



RESEARCH ARTICLE

Public Expenditure and Poverty Interdependence: Evidence from Nigeria

Sitt Ahmed Oluwatobi Adekunle*

Walter Sisulu University, South Africa

Kwara State University, Ilorin, Nigeria

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Public expenditure viz-a-viz poverty interdependence has one core objective, that is, provision of finance to those fit poor or facing poverty challenges. Based on Nigeria statistical data covering public expenditure and poverty between 1981-2019. The study adopted the Engle-Granger single equation approach to co-integration, the residual unit root test and ARDL model to evaluate possible connections amid the variables using time series data from National Bureau of Statistics, Nigeria and Central Bank of Nigeria Statistical Bulletin. The findings show that public expenditure variable in the short and long run do not conform to a priori expectation. This implies that public expenditure can only affects per capita consumption in the short run but has a weak impact on the long run. The diagnostic statistics from the results reveals that the model has a high goodness of fit as indicated by the adjusted coefficient of determination which shows that about 86 per cent of the systematic variations in the dependent variable is explained by the variations in the regressors altogether. The F-statistic value of 18.1771 with p-value of 0.0000 passes the test of statistical significance at the 1 per cent level of significance, thus indicating that the explanatory variables are jointly significant in the determination of the dependent variable. The study recommends public expenditure on capital projects tailored towards infrastructural development should be encouraged and propagated. These findings shed light on the complex dynamics of public expenditure and poverty in Nigeria and highlight the need to include government recurrent expenditure, government capital expenditure, real gross domestic product and foreign direct investment. These findings can help policymakers, government, and stakeholders plan for sustainable public expenditure, economic durability, and financial stability. Public expenditure, real gross domestic product and poverty are empirically linked in this study, adding to current knowledge. This research aims to illuminate these relationships to inform governmental decisions, public expenditure, real gross domestic product and poverty management. This knowledge can assist build a lasting poverty management that boosts economic growth and stability.

*Corresponding Author:

1. INTRODUCTION

The goal of all economies has been to minimize poverty, and this has led to extensive empirical debate among academics and policymakers (Busso, Gregory, and Kline, 2013; Neumark & Simpson, 2015; Zhu et al., 2021; Le-rong et al., 2021; omodero et al., 2019). Policy-makers around the world have shown a keen interest in the merits and demerits, and repercussions of public expenditure. On the one hand, decisions about public spending may encourage business growth overall (Bo, 2020; Durantón & Venables, 2018; Perez-Fargallo et al., 2023). However, Kline (2010) and others have

theorized that making such a choice could be considered wasteful. Public expenditure programs can result in significant economic behavior distortions, which is another cause for concern (Bandiera et al., 2009; Busso et al., 2013; Zhu et al., 2021). Although there are theoretical analyses of the merits and demerits of public spending in relation to the interdependence of poverty, empirical studies measuring the effect of such plans on economic activities are still comparatively rare.

The amount and composition of national spending dictates the pace vis a vis the mode of economic growth. National spending in Nigerian economy can be broadly divided into capital and recurring expenditure. Government administrative costs like labor, salaries, loan interest, maintenance, etc. are considered recurrent expenses while costs for major projects like roads, airports, schools, telecommunications, energy production, etc. are referred to as capital expenditures.

Infrastructure provision is one of the major goals of national spending, and maintaining these infrastructures demands significant expenditures. In emerging nations, the majority of which have seen rising levels of public investment over time, the connection between governmental spending on infrastructure projects and economic growth is frequently examined (World Development Report, 1994). Government consumer spending is predicted to slow growth, in contrast to financial outlay on fundamental investment and economic activity (in State-Owned Enterprises).

Given the enormous sums of money the government has invested in combating the problem of poverty, the high incidence of poverty in Nigeria is surprising. Government recurrent spending, for instance, went from N3819.2 million in 1977 to N461,600 million and N1,589,270.00 million in 2000 and 2007 (Okulegu, 2013). A low of N5004.60 million in capital expenditure in 1977 was followed by a high of N10, 163.40 million in 1980. Capital expenditures as of 2000 and 2007 were N239,450.90 and N759,323.00m, respectively. This increase in spending covered areas including agriculture, housing, power production, and health care that are meant to directly combat poverty but did not result in a drop in the nation of Nigeria's poverty rate. Thus, the economic downturn was expected. This is evident in the lack of fundamental infrastructure, such as decent schools, decent hospitals, decent housing, decent food, etc. Nigeria has more income inequality than other African nations, according to Aluko (2003). Additionally, it was noted that the top 40% of Nigerians earn more than 10% of the country's gross domestic product, with the remaining 60% going to the remaining 90% of the population. This calls into question the government's attempts to reduce poverty.

