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## GOVERNMENT SPENDING, TAXATION, AND INCOME INEQUALITY IN NIGERIA

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**Abstract:** This study investigated the relationship between fiscal policy and income inequality in Nigeria from 1985 to 2022. The specific objectives were to examine the impact of capital expenditure, recurrent expenditure, deficit financing, and value-added tax revenue on income inequality. Data for each variable were obtained from existing secondary sources, including the Central Bank of Nigeria (CBN) Statistical Bulletin and the World Bank. The autoregressive distributed lag (ARDL) method, along with pre-estimation tests for unit roots and bounds cointegration, formed the basis for data analysis. The results of the unit root test show that the variables are mixed-integrated, with the Gini coefficient being stationary at levels, while the other variables were stationary after first differencing. The bounds cointegration test results indicate a long-term relationship between the Gini coefficient and the independent variables. The ARDL results show that capital expenditure has a positive and insignificant impact on income inequality in Nigeria, implying that an increase in capital expenditure will, in the long run, increase income inequality. Evidence of a negative insignificant impact of deficit financing on income inequality was found in the long run. The results further show that recurrent expenditure and value-added tax have a negative insignificant influence on income inequality in the long run. Additionally, the error correction coefficient (-0.021084) is negative and significant at the 5% level, indicating that about 2.10% of distortions from long-run equilibrium will be adjusted each year. Based on these findings, the study concludes that capital expenditure plays a pivotal role in income inequality in the Nigerian economy. Thus, it is recommended that the government prioritize investments in sectors that directly reduce inequality, such as education, healthcare, and rural infrastructure.

**Keywords:** Capital Expenditure, Recurrent Expenditure, Deficit Financing, Value-Added Tax Revenue, Income Inequality

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### **INTRODUCTION**

In any society wide spread inequality gives rise to poverty. Poverty is the end product of inequality, which has raised concerns among economists globally, in their pursuit for sustainable economic growth and development. With respect, to Nigeria, available data show that there was increase in the average growth of poverty rate from 42.07% between 1981 to 1990 to an alarming rate of 63.99% between 2001 and 2010 (World Bank, 2016). Gallo (2002) defines inequality as the difference in the standard of living across the population. Damien (2021) refers to income inequality as the degree of variance in income amongst the households in the economy. In any economy structure, there is the requirement for government to attempt exceptionally valuable actions aimed at shaping various developmental aspirations. One of such actions is fiscal policy. The relationship between fiscal policy and development in terms of poverty reduction and unemployment represents one of the most widely debated topics among economists and policy makers in both developed and developing countries (Ewubare & Obayori, 2015). This relationship can either be negative, positive or uncertain. In this way, fiscal arrangement was designed to divest resources that are less socially desirable to those investments that have social desirability. The differences on the nature of the relationship between fiscal policy measures and these development variables as found in economic literatures could be explained by the methodology the country and the nature of the data used by the different researchers (Obayori, 2016). By means of definition, fiscal policy was defined by Ewubare and Obayori (2015) as changes in government expenditures, taxes, or both to counteract macroeconomic problems. Fiscal policy could be expansionary or contractionary. It is expansionary if government expenditures are increased and taxes reduced while fiscal policy is contractionary if government expenditures reduced and / or taxes increased. Thus, the target of both contractionary and expansionary fiscal policy is to achieve a reduction in poverty, unemployment level, and income inequality and spur growth. Nigeria is a large country which occupies about 923768 2 with a population of 190,632, 261 million estimated based in world fact book (CIA, 2018). Nigeria has a huge and vast availability of Natural resources which has generated more than \$500 billion, since its inception to crude oil exportation (Xavier & Subramanian, 2003). Yet achieving equitable distribution of income and alleviating poverty has always been some major development objectives. Hence, successive governments have engaged in various income redistribution and poverty reduction programmes. But it is disappointing to note that despite the several fiscal measures introduced since 1986, and given the prominence of fiscal policy in macroeconomic management in Nigeria, economic growth over the years has not accelerated yet poverty and income inequality remained widespread and pervasive, particularly in the rural areas and there is still a glaring level of income inequality, low per capita income, rising unemployment, poverty and associated economic woes in Nigeria (Okulegu, 2013; Uchechukwu & Ibiok, 2015; Wachukwu, Onyema, & Amadi, 2018). Moreso, with respect to Nigeria, available data from world development indicators (2019) revealed that from 1986 to 1987, income inequality remained steady at 3.9 it however increased to 40.2 percent and 40.7 percent in 1988 and 1989 respectively. By 1990 and 1991, it has increased to 41.2 percent and 41.7 percent respectively. As at 1992 to 1995, the income inequality has increased steadily from 45 percent, 46 percent, 47.0 percent and 47.7 respectively. While the period of 1996 to 2001 witnessed a steady increase in income inequality of about 51.9 percent, 52.1 percent, 53.5 percent, 55 percent, 56 percent respectively, it however, witnessed a steady decline of about 40.1 percent, 40.0 percent, and 40.7 percent in 2003, 2004 and 2005 respectively. While the rate of income inequality

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stood at 41.8 percent in 2007, it increased to 42.9 percent in 2008 and by 2010, it has increased to 43.9 percent and then 44.5 percent in 2011 and 45.7 percent in 2013. While it increased to 46.9 percent and 47.5 percent in 2015 and 2016 respectively, it however declined to 46.9 percent as at 2017 and then 47.1 percent by 2018. But by 2019, the rate of income inequality had declined to 35.1 percent. From the forgoing, the index of income inequality was increasing during the period under study. Additionally, the nature of income distribution in Nigeria has been described as extremely skewed and uneven. As observed from the Nigerian Living Standard Survey (NLSS) provided by the NBS for 2018 and 2019, the Gini coefficient in Nigeria stood at 35.1 percent. This indicates that the country experienced uneven distribution of income. The scenario above requires further investigation into the relationship between fiscal policy and the problem of income inequality. Consequently, the major questions that come to mind are: What is the effect of government capital expenditure on income inequality in Nigeria? How does government recurrent expenditure affect income inequality in Nigeria? To what extent does deficit financing affect income inequality in Nigeria? How does value added tax revenue affect income inequality in Nigeria? This study therefore determined the effect of fiscal policy variables such as government capital expenditure, deficit financing and value added tax revenue on income inequality in Nigeria.

