GOVERNMENT SPENDING AND POVERTY REDUCTION IN NIGERIAN’S ECONOMIC GROWTH

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ABSTRACT
This study was carried out to investigate the link between government spending and poverty reduction in Nigeria’s economic growth. As the government of Nigeria faces development challenges that are key to both welfare and improvements for its population and enhancement of the economy in particular, this study acts as a source of information on various ways of adopting effective measures of achieving economic stability through an aspect of fiscal policy known as government expenditure. Therefore, this study adopted time series econometrics analysis and descriptive statistics to determine the impact of government spending on Nigeria’s economic growth. This research work employed the use of multiple regression model based on Ordinary Least Square (OLS) method in order to achieve the objectives mentioned above, the variables used are Poverty Level (Dependent variable) and the explanatory variables; Agricultural Credit Guarantee Scheme Fund (ACGSF) and Government Expenditure on Agriculture (GEA). It covers the period of years 1980-2009, and the data was mainly from CBN statistical bulletin. The regression result shows that public spending has significant impact on Poverty reduction in Nigeria. It is estimated from the result that 1% increase in Agricultural Credit Guarantee Scheme Fund (AGCSF) will, on the average lead to decrease by 0.06% in Poverty Level. Based on the findings above, the study recommends that Effort should be made by the Government to see that rural farmers benefit the opportunities surrounding her expenditures as this will also contribute to Poverty Reduction in Nigeria. The study equally recommends that Government funding on agriculture should be channelled to farm mechanization. This will help to create employment and boost food production, thereby reducing poverty.

Keyword: government, poverty, economy, growth, reduction.

INTRODUCTION
The size of government spending and its effect on poverty reduction, and vice versa, has been an issue of sustained interest for decades. The relationship between government spending and poverty reduction has continued to generate series of debate among scholars. Government performs two functions - protection (and security) and provisions of certain public good (Al-Yousif Y, 2000). Protection function consists of the creation of rule of law and enforcement of property rights. This helps to minimize risks of criminality, protect life and property, and the nation from external aggression. Under the provisions of public goods are defense, roads, education, health, and power, to mention few. Some scholars argue that increase in government spending on socio-economic and physical infrastructures encourages economic growth. For example, government spending on health and education raises the productivity of labour and increase the growth of national output. Similarly, expenditure on infrastructure such as roads, communications, power, etc, reduces production costs, increases private sector investment and profitability of firms, thus fostering economic growth. Supporting this view, scholars such as Abdullah HA, (2000), Ranjan KD, Sharma C, (2008) and Cooray A, (2009) concluded that expansion of government spending contributes positively to economic growth.
Over the past decades, the Nigeria’s public sector spending has been increasing in geometric term through government various activities and interactions with its Ministries, Departments and Agencies (MDA’s), (Niloy et al. 2003). Although, the general view is that public expenditure either recurrent or capital expenditure, notably on social and economic infrastructure can be growth-enhancing although the financing of such expenditure to provide essential infrastructural facilities—including transport, electricity, telecommunications, water and sanitation, waste disposal, education and health—can be growth-retarding (for example, the negative effect associated with taxation and excessive debt).

The size and structure of public spending will determine the pattern and form of growth in output of the economy. The structure of Nigerian public expenditure can broadly be categorized into capital and recurrent expenditure. The recurrent expenditure are government expenses on administration such as wages, salaries, interest on loans, maintenance etc, whereas expenses on capital projects like roads, airports, education, telecommunication, electricity generation etc., are referred to as capital expenditure. One of the main purposes of government spending is to provide infrastructural facilities and the maintenance of these facilities requires a substantial amount of spending. The relationship between government spending on public infrastructure and economic growth tends to be an important analysis in developing countries, most of which have experienced increasing levels of public expenditure overtime (World Development Report, 1994). Expenditure on infrastructure investment and productive activities (in State-Owned Enterprises) ought to contribute positively to growth, whereas government consumption spending is anticipated to be growth-retarding (Josaphat and Oliver, 2000).

However, economies in transition do spend heavily on physical infrastructure to improve economic welfare of the people and facilitate production of goods and services across all sectors of the economy so as to stimulate rapid growth in aggregate output. Empirical studies (like Ram, 1986; Deverajan et al., 1993; Nitoy et al., 2003) have found that there exists positive correlation between economic growth and public spending on infrastructural facilities. Manufacturing industries do consider infrastructure services or facilities before locating their production base in order to gain large economies of scale and reduce cost of production. Also, to increase total industrial output at a cheaper price in the economy.

Following the World Bank’s Development Report (1994), developing countries invest $200billion a year in new infrastructure representing 4 percent of their national output and a fifth of their total investment. The result has been a dramatic increase in infrastructure services for transport, power, water, sanitation, telecommunications, and irrigation. The provision of infrastructure services to meet the demands of business, households, and other users is one of the major challenges of economic development in developing countries like Nigeria.

**Statement of the Problem**
In Nigeria, government spending has continued to rise due to the huge receipts from production and sales of crude oil, and the increased demand for public (utilities) goods like roads, communication, power, education and health.

