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**RE-EVALUATION OF THE RELATIONSHIP BETWEEN ECONOMIC GROWTH AND PUBLIC
EXPENDITURE IN NIGERIA**

UDOCHUKWU GODFREY OGBONNA
Department of Management Sciences
Rhema University Nigeria

UNIAMIKOGBO EMMANUEL
Department of Management Sciences
Rhema University Nigeria

EJEM CHUKWU AGWU
Department of Banking and Finance
Abia State University, Uturu

And

OBINNA NGOZI BLESSING
Department of Management Sciences
Rhema University Nigeria

Abstract

This study re-examined the contribution of public expenditure on economic growth mostly now the macroeconomic variables look stifled around the globe. Data for this study were obtained from the Central Bank of Nigeria Statistical Bulletin for Economic growth proxied by the Gross Domestic Product, Government Recurrent Expenditure, Government Capital Expenditure and Government Total Public Expenditure from 1981 to 2021. Error Correction Mechanism was employed to estimate the relationship between economic growth and public expenditure. It was found among others that capital expenditure and total public expenditure significantly impact economic growth in Nigeria, while recurrent expenditure exerted insignificantly on economic growth. Consequently, the researchers are suggesting that government should restructure recurrent expenditure to significantly contribute to growth of the economy. Furthermore, government should consider more allocation on capital expenditure since it contributes significantly to the economic growth in Nigeria.

Keywords: Public expenditure, Gross domestic Product, ECM, Nigeria.

Introduction

Public expenditure also known as government expenditure or government spending is seen as expenditure on goods and services provided by the public sector (government) and is a major component of the Gross Domestic Product (GDP) of any nation (Ranjan & Bhanumurthy, 2020). Public expenditure continues to be a key tool in the development process. It is critical to the functioning of any economy at practically all stages of

development and expansion. Today, most emerging, and industrialized countries employ public spending to promote income distribution, direct resource allocation to preferred areas, and alter national income composition (Vtyurina, 2020; World Bank, 2008). In emerging countries, for example, the variety in government spending patterns is expected not to only ensure stability but also drive economic growth and expand job possibilities.

This kind of spending is intended to hasten economic development and growth with the goal of turning the country into an industrialized economy and improving the standard of living for the populace. Public expenditure is an essential tool for government to control the economy, thus, borne out of revenue allocation which refers to the redistribution of fiscal capacity between the various levels of government or the disposition of responsibilities between tiers of government. Public expenditure policies such as tax adjustments, budget target setting, increase in public expenditure and public works are effective tools in influencing economic growth. Public expenditure plays a significant role in the functioning of an economy both in developed and developing economy. Globally, public expenditure is viewed from two perspectives: capital and recurrent expenditures. In similar vein, the Nigeria government categorised public expenditure into capital and recurrent expenditures. Capital expenditures are those government expenditures on capital projects such as electricity, education, health, roads, airports, telecommunication, electricity generation, bridges, dams, etc. While ongoing costs are those that the government incurs on a regular basis, such as salaries, wages, interest payments, loans, upkeep, etc (Okoro, 2013).

The link between government spending and economic growth has been the subject of numerous scholarly discussions over the past few decades. Government as an institution performs two major functions which are protection of lives (security) and provision of certain public goods (Razzolini & Shughart, 2017). The establishment of the rule of law and the enforcement of property rights are components of the protection function. This reduces the likelihood of crime, safeguards people and property, and defends the country from foreign assault. A few scholars, including Ranjan and Chandan (2008), contend that increased government spending on socio-economic and physical infrastructures like health and education increases labour productivity and accelerates the growth of national output. Public goods include defence, roads, education, health, and power, to name a few. Like this, Cooray (2009) argues that investing in infrastructure, such as roads, communications, and power, lowers production costs, boosts private sector investment, and improves company profitability-all of which contribute to economic growth.

Ranjan and Chandan (2008) and Cooray (2009) in their separate studies concluded that expansion of government expenditure encourages economic growth as it enhances the growth of the economy positively. Ahsan et al, (2012), Kolluri et al, (2016) and Ghali, (2018) are the opinion that increased government expenditure contributes positively to economic growth. Their view is that public expenditure, whether recurrent or capital, especially on social and economic infrastructure can be growth-enhancing.

Conversely, Engen and Skinner (1992) refute the claim that rising government expenditure promotes economic growth and affirm that increased government expenditure may slowdown the overall economic performance of government. They postulate that for government to finance rising expenditure, she may need to increase taxes and/or borrowing. By implication increased income taxes and borrowing by government will discourage individuals from working for long hours or even searching for jobs, and this in turn may reduce aggregate income and demand thus, having adverse effect on the

economy. Similarly, Landau (2016) opined that higher profit tax tends to increase production costs, reduce investment expenditure and profitability of firms. He argues that, if government increases borrowing (especially from the banks) to finance its expenditure, it will completely crowd out the private sector, thus reducing private investment. Additionally, politicians and government officials from time to time increase expenditure and investment in unsuccessful projects or in goods that can be efficiently and conveniently produced by the private sector to score cheap popularity and continue to remain in power.

Most times government activities produce misallocation of resources that impede the growth of national output. In fact, studies by the above scholars had shown that large government expenditure had negative impact on economic growth. Due to the significant revenues from the production and sale of crude oil as well as the rising demand for public (utilities) products including roads, communication, power, education, and health, government spending in Nigeria has continued to climb. However, a significant obstacle to Nigeria's economic development is the supply of infrastructure services to suit the needs of homes, businesses, and other users.

Government spending in Nigeria is the spending of the federal government, its state and local governments. In most governments across the world, most of the government spending takes place at the national level which is the federal government. As of 21st century in Nigeria, roughly two-third of government expenditure is by the federal government, while the remaining one-third of government spending is by state and local government (Aluthge et al, 2021; Amadeo, 2018). Often, federal government spends more money than they collect from tax revenue each year. When a government spends more than it generates, it runs a deficit budget that year (Taylor, 2017). For government to pay for the extra spending, she would need to source for debt capital to bridge the deficit gap. Government debt is the amount of money borrowed from individuals, firms, or foreign entities. Most of the public debts are held in the form of treasury bills and bonds, and the government has to pay down debt over time. Government should provide incentives for individuals, businesses, and other entities to lend money by paying to these parties interest on debt.

The Nigerian government often times runs budget deficits (where government spending exceeds government tax revenue) caused from a decline in revenue due to an economic contraction such as a recession or depression. Massive fiscal stimulus can also increase government spending over and above the income it receives. Thus, for government to avoid borrowing and cost of servicing debts borrowed, she may need to maintain a balance budget. A balanced budget is when government spending in a given year equals government revenue in that year. Nations who often maintain balance budgets are those countries who have in place balanced budget requirements.

Thus, the high degree of fiscal responsibility of most states in Nigeria is a result of having balanced budget requirements. A law requiring a government to balance its budget annually, where government spending matches government revenue, is known as a balanced budget requirement. Ex-post balanced budget requirements and ex-ante balanced budget requirements are the two different categories of balanced budget requirements. While a state must approve a balanced budget at the start of each fiscal year under an ex-ante balanced budget requirement, a government is required to balance its budget by the conclusion of each fiscal year under an ex-post balanced budget requirement. Ex-ante balanced budget rules are more susceptible to manipulation because they rely on

projections and assumptions about future expenses and income increases. (Office of Management and Budget, 2018).