## **LITERATURE REVIEW**

### **Theoretical Framework**

#### **Keynesian Fiscal Policy Theory**

The theoretical underpinning of this work is based on the Keynesian theory of government intervention proposed by Keynes in his book, 'The General Theory of Employment, Interest and Money', published in 1936. The Keynes theory states that expansion of government expenditure accelerates economic growth. Keynes (1936) assumes the aggregate supply function to be stable. He concentrates his entire attention upon the aggregate demand function to fight economic depression. He submitted that the lingering economic depression was a result of failure on the part of the government to control the economy through appropriate economic policies. Consequently, he proposed the concept of government intervention in the economy through the use of macroeconomic policies (Torres, 2010). According to Keynesian economists, when the economy is knocked off balance by serious economic shocks, the government can help restore normalcy by increasing demand through government spending. And because the influx of government spending drives businesses to hire factor input and consumers to spend, its impact is multiplied (Mankiw, 2010). In summary, this theory holds that increase in government expenditure leads to increase in economic activities and higher economic growth. The Keynesian theory asserts that government expenditure especially deficit financing could provide short - term stimulus to help halt a recession or depression. During a recession, aggregate expenditure is deficient causing the underutilization of inputs (economic resources). Aggregate expenditure (AE) can be increased, according to Keynes (1936), by increasing consumption spending (C), increasing investment spending (I), increasing government spending (G), or increasing the net exports (X-M). i.e,  $AE = C + I + G + (X - M)$ . For the sake of simplicity, this analysis holds that public spending measures have a direct impact on aggregate demand, which will stimulate the economy. In line with the explanations of this theory, an expansionary fiscal policy has the promise of minimizing economic misery and improves wellbeing through increase in the level of investment, employment generation, higher productivity and economic growth.

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### **General Theories of Income Distribution**

This study utilized the vantage offered by general theories of income distribution. These theories blend ideas from Ricardian theory, Marxian theory, Neo-classical theory, and Kaldor's model to explain the multiple and complex reasons for wage and income inequality in society. It is an embodiment of four major theoretical postulates that attempts to explain income and wage inequality among individuals, groups, nations, and regions. The general theories of income distribution drew heavily from the works of David Richado (1951), Karl Marx (1867), Nicholas Kaldor (1955), and neo-classical theorists such as John Bates Clark (1899; 1929) and Fritz Machlup (1939). The general theories of income distribution considered three major factors of production to include land, capital, and labour. Total income is distributed to these factors in terms of rent, profits, and wages. These theories see income as the final result or stage of the entire economic process (Bigsten, 1983). Ricardo posits that when income is shared in favour of landlords, it hinders economic growth. He also observed that, conflict in income sharing revolves around profits and wages. Suggesting that rents are less shared and, less

The Neo-classical or Marginal Productivity theorists spiced up the general theories of income distribution. Clark, Machlud among other neo-classical theorists posit that all factors of production are scares including labour, and all creates value. This position refutes Marxian view that value is only created by labour. Like Marx, the assumptions of Kaldor's model on income distribution reveals that return to economic processes or production is shared between two major classes: capitalists and workers. Kaldor observed that both the capitalists and workers have the propensity to save, and workers savings are usually lower than that of the capitalists. Kaldor holds that if profits are properly shared, it will help in bridging wages gaps between the capitalists and workers. The relevance of the general theories of income distributions to this study is remarkable. These theories identified sources of income in society, and how income is shared among the two major class of people in society – the capitalists (owners of means of production) and workers. General theories x-rayed how wages and income inequality cause conflicts between workers and capitalists. It explains how labour surplus influences wages/income accruing to workers. General theories highlight clearly how innovation of means of production by capitalists constitutes to labour surplus and encourage capitalists to place wages/income at subsistence level.

## **2.2 Conceptual Review**

### **2.2.1 Fiscal Policy**

Abdurrauf (2015) defines fiscal policy as the process of government management of the economy through the manipulation of its income expenditure and to achieve certain desired macroeconomic objectives. Central Bank of Nigeria (2011) defines fiscal policy as the use of government expenditure and revenue collection through tax and amount of government spending to influence the economy. Fiscal policy is the means by which the government adjusts its level of spending in order to monitor and influence the nation's economy (Agu & Idike, 2014). It is used along with the monetary policy which the central bank uses to influence money supply in a nation. In other words, fiscal policy is a major economic stabilization weapon that involves measure taken to regulate and control the volume, cost and availability as well as direction of money in an economy to achieve some specified macroeconomic policy objective and to counteract undesirable trends in the Nigerian economy (Abdurrauf, 2015). Agu, Idike, Okwor and Ugwunta (2014) define fiscal policy as government's program with respect to the purchase of goods and services and spending on the transfer of payments, and as well the amount

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and type of taxes. In finance, fiscal policy is the use of government revenue collection (taxation) and expenditure (spending) to influence the economy. The two main instruments of fiscal policy are government taxation and expenditure. Changes in the level and composition of taxation and government spending can affect aggregate demand and the level of economic activity; the pattern of resource allocation; and the distribution of income (Ogunlana, Fatai, Arogundade, Al-Hassan, & Olayinka, 2014). This implies that fiscal policy refers to the use of the government budget to influence economic activities. Anthony and Chukwu, (2015) contends that fiscal policy involves the use of government spending, taxation and borrowing to affect the level and growth of aggregate demand, output and jobs creation. It is the government spending policies that influence macroeconomic conditions. These policies affect tax rates, interest rates and government spending, in an effort to control the economy. Fiscal policy is the means by which a government adjusts its levels of spending in order to monitor and influence a nation's economy. Various researchers have submitted that fiscal policy goals include the following: increasing employment opportunities; attaining full employment; stabilization of domestic prices; promoting economic growth and development through industrialization; achieving equity in income redistribution; achieving stable exchange rate; and increasing the rate of investment in the country (Cynthia, & Itode, 2018). According to Morakinyo, David and Alao (2018) fiscal policy is associated with the use of government expenditure and taxation to influence the economic activities of a country. Fiscal policy involves government deliberate actions in levying taxes and spending money with the view of influencing targeted macroeconomic variables to move in a desired direction. These microeconomic variables include high employment rate, sustainable economic growth, and low inflation. As a result, fiscal policy seeks to stabilize the economy. Increases in government spending or reductions in taxes tend to lift the economy out of a recession, whereas decreases in expenditure or increases in taxes tend to slow down a boom (Dornbusch & Fischer, 1990). Peter and Simeon (2011) define fiscal policy as the process of government management of the economy through the manipulation of its income and expenditure to achieve certain desired macroeconomic objectives. Central Bank of Nigeria (2011) defined fiscal policy as the use of government expenditure and revenue collection through tax and amount of government spending to influence the economy. Fiscal policy is the use of government taxation and expenditure to control the economy. Government taxes and expenditure are the two primary fiscal policy instruments. According to Grey and Okoiarikip (2015) fiscal policy entails the use of government expenditure, taxing, and debt to influence the level and growth of aggregate demand, production, and employment generation. Government spending decisions have an impact on macroeconomic conditions. In order to regulate the economy, these policies impact tax rates, interest rates, and government expenditure. Fiscal policy is the process through which a government changes its expenditure levels in order to monitor and control a country's economy. From all of these definitions, we can conclude that fiscal policy is one of the regulatory policies employed by the government to achieve its goals of economic growth. Fiscal policy is an offshoot of Keynesian economics, and its logical analysis implies that it is a definite way to stabilize the economy. Modern fiscal policy seeks to improve economic efficiency and stability. In a contemporary economy, the government has a hand in every aspect of economic activity. Taxation and expenditure are two primary fiscal instruments used by governments to affect private economic activity. Buhari (2016) argued that fiscal policy is concerned with deliberate actions which the government of a country take in the area spending money and or levying taxes with the objective of influencing