Thus, the goal of the study is to determine whether Nigeria's poverty level has actually decreased as a result of government spending on efforts to reduce it. With the techniques employed, the overall picture of public expenditure and poverty in Nigeria will be clearly portrayed. From there, the authors develop recommendations for policymakers and governments to improve public expenditure and poverty.

This research study examines the effect of public expenditure and poverty in Nigeria. The study's main purpose is to lighten the complex association between these elements and how they have shaped poverty in Nigeria. The research uses advanced regression analysis and empirical evidence to shed light on poverty dynamics for policymakers, government and other stakeholders.

This study examines the effects of public expenditure and poverty in the Nigerian economy from 1981 to 2019. The paper examines how public expenditure affects poverty, testing for cointegration, short run and long run equilibrium between the variables. This research sheds light on Nigeria's public expenditure and its effects on poverty. In-depth analysis of these various variables will achieve this. The major research topic for this study is: public expenditure and poverty interdependence in Nigeria; What effect do public expenditure, FDI and gross domestic product have on poverty? This study seeks to examine the effect of employed exogenous variables on poverty and their effects on policymakers, economy and other stakeholders in the Nigeria economy.

Except for a few nations in Sub-Saharan Africa, like Nigeria, poverty has been declining worldwide. In the last 20 years, Africa's poverty rate increased from 44.6 to 46.4 percent (Adigun, Awoyemi, & Omonona, 2011; Abimbola et al, 2015; Brunner et al., 2012; Middlemiss et al., 2015). There are two aspects to poverty. The first is moneylessness, which denotes a lack of funds and resources necessary to meet fundamental human requirements. Additionally, it conveys helplessness. Those who lack opportunities and options, fall under this category. Deficient and deteriorated human conditions that prevent the full satisfaction of fundamental human needs including health, food, education, shelter,

and clothes are another definition of poverty. Poverty incidence has increased as a result of the declining standards of life in developing nations like Nigeria. The slowing of economic growth in developing nations has been related to this drop. The significance of this study lies in its potential to provide valuable insights for policy decisions, enhance poverty level, boost economic growth, and advance academic understanding of poverty issues in Nigeria. Ultimately, this will contribute to the development of a strong and sustainable public expenditure that benefits individuals, communities and the overall economy.

2. LITERATURE REVIEW

Multiple fixed-effects modeling (MFEM) was used by Sasana and Kusuma (2018) to study the effect of governmental outlays on alleviation of poverty in Indonesia from 2008 to 2013. The study discovered that while government outcomes, including government spending, had a robust indirect impact on poverty level, economic factors had a favorable impact on poverty reduction in Indonesia. Anderson et al. (2018) used meta-regression in a different study to examine the connection amid national outlay and poverty level in low-middle income countries. In general, the study found that reducing income poverty in the low- and middle-income countries under examination was not significantly aided by increasing government spending.

Omari and Muturi (2016) used time series data spanning the years 1964 to 2010 to examine the effect of national sectoral outlay on Kenya's poverty level. The findings indicated that expenditure on social and economic well-being have a considerable direct impact on the degree of poverty. While infrastructure spending had a robust negative effect on poverty levels, the effect of education spending was not statistically substantial. Using both fixed and random effects models, Sasmal and Sasmal (2016) looked at the effects of public spending on economic growth and poverty reduction in India. According to the data, both per capita income and governmental spending on infrastructure (such as roads, power, irrigation, transportation, and communications) were high. As a result, there was a considerable and favorable impact on reducing poverty.

Okorafor and Nwaeze (2013) conducted an empirical study of poverty and economic growth in Nigeria between 1990 and 2011. Ordinary Least Squares (OLS) techniques were employed in the investigation. The outcome demonstrated that fluctuations in Nigeria's economic growth may be statistically explained by the Human Development Index and the Uncomfort Index. The impact of poverty reduction initiatives on Nigeria's economic expansion was studied by Bimuyo (2013). The research spanned the years 1980 through 2010. The OLS finding showed that reducing poverty has a considerable effect on economic growth. In 2017, Stephanie looked into the connection between economic expansion and the decline of poverty in Nigeria. Over 70% of Nigerians lack the resources and material possessions to access the basic services like health, education, etc. that bring happiness, according to the study's descriptive statistic. In rural Nigeria, Adigun, Awoyemi, and Omonona (2011) assessed the elasticity of economic growth and inequality. The study's time frame was from 1996 to 2004. The OLS and the descriptive statistic were utilized in the study. According to the growth elasticity of poverty, a 1% rise in income will result in a 0.62 % decrease in poverty. The outcome also shows that a 1% drop in inequality would only result in a 0.34 % drop in poverty.

According to Abimbola et al. (2015), entrepreneurship can reduce poverty and promote sustainable economic growth. The use of descriptive statistics produced the finding that the entrepreneurship program decreased social poverty. Aluko (2003) evaluated Nigerian poverty alleviation measures. Using the descriptive statistics, it was determined that poverty was still pervasive in Nigeria despite the many measures for reducing it. John and Bright (2012) evaluated youth unemployment and poverty in Nigeria. The study's time frame was from 1987 to 2011. The OLS method was used in the study, and it was discovered that population has a favorable impact on poverty level.