Most developing countries like Nigeria invest about \$200billion a year in new infrastructure, representing about four per cent of their national output and one-fifth of their total investments as a result, infrastructure services for transportation, power, water, sanitation, telecommunications, and irrigation have dramatically increased (World Bank's Development Report, 2017). Due to the significant revenues from the production and sale of crude oil as well as the rising demand for public (utilities) products including roads, communication, power, education, and health, government spending in Nigeria is continuing to climb. For the benefit of the people and the country, there is a rising need to guarantee both internal and external security. The overall government expenditure (capital and recurrent) and its components have been rising over the past three decades, according to statistics from the Central Bank of Nigeria (CBN).

This can be seen in government total recurrent expenditure increase from N4, 805.20 million in 2000 to N984, 277.60 million in 2010 as well as N4, 880, 435.80million in 2020. Government capital spending, on the other hand, increased from N10, 163.40 million in 1980 to N24, 048.60 million in 1990. In 2010 and 2020, capital expenditure was N2, 325,688,304.42 billion and N241, 140, 667,350.32 billion, respectively (CBN, 2020). Between 1980 and 2020, each component of capital spending has increased. However, given that Nigeria is one of the world's poorest nations; it's possible that the growing government spending did not result in appreciable growth and development. More than half of Nigerians still survive on less than \$1 a day, while many continue to live in utter poverty. Macroeconomic indicators, such as the balance of payments, import debt, inflation rate, exchange rate, and national savings, also showed that Nigeria had a difficult time throughout the previous three decades.

The size, structure and growth of government expenditure have increased tremendously over the years, even as it becomes increasingly complex. Recent political developments have increased spending, but the difficulty in finding new and alternative sources of funding to fulfill the growing demands of governance has increased the need for a closer examination of government operations, especially its expenditure. In less developed countries like Nigeria, less attention had been given to examining the productiveness of the various components of public spending. This was borne out of the observation that the primary objective of fiscal policy was aggregate demand management. This viewpoint gave priority to total government spending and seemed unenthusiastic to distinguish between or among the many parts of public expenditures. The problem of economic growth in Nigeria seems to have a strong link with expenditure pattern because, there have been huge spending year after year yet, the performance of the economy stood below target.

This is evidenced in the fact that the Nigeria expenditure management has not been inspiring. A close look at previous and present budgets shows that more of the allocations are on recurrent expenditure than the capital expenditure. This expenditure pattern could be attributed to why Nigeria which is endowed with both human and natural resources and known to be rich economically has a vast majority of her citizens living in abject poverty. This shows that there is a problem otherwise, the level of increase in national budget year in year out and the attendant expenditure growth experienced in the past is enough to reduce the level of poverty and have major impacts on the growth and development of the country, because Nigeria has all it takes (both human and material resources) to build the strongest economy in the world. However, government expenditure and economic growth are

disaggregated resulting in distortion of economic performance coupled with widespread corruption. It is evident that the root of the problem cannot be traced by mere discussion but by empirical research to find out why public expenditure did not lead to economic growth in Nigeria as the case of other developed economies of the world.

It is disturbing to discover that government spending in Nigeria does not appear to have produced the same rate of economic expansion. While several studies such as Gopalan and Rajan (2016), Beraldo, Montolio and Turati (2018) which relate government expenditure to economic growth concluded that increasing government expenditure fosters economic growth. Cakerri et al, (2014), Wenyi et al, (2015) in their studies established that increasing government expenditure reduces economic growth. Studies by Prasetyo and Zuhdi (2013) and Riedl (2018) showed an insignificant relationship between government expenditure and economic growth.

Flowing from the above, it is evident that the findings from the various scholars on the association between government expenditure and economic growth lack uniformity, mixed and inconclusive, thereby establishing a gap in knowledge. Furthermore, prior studies reviewed covered accounting periods which are relatively not current and whose findings might not be relevant and reliable for making informed economic decisions following the dynamism in the political and market environments. This study, therefore, believes that additional evidence would be needed to validate findings from prior scholars on the relationship between public expenditure and economic growth in Nigeria, with a view to resolving conflicting issues arising from prior studies. This is the knowledge gap that motivated this study.

The remaining sections of this study are structured as follows; section two take cares of review of conceptual, theoretical, and empirical literature; section three harbours the materials and methods of analysis adopted; section four analyses the data, results and interpretation while section five conclusions and recommends.

Reviews of Related Literature

Conceptual Framework

Public Expenditure

Public expenditure, also referred to as government expenditure, is the money that a nation's government spends on things that all citizens need or want, such as defense, roads, infrastructure, and pensions (Singh, 2016). Public expenditure is frequently incurred by a nation's federal, state, and local governments. Public spending is the money used by public institutions, such as the federal, state, and municipal governments, to meet the general socioeconomic needs of the populace. Most governments in the 19th century adopted laissez-faire economic principles, and their only duties were to repel aggression and uphold law and order. Then the size of public expenditure was very small, but now the expenditure of governments all over the world has significantly increased. John Maynard Keynes promoted the role of public spending in determining the level of income and its distribution at the beginning of the 20th century. Public spending policies in developing nations will aid in eliminating poverty and income inequality in addition to promoting employment opportunities and accelerating economic growth (Gaurav, 2012).

The price of the products and services purchased by the State and its articulations is known as public spending. Public expenditure plays four main roles: it contributes to current effective demand; it conveys a coordinated economic impetus that can be employed for economic stabilization, business cycle inversion, and growth goals; it increases the public

endowment of goods for everybody; it gives rise to positive externalities to the economy and society (in specific sectors and geographical areas), through its capital component. It supports the current type of state by its prioritized structure and unusual decision-making procedures. Public spending, which is controlled by political parties and institutions in a democracy, is a manifestation of the will of the people, but it is also characterized by a high degree of inertia and law-dependency, which tempers the will of the present majority. Taxes, public debt, money creation, and foreign aid can all be used to fund public spending. The type of products and services purchased can be used to categorize public spending, in addition to generic elements like capital purchases, consumer purchases, and employee costs (Piana, 2011).

Government Recurrent Expenditure

Recurrent expenditure refers to the price of costs incurred during the accounting year. In other words, it's the matching of the accounting year's costs and revenues. Revenue expenditures and fixed asset costs are frequently aligned. It usually has something to do with how much money was spent on recent maintenance, repairs, and upkeep. Recurrent expenses encompass any payments made for items other than capital assets, such as wages and salaries, employer contributions, interest payments, subsidies, and transfers. They also include payments for products and services. Recurrent expenses are only utilized to restore assets to their prior state (Jakupi & Prodani, 2015).

Recurrent expenditure consists of regular expenses that go into the running of the County. In addition to covering operational expenses like travel and lodging, phone, electricity, and water bills, maintenance costs for machinery, buildings, and installations, and funding for expenses incurred to meet mandated obligations like bank fees, interest on official debt, remuneration costs, and other services (Office of the Controller of Budget, 2015).

Government Capital Expenditure

Capital expenditures are funds used by a company to acquire, upgrade, and maintain physical assets such as property, industrial buildings, or equipment. Capital expenditure is often used to undertake new projects or investments by the firm. This type of financial outlay is also made by companies to maintain or increase the scope of their operations. Capital investments might range from fixing a building's roof to buying a piece of machinery to constructing an entirely new facility. When an expense extends the useful life of an existing capital asset or when it is a capital asset that has just been purchased, it is seen as a capital expenditure in accounting terms. A cost must be capitalized if it qualifies as a capital expense. Due to this, the business must spread out the fixed cost of the investment across the asset's useful life. However, the cost is entirely deductible in the year it was incurred if it is one that keeps the asset in its current condition (Zimcik, 2016).