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macroeconomic variables such as the level of national income or output, the employment level, aggregate demand level, the general level of prices etc in a desired direction. Bhatia (2008) noted that fiscal policy consists of steps and measures which the government takes both on the revenue and expenditure sides of its budget and that it is the aggregate effects of government expenditures and taxation on income, production and employment. Dandan (2011) stated that it is government's programme of taxation, expenditure and other financial operations to achieve certain national goals. He posited that whatever the objectives and the order of priorities, the two basic instruments of fiscal policy used to achieve social goals are taxation and public expenditure. According to Iyeli and Azubuike (2013) opined that fiscal policy refer to government actions affecting its receipts and expenditures which we ordinarily taken as measured by the government's net receipts, its surplus or deficit. Again, Ijeh (2008) refer to fiscal policy as government action plan concerning how to raise funds and disburse funds. He further posited that it is the use of government revenue and expenditure programmes to affect the economy in a way to produce desirable effect such as achieving full employment, general good price level, aggregate demand and economic growth and development. He noted that the instruments of fiscal policy are taxation, government expenditure, government budget, public debts and subsidy. Government intervention in the economy through its fiscal policy is usually enunciated in its budget. Government tries to manipulate the fiscal policy instruments to stabilize the economy and achieve a desired level of economic growth. Bhatia (2008) posited that when an economy is stabilized, investment decisions are more favourably effected as consumption expenditure does not fall below certain minimum level and forms a cushion against economic contraction.

## **Capital Expenditure**

A developed market economy having enough flexibility may be suffering from a deficiency of effective demand. Public expenditure can add to the effective demand directly and this generates conditions favourable for the market forces to push up production. Such public expenditure is not meant to add to the supply side of the market at the same time. It is just a means of disbursing purchasing power in order to add to effective demand. This technique can only be effective at a less than full employment otherwise money income will increase without a corresponding increase in the real income since real income depends on the use of real resources. The repercussion effects will be inflationary pressures if demand is pushed beyond full employment. The government is not selective in its expenditure. This is so because effective demand resulting from public expenditure may not proportionately stimulate increased production because of various rigidities, which the developed economy may suffer. For instance, some industries may not have unutilized excess capacity. When demand goes up, monopolistic practices may be in vogue and there can be strong militant trade unions. Under different technical constraint and other types of rigidities, the economy may not be able to respond fully to increased demand. Consequently, there may be a partial increase in production, which does not match the effective demand and hence can be quite inflationary beyond limit. The situation is a bit different in a developing economy being characterized by a low level of saving and investment. The deficiency of demand in the developing economy may be remedied by stimulating private saving and investment or through direct public saving or investment or both. The developing economies lack social overheads, skilled labour, capital equity and basic industries. Public

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expenditure can be directly used to create trade. Also, public expenditure is useful in correcting externalities and regional disparities. In Nigeria, some states are termed educationally disadvantaged States and get lion share of the expenditure on education so as to spring them up. Public expenditure can be used to provide the necessary economic infrastructure for the development of selected economic activities and can be used to give subsidies for increasing their profitability. For instance, public sector investment can be specifically directed towards creation of particular supplies and facilities, which form important and necessary input for other industries. In such a case, shortages and bottlenecks in the way of production are removed.

### **Diversified Recurrent Expenditure**

Recurrent expenditure on the other hand refers to expenditure on Purchase of goods and services, wages and salaries, operations as well as current grants and subsidies (usually classified as transfer payments). Recurrent expenditure, excluding transfer payments, is also referred to as government final consumption expenditure. Recurrent expenditures are those incurred on either day to day basis, or weekly, monthly, or even yearly basis and they include administration, internal security expenses, wages and salaries of public workers (Agu, Idike, Okwor & Ugwunta, 2014). Recurrent expenditures associated with a public investment projects are those operations and maintenance expenditures needed to run the project at a level consistent with its expected use, and to maintain the capacity of the investment during its expected lifetime. For example, recurrent expenditures in the case of a new school serving an expanded student population would include the teachers' salaries and additional textbooks and teaching materials required to operate the new facility. They would also include electricity, heating and other costs needed to operate the facility, and the regular and periodic maintenance needed to maintain the facility. Importantly, recurrent expenditures should reflect full capacity utilization of the facility that is; the recurrent expenditures expected when the investment is being used as designed (Akpan, & Abang, 2013). Recurrent expenditures will be both direct and indirect. Clearly, increasing the number of teachers to staff additional classrooms is a direct cost of investment in improved access to education. Teacher training to supply the necessary teachers may be an indirect cost unless explicitly provided for as part of the investment project. If possible, indirect recurrent expenditures should be referenced in public investment proposals (Cyril, 2016). Most recurrent expenditure is based on salaries and overheads instead of investment, diversified recurrent expenditure from salaries and overheads have the capacity to increase the productivity of the economy.

### **Fiscal Deficit**

Richard and Ogiji (2016) opined that fiscal deficit is the amount by which spending exceeds revenue over a particular period of time, also called simply deficit, or budget deficit, the opposite of budget surplus. Government deficit spending is the main issue of debate in financial matters, with noticeable market analysts holding varying perspectives. The standard financial matters position is that deficit spending is alluring and important as a major aspect of countercyclical fiscal policy, yet that there ought not be an auxiliary structural deficit: run deficits amid retreats to make up for the setback in aggregate demand, however run surpluses in blast times so that there is no net shortfall over a monetary cycle, i.e., just run repetitive shortages. This is gotten from Keynesian financial aspects and picked up acknowledgment (particularly in the Anglo-Saxon world). Numerous financial experts prescribe deficit spending to direct or end a retreat, particularly a serious one. At the point when the economy has high unemployment, an expansion in government buys makes a business opportunity for business yield, making

