RETHINKING THE EFFECTIVENESS OF FISCAL ALLOCATION STRATEGY: A FOCUS ON ECONOMIC DEVELOPMENT IN NIGERIA

Johnbosco Chukwuma Ozigbu

Ph.D Candidate, Rivers State University, Port Harcourt, Nigeria

ABSTRACT: *This paper developed and estimated two autoregressive distributed lag (ARDL) models to explore the empirical relationship between fiscal policy allocation strategies and economic development in Nigeria. Specifically, the impacts of public expenditures on social and community services, economic services and administration on poverty headcount and income inequality were examined between 1990 and 2017. The unit root test results show that the variables are mixed integrated. The ARDL bounds test results revealed that long run relationship exists among the variables in each of the models. The ARDL estimates reveal that public capital expenditure on economic services in addition to expenditure on social and economic services have significant positive impact on poverty headcount in the short run. The result further indicates that expenditure on administration negatively influenced the poverty level. More so, expenditure on economic services and income inequality are relatively related in the short run while public expenditure on social and community services play significant in reducing income inequality in both short and long run. Therefore, it is recommended that fiscal policy allocation should made adequate provision for investments in social and economic services in order to create better opportunities for everyone in a view to reducing the income divide within the Nigerian economy.*

KEYWORDS: Fiscal policy, public investments, poverty, income inequality, ARDL and Nigeria

INTRODUCTION

There is growing recognition in macroeconomics literature that fiscal allocation strategy remains an outstanding source of economic stabilization and development in many societies, especially developing economies. This insight gleaned from macroeconomic perspective suggests that prudent fiscal policy measures involving low budget deficits and low levels of public debt are helpful for economic growth, which in turn foster poverty reduction and improve social outcomes (Chen & Ravallion, 1997; Rodrik, 2000; Dollar & Kraay, 2001). Traditionally, economists are of the view that, in the short run, fiscal policy is effective in addressing distortions in output and employment. Therefore, countercyclical fiscal policy is considered helpful for boosting aggregate demand and reviving a stagnant economy. From the Keynesian perspective, it is believed that the expenditure component of fiscal policy is credible for stimulating the level of economic prosperity and overcoming short-term cyclical fluctuations in total expenditure (Singh & Sahni, 1984 as cited in Ukwueze, 2015). Accordingly, Babalola (2015) argued that fiscal policy is a useful instrument for achieving a variety of economic transformation such as economic development and growth, price stability, full employment, external equilibrium as well as income redistribution. He further described fiscal policy as a "shock absorber" in specific areas of development.

In accordance with the Keynesian economics, the role of fiscal policy in the development process has broadened over time, and the expenditure component has moved up in the policy agenda. Lucas (1988); Barro (1990) and Bloom, Canning & Sevilla (2001) are of the view that increased spending on education, healthcare, infrastructure, and research and development can boost long-term growth. More so, there is now a renewed interest in the economics literature over fiscal policy in relation to economic growth, poverty reduction and income inequality (Woo, 2011; Muinelo-Gallo & RocaSagalés, 2014).The economic development objective, defined not only as a continuous and sustained growth in total output as well as in output per head, but also as the structural transformation from an underdeveloped agrarian economy to fully industrialized one, has also remained at the core of fiscal policy operations. Despite of the growing supports for fiscal expansion, contrary views have continued to emerge which question the rationale for growth of public expenditure. On one hand, it is argued that government intervention through fiscal expansion generates intended and desired effects on the overall economy. On the other hand, growth in government expenditure often powered by increase in taxation is adjudged by Barro (1990); and King & Rebelo (1990) as a major of source of macroeconomic distortions and sub-optimal economic outcomes.