Using annual time series data from 1972 to 2008, Asghar et al. (2012) examined the effect of government spending on poverty reduction in Pakistan. According to the study, government spending on community and economic services, the budget deficit, and education has a negative influence on poverty in Pakistan. Government spending on these areas has a positive impact on maintaining peace and order and reducing poverty. Mehmood and Sadiq (2010) used an error correction model in a comparable study to investigate the connection between government spending

and poverty reduction in Pakistan from 1976 to 2010. The findings showed that there is a direct link amid national spending and Pakistan's degree of poverty.

In Nigeria, the impact of government spending on alleviating poverty was examined by Oriavwote and Ukawe (2018). The study used the ordinary least squares method and spanned the years 1980 to 2016. The results demonstrated a considerable and favorable influence of government spending on health and education on per capita income (a measure of poverty). Similar to this, the outcome demonstrated that national spending on housing and development had an equally robust and advantageous impact on PCI.

Between 1980 and 2011, Owuru and Farayibi (2016) employed fiscal decision strategies to evaluate the problem of poverty minimization in Nigeria. The results showed that, during the research period, the level of government capital investments in Nigeria were insufficient to reduce poverty. In a different study, Asimiyu and Saidi (2015) used annual time series data spanning the years 1980 to 2013 to analyze the effect of the public budget and total expenditure on the degree of poverty in Nigeria. The study found that Nigeria's poverty rate is negatively impacted by total government spending and federally collected taxes.

Adelowokan and Osoba (2015) evaluated the contribution of oil income and national outlay in lowering the poverty level in Nigeria using OLS method and granger causality test. The study discovered evidence that the GDP and oil revenues had detrimental effects on the rate of poverty throughout the time period under review. Nwosa (2014) investigated the effect of government spending on unemployment and poverty rates in Nigeria using annual time series data covering the years 1981 to 2011 using the ordinary least squares approach. The analysis found that while government spending had a little negative impact on poverty rates, it had a large beneficial influence on unemployment rates.

Enyim (2013) used the ordinary least squares method and data from 1980 to 2009 to examine how government spending in Nigeria affected the alleviation of poverty. According to the regression analysis, government spending significantly contributed to Nigeria's reduction in poverty. Olabode (2012) used the Dynamic Ordinary Least Squares (DOLS) approach to analyze how Nigeria's defense spending affected the country's poverty rate. The study showed proof that defense spending had a favorable connection with a measure of poverty. However, there was a negative correlation between poverty level and military spending, secondary school enrollment, and output per capita. Therefore, researching the public expenditure and poverty interdependence in Nigeria is essential in the current context.

3. METHODOLOGY

3.1 Model specification and sources of data

In line with the objective of the study, the paper investigated the connection between government expenditure and poverty in Nigeria. Following Osemwengie and Sede (2013) the study specifies the model to investigate the nexus between government expenditure and poverty in Nigeria, but with some modification by incorporating FDI and RGDP variables as:

$$PCC = f (GRE, GCE, RGDP, FDI) \tag{1}$$

Where: PCC = Per Capita Consumption; GRE = Government Recurrent Expenditure; GCE= Government Capital Expenditure; RGDP = Real Gross Domestic Product; FDI = Foreign Direct Investment. On the a priori, we expect; $F1 > 0, F2 > 0, F3 > 0, F4 > 0$.

The ARDL approach to error correction analysis is employed to investigate the long run and short run effects of government expenditure as well as other control variables on poverty variable (proxy by per capita consumption).

The error correction model of equation 1 is specified econometrically as:

$$\Delta PCC_t = \beta_0 + \sum_{k=1}^p \beta_{1k} \Delta PCC_{t-k} + \sum_{k=1}^{q1} \beta_{2k} \Delta GRE_{t-k} + \sum_{k=1}^{q2} \beta_{3k} \Delta GCE_{t-k} + \sum_{k=1}^{q3} \beta_{4k} \Delta RGDP_{t-k} + \sum_{k=1}^{q4} \beta_{5k} \Delta FDI_{t-k} + \phi ECM_{t-1} + \mu_{1t} \dots \dots \dots \tag{2}$$

The associated long run model is specified as:

$$PCC_t = \alpha_0 + \sum_{k=1}^p \alpha_{1k} PCC_{t-k} + \sum_{k=1}^{q_1} \alpha_{2k} GRE_{t-k} + \sum_{k=1}^{q_2} \alpha_{3k} GCE_{t-k} + \sum_{k=1}^{q_3} \alpha_{4k} RGDP_{t-k} + \sum_{k=1}^{q_4} \alpha_{5k} FDI_{t-k} + V_{1t} \dots \dots \dots (3)$$

The variables are previously defined. Δ is the first order difference operator, ECT is the error correction term included in the model to reconcile the short run dynamics with the long run relationship. φ is expected to be negatively signed and statistically significant to play the role of error correction in the model. μ_{1t} and V_{1t} are the residual or error terms.