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salary and empowering increments in shopper spending, which makes further increments in the interest for business yield. (This is the multiplier impact). This raises the genuine Gross Domestic Product (GDP) and the occupation of work, and in the event that all else is steady, brings down the unemployment rate. (The association between interest for GDP and unemployment is called Okun's Law. The expanded size of the business sector, because of government shortages, can assist animate the economy by raising business gainfulness and impelling confidence, which empowers private settled interest in processing plants, machines, and so forth to rise. This quickening agent impact invigorates request promote and empowers rising work. The expansion in government finance has been appeared to discourage the economy over the long run. Correspondingly, running a government surplus or diminishing its deficit decreases buyer and business spending and raises unemployment. This can bring down the inflation rate. Any utilization of the government deficit to control the large scale economy is called fiscal policy. A deficit does not just stimulate demand. On the off chance that private investment is fortified, that builds the capacity of the economy to supply yield over the long run. Additionally, if the government's deficit is spent on such things as base, fundamental examination, general wellbeing, and instruction, that can likewise expand potential yield over the long run. At last, the appeal that a government deficit gives may really permit more prominent development or potential supply, taking after Verdoorn's Law. There is, however, a danger that deficit spending may create inflation or encourage existing inflation to persist. (In the United States, this is seen most clearly when Vietnam-war era deficits encouraged inflation.) This is especially true at low unemployment rates (say, below 4% unemployment in the U.S.). But government deficits are not the only cause or inflation: it can arise due to such. Supply-side shocks as the "oil crises" of the 1970s and inflation left over from the past (inflationary expectations and the price/wage spiral). If equilibrium is located on the classical range of the supply graph, an increase in government spending will lead to inflation without affecting unemployment. There must also be enough money circulating in the system to allow inflation to persist -so that inflation depends on monetary policy. According to Keho (2019) deficit financing is a normal economic condition. The high public investment in the economy makes a better economy among which fiscal stimulation leads to more investments and raises the future potentials of the economy. This implies that in times of rises, the deficit spending policy will lead towards crowding out, however inverse to crowding in. After some time the liquidity will be accomplished again and the principles for typical financial reasonability will be reactivated. Anyway, one thing is certain that the nations must know not to support significant budget deficit. The deficit budget policy is a celebrated instrument of fiscal policy used to expand the rate of economic growth of the nation. That method for financing was initiated after the two world wars, oil emergencies and current budgetary and monetary emergencies. There are three approaches to back the deficit – taxes, borrowing and monetization (inflation tax). The most famous model of deficit finance is borrowing, which is typically done by issue of government bonds. At the point when the administration is over-indebted tends through the central bank to purchase government securities which increment the cash stream and decreases the interest rate pressure. Be that as it may, it reduces the genuine estimation of cash and makes the future eccentric for the financial performers. Solawon and Adekunle (2018) expressed that deficit financing is unavoidable under planned economic development to enact unutilized assets. It is important to the degree it can advance capital formation and economic development. If the borrowed money is used properly, it can put the government in a dangerous economic position. In the end, the bonds will be due for payment and the government



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must be set up to pay them off when this happens. When government bond is increased in the market, it will create competition of bonds, which will also increase interest rate. Interest rates across the nation will follow the same way, making it problem for some individuals to manage the cost of loans. Ifeanyi and Umeh, (2019) stated that: deficit financing ought to be utilized as a part of moderate measurements, watching on price index and controlling prices consumer products and vital raw materials. , ensure a relative increase in the accessibility of goods, concentrate on speedy yielding projects and control money supply through taxation and borrowings. Increasing the supply of money and raise the level of income, general price increase of goods services, there is plenty of channels into which money can flow, non-homogeneity in productivity, resources in supply is perfectly inelastic, marginal cost will expand due increase in wages, Nwanne (2014) distinguished approaches to minimize an inflationary pressure of deficit financing; appropriate disinflationary financial strategy, a prohibitive fiscal arrangement to control unimportant private venture, proper distribution of resources and creating import surpluses for expanding the supply of good. The fiscal policy represents to a solid instrument which through public expenditure and taxes can have an impact on the total interest of goods and services in the economy. The spending deficit policy, over public expenditure upon collected public revenues, is started in view of economic growth impact through the household unit and firm choices that change the money supply or level of taxes, there is a circuitous effect on the total interest curve. Be that as it may, with public expenditure intercession from the government, there is an immediate impact on the aggregate demand curve. In the event that we expect that the government made a purchase of some public great, autos, it will expand the aggregate demand. But is the amount of change the same as the initial public expenditure? In this manner, we are confronted with two macroeconomic impacts. The main, multiplier impact recommends that the development in the aggregate demand will be greater than the purchase. In any case, the second one "crowding out" recommends that the aggregate demand change will be smaller than the underlying public expenditure that can be seen latter. Nonetheless, increased demand adds to the bigger engagement of workforce and higher profits of the organization. That sort of dynamic impact is exchanged to the worker compensation and other firm profits, which brings about an expansion of utilization of various goods and services. So the state demand for autos increased the demand for other company's items in the economy. Since the expansion in the aggregate demand is bigger than the underlying government expenditure, it is said that the government spending has a multiplying impact on aggregate demand. This suggests there is a criticism between the higher aggregate demand and the income which persistently leads towards higher demand, on the other hand to higher income, and so forth.

### **Value Added Tax**

Value Added Tax (VAT) is a tax on estimated market value added to a product or service at each stage of its manufacture or distribution and the additions are ultimately added to the final consumer (Kareem et al., 2020). The rationale behind the introduction of value added tax in Nigeria came from the study group set up by the federal government in 1991 to review the entire tax system. This review was urgently needed as it is proven theoretically that economic growth (GDP) depends on total government revenue generated via different means of which value added tax (VAT) revenue is inclusive. This proven assertion coupled with the need to revamp Nigeria's economy and set it on the path of growth and sustainable development, the Nigerian government worked tirelessly for years in search of a permanent solution to the economic problems it faced (Chigbu, 2014). Hence,

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value added tax was proposed in Nigeria and a committee was set up to carry out feasibility studies on its implementation. In January, 1993, the then government agreed to introduce VAT by the middle of the year. It was later shifted to 1 September 1993 by which time the relevant legislation would have been made and proper groundwork for success already laid. The actual implementation however, did not commence until January 1994 after the promulgation of the Value Added Tax Decree No. 10(1 and 2) of 1993 (now VAT Act No. 102 of 1993). According to the Act a, Vatable organization is an existing manufacturer, distributor, importer or supplier of goods and services (Adegbe et al., 2016). This highlights the fact that every vatable person has the obligation to register for VAT payment. Professionals like lawyers, accountants, engineers and a host of others who provide professional services to their clients are required to register. There is therefore neither threshold nor stringent conditions for registration. Registration of VAT is to cover all the business activities of the vatable persons. Therefore, all domestic manufacturers, wholesalers, distributors, importers and suppliers of goods and services in Nigeria are expected to register for VAT within six months after the commencement of the Act or six months from the commencement of business, whichever is earlier. The Value Added Tax Act of 1993 was enacted to repeal and replace the sales tax which had been in operation under the Federal Government Legislated Decree No. 7 of 1986. Adegbe et al. (2016) opined that the Act was marred by a number of factors and considerations and the narrow base of the old sales tax negates the fundamental principles of consumption tax which by nature is expected to cut across all consumable goods and services. Value added tax in Nigeria is a federal government tax, which is administered using the existing machinery of the Federal Inland Revenue Services (FIRS). However, the interesting aspect of Nigeria's value added tax is the very low single rate of 5% which is one of the lowest in the world and even in the West African sub-region. To mention but a few, Ghana has a rate of 10%, Republic of Benin 18% while Togo has multiple rates ranging from 5% to 30% (Olaoye, 2004).