Since the attainment of political independence in 1960, successive governments in Nigeria have leveraged on fiscal policy to foster the pace of economic development. This is because increase in fiscal space is believed to stimulate the demand side, promote job creation and income redistribution and increase opportunities for inclusive growth. Although the pattern and dimensions of fiscal policy measures vary over time, both national and sub-national governments tend to reignite interest in fiscal expansion as a pathway to sustainable development. For instance, in the past decade (2008-2017), the trends of public investments in the key sectors of the Nigerian economy based on the Central Bank of Nigeria (CBN, 2017) report are showed in Figure 1.
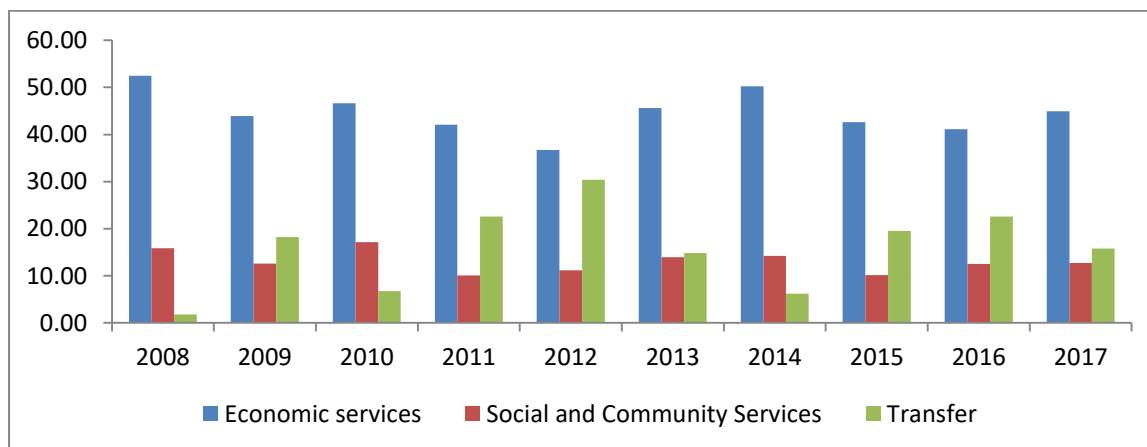

Figure 1: Sectoral allocation of public capital expenditure (% of total expenditure)

Figure 1 reveals that investments in economic services such as agriculture, construction; communication and transportation surpassed the other forms of investments in each of the period. This could be linked to the relevance that has been accorded to economic services in the process of economic stabilization and development. On the average, capital expenditure in economic services more than doubled investment in social and community services (investment in education and healthcare) as the former accounted for 44.63 percent of the total capital expenditure while the latter accounted for only 13.04 percent of the gross capital expenditure over the decade 2008-2017. This suggests that fiscal policy operation in Nigeria in past decade has prioritized infrastructural development in agriculture, construction, transport and communication at the expense of human capital development.

Notably, the Millennium Development Goals (MDGs) and now the Sustainable Development Goals (SDGs) recognized the increasing role of fiscal policy in enhancing the development efforts (United Nations, 2015). Although, the SDGs provide for large and sustained public investment to sustain the height attained in the MDGs in terms of improving human development indicators, especially in the areas of access to basic healthcare and primary education (Grown, Addison, & Tarp, 2016), the level of success achieved in Nigeria compared to the incremental level of public investment has remained a source of concern to policy makers and other stakeholders in the economy. The question, therefore, is how effective has the fiscal allocation strategy been in driving the process of economic development? What public investment measure should Nigeria adopt in realizing the objectives of poverty reduction and more equitable income distribution? It is against this backdrop this paper examines the role of fiscal allocation strategy in the economic development process. Following the introduction above, the rest of this paper is structured into review of related literature, research method, results and discussion as well as conclusion and recommendations.

REVIEW OF RELATED LITERATURE

Theoretical Literature

The theoretical underpinnings of the growth of public expenditure have evolved overtime. Keynes (1936) theory of public investment assumes that changes in public expenditure are necessary for short-term stability and growth. Thus, public investment is believed to contribute positively to sectoral growth such as agricultural, manufacturing and services output. Further contribution to the theoretical debate of government expenditure growth was offered by Peacock & Wiseman (1961) as they observed that the channel through which government expenditure evolve overtime. The Wiseman-Peacock hypothesis which builds on the political theory of public determination rather than the organic state as maintained by Wagner (1890) assumes that government expenditure evolves as an impulse to social unrest such as wars.

The Wiseman-Peacock hypothesis further segmented the effects of growth in public expenditure into displacement, inspection and concentration effects. The displacement effect is concerned with fluctuations in public expenditure between times of peace and social displacement while inspection effects involves efforts geared towards achieving fiscal balance. The concentration effect encompasses the stabilization of public revenue and expenditure to new level to bolster economic prosperity. The Wiseman-Peacock hypothesis is believed to hold sway when expansion in public expenditure compels government to increase revenue by raising taxes, borrowing or through seigniorage. This is a pointer that higher spending in the current period translates to higher tax in the future.