The study used Augmented Dickey-Fuller technique to unit root test to investigate the stationarity properties of the variables employed. Unit root testing in empirical studies is very important so as to eliminate the presences of biasedness and inefficiency so as to guarantee stable and reliable estimates. In addition, a two-step cointegraion test procedure proposed by Engle and Granger (1987) is adopted. This technique of cointegration requires that residual series of an estimated OLS equation to be tested for unit root in levels, and stationarity means cointegration among the variables that generated the residual series. This technique to cointegration is very appropriate for the case of single-equation system. Hence, why it is deployed in this study

The study employed secondary data obtained from the Central Bank of Nigeria’s Statistical Bulletin, World Development Indicators of the World Bank, and the Annual Abstract of Statistics of the National Bureau of Statistics covering the period 1981 to 2019.

4. DISCUSSION OF EMPIRICAL RESULTS

4.1. Unit root tests results

This section presents unit root tests results using Augmented Dickey-Fuller (ADF) approach to unit root test. The results are presented in Table 4.1.

Table 4.1: ADF unit root tests results

Variables	Level			1 st Difference			Integration Order
	ADF Statistics	Prob.	Inference	ADF Statistics	Prob.	Inference	
PCC	2.521	3.5628	NS	7.6302	4.6527	S	I(1)
RGDP	0.0651	2.6401	NS	3.1133	3.6410	S	I(1)
GCE	1.5661	3.4610	NS	4.5316	4.6101	S	I(1)
FDI	3.3211	3.4310	NS	6.7541	3.4411	S	I(1)
GRE	1.1068	3.6161	NS	4.5310	4.4516	S	I(1)

Note: NS = Non stationary; S = Stationary

Source: Authors’ estimation using EViews 9, 2024

From the ADF unit root tests results presented in Table 4.1, all the series (PCC, RGDP, GCE, FDI and GRE) are integrated of order 1, that is, they are difference stationary judging by their ADF probability at 5 per cent level which is lesse than their ADF critical statistics. We therefore conclude that all the variables are unit roots free after first differencing. In what followed, we proceeded to ascertain whether a long-run-relationships exist between the variables in the ECM model.

4.2. Co-integration test result

The study adopted the Engle-Granger single equation approach to co-integration. This approach uses the residual unit root test in levels as proposed by Engle and Granger (1987). The result is presented below.

Table 4.2: Co-integration test result (based on residual unit root test)

Variable	ADF Statistics @ Levels	Probability @ 5%	Inference	Integration Order
RESIDUAL	-5.221	-4.521	S	I(0)

Note: NS = Non stationary

Source: Authors' output using EVIEWS 9, 2024

From the result in Table 4.2, the ADF statistic value of -5.221 is greater than the critical value of -4.521 at 5 per cent level of significance. This suggests that the residual is stationary in levels. We therefore conclude that cointegrating relationships or equilibrium exist between the variables in the long run. Thus, the presence of cointegrating relationships between the variables justifies the use of ECM technique in the study. We therefore represent the short run (dynamic) relationship with an error correction model (ECM).

4.3. Estimated ARDL error correction and long-run poverty model

This technique became necessary when we established a cointegrating long run relationships between the variables in the model. This procedure attempts to reconcile the short run (dynamic) relationship with the long run equilibrium due to the loss of some vital information in the process of integrating. The test required the cointegrating coefficient to be negative, significant as well as lies between zero and one. The results are reported in Table 4.3 below.

Table 4.3: ARDL Cointegrating and long-run estimates

Dependent Variable: PCC				
Selected Model: ARDL(2, 0, 2, 2, 1)				
Sample: 1981 2019				
Included observations: 32				
Cointegrating Form				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(PC(-1))	-0.213029	0.147787	-1.441459	0.0469
D(FDI)	0.893913	25.912402	0.034497	0.9698
D(GRE)	-1.164001	0.434132	-2.681214	0.0236
D(GRE(-1))	-0.493067	0.341230	-1.444969	0.2629
D(GCE)	0.019898	0.421590	0.047197	0.7790
D(GCE(-1))	-1.159129	0.698263	-1.6600177	0.0109
D(RDGP)	0.278758	0.057562	4.8427434	0.0056
CointEq(-1)	-0.127680	0.141672	-0.9012366	0.0315
R-squared = 0.8090; R-bar-squared = 0.7890; F-stat.= 18.1771; Prob (F-stat.) = 0.0000; DW-stat = 2.2496				
Long Run Coefficients				
FDI	3.033181	79.562274	0.038123	0.9700
GRE	-1.469532	1.537920	-1.020555	0.3197
GCE	2.507370	3.012368	1.197520	0.2451
RDGP	0.071623	0.092356	0.775517	0.4471
C	207.825967	108.522951	0.159297	0.8750

