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Public Sector Account Allocations and Poverty Reduction in Nigeria

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ABSTRACT

This study examined the relationship between public sector allocations and poverty reduction in Nigeria. The purpose was to examine the relationship between federal, state and local government allocations from the federation account on Nigeria poverty index. Time series data were sourced Central Bank of Nigeria statistical bulletin from 2000-2020. Federal Government share from the federation account, State Government share from the federation account and Local Government share from the federation account were used as independent variables. Ordinary least square methods of cointegration, granger causality test, unit root test and vector error correction model were used to determine the long run relationship between federal allocations and Nigeria poverty reduction. The model found that 76.6 percent changes in poverty index in Nigeria could be traced to federal allocations. Local government allocation and federal government allocations have negative effect on poverty index in Nigeria while state government allocation has positive effect on poverty index. From the findings, the study concludes that federal allocations have significant effect on Nigeria poverty reduction. The study recommends legal framework to back allocation formula and the spending policy at the three tiers of government.

KEYWORDS:

Federation Account, Poverty reduction, Poverty Index, Federal Government, State Government.

Introduction

Nigeria, often hailed as the "giant of Africa," stands at a crucial juncture in its economic and demographic trajectory. Positioned in West Africa and marked by a history of British colonial rule, the country exhibits rapid growth economically and in population. Aspirations for Nigeria to become Africa's global superpower hinge on overcoming developmental hurdles (Abbasov & Aliyev,2018). With the largest economy on the continent, substantial military expenditure, and active involvement in regional and continental affairs, Nigeria holds immense potential. By 2040, projections indicate it will be the fourth most populous country globally, with a population soaring from 184 million to 320 million, and an anticipated Gross Domestic Product (GDP) growth from $525 billion in 2014 to a staggering $4.2 trillion (Okoye et al., 2019).

However, amid these promising statistics, Nigeria grapples with multifaceted challenges. The 2020 Human Capital Index by the World Bank ranked the country at 150 out of 157 nations, highlighting the pressing need for enhanced human capital development. Issues of inequality, both in income distribution and opportunities, pose significant barriers to poverty reduction efforts. The scarcity of job opportunities lies at the heart of elevated poverty levels, regional disparities, and social and political unrest. High inflation rates have further impacted household welfare, potentially pushing an additional 8 million Nigerians into poverty.While economic growth focuses on sustained increases in per capita real income over time, economic development encompasses qualitative and quantitative improvements in political, social, and economic institutions, alongside income distribution. The research advocates for a comprehensive approach addressing the multifaceted aspects of societal progress.

A critical aspect of Nigeria's economic policies revolves around fiscal federalism, a system that allocates resources and responsibilities across different tiers of government. The study underlines the importance of transparent, accountable, and decentralized governance structures for achieving national development objectives. However, it questions the efficacy of macroeconomic tools and their alignment with national development priorities.

The perennial challenge of revenue allocation in Nigeria emerges as a focal point of concern. Despite continuous increases in revenue generation, the expected impact on economic growth remains elusive. Dissatisfaction with the current revenue-sharing formula, particularly the vertical distribution, is palpable. Grievances include perceived enrichment of the federal government at the expense of other tiers, inadequacy in addressing regional development challenges, and allegations of corruption at the federal level.

The study aims to empirically scrutinize the effects of fiscal federalism on Nigeria's economic development. It seeks to explore how past revenue allocations to the federal, state, and local governments have influenced economic development indicators such as the Human Development Index, per capita income, and poverty index. By doing so, the research endeavors to provide valuable insights into the effectiveness of existing fiscal policies and their alignment with the overarching goal of sustainable economic development.

Overall, Nigeria's trajectory toward becoming a global economic powerhouse is marked by both promise and challenges. While economic growth and development remain at the forefront of policy agendas, the study advocates for a holistic and inclusive approach. Through comprehensive fiscal federalism, transparent governance, and equitable resource allocation, Nigeria has the potential to overcome its challenges and emerge as a beacon of sustainable economic development on the African continent.

Literature Review

Theoretical Framework: Unraveling the Dynamics of Statutory Allocation and Poverty Reduction

To comprehensively grasp the impact of Statutory Allocation on poverty reduction, we delve into the intricate realms of public goods theory and fiscal federalism. These frameworks, as elucidated by Agu (2010), offer profound insights into the discourse surrounding the internally generated revenue of sub-national governments.

Kremer's O-Ring Theory of Poverty Reduction: Within the expansive landscape of economic theory, Kremer's O-Ring Theory emerges as a cornerstone for understanding poverty reduction dynamics. This model, rooted in complementarity within the production chain, underscores the importance of skill-level matching in the workforce. The theory posits that the value of output is contingent on the meticulous execution of various tasks, necessitating a high degree of complementarity in technology (Okoye et al., 2019).

The O-Ring Theory aligns with the observed income disparities between countries, the prevalence of small firms in economically challenged nations, and the positive correlation between wages in different occupations within enterprises. It introduces the concept of imperfect observability of skill, leading to spillovers, strategic complementarity, and multiple equilibria in education. In the context of international poverty reduction, the theory sheds light on the dynamics of skill migration and the imperative of fostering an environment conducive to high-skilled individuals (Asogwa, 2015).

Buchan Fiscal Residuum Theory: Buchan's Fiscal Residuum Theory offers a nuanced perspective on fiscal federalism, emphasizing the individual's overall fiscal pressures. By evaluating the balance between contributions made and the value of public services received, the theory introduces the notion of fiscal residua. Buchan contends that for horizontal equity, fiscal residua should be equal among individuals or states(Abbasov & Aliyev,2018).

The theory's implications for poverty reduction are evident in its examination of relative poverty or richness within a state or locality. It posits that unequal fiscal residua impose heavier tax burdens on citizens of relatively poor states, violating principles of equity and efficient resource allocation. While constitutional barriers may impede direct fiscal adjustments, Buchan advocates for "Unconditional Equalization Grants" as a pragmatic solution to foster equal development among federating states.

Intergovernmental Revenue Allocation Theory and Practice: In the realm of developing nations' governance, the interplay between central and local government control over expenditures and revenues is a critical focus. Traditionally centralized structures are being challenged by decentralization efforts aimed at improving service delivery, enhancing economic governance, and fostering government accountability.

Recognizing the potential drawbacks of over-centralization, countries are increasingly embracing fiscal decentralization reforms(Okoye et al., 2019). These reforms involve a fundamental review of expenditure and revenue allocation responsibilities by different levels of government. The objective is to create a fiscal structure that empowers local governments, enabling them to fulfill stabilization, distribution, and allocation functions more effectively.

For developing countries, where local revenue alternatives are often scarce, the analysis of intergovernmental fiscal dynamics typically begins with a focus on revenue allocation and mobilization alternatives. The aim is to identify a fundamental revenue structure that provides

sufficient financial resources for effective local governance and service delivery, thereby contributing to poverty reduction.