This Wiseman-Peacock hypothesis is in conformity with assertions of Baro (1979) that deficit spending today implies increased tax liabilities in future in the context of the Ricardian equivalence proposition. More so, Musgrave (1959) theory of public expenditure growth is based on the assumption that increase in government expenditure is as a results of the expansion of the economy overtime. According to the theory, rising levels of per capita income causes public expenditure on public services to increase following the increasing demand for public goods. Regardless of its contributions to economic literature, the Musgrave theory of public expenditure growth is criticized for ignoring the existence of several stages of development for an economy, especially as evidenced in developing countries.

Evidence from Previous Studies

Over the years, different empirical investigations have been carried out to explore the economic development implications of fiscal policy across the globe. Below is a brief review of some of the studies. Fan & Zhang (2008) employed district-level data for 1992, 1995, and 1999 to estimate the effects of different types of government expenditure on agricultural growth and rural poverty in Uganda. Findings from the empirical analysis indicate that government spending on agricultural research and extension improved agricultural production substantially and by so doing generates large impact on poverty reduction. Government spending on rural roads also had a substantial marginal impact on rural poverty reduction. The impact of low-grade roads such as feeder roads is larger compared to that of high-grade roads. Additionally, education's effects are second to agricultural research and extension, and roads in terms of reducing the level of rural poverty. However, government healthcare expenditures did not largely reduce the pace of rural poverty.

Okulegu (2013) investigated the link between government spending and poverty reduction in Nigeria's economy. The study adopted time series econometrics analysis and descriptive statistics focusing on multiple regression model based on Ordinary Least Square (OLS) method. The time frame spanned from 1980 to 2009 and the data required was sourced from the Central Bank of Nigeria Statistical Bulletin. The regression result shows that public spending has significant impact on Poverty reduction in Nigeria. The result revealed that 1 percent increase in Agricultural Credit

Guarantee Scheme Fund (AGCSF), on the average, leads to decrease by 0.06 percent in Poverty Level. Consequent upon the findings, the study recommended that government funding on agriculture should prioritize farm mechanization in order to create employment and boost food production, thereby reducing poverty. The empirical study by Amakom (2013) which analyzed the public spending efforts in reducing inequality and poverty at all levels using the Benefit Incidence Analysis (BIA) in Nigeria indicate that income redistribution may be achieved through subsidized government services, rather than through direct income or consumption transfers.

Dahmardeh & Tabar (2013) explored the relationship between government spending and poverty rate in Sistan and Baluchestan Province of Iran by examining how budget expenditure helps in poverty reduction between 1978 and 2008. Additionally, the study investigated income distribution of 420 household in Sistan and Baluchestan region in 2010 and estimated government expenditure impacts on poverty reduction using Autoregressive Distributed Lag (ARDL) model. From the results, constructive expenditure was found to have positive effect on poverty reduction.

Ospina (2010) utilized panel dataset from 1980 to 2000 to analyze the determinants of income inequality in Latin American countries with special attention paid to education, health, and social security expenditures. The study adopted 2SLS and GMM methods in order to control for the correlation of some of the explanatory variables with the disturbance term. The results revealed that social spending variables are endogenous with income inequality index. Controlling for endogeneity ensures that education and health expenditures have a negative effect on income inequality, while social security expenditures have no effect on income inequality. Similarly, Afonso, Schuknecht, & Tanzi (2010) examined the impact of public spending, education, and institutions on income distribution in advanced economies. It was obvious from their results that that public policies significantly affect income distribution through social spending, and indirectly through high quality education/human capital.

Anderson (2018) offered a meta-regression analysis focusing on the relationship between government spending and income poverty in low and middle-income countries. From the results, there was no clear evidence that higher government spending translates into significant reduction in income poverty in low and middle-income countries. This is in accordance with the view that fiscal policy plays a much more limited redistributive role in developing countries, in comparison with OECD countries. The results further revealed that the relationship between government spending and poverty is, on the average, less negative for countries in the sub-Saharan Africa, and more negative for countries in Eastern Europe and Central Asia, compared to other regions.

MATERIALS AND METHODS

Research Design

This paper adopts ex post research design. Following the adoption of ex post facto research design, this paper utilized annual time series data.