Source: Authors' Estimate using Eviews 9.0, 2024

The diagnostic statistics from the results presented in Table 4.3 reveals that the model has a high goodness of fit as indicated by the adjusted coefficient of determination which shows that about 86 per cent of the systematic variations in the dependent variable is explained by the variations in the regressors altogether. The F-statistic value of 18.1771 with p-value of 0.0000 passes the test of statistical significance at the 1 per cent level of significance, thus indicating that the explanatory variables are jointly significant in the determination of the dependent variable. The Durbin-Watson (DW) statistic of 2.2496 reveals absence of first order negative serial correlation in the model.

Essentially, the findings of this study show that the short and long run effects of FDI on per capita consumption (proxy for poverty) is positive but statistically not significant as indicated in Table 4.3. Both the short and long run conform to the predictions of the per capita consumption theories and similar with previous studies such as Thakur et al. (2024), Xu (2024), Haw (2023), Zhu et al. (2021), Yu et al. (2021), Okere et al. (2023). The non-statistical significance suggests that FDI growth has not been able to stimulate consumption in the Nigeria economy, as most of the foreign investments are portfolio base. This has little or no effects on the consumption level of the individuals so as to lift them above poverty level. FDI targeted at providing quality healthcare, sound education and quality infrastructure would be very germane to eradicating poverty particularly for developing and emerging economy like Nigeria.

The negative sign on the coefficient of government recurrent expenditure variable in the short and long run results do not conform to *a priori* expectation, though significant at 5 per cent level in the short run only. This implies that government recurrent expenditure can only affects per capita consumption in the short run but has a weak impact on the long-run. This finding suggests that recurrent expenditure can only support “stomach infrastructure” of the citizenry but lack the capacity to provide “sustainable infrastructure” (basic means of living, for instance, decent houses, quality healthcare, good education, etc) capable of lifting the citizenry from the sphere of poverty. The unexpected sign further implies that the returns from recurrent expenditure on per capita consumption tends to diminishes after a year (see Coulibaly et al., 2024; Yoon, 2024). The nature of data and the proxies employed could also provide explanations for the negative sign.

Government capital expenditure is observed to be positive but not a significant determinant of per capita consumption (proxy for poverty) in both the short and long run estimates. While the coefficients (short and long run) conform to *a priori* expectation, the non-significance or performance of the variable to poverty reduction is not quite surprising in the Nigeria context, given that funds allocated to capital projects in the budget are usually very meagre compared to recurrent expenditure. Capital projects such as adequate power (electricity), effective and efficient transportation system, quality education, excellent healthcare system, decent environment, etc, are the only factors capable of stimulating economic growth and therefore assist to reduce poverty. All of these are currently lacking in Nigeria.

Real gross domestic product (RGDP) from the result in Table 4.3 is observed to positively and significantly relate to per capita consumption contemporaneously in the error correction model in the short run. This is in conformity with theoretical expectation. Also, it underscores the relevance of economic growth to poverty alleviation. But this significant positive relationship between per capita consumption (proxy for poverty) only exist in the short run while in the long run, though positive, weak connection was observed. This implies that growth in the economy has not been able to sustain progress and prosperity in the country so as to lift the citizenry from poverty trap in the long run.

The error correction term (CointEq(-1)) in the error correction model is negatively signed as expected. Also, it is statistically significant and its absolute value lies between one (1) and zero (0). The coefficient which measures the speed of adjustment of PCC to its equilibrium level in the event of short-run deviation from the equilibrium indicates that 32 per cent of the short-run deviation from equilibrium is offset by short-run adjustments yearly to restore the equilibrium. The speed of adjustment to equilibrium is fairly slow.

4.4. Test of structural stability for the PCC model

The stability of the model was investigated using the plots of CUSUM and CUSUM of Squares. The plots are reported in Figure 4.1 and 4.2.

The stability of the model was proved by the cumulative sum of recursive residuals (CUSUM) and the cumulative sum of recursive residuals square (CUSUMSQ). Figure 4.1 and 4.2 show both plots of the series lies within the critical bounds at 5 per cent level of significance which confirmed that the model is stable and reliable for policy direction.