In essence, these theoretical frameworks collectively illuminate the intricate dynamics shaping the relationship between statutory allocation, fiscal federalism, and poverty reduction, offering a nuanced lens through which to interpret the multifaceted challenges and opportunities in the Nigerian context(Abbasov & Aliyev,2018).

Conceptual Review

Poverty is about not having enough money to meet basic needs including food, clothing and shelter. However, poverty is more, much more than just not having enough money.The World Bank Organization describes poverty in this way:Poverty is hunger. Poverty is lack of shelter. Poverty is being sick and not being able to see a doctor. Poverty is not having access to school and not knowing how to read. Poverty is not having a job, is fear for the future, living one day at a time.Poverty has many faces, changing from place to place and across time, and has been described in many ways. Most often, poverty is a situation people want to escape. So poverty is a call to action for the poor and the wealthy alike a call to change the world so that many more may have enough to eat, adequate shelter, access to education and health, protection from violence, and a voice in what happens in their communities.

The National Bureau of Statistics (NBS) recently released the "2019 Poverty and Inequality in Nigeria" report, which highlights that 40 percent of the total population, or almost 83 million people, live below the country's poverty line of 137,430 naira ($381.75) per year. The NBS report is based on data from the latest round of the Nigerian Living Standards Survey, conducted in 2018-2019 with support from the World Bank's Poverty Global Practice and technical assistance from the LSMS program.

The Nigerian Living Standards Survey is the official survey that is the basis for measuring poverty and living standards in the country and is used to estimate a wide range of socio-economic indicators including benchmarking of the sustainable development goals. Between September of 2018 and October of 2019, the National Bureau of Statistics conducted the latest round of the NLSS, a decade after the previous one(Okoye et al., 2019).

Empirical Review

Ologunde, Kapingura and Sibanda (2020) investigated the relationship between HDI and crude oil revenue (COR) in selected oil-producing African countries from 1992–2017 using the Pooled Mean Group (PMG) estimators on panel autoregressive distributed lag model (ARDL). Sustainable development was measured with the Human Development Index (HDI). The a priori expectation is that crude oil revenue will tank so much that many countries will record negative positions and might not be to meet fiscal demands in the long run if the situation is protracted. Empirical results revealed that there was no long-term relationship between COR and HDI.

Ojukwu and Odoemelam (2020) examined the nexus between petroleum profit tax revenue and standard of living using Gross Domestic Product per Capita (GDPpC) which is a component of HDI in Nigeria. Time series data from 1990-2019 were sourced through secondary sources from Central Bank of Nigeria (CBN) Statistical Bulletins, Federal Inland Revenue Service (FIRS) quarterly publications, World Bank Development Indicators and Trading Economics. The data were analyzed and tested using Augmented Dickey Fuller Unit Root Test, Co-intergration test, Vector Error Correction Model and Ordinary Least Square(OLS). The study found that PPT revenue has a long run positive and significant effect on Gross Domestic Product per Capita (GDPpC). It further found that

PPT revenue has only a short run positive and significant effect on Gross National Income per Capita (GNIpC). Therefore, the study concludes that PPT revenue contributes positively and significantly to poverty reduction.

Okoh et al (2021) investigated the impact of direct taxes on income redistribution in the context of Nigeria, using company income tax, personal income tax, petroleum profit tax and education tax as direct tax variables. The study covered the period 1990 to 2019 using annualized data set from Federal Inland Revenue Service (FIRS) and Central Bank of Nigeria Statistical Bulletin. The study employed the Fully Modified Least Squares (FMOLS) to analyze the data. Empirical results of revealed that, company income tax and education tax had insignificant negative effects on income redistribution, while personal income tax and petroleum profit tax had significant positive effects on income redistribution, thus reducing income inequality in the context of Nigeria.

Ideh (2019) assessed the relationship between components of PPT and HDI in Nigeria. For this purpose, the ex-post facto research design was adopted and secondary time series data were sourced from relevant records of appropriate authorities for the study period (2003 to 2017). The data were analysed using the Autoregressive Distributed Lag technique 30 alongside other necessary statistical tools. The results obtained from the study have far reaching policy implications. Specifically, we observed amongst others that even though petroleum profit tax stood as a major component of tax revenue, its relationship with HDI were negative.

Felix and Ibeanu (2020) examined the influence of CIT on HDI in Nigeria. Annual time series data, from CBN and FIRS from 1997 to 2018 was used. The study used regression analysis. The result showed that company income tax have significant effect on HDI. The implication of the finding is that the higher the amount of tax revenue generated, the higher the level of poverty reduction experienced by the economy. This implies that taxes that have positive effect on poverty reduction are direct taxes, thus direct taxes exert more significant influence on poverty reduction of Nigeria than indirect taxes. This anomaly was attributed to dysfunctional ties in tax system, loopholes in tax law and inefficient tax administration. The lower the amount of revenue generated from tax the lower the quality of development to be witnessed.

Okoh, Edo, Akhigbodemhe and Edeoghon (2021) investigated the impact of direct taxes on income redistribution in the context of Nigeria, using company income tax, personal income tax, petroleum profit tax and education tax as direct tax variables. Methodology/Technique - The study covered the period 1990 to 2019 using annualized data set from Federal Inland Revenue Service (FIRS) and Central Bank of Nigeria Statistical Bulletin. The study employed the Fully Modified Least Squares (FMOLS) to analyze the data. Empirical results of revealed that, company income tax had insignificant negative effects on income redistribution.

Okoh et al (2021) investigated the impact of direct taxes on income redistribution in the context of Nigeria, using personal income tax. The study covered the period 1990 to 2019 using annualized data set from Federal Inland Revenue Service (FIRS) and Central Bank of Nigeria Statistical Bulletin. The study employed the Fully Modified Least Squares (FMOLS) to analyze the data. Empirical results of revealed that, personal income tax had significant positive effects on income redistribution, thus reducing income inequality in the context of 33 Nigeria.

Metu, Maduka, Eze and Adujua (2019) investigated how fiscal policy can be designed to promote inclusive growth as well as identify the most effective fiscal policy instrument that can lead to inclusive growth in Nigeria, using annual data from 1980 to 2017. The Structural Vector Autoregressive (SVAR) model was adopted for the analysis. The result shows that government capital

expenditure is a more effective fiscal policy instrument for achieving inclusive growth in Nigeria. The dominance of the shocks to tax revenue has a higher impact on unemployment than on poverty and per capita GDP growth rate. Based on these findings, it is recommended that the Nigerian government should strengthen the mobilization of tax revenue and channel it towards government capital expenditure in order to promote inclusive growth in Nigeria. This study empirically estimates a unified measure of inclusive growth for Pakistan and determines the impact of macroeconomic stability, financial deepening and structural changes on inclusive growth over the period from 1987 to 2016. Inclusive growth is measured by income growth and distributions which are calibrated by combining GDP per capita growth and income inequality GINI coefficient. We apply the microeconomic concept of a social mobility function at the Macroeconomic level to measure inclusive growth that is closer to the absolute definition of propoor growth. The study applied a two-step 37 methodology to capture the empirical estimations, in the first step the study estimated inclusive growth by social function through combining the income distribution and of GDP per capita and in the second step incorporated it in time series analysis by applying standard unit root tests and autoregressive distributed lag model (ARDL) approach of conintegration. The results are supported with standard diagnostic tests. Our results indicate that macroeconomic stability and structural changes are foundations for achieving inclusive growth. Other indicators which are included in the analysis have also some important implications, the role of external sector could also be positive with terms of trade fostering greater inclusiveness, while financial deepening has also prominent implications on inclusive growth. Financial development can lead to encourage more inclusiveness in the country.