3.3 Model Specification

The model set-up for this paper is patterned after the work of Okulegu (2013), but with an improving following the measures of public expenditure via public capital expenditure on economic services (EES), social and community services (ESC) as well as administration (EAD). This paper adopts an expanded measure of economic development indices with a focus on poverty incidence (POI) and inequality index (IEQ). The autoregressive distributed lag (ARDL) models set-up depicting the long and short run relationships among the variables are of the form:

$$\Delta POI_t = k_1 + \sum_{i=1}^{q} \alpha_1 \Delta POI_{t-i} + \sum_{i=1}^{q} \alpha_2 \Delta EES_{t-i} + \sum_{i=1}^{q} \alpha_3 \Delta ESC_{t-i} + \sum_{i=1}^{q} \alpha 4 EAD_{nt-i} + \theta_1 POI_{t-1} + \theta_2 EES_{t-1} +$$

$$\theta_3 ESC_{t-1} + \theta_4 EAD_{t-1} + e_{1t} \tag{1}$$

$$\Delta IEQ_t = k_1 + \sum_{i=1}^{q} \alpha_1 \Delta IEQ_{t-i} + \sum_{i=1}^{q} \alpha_2 \Delta EES_{t-i} + \sum_{i=1}^{q} \alpha_3 \Delta ESC_{t-i} + \sum_{i=1}^{q} \alpha 4 EAD_{nt-i} + \theta_1 IEQ_{t-1} + \theta_2 EES_{t-1} +$$

$$\theta_3 ESC_{t-1} + \theta_4 EAD_{t-1} + e_{2t} \tag{2}$$

Where: POI and IQE denote Poverty headcount and income inequality. EES = public capital expenditure on economic services, ESC = public capital expenditure on social and community services and EAD = public capital expenditure on administration. k_1- k_2 represent the vector of intercepts, α_1 - α_4 = short-run coefficient of the predictor variables, θ_1- θ_4 = the long-run multipliers, q = optimal lag order selected based on Schwarz information criterion (SIC) and e_{1t} and e_{2t} = random disturbance terms.

3.3 Variable Description/Source of Data

The descriptions of the variables as well as their measures and data sources are provided in Table 1.

Table 1: Description of variables

Variable	Description	Source
Poverty incidence (POI)	This defines the ratio of population living below the poverty threshold of US$1.9 per day. It is specifically captured by the poverty headcount.	National Bureau of Statistics (NBS)
Income inequality	This refers to extreme concentration of wealth or income in the hands of a small proportion of a population. It fundamentally measures the gap between the rich and the poor.	World Bank
Public capital expenditure on economic services	This encompasses public investment on agriculture, construction, transport and communication as well as other economic services. It is measured as a percentage of total public capital expenditure over the study period.	CBN Statistical Bulletin
Public capital expenditure on social and community services.	This mainly involves public investment in education and healthcare delivery. It is measured as a percentage of total public capital spending over the study period.	CBN Statistical Bulletin
Public capital expenditure on administration	This connotes public investments in defense, internal security, national assembly and general administration. It is captured as a percentage of total government capital expenditure.	CBN Statistical Bulletin

Source: Author's compilation, 2019

Data Analysis Techniques
This paper applies the Autoregressive Distributed Lag (ARDL) model developed by Pesaran & Shin (1999). The choice of this estimation method lies on its growing recognising and widespread popularity in both theoretical and empirical econometrics. The empirical validity of the ARDL was initially evaluated by Pesaran, Shin & Smith (2001). As a dynamic regression model, the ARDL integrates the short run and long run behaviours of the explanatory variables in a single equation set-up. Basically, the ARDL allows for the introduction of lags of the regressand as well as of other predictor variables, as explanatory variables. Additionally, the ARDL is based on the assumption that the series are I(0), I(1) or a combination of I(0) and I(1). Thus, no I(2) variable is allowed into the ARDL model. Descriptive statistics and diagnostics tests were conducted in the course of this paper. The diagnostics tests include unit root test, bounds test approach to cointegration proposed by Pesaran and Shin (1999), Breusch-Godfrey test for serial correlation credited to Breusch (1978) and Godfrey (1978) as heteroscedasticity test amongst others.