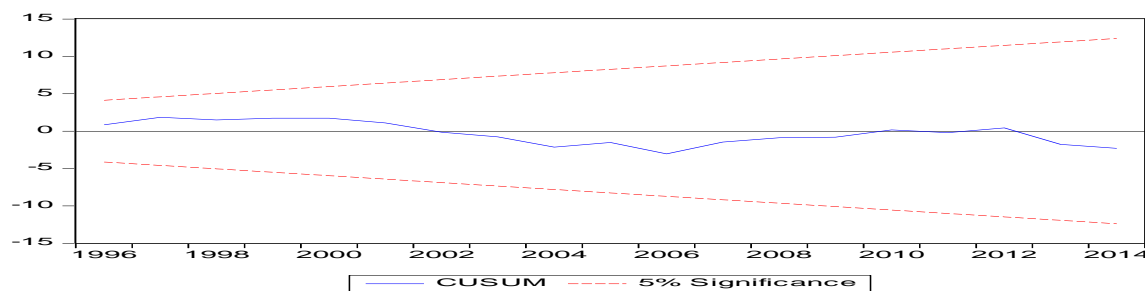


Figure 4.1: Plot of CUSUM for the PCC model

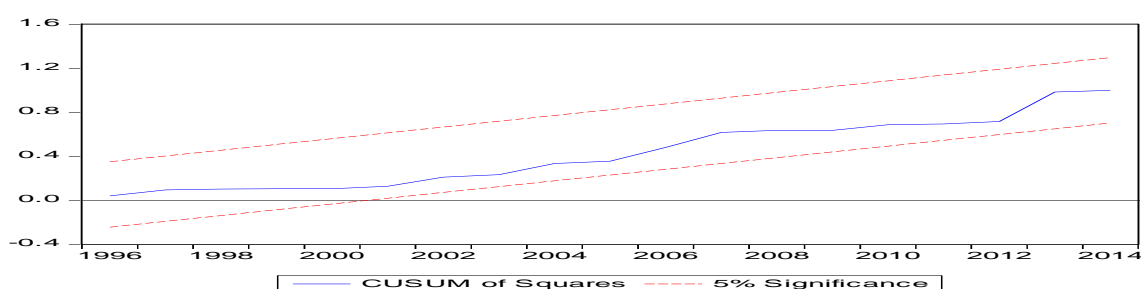


Figure 4.2: Plot of CUSUM of Squares for the PCC model

Considering the applicability of the results may be limited by the distinctive attributes of the poverty level in Nigeria. The study's findings may have limited generalizability due to differences in public expenditure, economic structures, and socio-cultural dynamics among various nations and cultural set-up. Hence, it is advisable to exercise caution when applying the findings to different geographic regions or economic frameworks. Moreover, in order to overcome these limitations, future research should aim to adopt a multidisciplinary strategy that incorporates various views and approaches. Researchers can enhance our comprehension of poverty dynamics and make valuable contributions to policy decisions and economic practices by embracing the intricacies of the knowledge-based economy and recognizing the inherent uncertainties.

5. CONCLUSION AND RECOMMENDATIONS

The paper has investigated the nexus between government expenditure and poverty in Nigeria using data that spans the period from 1981 to 2019. The ARDL approach to cointegration and error correction were utilized for the investigation. The study finds that government recurrent expenditure had a significant impact on per capita consumption (proxy for poverty) in Nigeria in the short run while in the long run, a weak relationship was observed. For capital government expenditure, weak relationships were observed, as the variable under performed in both the short and long run periods. This strongly underscored the fact that capital expenditure of government is not a significant determinant of per capita consumption in Nigeria. Similar finding, was observed by FDI. FDI proved to be a weak determinant of per capita consumption in both the short and long run periods. Finally, RGDP proved to impact significantly on per capita consumption on the short run period. However, the long run results showed that economic growth proxy by RGDP could not support poverty alleviation in the long run as it has a modest impact on per capita consumption.

In view of the finding that recurrent expenditure affects poverty in the country, policies aimed at reducing (or narrow) income inequality gap (poverty) should be formulated and implemented. Based on the empirical evidence from the estimated PCC model, we recommend that economic growth should be stimulated so as to translate to growth in consumption and thereby reduce poverty incidence. Also, sustainable FDI inflows for capital projects on healthcare, education, transportation sector and energy should be attracted to facilitate economic growth which will eventually assist to

reduce poverty level in the country. Government expenditure on capital projects tailored towards infrastructural development should be encouraged and propagated. In conclusion, the study finds evidence of a short run relationships between government expenditure (recurrent) and poverty in Nigeria.

In conclusion, various socioeconomic indices demonstrate how pervasive and entrenched poverty is in Nigeria. Despite this, the government has made some overall success in reducing poverty, given the resources at its disposal and the internet's wealth of methods. The most basic necessities of life are still inaccessible to a sizable majority of Nigerians. The following conclusions are drawn by the study in light of its findings. i. Nigeria's government spends an uneven and unpredictable amount of money. ii. There is a flagrant misalignment in Nigeria's government spending pattern. Lastly, there is a relationship between public spending and the country's efforts to reduce poverty.