Capital expenditures are payments made for the purchase of stock, land, fixed capital assets, or intangible assets. A suitable example would be the construction of roads, hospitals, or schools. Companies enhance their physical assets through capital expenditures or capital expenditure processes. These tangible assets could be machinery, commercial real estate, or any other form of property that is under the company's purview. Enterprise projects will continue to develop thanks to capital expenditure investments.

Planning for capital expenditures has virtually no limitations. It can involve making any form of construction, building, or repairing equipment. Even the construction of a new factory could be considered a capital expense (Irmén, & Kuehnel, 2018). The amount you need to spend on long-term asset improvement is known as capital expenditure. In other

words, it refers to anything large-scale, such as structures or machinery. Equipment, property, and plant are included in capital expenditures, following the account classification.

Government Total Public Expenditure

All government purchases, investments, and transfer payments are considered government expenditures (Mankiw, 2014). Government final consumption spending is defined in national income accounting as the purchase by governments of goods and services for immediate consumption, directly meeting the individual or collective needs of the community. Government investment is defined as the purchase of goods and services by the government with the intention of generating future benefits, such as infrastructure investment or research spending (government gross capital formation). Together, these two categories of government spending on final consumption and on gross capital formation make up one of the key elements of GDP (Gruber, 2017). Government spending can be financed by government borrowing, or taxes.

Government spending can be classified into current expenditures, capital expenditures and transfer payments (OECD, 2018).

- i. Current Expenditures or Government final consumption spending on products and services for immediate consumption that directly meet the individual or group needs of community members.
- ii. Government spending on goods and services with the goal of generating future benefits, such as infrastructure investments in the fields of transportation (roads, rail airports), health (water collection and distribution, sewage systems), communication (telephone, radio, and television), and research (defense, space, genetics).
- iii. Transfer payments, such as social security payments, pensions, and unemployment benefits, are expenditures that don't entail the exchange of goods and services but rather reflect transfers of money.

Economic Growth

Economic growth is an increase in the amount of goods and services produced per head of the population over a period (Lee, 2018). Economic growth is the rise in the market value of the goods and services an economy produces over time, adjusted for inflation. It is conventionally measured as the percent rate of increase in real gross domestic product, or real GDP (Berg & Ostry, 2017). To account for inflation's distorting influence on the price of produced items, growth is typically expressed in real terms, or terms adjusted for inflation. The term "rate of economic growth" refers to the geometric yearly rate of GDP growth from the first to the last year over a period.

This rate of growth excludes the variations in GDP that occurred around this trend and represents the trend in the average level of GDP across the time. Intensive growth is the term used to describe economic growth that is fuelled by a more efficient use of inputs, such as higher labour, physical capital, energy, or material productivity. Extensive growth is the term used to describe GDP growth that is solely the result of increases in the quantity of inputs available for usage (increasing population, new territory) (Herzer & Vollmer, 2013). Economic growth is also produced by the development of new products and services (Breton, 2015). The GDP figures collected by national statistical offices are used to compute the economic growth rate. Data on the GDP and population for the initial and final periods are used to compute the rate of growth of GDP per capita.

Economic growth is an increase in the capacity of an economy to produce goods and services, compared from one period to another. It can be measured in nominal or real

terms, the latter of which is adjusted for inflation. Economic growth is an increase in the production of goods and services over a specific period. To be most accurate, the measurement must remove the effects of inflation. Economic growth creates more profit for businesses. As a result, stock prices rise. That gives companies' capital to invest and hire more employees. Incomes increase as more jobs are created. With more money, consumers may purchase more goods and services. More purchases result in faster economic growth. For this reason, all countries want positive economic growth. This makes economic growth the most watched economic indicator (Hanushek & Woessmann, 2015).

Gross domestic product is the best way to measure economic growth. It considers the country's entire economic output. All products and services that companies in the nation create and offer for sale are included. Whether they are sold domestically or abroad has no bearing. GDP is a measure of output. It excludes the components that are produced to create a product. Exports are included because they are made in the nation. Economic growth is adjusted to account for imports. Real GDP is the most accurate indicator of growth. It eliminates inflation's negative impacts. The GDP growth rate uses real GDP (Garrett, 2014; Gordon, 2016).

Real Gross Domestic Product

Real gross domestic product (GDP), also known as "constant-price," "inflation-corrected" GDP or "constant dollar GDP," is a statistic that takes inflation into account and expresses the worth of all goods and services produced by an economy each year in base-year prices. Real GDP, as opposed to nominal GDP, can take price level changes into account, and provide a more accurate measure of economic growth (Johnson & Koyama, 2017). Real gross domestic product is a macroeconomic assessment that measures the value of the goods and services produced by an economic entity in a specific period, adjusted for inflation. GDP is derived by valuing all production by an economy using a specific year's average prices. Governments use GDP as a comparison tool to analyze an economy's purchasing power and growth over time. This is done by looking at the economic output of two periods and valuing each period with the same average prices and comparing the two together (Hunt & Lautzenheiser, 2014).

A macroeconomic indicator of the value of economic output adjusted for price fluctuations is the real gross domestic product (real GDP) (i.e., inflation or deflation). Nominal GDP, a measure of economic worth, is adjusted to create an index of the total amount of output. Although GDP measures overall output, it is most valuable since it roughly approximates total spending, which includes government spending, business investment, consumer spending, and industry's surplus of exports over imports. GDP rises because of inflation, which does not accurately represent an economy's underlying growth. To determine the growth of the real GDP, the GDP must be multiplied by the inflation rate (raised to the power of the units of time in which the rate is measured) (Li & Heng-fu, 2018).

Government Total Public Expenditure and Economic Growth

Government expenditure (like expenditure by private sector firms) can be categorized into either recurrent expenditure or capital expenditure. Recurrent expenditure is ongoing spending, or, to put it another way, spending on consumables that have a short shelf life. They are depleted during the delivery of a good or service. For the government, current expenses would include salaries and wages as well as spending on consumables like bandages, stationery, and medications for medical services. By contrast, capital expenditure is spending on assets. It is the purchase of items that will last and will be used time and time again in the provision of a good or service. In the case of the government, examples would

be the building of a new hospital, the purchase of new computer equipment or networks, building new roads and so on. Scholars in the accounting literature have continued to debate the connection between governmental spending and economic expansion. While some authors claimed that government spending has a negative or insignificant effect on economic growth, the nature of the influence remains inconclusive (Akpan, 2005), others believed that the impact is positive and significant (Popescu & Diaconu 2021; Korman & Brahmasrene, 2007).

Aregbeyen (2007) revealed a negative and substantial association between current and consumer expenditures and economic growth, but a positive and significant correlation between government capital and public investment and economic growth. Other studies also confirmed either a negative or a positive correlation/relationship between government expenditure and economic growth. Modebe et al, (2012) revealed that recurrent government expenditure had a positive and non-significant impact on economic growth of Nigeria, while capital expenditure had a negative and non-significant impact on economic growth of Nigeria.