RESULTS AND DISCUSSION

Descriptive Statistics
The descriptive statistics for each of the series are reported in Table 2.
Table 2: Summary of descriptive statistics

	POI	IQE	EES	ESC	EAD
Mean	58.39595	44.37405	40.88730	11.76135	19.98405
Median	60.00000	43.90000	43.89000	11.68000	22.25000
Maximum	88.00000	56.00000	67.00000	23.06000	39.22000
Minimum	32.00000	36.70000	5.880000	2.560000	3.110000
Std. Dev.	14.22755	5.188835	15.90918	5.415465	9.653534
Jarque-Bera	1.493403	2.659460	1.881029	1.505841	1.902893
Probability	0.473927	0.264549	0.390427	0.470989	0.386182
Observations	37	37	37	37	37

Source: Author's computation based on data from CBN Statistical Bulletin, NBS and WDI
Table 2 shows that poverty headcount averaged 58.39 percent while the Gini index, public capital expenditure on economic services have mean values of 44.37 percent and 40.89 percent respectively. Additionally, public expenditure on administration averaged 19.98 percent during the study period. It was evident from the result that public expenditure on surpassed other components of public investment, indicating that the federal government has given greater attention to economic services in its fiscal allocation strategy. The standard deviation for each of the variables show that all the variables clustered around their respective mean values. More so, the Jarque Bera statistic and its corresponding probability value indicate that all the variables are normally distributed at 5 percent level of significance.

Testing for Unit Root

The unit root test was conducted using ADF method at 5 percent level of significance. The results are summarized in Table 3.

Table 3: ADF unit root test results

Levels test results			
Series in the model	t-statistic	Probability value	Stationarity status
POI	-1.751	0.707	Nonstationary
IQE	-2.536	0.310	Non-stationary
EES	-2.969	0.154	Non-stationary
ESC	-4.899	0.002	Stationary
EAD	-3.764	0.031	Stationary
First difference test results			
Series in the model	t-statistic	Probability value	Stationarity status
POI	-6.2159	0.000	Stationary
IQE	-3.605	0.044	Stationary
EES	-4.524	0.005	Stationary

Source: Author's computation based on data from CBN Statistical Bulletin, NBS and WDI

The results in the upper part of Table 3 revealed that public investments in social and community services, and investment in administration are stationary at levels while the order other variables are nonstationary. The first difference test result showed that poverty headcount, Gini index and public investments in economic services are first difference stationary. It therefore, follows from the results that the variables are mixed integrated and the order of integration for the series are I(0) and I(1). Thus, the ARDL bounds test was applied to determine if the variables are cointegrated.

Testing for Cointegration

The existence of cointegration among the variables in each of the models was checked using ARDL bounds test method. The results are reported in Tables 4 and 5.

Table 5: Cointegration test result for model 1

Series: POI EES ESC EAD		
Null Hypothesis: No long-run relationships exist		
Test Statistic	Value	k
F-statistic	6.679	3
Critical Value Bounds		
Significance	I0 Bound	I1 Bound
10 percent	2.72	3.77
5 percent	3.23	4.35
1 percent	4.29	5.61

Source: Author's computation based on data from CBN Statistical Bulletin, NBS and WDI

Table 4: Cointegration test result for model 2

Series: IQE EES ESC EAD		
Null Hypothesis: No long-run relationships exist		
Test Statistic	Value	k
F-statistic	7.332	3
Critical Value Bounds		
Significance	I0 Bound	I1 Bound
10 percent	2.72	3.77
5 percent	3.23	4.35
1 percent	4.29	5.61

Source: Author's computation based on data from CBN Statistical Bulletin, NBS and WDI

The results in Tables 4 and 5 are very welcoming following the evidence of cointegration in each of the models. From table 3, the calculated F-statistic (6.679) is greater than the 5 percent upper bound critical value (4.35). Similarly, Table 4 shows that the calculated F-statistic (7.332) for the second model exceeds the corresponding critical value (4.35) at 5 percent level. On the basis of the findings, the null hypothesis that no long run relationship exist is rejected at 5 percent level. Thus, the relationships between the dependent and explanatory variables in each of the models are expressed as an ARDL framework.

Model Estimation

Two ARDL models were developed and estimated to capture the short run and long run relationship between the underlying explanatory variables and indices of economic development. The results are summarized in Table 6 and 7.