Lustig (2018) examined the impact of fiscal policy on inequality and poverty in twenty-nine low-and middle-income countries for circa the year 2010. Success in fiscal redistribution is driven primarily by redistributive efforts (share of social spending to GDP in each country) and the extent to which transfers are targeted to the poor and direct taxes are targeted to the rich. While fiscal policy always reduces inequality, this is not the case with poverty. While spending on preschool and primary school is pro-poor (the per capita transfer declines with income) in almost all countries, pro-poor secondary school spending is less prevalent, and tertiary education spending tends to be progressive only in relative terms (equalizing, but not pro-poor). Health spending is always equalizing except for in Jordan.

Arshad, Hasnain and Zakia (2020) aim at analyzing the link between fiscal policy and income distribution. The model adapted was the simple Computable General Equilibrium model (CGEM) which was developed in accordance with the static model structure constructed by Lofgren et al. (2001). CGE model takes into account market interaction, that is, the effects of pricing outcomes of one market in other markets, and its effects, in turn, creating ripples throughout the whole economy, perhaps even to the extent of affecting the price-quantity equilibrium in the original market. Due to some miscalculations in Social Accounting Matrix (SAM) 2007, this study uses SAM 2002 developed by (Dorosh et al, 2006). To explore the impact of fiscal policy measures on income inequality, simulation exercises are performed while the budget deficit is not allowed to increase in the set of simulations. Inequality effects are investigated using Theil T, Theil L, Theil S and Hoover's 49 Index. Results have shown that a policy mix of sales tax, income tax and government expenditure help to reduce income inequality while at the same the lessen economy's financial dependency.

Figure 1: Operational framework
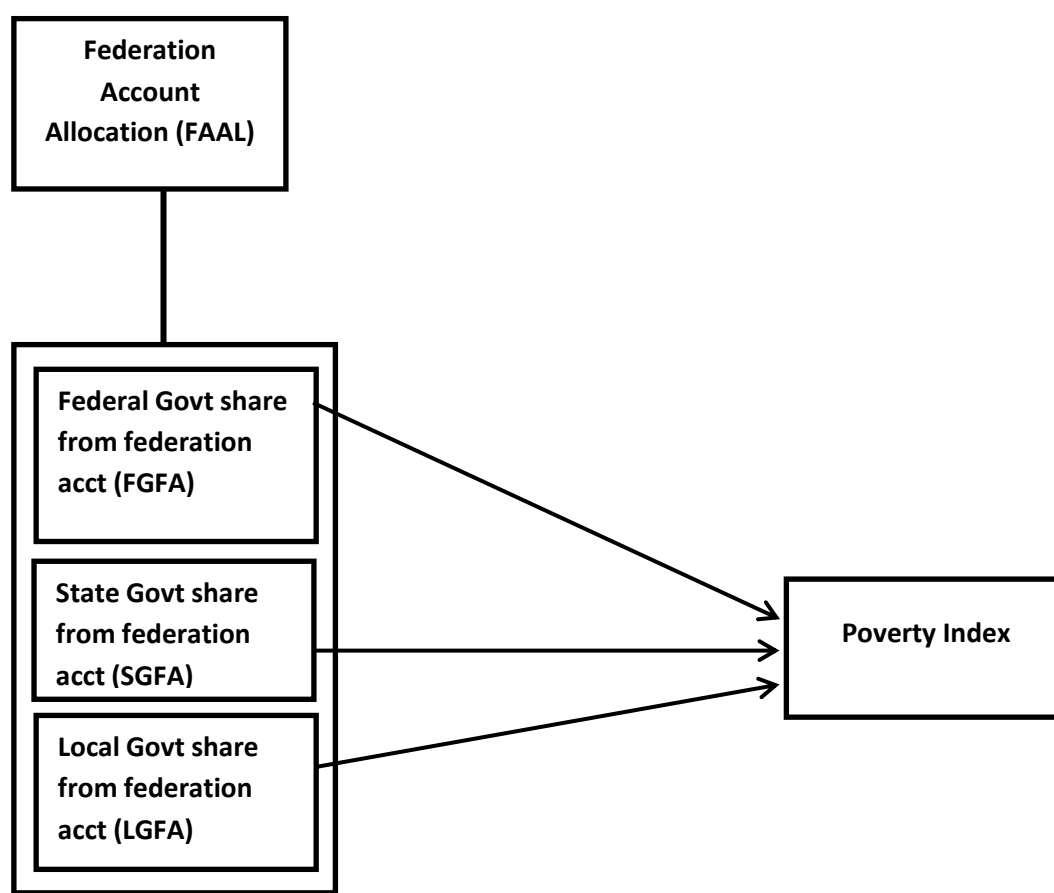
Methodology

This study adopts the ex-post facto research design approach in analyzing data.In order to actualize the objectives outlined in chapter one of this study, secondary data will be employed. This study will employ secondary data sourced mainly from the Central Bank of Nigeria (CBN) statistical bulletin and World Bank data base. Determining the long run relationship between variables is important as it enables the understanding of the effect that one have against the other. However, each endogenous variable is explained by its lagged, or past, values and the lagged values of all other endogenous variables in the model; which eliminates the use of any exogenous variables in the model (Gujarati, 2004). Since the methodology allows comprehensive information about the dynamics of the interactions, long-term trends are easily explained. This enables shocks within the regressions and the system to be easily seen.

The study adopts the Ordinary Least Square method of Vector Error Correction Mechanism (VECM) and granger causality. The Vector Error Correction Mechanism (VECM) however, minimizes the shortcomings of the Vector Auto Regression Model (VAR) procedure while retaining its attributes as it incorporates the co-integrating variables by forcing the model to converge in the long run. It equally allows for deviations, which are corrected through a series of adjustments that are dictated by the long run relationship.

However, the absence of any co-integrating vectors amongst them suggests the need to use Vector Autoregressive model. Irrespective of the number of variables used in the performance of the VEC,

the first vector is the most important co-integrating vector because it is the one associated with the highest Eigen value. The number of lagged difference terms to include is often determined empirically, the idea being to include enough terms so that the error term is serially uncorrelated (Gujarati, 2004). In addition, when two-time series are co-integrated, then regression results may not be spurious and the usual *t* and *F* test are valid.