Theoretical Framework

Endogenous Growth Theory

The “Endogenous Growth Theory” was propounded by Paul Romer and Robert Lucas in 1990. This theory emphasizes the need to continually supply additional resources to the labour force to boost productivity. Physical capital, human capital, and knowledge capital are all resources in this scenario (technology). As a result, growth is fuelled by the accumulation of factors of production, which in turn is driven by private sector investment. This means that, at least in the long run, the only way a government can influence economic growth is through its impact on capital investment, education, and research and development. Improved education (and, indeed, any sort of training or study that contributes to human knowledge in any society) is the focus of the strategy.

Faster economic growth is linked to more private or public sector investment, a smaller share of GDP spent on government consumption, higher school enrolment rates, and stronger political stability. Technical change, unlike neo-classical growth theory, is no longer based on chance, but can be encouraged and promoted by suitable policies. Furthermore, securing the foundation for innovation and entrepreneurship, the likelihood of further technological progress and related economic growth increases dramatically. In endogenous theories, technical change is no longer seen as inexplicable and subject to chance, as it was in neoclassical theory, but rather as a variable that can be changed by policy decisions and should now be included alongside the traditional inputs of labour and capital. Taxing consumption, subsidizing investment, and research, and transferring resources from government consumption to government investment are all ways that governments might influence economic growth rates. In these models, growth is stifled by government spending, which either creates tax wedges beyond what is required to support projects or removes the incentives to save (Bhatia, 2004).

The endogenous growth hypothesis underpins this research, which states that the only way a government can affect economic growth, at least in the long run, is through its impact on capital investment, education, and research and development. Improved education (any sort of training or research that adds to human knowledge in any society) is the key to achieving economic growth, according to endogenous growth theory.

Empirical Review

Aluthge, Jibir, and Abdu (2021) investigated the effect of capital and recurrent government spending in Nigeria on economic growth using time series data from 1970 to 2019. The Autoregressive Distributed Lag (ARDL) model is used in this paper. The unit root test and the co-integration analysis in the study take structural breaks into consideration to ensure that the conclusions are robust. The study's main conclusions are that while recurrent spending does not significantly affect economic growth in either the short or long term, capital investment does, both positively and significantly affecting economic growth in both the short and long terms. The report recommends that government should boost the share of capital expenditure, particularly on significant projects that directly affect the welfare of citizens. Government should carefully reallocate resources toward constructive activities that will advance the nation's human development to improve the spending patterns of recurrent expenditure.

Popescu and Diaconu (2021) investigated government spending and economic growth: a cointegration analysis on Romania by determining the nature of the relationship between government spending and economic growth, to test the two Wagner and Keynesian theories in the context of Romania. On the one hand, Keynes contends that government spending is a crucial tool for promoting growth. Wagner contends, however, that rising public spending is a result of economic expansion. They used Granger's causality test to study the short-term dynamics of the two-time series and Johansen's cointegration method to analyse the long-term dynamics of the two-time series. The results obtained support the double causality relation in the short term but do not suggest the existence of long-term cointegration vectors. Therefore, the Granger cause for government spending is both GDP and the other way around. Their findings support liberal criticism of the role played by the government in fostering economies. The impact of increasing government spending on the national income is temporary, as the monetarist school's detractors have noted. When inflationary macroeconomic bottlenecks are in place, the long-term effect is visible.

Ranjan and Bhanumurthy (2020) investigated the topic of public spending on the effectiveness of the education, health, and social sector overall throughout the 15 years since the year 2000, broadly covering the period of the millennium development goals in India. Using several data envelopment analytic techniques, they assessed the effectiveness of government spending on the social sector, particularly health and education, across the major Indian states. The study generates the efficiency scores for the major states for three time periods under input-oriented, output-oriented, and non-oriented situations using data envelopment analysis. Overall, the findings indicate that there is a significant disparity in the levels of efficiency between the states and identify some spatial patterns. Compared to other regions, Western states seem to be more productive. In general, the states seem to be spending their money more wisely on education than on health. The study examines larger drivers, such as general governance, together with conditional variables like income level and mothers' educational attainment, to determine what accounts for such inefficiencies in efficiency levels. The econometric findings imply that the quality of governance in India has an impact on efficiency levels at the subnational level.

Seshaiah, Koti, Reddy, and Sarma (2018) analyzed using simple regression the effect of general government spending on GDP growth in India from 1980–1981 to 2015–2016. In addition to the FDI growth rate, two dummy variables—one for the financial crisis of 2008 and another for the reform era of 1991—were also employed. All the explanatory factors,

except for FDI Growth Rate, were positively and significantly affecting the GDP Growth Rate. The crisis period dummy demonstrates the negative and large impact of general government spending on GDP growth rate in the years following 2008. The reform period dummy demonstrates the strong and favorable impact of general government spending on GDP growth rate in the years following 1991.

The multicollinearity test was used in the investigation, which shows that there is no serial correlation between the explanatory factors. The Breutch Pagan test was used in the study to test for autocorrelation, and the results show that there is no autocorrelation. The survey also showed that a significant share of general government spending is still dedicated to non-development activities. The design of the program and the investigation of the alternatives must receive more attention from expenditure management. According to the study, increasing infrastructure development spending is necessary to boost economic growth. The study emphasizes that fiscal reform at the state level should concentrate on fixing guaranteed ceilings, considering the likelihood of default and development, the type of guarantees issued, and the cost of the services provided by the project for which guarantees are extended. This is in addition to fiscal correction and consolidation.

Loizides and Vamvoukas (2018) explored whether it is possible to attribute the pace of economic growth to the relative size of government (measured as the share of total expenditure in GNP) or the opposite, whether it is possible to attribute the rate of economic growth to the relative size of government. To create a straightforward "trivariate" analysis for each of these two variables, the study initially employed a bivariate error correction model within a Granger causality framework. It also added unemployment and inflation (separately) as explanatory factors. A wide variety of potential causal patterns are available through the combined examination of bivariate and trivariate tests. Data from study for Greece, the UK, and Ireland demonstrates that: (i) government size Granger raises relative government size in Greece and, when inflation is considered, in the UK; (ii) economic growth Granger produces rises in relative government size in all sample countries.

Maingi (2017) explored how government spending affected economic expansion. The study's specific goals were to: investigate the link between government expenditure components and economic growth; look at how government expenditure components affect GDP growth rate; examine the impact of government expenditure reforms on economic growth; and draw policy conclusions from the results. The information was taken from the parts of government spending that covered defence, public order and national security, physical infrastructure, education, health care, public debt servicing, economic affairs, general administration and services, and government consumption. Data came from foreign financial statistics sources and Kenyan government documents. The impact of government spending on economic growth was assessed using the annual time series data for the years 1963 to 2008 and the vector auto regression estimation approach. The results of the Johansen cointegration tests showed a long-term correlation between the GDP growth rate and the chosen elements of government spending. Data came from foreign financial statistics sources and Kenyan government documents.

The impact of government spending on economic growth was assessed using the annual time series data for the years 1963 to 2008 and the vector auto regression estimation approach. The results of the Johansen cointegration tests showed a long-term correlation between the GDP growth rate and the chosen elements of government spending. The Granger-Causality test also revealed a bi-directional causal relationship between the GDP growth rate and several government expenditure components. According

to the findings of impulse response functions and variance decomposition, government spending on investments, physical infrastructure, public debt servicing, education, health care, economic affairs, general administration and services, defence, public order and national security, and government consumption all have an impact on economic growth. The study also found that budget rationalization; expenditure reduction, privatization, and governance reforms had an impact on economic growth. The study concluded that improvements to public expenditure and the composition of government spending are important for economic growth.