## **Income Inequality**

Kopp (2019) defines income inequality as "an extreme disparity of income distribution with a high concentration of income usually in the hands of a small percentage of a population". When income inequality thus occurs, there is a large gap between the wealth of one population segment in comparison to another. Income inequality and income disparity segregations can be analyzed through a variety of segmentations such as occupation, historical income, male vs. female, ethnicity, and geographic location. Segmentations of income disparity analysis are used for analyzing different types of income distributions, as such, income distributions by demographic segmentation forms the basis for studying income inequality and income disparity. Inequality has to do with differences in the share of something between/among two or more persons where the share of one/some is greater than that of the others (Lucky & Sam, 2018). According to ray (1998), economic inequality occurs when one individual is given some material choice/resources and another is denied the same thing. Inequality can be in income, consumption, wealth, gender, employment, health variables and many more. But for this study we are interested in income inequality. Income inequality is defined as the inequitable distribution of income among the members of a particular group, an economy or society. Income inequality can be measured generally using the Lorenz curve, the gini coefficient and general entropy class. The gini coefficient is most frequently used measure and it is close to the Lorenz curve (Ogbeide and Agu, 2015).

## **Empirical Review**

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Ogwu (2023) scrutinized the correlation amid deficit financing, debt servicing and economic development in Nigeria from 1981 -2022, using secondary time series data traced from Central Bank of Nigeria annual statistical bulletin and World Bank development indicators. Government external debt (GED), Government domestic debt (GDD), cost of servicing debt (CSD), inflation rate (INFL) and interest rate (INTR) were used as measurements the regressors variables, while Human Development Index (HDI) was used as the regress and variable. The ADF Unit root test shows that CSD, GDD, GED, INTR and human development index are all integrated of order one (1(1), while inflation rate was integrated of order zero 1(0). Autoregressive Distributed Lag (ARDL) was engaged to estimate the variables both at the short and long run impact. The study endorses that human development index exerted a negative correlation with the variables of CSD, GED, INF and INTR both at the long and short term, while GDD exerted a positive significant pressure just at the long term. The work applauds that the Federal government have a duty to minimize its resort to external loans as a medium of budget deficit financing, reduces the domestic interest rate for investors as well as the government should invest in education, health, industry and transportation to project economic growth and development in the economy. Onyekachi (2022) scrutinized the consequence of Fiscal Policy in reducing economic inequality in Nigerian from 2000 to 2019 using secondary time series data from Central Bank of Nigeria and World Development Indicator and World Bank. The study applied descriptive analysis, a two-model regression equation where Poverty and Gini coefficient are the dependent variables, the bi variety correlation was used in explaining the independent variables of Health and Education expenditure, other independent variables are income and consumption tax, while the control variable are data from Ghana and Senegal. This research reveals a weak negative connection amid Poverty /Inequality, health and education expenditure. The work. Endorses that an increase in health expenditure has the potential of reducing inequality. The study recommends quality educational system in the rural area as well as operating an efficient and effective tax system. There's also a need for a balance in expenditure and revenue at the local government level. Aniele and Nyeke (2021) examined the effect of fiscal policy on misery index in Nigeria from 1981 to 2018. The fiscal policy variables such as government capital expenditure, government recurrent expenditure and government external debt were used. Dummy variable to capture the effects of policy shift on misery index in Nigeria. Direct policy was coded zero (0) while indirect or market-based policy was coded one (1). Misery index was measured by the sum of unemployment, inflation and lending rates less growth rate of real GDP per capita. This study adopted the ordinary least square (OLS) method of regression analysis. The study conducted some other tests such as: R<sup>2</sup>, T-test, F-test, DW-tests, Philip Perron (PP) unit root test, Johansen cointegration test and error correction mechanism (ECM). From the results of the analysis, it was shown that government capital expenditure, government recurrent expenditure and government external debt conformed to the Keynesian theory of government expenditure. That is, increase in government capital expenditure and government recurrent expenditure reduced misery index in Nigeria in the current period. It implies that rising external debt in current period worsened misery index in Nigeria. The analysis further revealed that the fiscal policy alone under the current regime of market-based policy performed poorly in tackling economic misery in Nigeria due to the fact that it is insignificant. In line with the findings, the study recommends that: the government should sustain the recent expansionary fiscal policy actions and it should give more priority to capital expenditure than the recurrent expenditure component. This because it has the capacity of creating employment opportunities

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through building and construction works for the teeming Nigerian population. Hence, reducing the rate of unemployment and misery index in Nigeria. Opara, Nzotta, and Kanu (2021) investigates the consequence of domestic public debt and economic development of Nigeria from 1981-2018, applying secondary time series data fetched in Central Bank of Nigeria, Debt Management Office of Nigeria, World Bank Development Indicators and United Nations Development Program. An ordinary Least Square Regression tool was involved to determine statistical connection amongst Nigeria's domestic public debt profile, Human Development Index and private sector investment. The study in the first model endorses that domestic debt servicing and state governments' domestic debts are significantly related to economic development. Additionally, Federal domestic debt and State domestic debt are positively significant related to private sector investment. The study argues Nigeria government to practice an efficient and effective domestic borrowing policy to mitigate servicing debt and debt burden. Also, the government should prevent the effect of crowding out private sector investment in Nigeria. Nwkina, Meekor, Cookey & Gbarato (2021) examined deficit financing and Economic Development in Nigeria commencing 1986 to 2019, using secondary data sourced from Central Bank of Nigerian and Statistical Bulletin. The human development index was used to measure economic development as the explained variable, while budget deficit and government expenditure were used to proxy deficit financing as the independent variable. The study engaged ADF' unit root test, Autoregressive Distributive Lag and Granger Causality Test techniques; the results revealed that budget deficit and government expenditure exert positive but fringe influence on economic development in Nigeria. Also, the study shows a unidirectional causality, signifying that deficit financing through government expenditure promotes economic development in Nigeria. This study recommends establishment of an institutional framework to monitor the application of budgeted funds and the state and national assemblies should have a strong supervisory function in Nigeria. Borrowed funds should be keyed into productive projects and investments with the potential of positively improving the economic welfare of the people as well as effectively service the debt. Imide and Imoughele (2019) examined the influence of fiscal policy on Nigeria human development index (HDI) in Nigeria during (1999 -2016), using time series data traced from Central Bank of Nigeria and United Nation Development Report. The research engaged the ADF unit root and Johansen co-integration tests, the error correction model and Ordinary Lease Square on the time series data. The variables used for the estimation are HDI as the regress and variable, ratio of total government expenditure to GDP, ratio of domestic debt to GDP, ratio of external debt to GDP and ration of total tax revenue to GDP are the independent variables. Unit root test indicated that all variable were integrated of order one  $I(1)$  with cointegration test showing a long-term connection among the variables. The study revealed that domestic debt and tax exerted a positive significant control on Nigeria HDI both at the short and long term, total government expenditure exerts negative insignificant control on Nigeria HDI both at the short and long tenure. This meant that total government expenditure during the period reviewed has not improved the welfare of Nigerians. Furthermore, external debts exerted inverse insignificant pressure on Nigeria HDI at short term but exerted inverse significant pressure on HDI in long term. This implies that budget deficit financed by external debt does not improve the welfare of Nigerians, domestic debt had impact. Hence, the study recommended that Nigeria government fiscal policies should place greater emphasis on the principles of effective taxation aimed at promoting investment and improvement of the HDJ in the country and government have a duty to ensure that total government expenditure on human development projects followed

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due process to avoid leakages in the system as well as ensure that external loans are tied to economic and social profitable projects capable improving Human Development Index and debt services. Owuru and Farayi (2016) used autoregressive distributed lag framework to examine fiscal policy and poverty reduction nexus in Nigeria. Fiscal policy variables (government capital expenditure, government recurrent expenditure and government budget deficit) as regressors and the rate of poverty in Nigeria as the dependent variable. Findings indicated that the level of government capital expenditures in Nigeria does not reduce the level of poverty in the country over the period of time covered by the study. Although the ECM result, which shows the speed of adjustment of the model from the short run to the long run equilibrium, is on the average, yet the economy did not show any sign of much potency in using the selected fiscal policy variables to tackle the menace of poverty in Nigeria.