The study models are specified below:

PI =f(FGFA, SGFA, LGFA)   3.3

Where:

POV   = Poverty Index

FGFA   = Federal Government share of federation account

SGFA   = state government share of federation account

LGFA   _local Government share of federation account

μ_0 = Error Term

$\beta_1 - \beta_4$ = Coefficient of Independent Variables to the Dependent Variables

β_0 = Regression Intercept

Table 1: Operational measures of Variables and A-priori Expectations

Variable	Measurement	Notation	Expected relationship
Poverty Index	Human poverty index as percentage of Gross domestic product	PI	Dependent variable
Federal Government allocations	Allocation from federation account	FGFA	+
State Government allocations	Allocation from federation account	SGFA	+
Local Government allocations	Allocation from federation account	LGFA	+

Method of Data Analysis

The main tool of analysis is the Ordinary Least Squares (OLS) using the multiple regression method for a period of 34years, annual data covering 1990– 2020.

Stationarity (Unit Root) Tests

The study investigates the stationarity properties of the time series data using the Augmented Dickey Fuller (ADF) test. According to Nelson and Plosser (1982) and Chowdhury (1994) there exists a unit root in most macroeconomic time series. While dealing with time series, it is necessary to analyze whether the series are stationary or not. Since regression of non-stationary series on other non-stationary series leads to what is known as spurious or   nonsense regression causing inconsistency of parameter estimate.

Co-integration Test (The Johansen' Test)

It has already been warned that the regression of a non-stationary time series on another non stationary time series may lead to a spurious regression. The important contribution of the concept of unit root and co-integration is to find out if the regression residual are stationary. Thus, a test for co-integration enables us to avoid spurious regression situation. This study employed Johansen Multivariate Co-Integration Test to ascertain if there is the existence of a long run equilibrium relationship among time series variables.Johansen (1988, 1991) pointed out that a linear combination of two or more non stationary time series may be stationary, if such a stationary linear combination of two or more non-stationary time series exists, the non-stationary time series are said to be co-integrated and may be interpreted as long-run relationship among the variables. The lag length is one and is based on the Akaike (1969) information criterion (AIC).

Data Presentation, Analysis and Discussion Of Findings

The estimates and results of the models and techniques as formulated in chapter three of this work are presented in this chapter. The short run regression results of the monetary policy variables, the unit roots test, the test of co-integration test are presented. The granger causality test was used to examine the causal relationship running from the independent variables to dependents variable and from dependents to independent variables. Vector Error correction model was use to estimate the long-run relationship between fiscal allocations and Nigeria poverty reduction. The Ordinary Least Square (OLS) estimates for the models and the discussion of hypotheses and findings were also presented.

Data Presentation

Table 2: Time Series Data for Model One

Year	POV	FGFA	SGFA	LGFA
2000	59.21	17.88	3.56	1.68
2001	67.00	17.34	4.91	1.56
2002	40.54	13.96	3.38	1.12
2003	47.75	14.84	3.95	2.15
2004	51.02	14.66	4.29	2.07
2005	47.47	13.12	3.98	2.13
2006	47.20	10.60	3.35	1.81
2007	52.48	11.18	3.20	1.64
2008	43.89	11.40	4.28	1.81
2009	46.64	8.28	2.24	1.22
2010	42.07	8.63	2.44	1.29
2011	36.69	9.67	2.80	1.48
2012	45.63	9.04	2.56	1.35
2013	50.24	9.24	2.60	1.37
2014	42.62	8.37	2.36	1.25
2015	42.68	6.14	1.56	0.86
2016	43.64	4.41	0.99	0.58
2017	44.79	1.85	1.27	0.72
2018	43.43	2.46	1.76	0.96
2019	43.43	2.11	1.47	0.84
2020	43.71	1.64	1.25	0.65

Source: Computed from Central Bank of Nigeria

PI   = Poverty Index
FGFA   = Federal Government share of federation account
SGFA   = State government share of federation account
LGFA   = Local Government share of federation account

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Table 3: ADF Unit Root Test

Variable	ADF Statistic	MacKinnon @ 1%	5%	10%	Order of integration	Summary	Conclusion
ADF @ Level							
POV	-1.633434	-3.808546	-3.020686	-2.650413	I(0)	Not stationary	Accept HO
FGFA	-0.855162	-3.808546	-3.020686	-2.650413	I(0)	Not stationary	Accept HO
LGFA	-1.294454	-3.808546	-3.020686	-2.650413	I(0)	Not stationary	Accept HO
SGFA	-1.341151	-3.808546	-3.020686	-2.650413	I(0)	Not stationary	Accept HO
ADF @ Difference							
POV	-3.980285	-4.004425	-3.098896	-2.690439	1(I)	Stationary	Reject HO
FGFA	-6.095341	-3.886751	-3.052169	-2.666593	1(I)	Stationary	Reject HO
LGFA	-6.177163	-3.886751	-3.052169	-2.666593	1(I)	Stationary	Reject HO
SGFA	-6.336309	-3.886751	-3.052169	-2.666593	1(I)	Stationary	Reject HO

Therefore, in view of the time – dependent feature of our data, the variables were tested for unit root using the Augmented Dickey Fuller (ADF) test. The results of the unit root tests are presented in Table 4.2.The ADF unit root test indicates that all the variables were stationary, at first difference. However, following Harris (1995) and Gujarrati (2003), both I(1) and I(0) variables could be carried forward to test for co-integration which forms the basis of the next section. The Johansen co-integration test was used to test for the existence or not of a long run relationship among the variables. The Johansen methodology was preferable for the study because it has the advantage amongst others of allowing for more than one co-integration vector. The result of the Johansen co-integration test is shown in the table below:

Table 4: Johansen Co-Integration Test Results:

Unrestricted Cointegration Rank Test (Trace)				
Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.838126	58.41328	47.85613	0.0038
At most 1*	0.611430	33.81550	29.79707	0.0483
At most 2	0.234959	5.855144	15.49471	0.7126
At most 3	0.039537	0.766452	3.841466	0.3813
Unrestricted Cointegration Rank Test (Maximum Eigenvalue)				
Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0.838126	34.59778	27.58434	0.0053
At most 1*	0.611430	37.96036	21.13162	0.0313
At most 2	0.234959	5.088691	14.26460	0.7306
At most 3	0.039537	0.766452	3.841466	0.3813

The trace statistics from the model indicate one co-integrating equation. In conclusion, there is long run relationship between federal allocations and poverty index in Nigeria.

Table 5: Pairwise Granger Causality Tests

Null Hypothesis:	Obs	F-Statistic	Prob.
LGFA does not Granger Cause POV	19	3.03466	0.0804
POV does not Granger Cause LGFA		1.29780	0.3041
FGFA does not Granger Cause POV	19	3.69010	0.0516
POV does not Granger Cause FGFA		0.78055	0.4771
SGFA does not Granger Cause POV	19	4.18244	0.0377
POV does not Granger Cause SGFA		0.32833	0.7255

The cointergration results alone are not adequate enough to explain the relationship between federal allocations and poverty index in Nigeria. We need to establish the direction of this relationship, hence the causality test. Given that a relationship exists between federal allocations and poverty index as shown from the Johansen cointegration test from the trace statistics, we ought to examine the causation of this relationship.