Kimaro, Keong and Sea (2017) analyzed effects of government efficiency and spending on Sub-Saharan African low-income countries' economic growth. The study made use of panel data from the World Development Indicators (WDI) database, which covered 25 low-income Sub-Saharan African nations from 2002 to 2015. Im-Pesaran-Shin and Fisher ADF tests were used in the study to run panel unit root tests. Panel co-integration tests were carried out in the study using the Pedroni test as well. In the end, GMM was used to analyze the data and provide answers to the two study objectives. The findings showed that Sub-Saharan African low-income countries' economies expand more quickly when the government spends more money on them. However, there is little proof that government efficiency increases the effects of government spending on economic growth when government expenditure is combined with it. Sub-Saharan African countries with low incomes should think carefully before using their spending to boost the economy.

Iheanacho (2016) used the Johansen cointegration and error correction approach to evaluate the long-term and short-term relationships between public spending and economic development in Nigeria for the period of 1986–2014. Cobb Douglas production function is used to calculate two components of public sector spending and the gross capital creation ratio. The outcome demonstrated that Nigeria's economic growth is primarily driven by recurrent expenditures. The study highlighted the dual effects of recurrent expenditure on economic growth in Nigeria by demonstrating a negative and significant long-run relationship between economic growth (RGDPC) and recurrent expenditure that coexists with a positive short-run relationship after controlling for the impact of non-oil revenue. The study found that capital expenditure has a negative and significant long-term impact on economic growth in Nigeria. The variance decomposition validated the overall impact of public spending on economic expansion. The study's conclusions have some policy implications for policyholders since they might serve as a guide for the efficient use of public funds on appropriate projects rather than wasting them on massive projects that won't result in significant economic growth.

Kalu and Mbah (2016) analysed how government spending affected Nigeria's economic growth (1981-2013). To estimate the given model, the study used an ex-post facto research strategy and ordinary least squares regression analysis. Government capital expenditure (CAPEXP) and government recurrent expenditure (RECEXP) serve as the independent variables, and real gross domestic product (RGDP) serves as the dependent variable. Granger Causality Examine, Johansen Rank Cointegration Test, and Error Correction Mechanism were used to test two hypotheses that stemmed from the study topics. A long-term link was confirmed, and it was suggested that two cointegrating vectors exist at a 5% level of significance. According to the findings, CAPEXP Granger Cause RGDP while RGDP Granger Cause RECEXP, and RGDP Granger Cause both CAPEXP and RGDP. While RECEXP does not Granger Cause CAPEXP, CAPEXP Granger Causes CAPEXP. As a result, the report suggested, among other things, increasing investment in the economy's productive

areas, such as infrastructure, education, and health. However, the government needs to stop all leaks that have previously prevented efficient and reasonable results from government spending.

Usman and Agbede (2015) used a co-integration and error correction model to study the link between government spending and economic development in Nigeria for the years 1970–2010. The Central Bank of Nigeria provided time-series data for the analysis. All variables included in the model were non-stationary at their levels but integrated of order one, according to the results of the ADF unit root test I (1). According to the results of the long-run analysis, there is a significant positive linear relationship between the two categories of government spending and economic growth (as measured by real GDP), whereas on the short-run, there is a significant positive linear relationship between economic growth and recurrent spending and a significant negative linear relationship with capital spending. The Pairwise Granger Causality test in a Vector Error Correction Model revealed unidirectional (one-way) causality, running from capital expenditure to economic growth and recurrent expenditure to economic growth, while bi-directional causality runs from capital expenditure to recurrent expenditure and vice versa. As a result, the study proposed that the national budget allocate an adequate proportion to capital expenditures by the government to boost economic growth.

Okoro (2013) studied how government expenditure affected Nigeria's economic expansion. 32-year time series data were used in the study (1980-2011). To estimate the given model, the study used ordinary least square multiple regression analysis. Government capital expenditure (GCEXP) and government recurrent expenditure (GREXP) served as the independent variables, and Real Gross Domestic Product (RGDP) served as the dependent variable. The Granger Causality Test, the Johansen Co-integration Test, and the Error Correction Mechanism were all applied, and the results demonstrated that there is an equilibrium long-run relationship between government spending and economic growth in Nigeria. At a rate of 60% annually, the short-run dynamics adjusts to the long-run equilibrium.

Modebe et al, (2012) studied the effect of government spending on economic growth between 1987 and 2010 (divided into recurrent and capital expenditure). Recurrent and capital spending were utilized as independent variables, while the gross domestic product growth rate was employed as the dependent variable, in a three variable multiple regression model. The study's findings showed that while ongoing government spending had a positive but insignificant impact on economic growth, capital spending had a negative but insignificant effect, reinforcing the need to boost and encourage private sector investment, which has consistently shown to be a more effective use of resources than public sector spending.

Muritala and Taiwo (2011) Utilizing an econometric model and the Ordinary Least Square (OLS) technique, researchers looked at the trend as well as the effects of government spending on the growth rates of real GDP in Nigeria throughout the period (1970–2008). The Durbin Watson unit root test was used in the study to see whether there was stationary between the variables. The outcome showed that there was no serial correlation and that all the model's variables were non-stationary at their levels. The results of an attempt to establish a long-term link between public spending and economic growth showed that the variables are critically co-integrated at 5% and 10%. The results demonstrated a favorable association between real GDP and both recurrent and capital spending. Therefore, it could be advised that the government should emphasize private

sector involvement and privatization/commercialization to increase efficiency in the allocation of development resources.

Materials and methods

Data and Tools

Data for study is obtained from the Central Bank of Nigeria (CBN) Statistical Bulletin of 2021, representing Economic growth was proxied by the Gross Domestic Product (GDP) as the dependent variable and the explanatory variables are Government Recurrent Expenditure (GREXP), Government Capital Expenditure (GCEXP) and Government Total Public Expenditure (GTPEXP) from 1981 to 2021. The data were subjected to these various tests; Descriptive Statistics, Augmented Dicker Fuller (ADF) unit root test, Johansen cointegration, Error Correction Mechanism (ECM), Serial correlation and Heteroscedasticity tests, Recursive Estimates of the CUSUM (Cumulative Sum Control) Test and Pairwise Granger causality.