SUGGESTION FOR FUTURE RESEARCH

One of the unresolved parts of the problem that goes beyond the scope of our research is the requirement for additional research on the intersection between economic inequality and sustainability in Nigeria. It is also necessary to do extensive research in order to gain a knowledge of the vulnerabilities of the economic system to future crises, particularly with regard to the dangers posed by insecurity. There are a number of recommendations for future research investigations, some of which include performing in-depth evaluations of the influence that structure change has on economic stability, researching new solutions to address income and wealth inequality, and improving insecurity measures to limit risks of wealth loss. Additionally, interdisciplinary approaches that incorporate expertise in finance, and insecurity can provide holistic insights into the process of addressing these complex difficulties that are currently confronting the economy of Nigeria

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Conflict of Interest: Not available

REFERENCES

- Abimbola, A., Olatunji, F., Adunola, O.O., Musibau, A. A., David, T. I. (2015). Sustainable economic growth and poverty reduction through entrepreneurship. *International Journal of Academic Research in Economics and Management Sciences*, 4(2).
- Adelowokan, A.O., & Osoba, A.M. (2015). Oil Revenue, Government Expenditure and Poverty Rate in Nigeria. *Global Journal of Management and Business Research: B Economics and Commerce*, 15(10), 11-20
- Anderson, E., D'Orey, M.A.J., Duvendack, M., & Esposito, L. (2018). Does government spending affect income poverty? A meta-regression analysis. *World Development*, 103(2018), 60-71. <https://doi.org/10.1016/j.worlddev.2017.10.006>
- Adigun, G.T., Awoyemi, T. T., & Omonana, B.T. (2011). Estimating economic growth and inequality elasticity of poverty in rural Nigeria. *International Journal of Agricultural Economics and Rural Development*, 4(1).
- Aluko, M.A.O. (2003). Strategies for poverty reduction in Nigeria. *Journal of Social Sciences*, 7(4) <https://doi.org/10.1080/09718923.2003.11892388>.
- Asimiyu, G.A., & Saidi, A.M. (2015). Impact assessment of public budget indicators on the Nigerian poor. *Journal of Economics and Development Studies*, 3(3), 71-85. <https://doi.org/10.15640/jeds.v3n3a7>
- Asghar, N., Hussain, Z., & Rehman, H.U. (2012). The Impact of Government Spending on Poverty Reduction: Evidence from Pakistan 1972 to 2008. *African Journal of Business Management*, 6(3), 845-853. <https://doi.org/10.5897/AJBM11.922>
- Bandiera, O., Prat, A., Valletti, T. (2009). Active and passive waste in government spending: Evidence from a policy experiment[J]. *American Economic Review*, 99 (4), 1278– 1308.
- Binuyo, B.O. (2014). Impact of poverty reduction programme on economic development: Evidence from Nigeria. *Arabian Journal of Business and Management Review*, 4(1), 1- 10