## METHODOLOGY

### Research Design

This study employed the ex-post facto research design. Time series data which spanned from 1985 to 2023 were obtained from the Central Bank of Nigeria (CBN) statistical bulletin, World Development Indicators (WDI), UNDP Human Development Reports and National Bureau of Statistics (NBS).

### Model Specification

The model was cast in line with the work of Owuru and Farayi (2016) who used autoregressive distributed lag framework to examine fiscal policy (government capital expenditure, government recurrent expenditure and government budget deficit) and poverty reduction nexus in Nigeria. The current model used four of the explanatory variables that are suspected to have direct bearing with income inequality as stated in the equation below:

The functional specification of the model is as follows:

$$\text{GINI} = f(\text{REXP}, \text{CEXP}, \text{DEFS}, \text{VADT}) \quad (3.1)$$

The mathematical form of the model is specified as follows:

$$\text{GINI} = \beta_0 + \beta_1 \text{REXP} + \beta_2 \text{CEXP} + \beta_3 \text{DEFS} + \beta_4 \text{VADT} \quad (3.2) \text{ Where:}$$

GINI = Gini coefficient

REXP = Government Recurrent expenditure

CEXP = Government Capital expenditure

DEFS = Deficit financing proxied Debt servicing

VADT = Value added tax revenue

The linear regression equation for this study is specified as follows:

$$\text{GINI} = \beta_0 + \beta_1 \text{REXP} + \beta_2 \text{CEXP} + \beta_3 \text{DEFS} + \beta_4 \text{VADT} + \mu_t \quad (3.3)$$

A priori expectations in the above model is  $\beta_1 - \beta_4 < 0$

Specifically, the ARDL model for this study based on the variables in equations (3.3) is provided below:



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$$\begin{aligned}\Delta GINI_t = & \alpha_0 + \sum_{i=1}^p \alpha_1 \Delta GINI_{t-1} + \sum_{i=1}^q \alpha_2 \Delta REXP_{t-1} + \sum_{i=1}^q \alpha_3 \Delta CEXP_{t-1} \\ & + \sum_{i=1}^q \alpha_4 \Delta DEFS_{t-1} + \sum_{i=1}^q \alpha_5 \Delta VADT_{t-1} + \lambda_1 GINI_{t-1} + \lambda_2 REXP_{t-1} \\ & + \lambda_3 CEXP_{t-1} + \lambda_4 DEFS_{t-1} + \lambda_5 VADT_{t-1} + \varepsilon_{1t}\end{aligned}$$

$\alpha_0$  = constant parameter to be estimated;  $\alpha_1 - \alpha_5$  = short run parameters;  $\lambda_1 - \lambda_5$  = long-run multipliers;  $p$  = optimal lag for each of the dependent variables;  $q$  = optimal lag of the independent variables;  $\Delta$  = first difference operator;  $\varepsilon_{1t}$  = error term;

## Data Analysis Technique

This study employed the Autoregressive Distributed Lag (ARDL) technique following the evidence of mixed order of integration from the KPSS unit root test and the establishment of long run relations from the bound's co-integration test. ARDL is a least square method developed by Pesaran, Shin and Smith (2001) that allows us to include the lag values of the dependent and independent variables of a model while carrying out regression analysis.

## RESULTS ANALYSIS AND DISCUSSION N OF FINDINGS

### Unit Root Test

The unit root test was conducted using the KPSS method to ascertain the stationary process of the series. The results are presented in Table 4.3 below.

**Table 1: KPSS unit root test results**

Variable	KPSS statistics at levels	KPSS statistic at 1 <sup>st</sup> difference	at 5% critical value	Order of integration
CEXP	0.707	0.152	0.463	I(1)
DEFS	0.751	0.157	0.463	I(1)
GINI	0.106	NA	NA	I(0)
REXP	0.740	0.334	0.463	I(1)
VADT	0.720	0.165	0.463	I(1)

**Source: Author's computation from E-views software**

**Note: NA denotes not available**

The KPSS unit root test results in Table 4.3 indicate that only the Gini coefficient is stationary at level, as its KPSS statistic is below the critical value at the 5% significance level. However, after first differencing, all other variables are found to be stationary, confirming that they are integrated of order one (I(1)). Therefore, the series used in the study consist of a mix of I(0) and I(1) variables. This distinction is vital for understanding the time series properties and for ensuring appropriate modeling and estimation techniques.

### Bounds Cointegration Test

The bounds cointegration test followed the evidence of mixed integration from the unit root test the results are presented in Table 4.4.

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**Table 2: Summary of bounds cointegration test results**

Series: HDI BLT CBL ETR MUT			
Null Hypothesis: No long-run relationships exist			
Test Statistic	Value	K	
F-statistic	9.978	4	
	Critical Value Bounds		
Significance	I0 Bound	I1 Bound	
10%	2.2	3.09	
5%	2.56	3.49	
2.5%	2.88	3.87	
1%	3.29	4.37	

**Source: Author's computation from E-views software**

**Note: K denotes the number of regressors**

The results show that the computed F-statistic (9.978) is greater than the lower and upper bound critical values of 2.56 and 3.49 at the 5% significance level. This finding necessitates the rejection of the null hypothesis that no long-run relationships exist among the variables at the 5% significance level. Therefore, it follows from the results that GNI has a long-run relationship with recurrent expenditure, capital expenditure, debt servicing, and value added tax. This finding is impressive as it provides for the estimation of the ARDL model.

### Model Estimation

The ARDL model was estimated following the evidence of mixed integrated and cointegrated series. The results are presented in Table 4.4.