Model Specification

The model in the study was specified to capture the key variables in the study which include gross domestic product (GDP), government recurrent expenditure (GREXP), government capital expenditure (GCEXP), and government total public expenditure (GTPEXP). The model is functionally presented as shown below:

$$GDP = f(GREXP, GCEXP, GTPEXP) \quad (1)$$

In a linear function, the above model is represented as follows:

$$GDP_t = \beta_0 + \beta_1 GREXP_t + \mu_t \quad (2)$$

$$GDP = \beta_0 + \beta_1 GCEXP_t + \mu_t \quad (3)$$

$$GDP = \beta_0 + \beta_1 GTPEXP_t + \mu_t \quad (4)$$

Where:

β_0 = Constant term

β_1 = Regression coefficient of the independent variable

μ_t = Error Term for period t

GDP_t = Gross Domestic Product for period t (Dependent variable)

$GREXP_t$ = Government Recurrent Expenditure for period t (Independent variable)

$GCEXP_t$ = Government Capital Expenditure for period t (Independent variable)

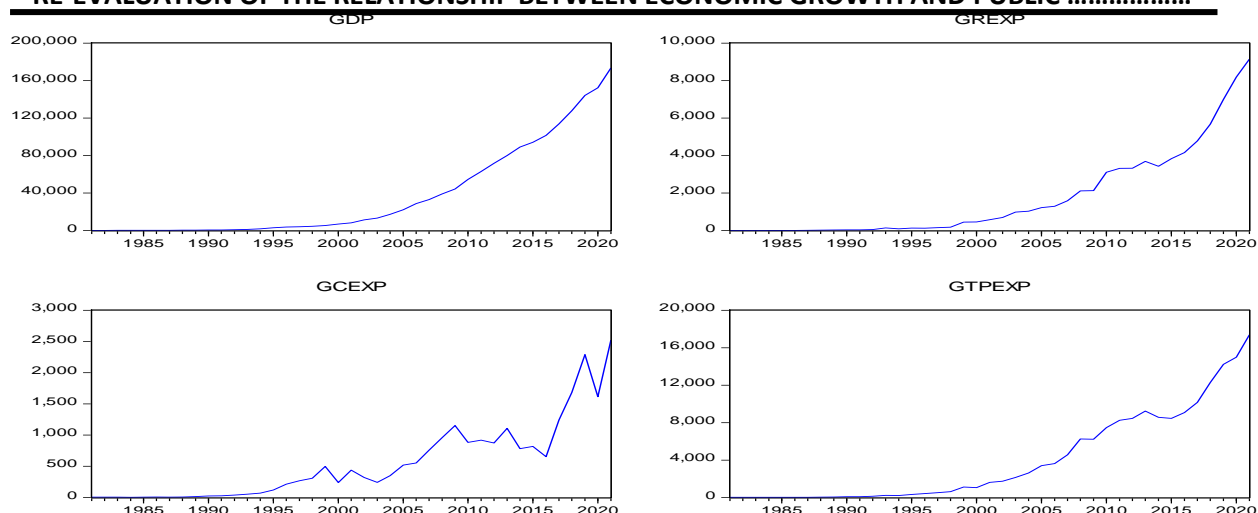
$GTPEXP_t$ = Government Total Public Expenditure for period t (Independent variable)

Trend Analysis of Data

The trend analysis of variables (GDP, GREXP, GCEXP and GTPEXP) in in figure 1 below revealed that except GDP that trended smoothly other variables trended upward with periods of peak and trough suggesting the expected non-stationarity of the variables.

Figure 1: Trend Analysis of GDP, GREXP, GCEXP and GTPEXP

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Analysis and Results

Description of Variables

Table 1 below is the descriptive statistics revealing the distributional features of all the variables employed in this study. The high values of the standard deviation as well as wide differences between the values of the minimum and maximum of the variables suggested high variability recorded within the scope of this study. This is supported by the excess Kurtosis recorded in all the variables, which is excess from the normal (greater than 3), an indication of a leptokurtic distribution. All the variables recorded positively skewed distribution. All the variables recorded p-values of Jarque-Bera that are significant at 5% at 95% confidence level, suggesting of abnormal distribution.

Table 1: Descriptive Statistics for GDP, OILEXP and NOILEXP

Parameters	GDP	GREXP	GCEXP	GTPEXP
Mean	37016.40	1786.256	551.7784	4044.002
Median	8134.142	579.3000	321.3781	1614.953
Maximum	173527.7	9145.153	2522.468	17370.54
Minimum	144.8312	4.750800	4.100100	16.99250
Std. Dev.	49873.23	2403.322	629.5968	4908.987
Skewness	1.284134	1.510973	1.434126	1.077663
Kurtosis	3.447564	4.543848	4.703509	3.090357
Jarque-Bera	11.61038	19.67253	19.01173	7.949887
Probability	0.003012	0.000053	0.000074	0.018780
Observations	41	41	41	41

Stationarity Properties of the Variables

This study applied Augmented Dickey Fuller (ADF) unit root test as shown below in table 2 to know the appropriate technique to use in model estimation. As revealed all variables did not attain stationarity at level, indicating non rejection of the null hypotheses that all the variables have unit root at level, rather are stationary at first difference. indicating rejection of null hypotheses that all variables have unit root at first difference.

Table 2: ADF Unit Root Test at Level and First differenced Data

Variables	Maxlag	Level	1 st Difference	Remarks
		ADF Statistics/P-value	ADF Statistics/ P-value	
LnGDP	9	-1.376205(0.5842)	-3.262714(0.0237)	@1(1)
LnGREXP	9	-1.614159(0.4660)	-8.520184(0.0000)	@1(1)
LnGCEXP	9	-0.891292(0.7808)	-6.778563(0.0000)	@1(1)

LnGTPEXP	9	-1.243382(0.6457)	-3.094249(0.0355)	@1(1)
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Co-integration and Equilibrium Test

This is to know if there exist equilibrium relationships between the variables; GDP, GREXP, GCEXP and GTPEXP. Table 3 below revealed that unrestricted rank tests (Trace and Maximum Eigenvalue) co-integrations are at “None” and “At most 3” respectively, suggesting one co-integration equation at 5% level of significance among the variables. This shows that long run relationship exists between the dependent variable economic growth proxied by GDP and public expenditure in Nigeria within the scope of this study.

Table 3: Johansen Cointegration Test

Unrestricted Cointegration Rank Test (Trace)				
Hypothesized		Trace	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.610912	65.55031	47.85613	0.0005
At most 1	0.306444	28.73625	29.79707	0.0659
At most 2	0.232629	14.46523	15.49471	0.0710
At most 3 *	0.100682	4.138637	3.841466	0.0419
Unrestricted Cointegration Rank Test (Maximum Eigenvalue)				
Hypothesized		Max-Eigen	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.610912	36.81406	27.58434	0.0025
At most 1	0.306444	14.27101	21.13162	0.3432
At most 2	0.232629	10.32660	14.26460	0.1914
At most 3 *	0.100682	4.138637	3.841466	0.0419

Estimation of Relationship between Economic Growth and Public Expenditure

The ECM results at table 4 revealed that capital expenditure and total public expenditure significantly relate to economic growth in Nigeria at lag 2 within the scope of the study, whereas recurrent expenditure insignificantly relate with economic growth. The Adjusted R-squared is 11.4%, indicating that government expenditure only explain 11.4% of the total variation in the economy proxied by GDP. This result is valid and reliable for further investigation since problem of autocorrelation is not bordered because Durbin-Watson (DW) stat is 1.760569 in this study.

Table 4: Error Correction Mechanism Test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(LNGREXP(-1))	0.027952	0.143490	0.194800	0.8468
D(LNGREXP(-2))	0.000774	0.142686	0.005426	0.9957
D(LNGCEXP(-1))	-0.041589	0.096141	-0.432582	0.6683
D(LNGCEXP(-2))	-0.194481	0.094400	-2.060182	0.0479
D(LNGTPEXP(-1))	0.479118	0.269018	1.780987	0.0847
D(LNGTPEXP(-2))	0.622101	0.247411	2.514444	0.0173
ECM(-1)	0.146381	0.114477	1.278694	0.2105
R-squared	0.114267	Durbin-Watson stat		1.760569
Adjusted R-squared	-0.057165			

Granger Causality Test

Causality test is a tool used to know if causality exists or otherwise, between any two or more variables. From the table 5 below, GREXP and GTPEXP granger cause GDP, suggesting a unidirectional causality between GREXP, GTPEXP and GDP. That shows causality flows from GREXP and GTPEXP to GDP only, no feedback effect.