Table 6: VAR Lag Order Selection Criteria

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-104.9352	NA	1.122711	11.46687	11.66569	11.50052
1	-66.50970	56.62709*	0.111414*	9.106284*	10.10043*	9.274533*
2	-55.83192	11.23977	0.257693	9.666517	11.45598	9.969366

The most popular of the information criteria are the Akaike information criteria (AIC), and Bayesian information criteria (BIC) (Stock and Watson, 2012). Since the value proposed by both AIC, HQIC is lag 1, the optimal lag length in this study is 1.

Table 7: Parsimonious Error Correction Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(LGFA)	-12.76912	5.267024	-2.424351	0.0295
D(FGFA)	-0.130264	1.155707	-0.112714	0.9119
D(SGFA)	6.367713	2.488658	2.558694	0.0227
C	0.161337	1.307300	0.123412	0.9035
ECM(-1)	-1.184722	0.263265	-4.500109	0.0005
FITTED^2	-0.027040	0.012836	-2.106545	0.0537
R-squared	0.766038	Mean dependent var		-0.775000
Adjusted R-squared	0.682480	S.D. dependent var		7.768457
S.E. of regression	4.377444	Akaike info criterion		6.034132
Sum squared resid	268.2682	Schwarz criterion		6.332852
Log likelihood	-54.34132	Hannan-Quinn criter.		6.092445
F-statistic	9.167734	Durbin-Watson stat		2.007448
Prob(F-statistic)	0.000485			

The Parsimonious ECM result highlighted the significance of the effect of federal allocations and poverty index in Nigeria. The result indicates that the relationship between of federal allocations and poverty index in Nigeria has mixed result, while some of the variables have positive impact at lag I it will record a negative impact at lag II. However, the variable is statistically significant in from the model.

Discussion of Findings

The analysis examined the effect of federal allocations on the poverty index in Nigeria. The estimated models found that 76.6 percent changes in poverty index in Nigeria could be traced to federal allocations as modeled in this study while 23.4 percent could be traced to other factors not captured in the model. The study further fund that local government allocation and federal government allocations have negative effect on poverty index in Nigeria while state government allocation have positive effect on poverty index.

The negative effect of the variables confirm the a-priori expectations of the study and justifies increase in public expenditure. The findings of the study confirm the findings of Babatunde (2018) that while public spending on agriculture and natural resources did not align with public expectations, expenditure on transportation and communication, education, and healthcare are consistent with public expectations on good governance, Dupor (2017) negative correlation between economic growth and government spending, Nurlina (2015) that increase in total government expenditure enhances economic growth, Abu Bader and Abu-Qarn (2003) military expenditures retard growth in the study sample, civilian expenditures contribute positively to growth in Israel and Egypt, the findings of Loizedes and Vamvoukas (2005), Jiranyakul and Brahmasrene (2007), Olugbenga and Owoye (2007) Liu, Hsu and Younis (2008) shows uni-directional causality from government expenditure to economic growth.Chiawa, Torruam and Abur (2012) and the findings of Okoro (2013) found that between 1980 and 2011 there is evidence that government recurrent expenditure enhanced economic growth while there is no evidence that capital expenditure significantly impacted growth.

Conclusion

The study concludes that Federal Government share from the federation account (FGFA) has no relationship with Poverty (POV). Also, the study concludes that there is no significant relationship between State government share from federation account (SGFA) and Poverty (POV). Finally, the study conclude that Local government share from federation account (LGFA) has no relationship with Poverty (POV).

Recommendations

From the findings, the study makes the following recommendations:
1. There is urgent need for reforms in the sharing formula from the federal account to allocate more funds to states and local governments and enhance effective utilization of allocated fund
2. There should legal framework that can back the utilization fund from the federation account to enhance poverty reduction in Nigeria.
3. Federal government should reform its public expenditure framework; more spending should be directed to the real sector and investment human capital as this increases poverty reduction.
4. Federal allocation to the states should be directed to infrastructural development as development of infrastructure enhances poverty reduction.
5. The local government should embark on projects that enhance the development of the people and reduce poverty from the fund allocated such as provision of economic life touching projects.
6. All factors that serve as barrier to effective utilization funds from the federation account should be discouraged while factors to encourage effective and productivity of the funds should be encouraged.
7. There is need to set committee at all tier of the government to ensure productivity utilization of the allocated funds to achieve desired poverty reduction.

REFERENCES

Abbasov, J. A. & Aliyev, K. (2018). Testing Wagner's Law and Keynesian Hypothesis in Selected Post-Soviet Countries. *Acta Universitatis Agriculturae et SilviculturaeMendelianaeBrunensis*, 66 (5), 1227-1237.

Abu-Bader, S. & Abu-Qarn, A. (2003) Government Expenditures, Military Spending and Economic Growth: Causality Evidence from Egypt, Israel and Syria, MPRA paper No. 1115.

Adeleye, N.,Osabuohien, E., Bowale, E., Matthew, O. &Oduntan, E. (2017). Financial reforms and credit growth in Nigeria: Empirical insights from ARDL and ECM techniques, *International Review of Applied Economics*, 7(4),90-121.

Afonso, A. & Agnello, L. (2008), Fiscal policy responsiveness, persistence and discretion, European Central Bank Working Paper Series, 954 (October 2008)

Akande, S. O., Falokun, G. O., Taiwo, S. O., Ogunwale, A. O & Adeoye, B. W. (2009). *Budget Process in Selected Countries: Lessons for Nigeria* (Monograph Series, No.8). Nigerian Institute for Social and Economic Research.

Alexiou, C. (2007). Unraveling the 'Mystery' Between Public Expenditure and Growth: Empirical Evidence from Greece. *International Journal of Economics,* 1(1), 21-31.

Alexiou, C. (2009). Government Spending and Economic Growth: Econometric Evidence from the South Eastern Europe (SEE). *Journal of Economic and Social Research*, *11* (1), 1–16.

Al-Fawwaz, T.M. (2016). The impact of government expenditures on economic growth in Jordan (1980–2013). *International Business Research*, *9* (1), 99–105.

Alshahrani, S., & Alsadiq, A. (2014). Economic growth and government spending in Saudi Arabia: An empirical investigation. IMF Working Paper WP/14/3. International Monetary Fund.

Altunc, O.F., & Aydın, C. (2013). The relationship between optimal size of government and economic growth: Empirical Evidence from Turkey, Romania and Bulgaria. *Procedia – Social and Behavioral Sciences*, *92*, 66–75.

Anaman, K. (2004). Determinants of economic growth in Brunei Darussalam, *Journal of Asian Economics,* 15, 777-796.

Asghar, N., Hussain, Z. & Rehman, H. (2012). The impact of government spending on poverty reduction: Evidence from Pakistan 1972-2008. *African Journal of Business Management*, 6 (3), 845-853.

Asghari, R., Heidari, H. (2016). An investigation of the impact of size of the government on economic growth: Some new evidence from OECD-NEA Countries. *Iranian Economic Review*, 20 (1), 49–68.