- Bo, S. (2020). Centralization and regional development: Evidence from a political hierarchy reform to create cities in China[J]. *Journal of Urban Economics*, 115, 103182.
- Brunner, K. M., Spitzer, M., Christanell, A. (2012). Experiencing fuel poverty, Coping strategies of low-income households in Vienna/Austria. *Energy Policy*, 49(1), 53-59, <https://doi.org/10.1016/j.enpol.2011.11.076>.
- Busso, M., Gregory, J., & Kline, P. (2013). Assessing the incidence and efficiency of a prominent place-based policy. *American Economic Review*, 103(2), 897-947.
- Coulibaly, M., Faltz, J., Parker, D., Olurotimi, O., Traore, N. (2024). The effects of mining on local poverty in developing countries: Evidence from Mali. *World Development*, 180(2), 25-42. <https://doi.org/10.1016/j.worlddev.2024.106605>.
- Duranton, G., & Venables, A. J. (2018). Place-based policies for development (No. w24562). *National Bureau of Economic Research*.
- Engle, R.F., & Granger, C.W.J. (1987). Co-integration and Error Correction: Representation, Estimation and Testing. *Econometrica*, 55, 251-276.
- Enyim, O.B. (2013). Government spending and poverty reduction in Nigeria's economic growth. *International Journal of Social Sciences and Humanities Reviews*, 4(1), 103- 115.
- Haw, N. J. (2023). Inequalities and impacts on poverty incidence of tobacco, alcohol and health out of pocket expenditure in the Philippines. *Social Sciences and Humanities Open*, 18(2), 120-135. <https://doi.org/10.1016/j.ssaho.2023.100595>
- John, O.A., Bright, O. (2012). Poverty and youth unemployment in Nigeria, 197-2011. *International Journal of Business and Social Sciences*, 3(20).
- Kline, P. (2010). Place based policies, heterogeneity, and agglomeration[J]. *American Economic Review*, 100(2), 383-387
- Le-rong, Y & Xiao-yun, L. (2021). The effects of social security expenditure on reducing income inequality and rural poverty in China. *Journal of Integrative Agriculture*, 20(4), 1060-1067
- Olabode, P.O. (2012). Defense Spending and Poverty Reduction in Nigeria. *American Journal of Economics*, 2(6), 122-127. <https://doi.org/10.5923/j.economics.20120206.05>
- Omodero, C. O. (2019). Government sectoral expenditure and poverty alleviation in Nigeria. *Research in World Economy*, 10(1), 1-15.
- Mehmood, R., & Sadiq, S. (2010). The Relationship Between Government Expenditure and Poverty: A Co-integration Analysis. *Romanian Journal of Fiscal Policy*, 1(1), 29-37.
- Middlemiss, L., Gillard, R. (2015). Fuel poverty from the bottom-up: Characterising household energy vulnerability through the lived experience of the fuel poor. *Energy Res Soc Sci*. 6(2), 146-154, <https://doi.org/10.1016/j.erss.2015.02.001>
- Neumark, D., & Simpson, H. (2015). *Place-based Policies[M]//Handbook of Regional and Urban Economics*. 5 pp. 1197-1287). Elsevier.
- Nwosa, P.I. (2014). Government expenditure, Unemployment and Poverty Rates in Nigeria. *JORIND*, 12(1), 77-84.
- Okere, K. I., Dimnwobi, S. K., Ekésiobi, C., Onuoha, F. C. (2023). Turning the tide on energy poverty in Sub-Saharan Africa: Does public debt matter? *Energy*, 282, 10-25. <https://doi.org/10.1016/j.energy.2023.128365>.
- Okoroafor, M.O. & Nwaeze, C. (2013). Poverty and economic growth in Nigeria, 1980-2011. *The MacrotHEME Review*, 2(6), 1-15.
- Okulegu, B. E. (2013). Government spending and poverty reduction in Nigeria's economic growth. *International Journal of Social Sciences and Economics*, 14(5).
- Omari, L.V., Muturi, W. (2016). The effect of government sectoral expenditure on poverty level in Kenya. *Global Journal of Human-Social Science: E Economics*, 16(2), 1-11.
- Oriavwote, V.E., Ukawe, A. (2018). Government Expenditure and Poverty Reduction in Nigeria. *Journal of Economics and Public Finance*, 4(2), 156-163. <https://10.22158/jepf.v4n2p156>.
- Osemwengie, K.P., Sede, I. P. (2013). Foreign Direct Investment and Poverty Reduction in Nigeria: Evidence from Cointegration and Error Correction Modelling Methodology. *Peace and Environment Africa*, (SE): 94-110.
- Owuru, J.E., Farayibi, A.O. (2016). *Examining the fiscal policy-poverty reduction nexus in Nigeria*. Munich Personal RePEc Archive. Retrieved from <https://mpira.ub.uni-muechen.de/741841>

- Perez-Fargallo, A., Marin-Restrepo, L., Centreras-Espinoza, S., Bienvenido-Huertas, D. (2023). Do we need complex and multidimensional indicators to assess energy poverty? The case of the Chilean indicator. *Energy and Buildings*, 295(1), 1-14.
- Sasana, H., Kusuma, P. (2018). Government expenditure and poverty in Indonesia. *International Conference on Economics, Business and Economic Education 2018*, KnE Social Sciences, Pages 142-153. <https://doi.org/10.18502/kss.v3i10.3125>
- Sasmal, R., Sasmal, J. (2016) Public expenditure, economic growth and poverty alleviation. *International Journal of Social Economics*, 43(6), 604-618. <https://doi.org/10.1108/IJSE-08-2014-0161>
- Thakur, R., Faizan, M. A. (2024). Magnitude of health expenditure induced removable poverty in India: Some reflections of Ayushman Bharat. *Heliyon*, 10(1), 34-50. <https://doi.org/10.1016/j.heliyon.2023.e23464>
- Yoon, Y. (2024). Poverty in the midst of plenty: Identifying energy poverty, hardship and vulnerable households in Russia. *Energy Research and Social Science*, 108(2), 108-120. <https://doi.org/10.1016/j.erss.2023.103362>.
- Yu, L., Li, X. (2021). The effects of social security expenditure on reducing income inequality and rural poverty in China. *Journal of Integrative Agriculture*, 69(2), 20-35. [https://doi.org/10.1016/S2095-3119\(20\)63404-9](https://doi.org/10.1016/S2095-3119(20)63404-9)
- Xu, K. (2024). Digital finance, social security expenditure and rural-urban household income poverty. Evidence based on an area and household level analysis. *Finance Research Letters*, 60(1), 10-25. <https://doi.org/10.1016/j.frl.2023.104845>
- Zhu, J., Liu, S., Li, Y. (2021). Removing the Hats of poverty: effects of ending the national poverty county program on fiscal expenditures. *China Economic Review*, 69(1), 20-38. <https://doi.org/10.1016/j.chieco.2021.101673>