Table 5: Pairwise Granger Causality Test Results

Null Hypothesis:	Obs	F-Statistic	Prob.
GREXP does not Granger Cause GDP	39	4.03020	0.0269
GDP does not Granger Cause GREXP		1.34709	0.2735
GCEXP does not Granger Cause GDP	39	1.54044	0.2289
GDP does not Granger Cause GCEXP		3.18886	0.0538
GTPEXP does not Granger Cause GDP	39	6.46918	0.0042
GDP does not Granger Cause GTPEXP		1.18054	0.3194

Residual Diagnostic and Stability Tests

This study used Normality test, Serial correlation test, Heteroscedasticity test and Recursive Estimates of the CUSUM (Cumulative Sum Control) Test for diagnostic and stability test.

Table 6: Breusch-Godfrey Serial Correlation LM Test

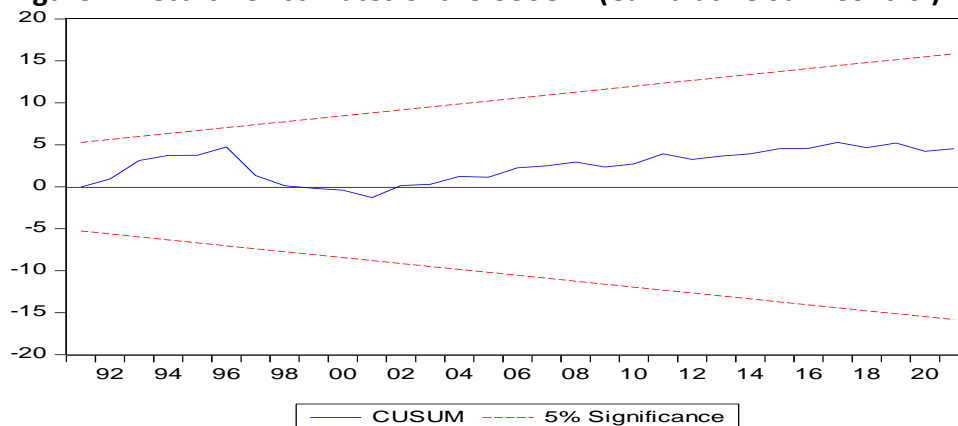
F-statistic	0.254091	Prob. F(2,29)	0.7773
Obs*R-squared	0.654426	Prob. Chi-Square(2)	0.7209

Table 7: Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	1.803116	Prob. F(7,30)	0.1234
Obs*R-squared	11.25313	Prob. Chi-Square(7)	0.1280

The results in tables 6 and 7 revealed of both Serial correlation and Heteroskedasticity tests showed that F-statistic and Obs*R-squared p-values are greater than the 5% level of significance, suggesting absence of serial correlation and no Heteroskedasticity in the model.

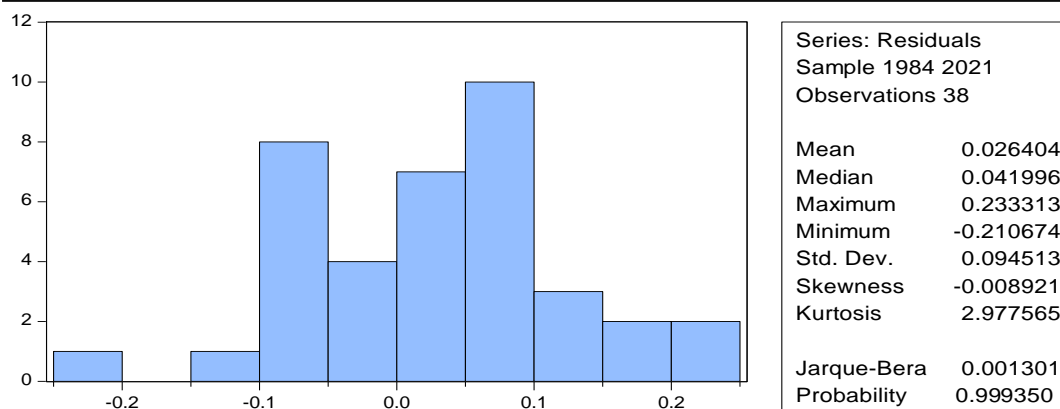
Figure 2: Recursive Estimates of the CUSUM (Cumulative Sum Control) Test



Recursive Estimates of the CUSUM in figure 2 above showed that the blue line falls between the two red lines showing the 5% significance level boundaries. This confirmed that the model is stable.

Figure 3: Normal Distribution Test

Histogram normality in Figure 3 revealed that the coefficient of Jarque-Bera 0.001301 with 0.999335; the p-value is more than 5% level of significance established in this study. This showed that the data set is normally distributed



Conclusion and Recommendations

This study found among others that capital expenditure and total public expenditure significantly impact economic growth in Nigeria, while recurrent expenditure exerts insignificantly on economic growth. The finding that recurrent expenditure insignificantly impact on economy is not in doubt in practical terms. This is because the significant component of the recurrent expenditure is on administration, which according to classical economist that expenditure on administration, defence, justice, law and order and maintenance of state are unproductive since they do not add to capital stock and/or tangible goods in the economy (Bhatia, 2004).

Such expenditures are practically inefficacious. Again, overheads which are a part of recurrent expenditure takes the chunk of the fund in the budget and such huge amount of money that is spent on day-to-day administration are always misappropriated (where top officers either divert them with inherent poor maintenance culture, Kickbacks and over invoicing etc.). Again, the huge amount spent on salaries are mostly unproductive since some workers are idle, in most cases, they abscond from their assigned duties and only appear at the end of the month for their salaries. Other unproductive recurrent expenditures are internal security expenditure; huge funds on Boko haram and other internal unrest have not yielded any meaningful result.

Huge funds are earmarked for Police officers and others for uniform and welfare but are misappropriated. For expenditure on national assembly, their legislation has not appropriately enhanced economic growth. Therefore, the researchers are suggesting that government should restructure recurrent expenditure to significantly contribute to growth of the economy. Again, government should consider more allocation on capital expenditure since the contribute significantly to the economic growth in Nigeria.

References

- Ahsan, S.M., Kwan, A.C. & Sahni, B.S. (2012). Public expenditure and national income causality: Further evidence on the role of omitted variables. *Southern Economic Journal*, 58(3), 623-634.
- Akpan, N. (2005). Government expenditure and economic growth in Nigeria: A disaggregated Approach. *CBN Economic Financial Review*, 43(1), 66-75.
- Aluthge, C., Jibir, A., & Abdu, A. (2021). Impact of government expenditure on economic growth in Nigeria, 1970-2019. *CBN Journal of Applied Statistics*, 12(1), 139-174.
- Amadeo, K. (2018). Current federal mandatory spending. *The Balance*. Retrieved 23-02-2020.