Attari, M.I.J., Javed, A.Y. (2013). Inflation, Economic Growth and Government Expenditure of Pakistan: 1980–2010. *Procedia Economics and Finance*, *5*, 58–67.

Ayemokhia, A. (2010, April 3). Budget implementation is key to nigeria's recovery. *Thisday Newspaper*, 4(4),14-16.

Babatunde, P. (2015). Effects of internal control system defciency on contractors' infrastructural development capability in the Nigerian public sector, *Chinese Business Review, 14*(12), 573–582.

Bąk, A. (2009). Innovative Concepts of Budgeting in the Enterprises. *Contemporary Economics*, 3 (1), 65-73.

Barlas, A. W. (2020). The impact of government expenditure on economic growth in Afghanistan. In: *Journal of Economics and Business*, 3(2), 729-733.

Barro, R.J. (1990) Government spending in a simple model of endogenous growth. *Journal of Political Economy* 98 S(5),103–125.

Bassanini, A., Scarpetta, S., & Hemmings, P. (2001), Economic growth: The role of policies and institutions, panel data evidence from OECD countries, OECD economic department. *Working Paper,* 283

Bivainis, J. &Butkevicius, A. (2003). Methodological Aspects of Evaluation of State Budget Programmes. *Journal of Business Economics and Management,* 4 (1), 53-61.

Bose, N., Haque, M E., Osborn, D.R. (2007). Public expenditure and economic growth: A disaggregated analysis for developing countries. *The Manchester School*, 75 (5), 533–556.

Boyo, H. (2012). Capital Budget Imbroglio and Subsidy: *The Punch Newspapers*, pp. 3-4.

Bunea-Bontus, C. A., & Petre, M. C. (2010). The international financial reporting standard for small and medium-sized entities: Pros, Cons and Challenges. *RevistaEconomica, 6(53), 89-104.*

Butkiewicz, J.L., Yanikkaya, H. (2011). Institutions and the impact of government spending on growth. *Journal of Applied Economics*, *14* (2), 319–341.

Chan, J, (2009). A comparison of government accounting and business accounting. In V. Montesinos and J.M. Vela (eds.). *Innovations in Governmental Accounting,* Kluwer Academic Publishers, *29 (23), 117-125.*

Chandana, A., Adamu, J., & Musa, A. (2021). Impact of government expenditure on economic growth in Nigeria, 1970-2019. *CBN Journal of Applied Statistics, 12(1), 139-174.*

Chandra, R. (2004). Government size and economic growth: An investigation of causality in India. *Indian Economic Review,* 39(2), 78-99.

Chen, S. T., & Lee, C. C. (2005), Government size and economic growth in Taiwan: A threshold regression approach. *Journal of Policy Modeling,* 27, 1051-1066.

Chirwa, T.G., Odhiambo, N.M. (2016). What Drives Long-Run Economic Growth? Empirical Evidence from South Africa. *Economia Internazionale/International Economics, Camera di CommercioIndustriaArtigianatoAgricoltura di Genova*, *69* (4), 429–456.

Chude, N.K., &Chude, D.I. (2013). Impact of government expenditure on economic growth in Nigeria. *International Journal of Business and Management Review*, 1 (4), 64-71

Connolly, M. & Li, C. (2016). Government spending and economic growth in the OECD countries, *Journal of Economic Policy Reform, 19*(4), 386–395.

Danladi, J.D., Akomolafe, K.J., Olarinde, O.S. &Anyadiegwu, N.L. (2015). Government expenditure and its implications for economic growth: Evidence from Nigeria. *Journal of Economics and Sustainable Development,8(5),* 142-152.

Danmola, R.A.; Olateju, A.O. & Abba, M.W. (2013). Nexus between Public Expenditure and Economic Growth by testing the Wagner's Law Time Series: Evidence from Nigeria. *International Journal of Development and Sustainability*, 2(4), 2383-2395.

Dauda, R. O. S. (2007). The role of community banking system in Nigeria's development process: An appraisal. *Journal of Banking, 2*(1) 82-103.

Devarajan, S. Swaroop, V., Zou, H. (1996). The composition of public expenditure and economic growth. *Journal of Monetary Economics*, *37* (2), 313-344.

Dupor, B. (2017). Does government spending stimulate the economy? *On the Economy Blog, Federal Reserve Bank of St Louis,* Retrieved, 25th April, 2019, https://www.stlouisfed.org/on-theeconomy/2017/december/government-spending-stimulate-economy

Egbetunde, T., &Fasanya, I. O. (2013). Public Expenditure and Economic Growth in Nigeria: Evidence from Auto-Regressive Distributed Lag Specification. *Zagreb International Review of Economics & Business, 16*(1), 79-92.

Egbetunde, T., &Fasanya, I.O. (2013). Public expenditure and economic growth in Nigeria: Evidence from auto-regressive distributed lag specification. *Zagreb International Review of Economics & Business*, *16* (1),79–92.

Evans, P., & Karras, G. (1994), Are government activities productive? Evidence from a Panel of U.S. States, *Review of Economics and Statistics, 76*, 1-11.

Ewa, U. E., &Okoi, C. U. (2018). Effects of Public Expenditure On Poverty reduction In Nigeria. *Advances in Social Sciences Research Journal, 5(11)* 229-243.

Facchini, F. & Melki, M. (2011), Growth and Political Ideology in a Democracy: The French Experience 1871–2009. EPCS, Rennes, France, 28th April-1st May, 2011

Faleti, K. O., & Myrick, D. (2012). The Nigerian budgeting process: A framework for increasing employment performance. *Mediterranean Journal of Social Sciences,* 3 (12), 193-213.

Fallahi, F. &Shoorchali, J.M. (2012), Government size and economic growth in Greece: A smooth transition approach, *MPRA Paper* 74078, Retrieved, 24th February , 2022, from: https://mpra.ub.unimuenchen.de/74078/

Fan, S., Hazell, P., & Thorat, S. (2000). Government Spending, Growth and Poverty in Rural India. *American Journal of Agricultural Economics,* 82 (4), 1038–1051.

Fan, S., Zhang, L., & Zhang, X. (2002). Growth, inequality, and poverty in rural China: The Role of Public Investment *(Research Report No.125).* International Food Policy Research Institute.

Folster, S., & Henrekson, M. (2001). Growth effects of government expenditures and taxation in rich countries, *European Economic Review, 45,* 1501-1520

Gale, W. G., &Samwick, A. A. (2016). *Effects of Income Tax Changes on Economic Growth*. The Brookings Institution. Available at https://www.brookings.edu/wp-content/uploads/2016/07/09_Effects_Income_Tax_Changes_Economic_Growth_Gale_Sa

Garba, T. & Abdulahi, S.Y. (2013), Public expenditure and economic growth: An application of co-integration and Granger causality tests on Nigeria, *Journal of Economic and Social Research,* 1-30.

Ghali, K.H. (1998). Government size and economic growth: Evidence from a multivariate cointegration analysis. *Applied Economics*, *31*, 975–987.

