study contributes to existing knowledge by highlighting that government capital spending on administration alone does not significantly influence life expectancy in Nigeria. While many studies have focused on economic growth or poverty, this research provides a clearer picture of how administrative spending decisions impact health and well-being. Future researchers can build on this work by using more recent data, extending the time frame, or comparing Nigeria with other African countries. Additionally, exploring how governance quality, corruption, and the effectiveness of administrative spending influence life expectancy, beyond just the amount spent, could provide deeper insights into optimizing public expenditure for better health outcomes.

REFERENCES

- Abubakar, I., Dalglish, S. L., & Walker, N. (2022). *The Lancet Nigeria Commission: Investing in health and the future of the nation*. *The Lancet*, 399(10330), 1155–1200. [https://doi.org/10.1016/S0140-6736\(21\)02752-2](https://doi.org/10.1016/S0140-6736(21)02752-2)
- Abubakar, I., Oni, T., Ali, Z., et al. (2022). *The Lancet Nigeria Commission: Investing in health and the future of the nation*. *The Lancet*, 399(10330), 1155–1200. [https://doi.org/10.1016/S0140-6736\(21\)02488-0](https://doi.org/10.1016/S0140-6736(21)02488-0)

- Aluthge, C., Jibir, A., & Abdu, M. (2021). Impact of government expenditure on economic growth in Nigeria, 1970-2019. *Central Bank of Nigeria Journal of Applied Statistics*, 12(1), 139-174.
- Anyawu, J. C., & Erhijakpor, A. E. O. (2009). Health expenditures and health outcomes in Africa. *African Development Review*, 21(2), 400–433. <https://doi.org/10.1111/j.1467-8268.2009.00215.x>
- Awoyemi, B. O., Makanju, A. A., Mpapalika, J. and Ekpeyo, R. S. (2023). A time series analysis of government expenditure and health outcomes in Nigeria. *Journal of Health Africa*, 14(7), 1409.
- Babatunde, F. (2023, June 15). Nigeria's infrastructure deficit is 40% short of World Bank standard. *Dataphyte*. <https://dataphyte.com/latest-reports/nigerias-infrastructure-deficit-is-40-short-of-world-bank-standard/>
- Becker, G. S. (1964). *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education*. University of Chicago Press.
- Bloom, D. E., Canning, D., & Sevilla, J. (2004). *The Effect of Health on Economic Growth: A Production Function Approach*. *World Development*, 32(1), 1–13.
- CIA. (2023). Life expectancy at birth in Nigeria in 2023, by gender. *Statista*. <https://www.statista.com/statistics/1122851/life-expectancy-in-nigeria-by-gender/>
- Dahliah, D. (2021). The role of public expenditure and private investment in economic growth in Makassar.
- Dankumo, A. M., Is'Hak, S., Auta, Y. and Denthe, A. (2023). Impact of Public Expenditure on Poverty: Role of Governance. *Jurnal Ekonomika Malaysia*, 2(1), 21-30.
- Edeme, R. K., Emecheta, C., & Omeje, M. O. (2017). Public health expenditure and health outcomes in Nigeria. *American Journal of Biomedical and Life Sciences*, 5(5), 96–102. <https://doi.org/10.11648/j.ajbls.20170505.13>
- Ibrahim, V. H., Ameji, N. E. and Taiga, U. U. (2023). Government expenditure and infrastructural development in nigeria: an empirical analysis of its economic effects. *KIU Journal of Social Sciences*, 9(2).
- Jidefor, N. J., Okafor, M. C. and Ohiorenuan, H. I. (2021). Impact of public capital expenditure on poverty rate in Nigeria. *International Journal Papier*, 2(4), 46-55.
- Megbowon, E. T., Mothae, L. and Relebohile, J. R. (2022). Effect of government agricultural expenditure on economic growth: evidence from a developing country. *Studia Universitatis Babes-Bolyai Oeconomica*, 67(2), 1-20.
- Musgrave, R. A., & Musgrave, P. B. (1989). *Public Finance in Theory and Practice* (5th ed.). McGraw-Hill.
- Ngobeni, E. and Muchopa, C. L. (2022). The impact of government expenditure in agriculture and other selected variables on the value of agricultural production in South Africa (1983–2019): Vector Autoregressive Approach, *Economies*, 10(9), 205.
- Nugroho, P., Syahnur, S., & Suriani, S. (2022). The impact of real government spending in physical and social infrastructures on economic growth. *Indonesian Treasury Review: Jurnal Perbendaharaan, Keuangan Negara Dan Kebijakan Publik*, 7(4), 287-300.
- Nzeribe, G. E., Ezenekwe, U. R., Uzonwanne, M., Metu, G. A., Oguanobi, C. R., and Uzodigwe, A. A. (2022). Empirical analysis of the effect of public health expenditure and out-of-pocket health spending on poverty in Nigeria. *Journal of African Development*, 23(2), 155-186.

- Ogundipe, M. and Adesola, A. (2022). Examine the impact of government expenditure on standard of living in Nigeria (1981 – 2018). Retrieved from <https://assets.researchsquare.com/files/rs-2202229/v1/eea3a3dc-80e4-48cd-b3b1-20e942fa3a17.pdf?c=1666880565>.
- Osakede, U. A. (2021). Public health spending and health outcome in Nigeria: The role of governance. *International Journal of Development Issues*, 20(1), 1–18. <https://doi.org/10.1108/IJDI-10-2019-0169>
- Schultz, T. W. (1961). Investment in human capital. *The American Economic Review*, 51(1), 1–17.
- Wandeda, D.O., Masai, W., & Nyandemo, S.M. (2021). Government expenditure and economic growth in Sub-Saharan Africa. *Journal of Economics and Public Finance*, 7(4), 14-30.
- World Bank. (2023). *Life expectancy at birth, total (years) - Nigeria* [Data set]. <https://data.worldbank.org/indicator/SP.DYN.LE00.IN?locations=NG>
- World Bank. (2023). *Nigeria public finance review: Fiscal adjustment for better and sustained results*. <https://www.worldbank.org/en/country/nigeria/publication/nigeria-public-finance-review>
- World Health Organization (WHO). (2022). *Global health observatory data: Life expectancy at birth*. [https://www.who.int/data/gho/data/indicators/indicator-details/GHO/life-expectancy-at-birth-\(years\)](https://www.who.int/data/gho/data/indicators/indicator-details/GHO/life-expectancy-at-birth-(years))
- World Health Organization. (2020). *Life expectancy at birth (years)* [Data set]. Global Health Observatory data repository. [https://www.who.int/data/gho/data/indicators/indicator-details/GHO/life-expectancy-at-birth-\(years\)](https://www.who.int/data/gho/data/indicators/indicator-details/GHO/life-expectancy-at-birth-(years))
- World Health Organization. (2022). *World health statistics 2022: Monitoring health for the SDGs, sustainable development goals*. <https://apps.who.int/iris/handle/10665/360511>
- Yusri, A. (2021). Does government expenditure affect poverty, health, and education? Evidence from Aceh, Indonesia. *Masters Project*, The Hague, Netherlands.
- Zomatic, T. L. (2021). An error correction model on the impact of government expenditure on economic growth in Liberia from 1970 to 2020: Keynesian economics visited. *International Journal of Business and Economics Research*, 10, 21.