- Aregbeyen, O. (2007). Public expenditure and economic growth. *African Journal of Economic Policy*, Ibadan (Nigeria): University of Ibadan Press 1(1).
- Beraldo, S., Montolio, D., & Turati, G. (2018). Healthy, educated and wealthy: A primer on the impact of public and private welfare expenditures on economic growth. *The Journal of Socio-Economics*, 38, 946–956.
- Berg, A., & Ostry, J. (2017). Inequality and unsustainable growth: Two sides of the same coin. *IMF Economic Review*, 65 (4), 792–815.
- Bhatia, H.L. (2004). *Public Finance*. New Delhi, Vikas Publishing House.
- Breton, T.R. (2015). Higher test scores or more schooling? Another look at the causes of economic growth. *Journal of Human Capital*. 9(2), 239–63.
- Cakerri, L., Petanaj, M. & Muharemi, O. (2014). The effect of government expenditures on economic growth: The case of Albania. *European Journal of Social Sciences*, 2(1), 242-253.
- Cashin, P. (2015). Government spending, taxes and economic growth. *International Monetary Fund*, 42, 237-269.
- Cooray A, (2009). Government expenditure, governance and economic growth. *Comparative Economic Studies*, 51(3), 401-418.
- Garrett, T. J. (2014). Long-run evolution of the global economy: Physical basis. *Earth's Future*. 2(3), 127.
- Gaurav, A. (2012). What is public expenditure? Meaning and classification. <http://kalyan-city.blogspot.com/2011/02/what-is-public-expenditure-meaning-and.html>. Retrieved 15/07/2018.
- Ghali, K.H. (2018). Government size and economic growth: Evidence from a multivariate cointegration analysis. *Applied Economics*, 31, 975-987.
- Gopalan, S. & Rajan, R.S. (2016). Has foreign aid been effective in the water supply and sanitation sector? Evidence from Panel Data. *World Development*, 85, 84–104.
- Gordon, R.J. (2016). *The rise and fall of American growth*. Princeton, NJ USA: Princeton University Press.
- Gruber, J. (2017). *Public finance and public policy* (Fifth ed.). New York: Worth Publishers.
- Hanushek, E., & Woessmann, L. (2015). *The knowledge capital of nations: Education and the economics of growth*. MIT Press.
- Herzer, D., & Vollmer, S. (2013). Rising top incomes do not raise the tide. *Journal of Policy Modeling*, 35 (4), 504-519.
- Hunt, E.K., & Lautzenheiser, M. (2014). *History of economic thought: A critical perspective*. PHI Learning.
- Iheanacho, E. (2016). The contribution of government expenditure on economic growth of Nigeria Disaggregated approach. *International Journal Economy and Management Sciences*, 5, 369.

- Irmen, A., &Kuehnel, J. (2018). Productive government expenditure and economic growth. InUniversity of Heildelberg, Discussion Paper Series, 464, 1-49.
- Jakupi, V.K., &Prodani, G. (2015).The impact of macroeconomic factors in public capital expenditures in Albania.European Journal of Sustainable Development, 4(1), 51-62.
- Kalu, I.A., &Mbah, O.R. (2016). An empirical analysis of the effect of government expenditure on economic growth in Nigeria (1981-2013), Research Journal of Finance and Accounting, 7(20), 60-72.
- 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, 5(2), 34-54.
- Kolluri, B.R., Panik, M.J., &Wahab, M.S. (2016). Government expenditure and economic growth: Evidence from G7 Countries. Applied Economics, 32, 1059-1068.
- Koman, J., &Bratimasrene, T. (2007). The relationship between government expenditure and economic growth in Thailand. Journal of Economic Education, 14, 234-246.
- Landau, D. (2016). Government and economic growth in the less developed countries: An empirical study. Economic Development and Cultural Changes, 35, 35-37.
- Lee, Y.S. (2018). growth. Journal of Business Venturing, 33, 70–83.
- Li, H., &Heng-fu, Z. (2018). Income inequality is not harmful for growth: Theory and evidence. Review of Developmental Economics, 2(3), 318–334.
- Loizides, J., &Vamvoukas, G. (2018). Government expenditure and economic growth: Evidence from trivariate causality testing. Journal of Applied Economics, 8(1), 125-152.
- Maingi, J.N. (2017).The impact of government expenditure on economic growth in Kenya: 1963-2008. Advances in Economics and Business 5(12), 635-662.
- Mankiw, G. (2014). Principles of economics (Seventh ed.). Stamford, CT: Southwestern Publishing Group.
- Modebe, N. J., Okafor, R. G., Onwumere, J. U., &Ibe, I. G. (2012). Impact of recurrent and capital expenditure on Nigeria’s economic growth. European Journal of Business and Management, 4(19), 66-75.
- Muritala, T.A., &Taiwo, A. (2011).Government expenditure and economic development: Empirical evidence from Nigeria. MPRA Paper, 37293, 1-10.
- Niloy, B., Emranul, M.H., & Denise. R.O. (2013). Public expenditure and economic growth: A disaggregated analysis for developing countries. Journal of Economic Review, 3(2), 35-44.
- OECD (2018), General government spending (indicator). doi: 10.1787/a31cbf4d-en (Accessed on 13 December 2021).
- Office of Management and Budget (2018). Outlays for discretionary programs: 1962–2023. Retrieved 23-02-2020.

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RE-EVALUATION OF THE RELATIONSHIP BETWEEN ECONOMIC GROWTH AND PUBLIC

- Okeke, M. N., Mbonu, C.M., &Amahalu, N. N. (2018). Tax revenue and economic development in Nigeria: A Disaggregated Analysis. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 8(2), 178-199.
- Okoro, A.S. (2013). Government Spending and Economic Growth in Nigeria (1980-2011). *Global Journal of Management and Business Research Economics and Commerce*, 13(5), 20-30.
- Piana, V. (2011). Public expenditure. <http://www.economicwebinstitute.org/glossary/pubexp.htm>
- Popescu, C. C, &Diaconu, L. (2021). Government spending and economic growth: A cointegration analysis on Romania. *Sustainability*, 13(12), 6575.
- Ranjan, K. M, &Bhanumurthy, N.R.(2020).Assessing public expenditure efficiency at the subnational level in India: Does governance matter? *National Institute of Public Finance and Policy, New Delhi Indian*, 1-14.
- Razzolini, L., &Shughart, W.F. (2017). On the (relative) unimportance of balanced budget. *Public Choice*, 90, 215-233.
- Seshaiah, S.V., Koti, T., Reddy, I.R. Sarma, S. (2018). General government expenditure and economic growth in India: 1980-81 to 2015-16. *Scientific research*, 8(4), 728-740.
- Seymour. D., & Oral, W. (2017). The impact of government expenditure on economic growth in the OECS. A disaggregated approach. *World Bank Research Oxford University Press*.
- Taylor, T. (2017). Principles of macroeconomics: Economics and the economy (Fourth ed.). Minneapolis: Textbook Media Press, 366–340.
- Usman, O.,&Agbede, E.A. (2015).Government expenditure and economic growth in Nigeria: A cointegration and error correction modeling. *MPRA Paper No. 69814*.
- Vtyurina, S. (2020). Effectiveness and equity in social spending: the case of Spain. *IMF Working Paper*, No. WP/20/16.
- Wenyi, S., Yang, S.C., &Zanna, L.F. (2015). Government spending effects in low-income countries, *WP/15/286*, International Monetary Fund.
- World Bank (2008).Public expenditure management handbook. Washington, D.C.: The World Bank Group.
- Zimčík, P. (2016). Economic growth and budget constraints: EU countries panel data analysis. Issue 2/2016. In: *Review of Economic Perspectives*, 2, 87-101.