Ghosh, S., Gregoriou, A. (2008). The composition of government spending and growth: is current or capital spending better? *Oxford Economic Papers*, *60* (3), 484–516.

Goffman, I. J. (1968). On the Empirical Testing of Wagner's Law: A Technical Note. *Public Finance,* 23 (3), 359-364.

Golenko-Ginzburg, D., Laslo, Z., Ben-Yair, A., & Baron, A. (2006). Optimizing Budget Allocation among Project Activities. *Journal of Business Economics and Management,* 7 (1), 17- 20.

Gomanee, K., Morrissey, O., Mosley, P., & Verschoor, A. (2005). Aid, Government Expenditure and Aggregate Welfare. *World Development,* 33 (3), 355–370.

Groot, T, & Budding, T (2008). Public Sector Management, current issues and future prospects. *Financial Accountability and Management, 24(1) 1-13.*

Guandong, B.Y.D. and Muturi, W.M. (2016). The relationship between public expenditure and

Gupta, G.S. (1989), Growth variations across developing countries: How much and why? *Indian Economic Journal,* 36(3), 49-64.

Gupta, K.L. (1988). Macroeconomic determinants of growth: Some implications of disaggregation, *Applied Economics,* 20(6), 843-852.

Gupta, S. P. (1967). Public Expenditure and Economic Growth: A Time Series Analysis. *Public Finance,* 22 (4), 423-466.

Hansson, P. & Henrekson, M. (1994), A new framework for testing the effect of government spending on growth and productivity, *Public Choice,* 8(3-4), 381-401.

Hasnul, A.G. (2015). The effects of government expenditure on economic growth: the case of Malaysia. MPRA Paper. Retrieved from: https://mpra.ub.uni-muenchen.de/71254 (25.10.2018).

Heidari, H., Parvin, S., & Fazeli, M. (2010). Relationship between government size and economic growth, evidence from OPEC members, *Quarterly Journal of Quantitative Economy, 7*(3), 43-66.

Henrekson, M. (1993). Wagner's Law, A Spurious relationship, *Public Finance*, 48 (3), 406-415.

Herath, S. (2012). Size of government and economic growth: A nonlinear analysis, *Economic annals,* 57 (194), 7-30.

Ibrahim, H. (2011, May 28). Of Budget Delay, Implementation and National Planning. Nigerian Tribune Newspapers, pp. 6-7.

Iheanacho, E. (2016). The contribution of government expenditure on economic growth of Nigeria Disaggregated Approach, *International Journal of Economics & management sciences, 5*(5), 1–9.

Iyodo, B. Y., Samuel, S. E., Adewole, C., & Ola, P. O. (2020). Impact of Non-life Insurance Penetration on the Economic Growth of Nigeria. *Research Journal of Finance and Accounting*, *11*(2), 40-50.

Jhingan, M. L. (2006). *The economics of development and planning.*Virinda Publications (P) Ltd., New Delhi.

Jiranyakul, K. &Brahmasrene, T. (2007). The relationship between government expenditure and economic growth in Thailand. *Journal of Economics and Economics Education Research,* 8(1), 93-102.

Jung, H. S., &Thorbecke, E. (2003). The Impact of Public Education Expenditure on Human Capital, Growth, and Poverty in Tanzania and Zambia: a General Equilibrium Approach. *Journal of Policy Modeling,* 25 (8), 701–725.

Jung, S., Seong-Hoon, C. & Roberts, R. (2009). Public Expenditure and Poverty Reduction in the Southern United States. Paper presented at the Southern Agricultural Economics Association Annual Meeting, Atlanta, Georgia.

Kimaro, E.L., Keong, C.C., Sea, L.L. (2017). Government Expenditure, Efficiency and Economic Growth: A Panel Analysis of Sub-Saharan African Low Income Countries. *African Journal of Economic Review*, *V* (II), 34–54.

Kocurek, K. (2008). Sources Evolution of Budget Deficit's in Poland Subject to Push-Out Effect. *Contemporary Economics,* 2 (3), 21-30.

Kuştepeli, Y. (2005). The relationship between government size and economic growth: Evidence from a panel data analysis. DokuzEylul University, Faculty of Business, Discussion Paper Series.

Lamartina, S. &Zaghini, A. (2007). Increasing Public Expenditures: Wagner's Law in OECD Countries. *German Economic Review* 12 (2), 149–164.

Lawanson, O. I. (2009). *Human Capital Investment and Poverty reduction in Nigeria. The Role of Education and Health*. Oxford Business and Economics Conference, June 24th-26th. Oxford University.

Leshoro, T.L.A. (2017). An empirical analysis of disaggregated government expenditure and economic growth in South Africa. UNISA Economic Research Working Paper Series. Working Paper 10/2017.

Lipton, M &Ravallion, M. (1995). Poverty and Policy. In H. Chenery & T. N. Srinivasan (Eds.), *Handbook of Development Economics* (Vol. 3) (pp. 2551- 2657).

Liu, C. H., Hsu, C., & Younis, M. Z. (2008), *The Association between Government Expenditure and Economic Growth: The Granger Causality test of the US Data, 1974-2002, Journal of Public Budgeting, Accounting and Financial Management*, 439-452.

Loizides, J. &Vamvoukas, G., 2005. Government Expenditure and Economic Growth: Evidence from Trivariate Causality Testing. *Applied Journal of Economics*, VIII(1), 125–152.

Lucas, R. E. (1988). On the Mechanics of Poverty reduction, *Journal of Monetary Economics*, 22 (1), 3–42.

Lupu, D., Petrisor, M.B., Bercu, A., Tofan, M. (2018). The impact of public expenditures on economic growth: A case study of Central and Eastern European countries. *Emerging Markets Finance and Trade*, *54* (3), 552–570.

Makstutis, A. (2007). The Problems of Development of National State. *Journal of Business Economics and Management*, 8 (1), 63-68.

Maku, O. E. (2009). Does Government Spending Spur Economic Growth in Nigeria*? (Working Paper No. 17941). Munich Personal RePEc Archive.*

Mann, A. J. (1980). Wagner's Law: An Econometric Test for Mexico. *National Tax Journal*, 33 (2), 189- 201.

Mavrov, H. (2007). The size of government expenditure and the rate of economic growth in Bulgaria, *Economic Alternatives*, 1

Mhaka, C. (2014). IPSAS, a guaranteed way of quality government financial reporting? A Comparative Analysis of the Existing Cash Accounting and IPSAS Based Accounting Reporting. *International Journal of Financial Economics, 3* (3), 134-141

Michas, N. A. (1975). Wagner's Law of Public Expenditure: What is the Appropriate Measurement for a Valid Test. *Public Finance,* 30 (1), 77-84.

Mohamed, J, & Farooq, S (2008).The role of public sector in poverty reduction of Balochistan*Dialogue, 4(3) 472-494.*

Musgrave, R. A. (1969). Fiscal Systems. New Haven, CT: Yale University Press

Muthui, J. N., Kosimbei, G., Maingi, J., & Thuku, G. K. (2013). The Impact of Public Expenditure Components on Economic Growth in Kenya 1964-2011.*International Journal of Business and Social Science*, 4(4),233-253.