Table 6: ARDL estimates for model 1

Dependent Variable: POI				
Short run coefficients				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(POI(-1))	-0.649906	0.265425	-2.448553	0.0343
D(POI(-2))	-0.630453	0.225094	-2.800839	0.0188
D(POI(-3))	-0.312756	0.268230	-1.166003	0.2707
D(POI(-4))	-0.124734	0.195069	-0.639433	0.5369
D(POI(-5))	-0.635928	0.085224	-7.461806	0.0000
D(POI(-6))	0.077242	0.192290	0.401696	0.6964
D(EES)	0.343210	0.058089	5.908291	0.0001
D(ESC)	1.470516	0.352943	4.166436	0.0019
D(EAD)	-0.839175	0.174590	-4.806541	0.0007
CointEq(-1)	-0.346928	0.140677	-2.466074	0.0393
Long Run Coefficients				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
EES	7.313613	37.134605	0.196949	0.8478
ESC	31.335919	155.060990	0.202088	0.8439
EAD	-31.618260	167.089935	-0.189229	0.8537
C	110.268602	444.353590	0.248155	0.8090
R-squared	0.965		Prob(F-statistic)	0.0000

Source: Author's computation based on data from CBN Statistical Bulletin, NBS and WDI

The result in Table 6 reveals that first and second lags of poverty headcount have significant negative relationship with the current level of poverty. Similarly, the fifth lag of poverty headcount impacted negatively on the current poverty level. The result further indicates that public capital expenditure on economic services as well social and economic services exert significant positive impact on poverty headcount in the short run. The findings are similar to result of Dahmardeh & Tabar (2013) and indicate that social and community expenditure is more positive than expenditure on economic services. On the contrary, public expenditure on administration has significant negative relationship with poverty headcount. This suggests that public expenditure on general administration, defence and internal security play important role in reducing the level of poverty. More importantly, the error correction estimate (-0.3469) is properly signed and meets the statistical criteria at 5 percent level of significant. It therefore, suggests that any short run deviation in the model is corrected at a speed 34.7 percent to achieve long run equilibrium position. The long run result shows that individually none of the capital expenditure components significant influenced poverty headcount. However, the test for joint significant of the coefficients mirrored by the probability value (0.000) of the F-statistic indicates that the underlying segments of public healthcare expenditure are collectively significant in explaining changes in poverty headcount. This is an indication that the capital expenditure measures jointly have forecasting ability for poverty headcount in the long run. The coefficient of determination is very insightful as it shows that 96.5 percent of the total variations in poverty headcount are explained by variations in the underlying capital expenditure measures. This is evidence that the model is well fitted.

Table 7: ARDL estimates for model 2

Dependent Variable: IQE				
Short run Form				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(IQE(-1))	0.638222	0.199031	3.206640	0.0037
D(EES)	-0.010111	0.040102	-0.252128	0.8030
D(EES(-1))	-0.073175	0.026461	-2.765361	0.0105
D(ESC)	-0.158264	0.048535	-3.260821	0.0032
D(ESC(-1))	0.171860	0.070827	2.426473	0.0228
D(EAD)	0.041941	0.046731	0.897497	0.3780
CointEq(-1)	-0.441608	0.134514	-3.282990	0.0030
Long run Coefficients				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
EES	0.137704	0.044336	3.105901	0.0047
ESC	-1.161017	0.172048	-6.748198	0.0000
EAD	0.094974	0.107194	0.885999	0.3841
C	50.534935	2.376944	21.260461	0.0000
R-squared	0.965		Prob(F-statistic)	0.0000

Source: Author's computation based on data from CBN Statistical Bulletin, NBS and WDI

The result in table 7 shows the first lag of public expenditure on economic services has significant negative relationship with income inequality in the short run. With 1 percent increase in expenditure in economic services, income inequality on the average reduces by 0.073. Both the contemporaneous and first lag of public expenditure in social and community services negatively influenced income inequality in the short run. Additionally, the long run result indicates that expenditure on social and community services has significant negative relationship with income inequality. From the result, income inequality, on the average, reduces by 1.161 following 1 percent increase in expenditure on social and community services in the long run. The error correction coefficient (-0.442) indicates that deviation from the long-term equilibrium position is corrected by 44.2 percent over the year. The coefficient of determination and F-test for model diagnostic reveals that the model is well fitted.

Diagnostics Tests Results

Test results for model 1		
Test type	Chi-square statistic	Probability value
Breusch-Godfrey Serial Correlation LM Test	6.149	0.1462
Breusch-Pagan-Godfrey heteroscedasticity test	14.035	0.523
Test results for model 2		
Breusch-Godfrey Serial Correlation LM Test	0.583	0.747
Breusch-Pagan-Godfrey heteroscedasticity test	10.849	0.286

Source: Author's computation from the estimated ARDL models

With the probability of each of the test statistics greater than 0.05, the models are free from both serial correlation and heteroscedasticity, Thus, the residuals are serially independent as well have constant variance. This authenticates the reliability of the models for long term forecast.