**Table 3: ARDL short and long-run results**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
				0.0180
				0.0004
			-2.739312	0.0001
D(GINI(-1))	-0.432098		-4.782135	0.0000
D(GINI(-2))	-0.684140		-5.991803	7.166166 -0.0009
D(GINI(-3))	-0.891671	8.819440 -	4.393637	0.0005
D(CEXP)	3.550020		-4.690243	0.3851
D(CEXP(-1))	-3.045508	0.541519	0.901416	0.0004
D(CEXP(-2)) D(DEFS)	4.339970	-6.901298	0.157739	0.1430624.898389 -4.927020
D(DEFS(-1)) D(REXP)	-5.407165	0.148815	1.230706	-4.440929
D(REXP(-1))	-5.092159	0.807991	0.649328	-6.270026
D(REXP(-2))	-3.024521	0.600743	0.885999	-4.231061
D(REXP(-3)) D(VADT)	-11.01887	1.400704	1.217575	-5.092351
D(VADT(-1))	-27.26230	0.812143	0.714837	-9.722687
D(VADT(-2))	-19.31233	2.163809	2.803988	-6.917002
D(VADT(-3))	-8.249710	2.792009	1.946565	-4.238086
CointEq(-1)*	-0.021084	0.002289	-9.209750	0.0000

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Longrun results				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
CEXP	777.3587	3564.890	0.218060	0.8310
DEFS	-383.3246	1797.743	-0.213225	0.8347
REXP	-277.5834	1240.929	-0.223690	0.8268
VADT	-22.29579	113.3210	-0.196749	0.8473
C	98.36970	270.0633	0.364247	0.7220

$R^2 = 0.927889$ ; Adjusted  $R^2 = 0.860019$  the results above presents both short-run and long-run tests results of the ARDL model. The coefficients of determination, which tests the goodness-of-fit, shows that the independent variables explain about (0.860019) 86 percent changes in the dependent variable. The F-test, which test for the overall significance of the model, is statistically significant while the speed of adjustment between the short-run and the long-run is (0, 021084) 2.10 percent annually.

**Table 4: Post-estimation test results**

Test Type	Null Hypothesis	Test Statistic	Prob. Value	Decision
Breusch-Godfrey Serial Correlation LM Test	$H_0$ : Serial independence	0.096243	0.9091	Accept $H_0$
White heteroskedasticity test	$H_0$ : Homoscedasticity	1.353748	1.0000	Accept $H_0$
Normality test	$H_0$ : Normal distribution of residuals	0.848322	0.654318	Accept $H_0$

**Source: Author's computation from E-views software**

The post estimation test results in Table 4.6 provided evidence that all the variables (Income inequality, government capital expenditure, government recurrent expenditure, deficit financing) in the model conform to the basic assumptions of ordinary least squares estimation.

## Discussion of Findings

The ARDL short- and long-run results provide compelling insights into the dynamics of income inequality in Nigeria, as measured by the Gini coefficient. One of the key findings is that the lagged values of the Gini coefficient are negative and highly significant, with coefficients of -0.432, -0.684, and -0.891, and p-values of 0.0180, 0.0004, and 0.0001, respectively. This suggests that past income inequality significantly influence current income inequality in Nigeria. In other words, the impact of historical income disparities on current levels of inequality appears to diminish over time. Another notable result pertains to the effect of capital expenditure on the Gini coefficient. In the short run, capital expenditure in the current period has a positive effect, with a 1% increase in capital expenditure leading to an 8.819% increase in the Gini coefficient. However, this effect reverses at lags 1 and 2, where a 1% increase in capital expenditure decreases the Gini coefficient by 3.550% and 3.045%, respectively. This indicates that while immediate capital expenditure might exacerbate inequality, its effects become more equitable over time. In the long run, however, capital expenditure has an insignificant positive impact the Gini coefficient, with a 1% increase leading to a substantial 777.35% increase in the Gini coefficient.

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This finding disagrees with the apriori expectation. However, it aligns with finding by Owuru and Farayi (2016) which stated that government capital expenditure does not reduce poverty in Nigeria. This counterintuitive finding warrants further investigation, as it suggests that sustained capital expenditure might significantly worsen income inequality over the long term. Deficit financing also exhibits interesting dynamics. In the short run, a 1% increase in deficit financing in the current and lag 1 periods increases the Gini coefficient by 0.541% and 4.339%, respectively. However, debt servicing has a negative insignificant effect on Gini coefficient in the long run, a 1% increase in debt servicing decreases the Gini coefficient by 383.32%. This aligns with Keynesian fiscal policy theory, which posits that deficit financing can have redistributive effects that reduce inequality over the long term. Recurrent expenditure consistently negatively impacts the Gini coefficient in both the short and long run but an insignificant impact on Gini coefficient in the long run. In the short run, a 1% increase in recurrent expenditure decreases the Gini coefficient by 6.901%, 5.407%, 5.092%, and 3.024% at the current period and lags 1, 2, and 3, respectively. In the long run, a 1% increase in recurrent expenditure also decreases the Gini coefficient. This finding agrees with the apriori expectation. Moreover, it aligns with the finding by Aniele and Nyeke (2021) which found a negative relationship between government capital expenditure and Misery index in Nigeria this suggests that recurrent expenditure plays a crucial role in reducing income inequality. Value-added tax (VAT) also has a significant equalizing effect on income distribution. In the short run, a 1% increase in VAT decreases the Gini coefficient by 11.018%, 27.262%, 19.312%, and 8.249% at the current period and lags 1, 2, and 3, respectively. In the long run, was not significant, a 1% increase in VAT decreases the Gini coefficient by 22.295%, this indicates that VAT has a reducing impact on income inequality. This finding agrees with theoretical expectation. However, it does not align with the finding by Khan and Padda (2021) who found that indirect taxes and fiscal deficit increase disparity in income inequality in Pakistan. The error correction coefficient (-0.021084) is negative and significant at the 5% level, indicating that about 2.10% of distortions of the Gini coefficient from the long-run equilibrium will be adjusted each year. This suggests a relatively slow adjustment process, taking less than two years for the model to fully adjust. The adjusted R-squared value of 0.860 shows that 86% of the variations in the Gini coefficient are jointly explained by changes in the independent variables, indicating a good fit of the model.

## **CONCLUSION AND RECOMMENDATIONS**

### **Concluding Remarks**

This study examined the relationship between fiscal policy and income inequality in Nigeria, motivated by the widening income gap in developing economies. It analyzes the effects of recurrent and capital expenditures, value-added tax, and debt servicing on income inequality during the study period. The econometric results reveal that capital expenditure exacerbates income inequality, while deficit financing recurrent expenditure and value-added tax, however, are found to reduce income inequality. The study concludes that capital expenditure plays a pivotal role in influencing income inequality in Nigeria.