Ndambiri, H.K., Ritho, C., Ng'ang'a, S.I., Kubowon, P.C., Mairura, F.C., Nyangweso, P.M., Muiruri, E.M., Cherotwo, F.H. (2012). Determinants of economic growth in sub-Saharan Africa: A Panel Data Approach. *International Journal of Economics and Management Sciences*, 2 (2), 18–24.

Niskanen, W. (1974). Bureaucracy and representative government. *The American Political Science Review*, *68(4) 1775-1777.*

Nkechukwu, G.C. & Okoh, J.I. (2013).Capital expenditure at disaggregated level and economic growth in Nigeria: An empirical analysis, *International Journal of Science and Research,* 4(6), 729-737

Nurlina, N. (2015). The effect of government expenditures on Indonesian growth, *Journal of Economics, Business and Accountancy Ventura,* 18(1), 1-14.

Nurudeen, A., & Usman, A. (2010). Government expenditure and economic growth in Nigeria: 1970-2008: a disaggregated analysis. *Business and Economic Journal*, 4(2), 1-11

Nurudeen, A., Usman, A. (2010). Government expenditure and economic growth in Nigeria, 1970–2008: A disaggregated analysis. *Business and Economics Journal*, *4*, 1–11.

Ogundipe, A.A. & Oluwatobi, S. (2013), Government spending and economic growth in Nigeria: Evidence from disaggregated analysis, *Journal of Business Management and Applied Economics,* 2(4): 1-11

Okoye, L.U.; Modebe, N.J.; Erin, O.A.; &Evbuomwan, G.O. (2017), Effect of external debt on economic growth: Evidence from Nigeria, Proceedings of the 29th International Business Information Management (IBIMA) Conference, Austria, Vienna-Austria, May 3-4: 4046-4058.

Okoye, L.U., Omankhanlen, A.E., Okoh, J.I., Urhie, E., & Ahmed, A. (2019).Government expenditure and economic growth: the case of Nigeria**.** *Proceedings of SOCIOINT 2019- 6th International Conference on Education, Social Sciences and Humanities* 24-26 June 2019- Istanbul, Turkey

Okoye, L.U., Omankhanlen, A.E., Okoh, J.I., Urhie, E., Ahmed, A. (2019). Government expenditure and economic growth: *The case of Nigeria. Proceedings of SOCIOINT 2019-6th International Conference on Education, Social Sciences and Humanities 24–26 June 2019. Istanbul, Turkey*, 1184–1194.

Oni, A. A., &Ozemhoka, A. M.(2014). Impact of Public Expenditure on the Growth of Nigerian Economy. *European Scientific Journal*, *10*(28), 219-229.

Onoh,J.K. (2007). Dimensions of Nigeria's monetary and fiscal policies-domestic and external: Astra Meridian Publishers

Oyinlola, M. A., &Akinnibosun, O. (2013), Public expenditure and economic growth nexus: Further evidence from Nigeria. *Journal of Economics and International Finance, 5*(4), 146-154.

Paparas, D. & Stoian, A. (2016), The validity of Wagners law in Romania during 1995-2015, *Munich Personal RePEc Archive* (*MPRA) Paper,* https://mpra.ub.uni-muenchen.de/74378/

Pina, V., Torres, L., &Yetano, A. (2009). Accrual accounting in EU Local Governments: One method, several approaches. *European Accounting Review*, *18(4) 765-807.*

Prasetyo, P.E. (2020).The role of government expenditure and investment for msme growth: empirical study in Indonesia**.** *Journal of Asian Finance, Economics and Business 7(10), 471–480.*

Pula, L. & Elshani, A. (2017), The relationship between public expenditure and economic growth in Kosovo: Findings from a Johansen co-integrated test and Granger causality test, *Ekonomika,* 97(1), 47-62.

Rainey, H, (2003). *Understanding and managing public organizations*. Jossey-Bass, San Francisco.

Riedl, B.M. (2010), Why Government Spending Does Not Stimulate Economic Growth: Answering the Critics, *The Heritage Foundation,* 2354, 1-9. https://www.heritage.org/budget-and-spending/report/whygovernment- spending-does-not-stimulate-economic-growth-answering-the

Sáez, M.P., Álvarez-García, S., Rodríguez, D.C. (2017). Government expenditure and economic Bgrowth in the European Union countries: New evidence. *Bulletin of Geography. SocioeconomicSeries*, *36*, 127–133.

Sakurauchi, F (2002). Public Sector accounting system and public governance.(Electronic version), *Keizai Sangyo Journal (METI Journal)*, Retrieved April 20th, 2012.

Schacter, M (2000).*Public sector reform in developing countries, issues lessons and future directions,* Institute on Governance, Ottawa, Canada

Schaltegger, C., Torgler, B. (2006). Growth effects of public expenditure on the state and local level: evidence from a sample of rich governments. *Applied Economics*, *38* (10), 1181– 1192.

Schumpeter, J.A. (1911). *The Theory of Poverty reduction: An Inquiry into Profits, Capital, Credit, Interest, and the Business Cycle*. Oxford: Oxford University Press.

Sedrakyan, G. S. & Varela-Candamio, L. (2019). Wagner's law vs. Keynes' hypothesis in very different countries (Armenia and Spain). *Journal of Policy Modelling*, 41 (4), 747-762.

Shahid, A., Rabbi, F., Hayat, U., Ali, N. (2013). The composition of public expenditures and economic growth: Evidence from Pakistan. *International Journal of Social Economics*, *40* (11), 1010–1022.

Taban, S. (2010). An Examination of the Government Spending and Economic Growth Nexus for Turkey Using Bound Test Approach. *International Research Journal of Finance and Economics*, *48*, 184–193.

Tolofari, S (2015). New Public Management and education. *Policy Futures in Education,3(2)75-89.*

Wahab, M. (2011). Asymmetric output growth effects of government spending: Cross-sectional and panel data evidence. *International Review of Economics & Finance*, *20* (4), 574–590.

Wang, L., Peculea, A.D. & Xu, H. (2016). The relationship between public expenditure and economic growth in Romania: Does it obey Wagners or Keynes law? *Theoretical and Applied Economics, 41-52*

Watkins, A., & Arrington, C. (2007).Accounting, new public managements and American politics; theoretical into national performance review. *Critical Perspective on Accounting, 18 (1)33-58.*

Yasin, M. (2000). Public Spending and Economic Growth: Empirical Investigation of Sub- Saharan Africa. *Southwestern Economic Review*, 59–68.

Yasin, M. (n.d), Public spending and economic growth: Empirical investigation of Sub-Saharan Africa, *South Western Economic Review,* 59-68

Zareen, S. & Qayyum, A. (2014), An analysis of the impact of government size on economic growth of Pakistan: An endogenous growth, *Research Journal of Social Science,* 4(1), 61-8.