CONCLUSION

Fiscal policy has remained one of the key policy instruments employed by the public sector in emerging market economies to drive the process of economic development. Thus, this study focused attention on the role of fiscal policy allocation strategies in shaping the process of economic development in Nigeria. The ARDL model was applied for analysing the data and the results show that public capital expenditure on economic services as well social and economic services exert significant positive impact on poverty headcount in the short run. However, expenditure on administration reduced the poverty level. This suggests that government expenditure in providing adequate security provides opportunity for reducing the poverty incidence. More so, expenditure on economic services helps in reducing income inequality in the short run while public expenditure on social and community services play significant in reducing income inequality in both short and long run. Based on the findings, it is concluded that investment

in education and healthcare as core indicators of social and community services play a key role in narrowing the income gap. Therefore, fiscal policy allocation should prioritize investments in social and economic services in order to create better opportunities for everyone with a view to dismantling or reducing the income divide within the Nigerian economy in accordance with the sustainable development goals (SDGs).

References

Afonso, A., Schuknecht, L., & Tanzi, V. (2010). Income distribution determinants and public spending efficiency. *The Journal of Economic Inequality*, *8*(3), 367-389.

Amakom, U. (2013). *Public Spending and Poverty Reduction in Nigeria: A Benefit Incidence Analysis in Education and Health*. African Economic Research Consortium.

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*, 60-71.

Babalola, A. I. (2015). Fiscal Policy and Economic Development in Nigeria. *Journal of Economics and Sustainable Development, 6(7),71-80.*

Barro, R. J. (1990). Government spending in a simple model of endogeneous growth. *Journal of political economy*, *98*(5, Part 2), S103-S125.

Bloom, D. E., Canning, D., & Sevilla, J. (2001). *Economic growth and the demographic transition* (No. w8685). National Bureau of Economic Research.

Dahmardeh, N., & Tabar, M. H. (2013). Government Expenditures and its Impact on Poverty Reduction (Empirical From Sistan and Baluchestan Province of Iran). *International Journal of Academic Research in Economics and Management Sciences*, *2*(1), 251.

Fan, S., & Zhang, X. (2008). Public expenditure, growth and poverty reduction in rural Uganda. *African Development Review*, *20*(3), 466-496.

Grown, C., Addison, T., & Tarp, F. (2016). Aid for gender equality and development: Lessons and challenges. *Journal of International Development*, *28*(3), 311-319.

Keynes, J M. (1936). The general Theory of Employment, Interest and Money. Harcourt: Brace and co, New York.

King, R. G., & Rebelo, S. (1990). Public policy and economic growth: developing neoclassical implications. *Journal of Political Economy*, *98*(5, Part 2), S126-S150.

Kraay, A., & Dollar, D. (2001). *Trade, growth, and poverty*. The World Bank.

Lucas Jr, R. E. (1988). On the mechanics of economic development. *Journal of monetary economics*, *22*(1), 3-42.

Musgrave Richard A. (1959). "Theory of public finance".New York : McGraw-Hill.

Okulegu, B. E. (2013). Government spendings and poverty reduction in Nigerian's economic growth. *International Journal of Social Sciences and Humanities Review*, *4*(1).

Ospina, M. (2010). The effect of social spending on income inequality: An analysis for Latin American countries. *Center for Research in Economics and Finance (CIEF), Working Papers, No, 10-03.*

Peacock, A. T., & Wiseman, J. (1961). Front matter, the growth of public expenditure in the United Kingdom. In *The growth of public expenditure in the United Kingdom* (pp. 32-0). Princeton University Press.

Ravallion, M. & Chen, R. (1997). What can new survey data tell us about recent changes in distribution and poverty? *World Bank Economic Review,11, 357–382.*

Rodrik, D. (2000). Institutions for high-quality growth: what they are and how to acquire them. *Studies in comparative international development*, *35*(3), 3-31.

Singh, B., & Sahni, B. S. (1984). Causality between public expenditure and national income. *The Review of economics and Statistics*, 630-644.

Ukwueze, E. R. (2015). Determinants of the size of public expenditure in Nigeria. *SAGE Open*, *5*(4), 2158244015621346.

Wagner, Adoph. 1890. Finanzwissenchaft, Winter, C. F., Leipzig.

Woo, J. (2011). Growth, income distribution, and fiscal policy volatility. *Journal of Development Economics*, *96*(2), 289-313.