### **Recommendations**

The recommendations proffered for this study based on the findings are as follows:

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1. The government should prioritize investments in sectors that directly reduce inequality, such as education, healthcare, and rural infrastructure. This shift would ensure that capital spending promotes equitable development rather than exacerbating income disparities.
2. The government should continue to manage debt effectively while ensuring that funds freed from debt servicing are redirected towards social welfare programs and pro-poor expenditures. This can further mitigate income inequality.
3. The government should boost spending on salaries, pensions, and social services that directly benefit lower-income populations. This could include expanding public sector employment and ensuring better funding for social protection programs.
4. The government should broaden the VAT base, ensuring that it captures a wider range of goods and services, while simultaneously enhancing tax compliance

## **REFERENCES**

- Abdurrauf I. B. (2015). Fiscal policy and economic development in Nigeria: *Journal of Economics and Sustainable Development* 6, (7), 19-35
- Adegbe, F.F., Jayeoba, O., & Kwabai, J.D. (2016). Assessment of value added tax on the growth and development of Nigeria economy: Imperative for reform. *Accounting and Finance Research* 5(4), 1-22.
- Agu, S., & Idike, A (2014). Government expenditure and economic development: Empirical evidence from Nigeria. *European Journal of Business and Management*, 2(3), 9 - 18.
- Agu, S.U., Idike, A.N, & Okwor, I.M. (2014). Fiscal policy and economic growth in Nigeria: Emphasis on various components of public expenditure. *Singaporean Journal of Business Economics and Management Studies*, 2(12), 37-57.
- Akpan, E.S., Nwosu, E.C., & Eweke, G.O. (2017). Causality between nonoil export, financial sector development and economic growth: Evidence from Nigeria. *Journal of Mathematical Finance*, 7:39-53.
- Aniele, A.A. & Nyenke, C.U. (2021). Effect of fiscal policy on misery index in Nigeria, *European Journal of Research in Social Sciences*, 9(1), 30-44
- Anthony, E., & Chukwu, U. (2015). Effects of fiscal policy variables on economic growth in Nigeria: A managerial economics perspective. *Investment Management and Financial Innovations*, 12(2), 67-89.
- Central Bank of Nigeria (2001). Annual report and statement of accounts, various Years. 12, 8-10.
- Central Bank of Nigeria (2010). Nigeria development prospects: Poverty assessment and alleviation study (pp. 123). Abuja: CBN Research Department.
- Central Intelligence Agency (CIA, 2018). Report on Socioeconomic Indicators of Nations.



## **Original Article**

- Chigbu, E. E., & Ali, P. I. (2014). Econometric analysis of the impact of value added tax on economic growth in Nigeria. *European Journal of Business and Management*, 6(18), 31-36.
- Cyrl, U. M. (2016). The effect of fiscal policy on economic growth in Nigeria. *Journal of Finance and Accounting*, 4(3), 140-145.
- Dandan, M. M. (2011). Government expenditure and economic growth in Jordan, 2011 International Conference on Economic and Finance Research, IOEDR, 4(3), 467 – 471.
- Dorubusch, R., & Fisher, S, (1990). *Macroeconomics*, New York: McGraw Hill
- Edourniekumo, 5. G., Tamarauntari, M. K., & Steve S. T. (2014). Income poverty in Nigeria: Incidence, gap, severity and correlates. *American Journal of Humanities and Social Sciences*, 2(1), 1-9.
- Ewubare, D.B. &Obayori, J.B. (2015). Fiscal policy measures and balance of payments in Nigeria. *Scholars Journal of Economics, Business and Management*, 2(9), 921-929
- Grey E E., & Okoiarikip, B. O (2015). Fiscal deficits and economic growth in Nigeria.A chow test approach. *International journal of economics and financial issues*, 5(3), 748-752.
- Ifeanyi O. N., & Umeh, G. N. (2019). Deficit financing and economic growth: The Nigerian experience. *International Journal of Economics and Financial Management*, 4(1), 40-47.
- Iyeli, I.Y. &Azubuike, I.M. (2013). A re-examination of fiscal policy applicability in nigeria's economic growth process: An econometric policy evaluation from empirical evidence. *American Journal of Social Sciences and Humanities*, 3(4), 180188.
- Kareem, R.O., Arije, R. A., & Avovome, Y. H. (2020). Value added tax and economic growth in Nigeria, (1994-2017). *Izvestiya Journal of Varna University of Economics*, 64(2), 137-152.
- Keho, Y. (2016). Impact of budget deficit on private consumption in WAEMU countries: Evidence from pooled mean group estimation. *International Journal of Economics and Finance*, 8(3), 189-200.
- Keynes, J. M. (1936). *The general theory of employment, interest, and money*. Paigrave; Macmillan.
- Lucky, L. A., & Sam, A. D. (2018). Poverty and income inequality in Nigeria: An Illustration of Lorenz Curve from NBS Survey. *American Economic & Social Review*, 2(1), 80-92.
- Maku, O. E. &Alimi, O. Y. (2018). Fiscal policy tools, employment generation and sustainable development in Nigeria. *ACTA UNIVERSITATIS DANUBIUS*, 14(3), 1-22.

## **Original Article**

- Mankiw, N. G. (2010). *Macroeconomics*. NY: Worth
- Morakinyo, F. O., David, J. O. & Alao, J. A. (2018). Impact of fiscal policy instrument on economic growth in Nigeria: *International Journal of Economics and Financial Management* 3 (1), 25-48.
- Morakinyo, F.O.; David, J. O. & Alao, J. A. (2018). Impact of fiscal policy instrument on economic growth in Nigeria, *International Journal of Economics and Financial Management*, 3(1), 14-29.
- Nwanne, T. F. I. (2014). Impact of budget deficit financing on economic stability in Nigeria. *European Journal of Accounting, Auditing and Finance Research*, 2(8), 122-135.
- Obayori, J.B. (2016). Fiscal policy and unemployment in Nigeria. *The International Journal of Social Sciences and Humanities Invention*. 3(2), 1887-1891.
- Ogbeide, E. N. O., & Agu, D. O., (2015). Poverty and Income Inequality in Nigeria: Any Causality? *Asian Economic and Financial Review* 5 (3), 439 – 452.
- Olaoye, C. O. (2004). An assessment of administration of value added tax as a source of revenue generation in Nigeria. [Unpublished master's thesis] University of Ilorin, Nigeria.
- Owuru, J.E. & Farayi, A.O. (2016). Examining the fiscal policy-poverty reduction nexus in Nigeria, Munich Personal RePEc Archive (MPR), and Online at <https://mpa.ub.unimuenchen.de/74184/> MPRA Paper No. 74184.
- Pesaran, M. H., Shin, Y. & Smith, R. J. (2001). Bounds testing approaches to the analysis of level relationships. *Journal of Applied Econometrics*, 16(3), 289-326.
- Richard, E. O. & Ogiji, F. O. (2016). Impact of deficit financing on economic stability in Nigeria: Analysis of economic growth. *Journal of Applied Finance & Banking*, 6(1), 111-112.
- Solawon. M. D., & Adekunle O. E. (2018). Deficit financing and economic growth: An autoregressive distributed lag approach. *Annals of Accounting, Educational & Social Research*, 5(1), 23–33
- Torres, R. (2010). Promoting employment recovery while meeting fiscal goals International Labour Organization (International Institute for Labour Studies). Policy Briefing. CH] 2]1 Geneva 22, Switzerland.
- World Bank (2004), *World Development Report 2000/2001: Attacking Poverty*, Oxford University Press, Washington, D.C.
- World Bank (2016). *World Development Report* Washington, DC