Besides, there is increasing need to provide both internal and external security for the people and the nation. Available statistics show that total government expenditure (capital and recurrent) and its components have continued to rise in the last three decades. For instance, government total recurrent expenditure increased from N3, 819.20 million in 1977 to N4, 805.20 million in 1980 and further to N36, 219.60 million in 1990. Recurrent expenditure was N461, 600.00 million and N1, 589,270.00 million in 2000 and 2007, respectively. In the same manner, composition of government recurrent expenditure shows that expenditure on defense, internal security, education, health, agriculture, construction, and transport and communication increased during the years; 1977-2007. Moreover, government capital expenditure rose from N5, 004.60 million in 1977 to N10, 163.40 million in 1980 and further to N24, 048.60 million in 1990. The value of capital expenditure stood at N239, 450.90 million and N759, 323.00 million in 2000 and 2007 respectively. Furthermore, the various components of capital expenditure (that is, defense, agriculture, transport and communication, education and health) also show a rising trend between 1977 and 2007.
Unfortunately, rising government spending has not translated to meaningful growth and poverty reduction, as Nigeria ranks among the poorest countries in the world. In addition, many Nigerians have continued to wallow in abject poverty, while more than 50 percent live on less than US$2 per day. Couple with this, is dilapidated infrastructure (especially roads and power supply) that has led to the collapse of many industries, including high level of unemployment. Moreover, macroeconomic indicators like balance of payments, import obligations, inflation rate, exchange rate, and national savings reveal that Nigeria has not fared well in the last couple of years.

Objectives of the Study
The general aim of the study is to investigate the link between government spending and poverty reduction in Nigeria. However, our specific goals is

- To examine the impact of government spending on poverty reduction in Nigeria.

Theoretical Literature
Economic theory has shown how government spending may either be beneficial or detrimental to economic growth. In traditional Keynesian macroeconomics, many kinds of public expenditures, even of a recurrent nature, can contribute positively to economic growth, through multiplier effects on aggregate demand. On the other hand, government consumption may crow out private investment, dampen economic stimulus in the short run and reduce capital accumulation in the long run. Strictly, crowding-out is due to fiscal deficits and the associated effect on interest rates (Diamond, 1989). Studies based on endogenous growth models distinguish between distortionary or non-distortionary taxation and between productive or unproductive expenditures. Expenditures are categorized as productive if they are included as arguments in private production functions and unproductive if they are not (Barro and Sala-I-Martin, 1992). This categorization implies that productive expenditures have a direct effect upon the rate of economic growth but unproductive expenditures have an indirect or no effect. The issue of which expenditure items should be categorized as productive or unproductive is debatable and may be difficult to define a priori.

Economic analysis and popular opinion often conflict. An example is the connection between the revenues and expenditures of the public sector. Common sense suggests that there should be a strong and logical connection between the two sides of the budget. For example, if an average citizen in any country is asked what he or she thinks about the desirability of a particular expenditure increase, the answer is often related to how the respondent thinks the increase will be financed. Similarly, while most people do not like tax increases, again their attitudes seem likely to depend to at least some extent upon what they think will be financed. People are right. Revenues and expenditures are inextricably linked. Indeed, as Musgrave (1969) has long emphasized, “a theory of public finance remains unsatisfactory unless it comprises both the revenue and expenditure sides of the fiscal process (p. 797).” Nonetheless, despite this admonition, and despite common sense, traditionally most formal economic analysis of either tax or expenditure changes has been conducted under the assumption that there is no connection between what happens on one side of the budget account and what happens on the other side.

Government spending is an important topic, one that has caught the attention of several researchers for over a century. A great deal of the research pursued in the last decade has introduced institutional elements such as party fragmentation (Mukherjee, 2003), degree of representation (Milesi, Perotti and Rosagno, 2000) and electoral competition (Tavits, 2004) as predictors of government growth. Great focus has also been placed on the level of analysis, evidenced by a concern with disaggregating government spending into two main types: public goods and services being one type and transfers and subsidies as another (Persson and Tabellini, 1999).

Concern for government spending has interested researchers of comparative politics for over a hundred years. Researchers have been interested in the mechanisms that fuel the expansion of the public sector for over a century, evidenced by Wagner’s important contributions in the late 19th century (Peacock and Scott, 2000). A great deal of research has emerged, very diverse in theory, methodology and data (Lowery and Berry, 1987).
Perhaps the forefather of all theories of government growth is Wagner’s Law of Increasing State Activity. This theory posits a relationship linking industrialization, urbanization and education to the expansion of the public sector (Bird, 1971). Wagner’s Law posits that increases in public goods are a product of increased demands by organized industrial workers, coming at the costs of growth in the private sector (Gandhi, 1971; Goffman and Mahar, 1971). Bureau Voting Theory rejected the role of industrialization and urbanization, suggesting that the main driver of public sector expansion is an artificial demand for government services created by self-interested government employees (Niskanen, 1971). Fiscal Illusion theory tries to explain government growth by linking convoluted tax systems to the masking of the costs of public goods. According to this theory, tax systems can hide the costs of public goods and therefore stimulate their growth (Goetz, 1977). Empirical support for these theories have varied, causing them to lose some of their impetus.

Even in this case, however, no unique answer emerges since, by definition, what differential incidence does is to compare the distributional effects of any particular change with some other change. The results will thus depending upon the nature of the change with which it is compared. One might perhaps think of comparing any tax change with a precisely offsetting change in an equal yield set of perfectly neutral taxes (“lump-sum taxes”) that affect neither distribution nor allocative decisions. Since no such set of taxes can exist, however, in practice differential incidence analysis is usually carried out by comparing a proposed change in taxes (or transfers) to an equal-yield change in a comprehensive proportional income tax (or occasionally, as in Shoup 1969), some other general levy such as a uniform value-added tax). Despite the many conceptual and empirical problems with such analysis, it is the best we can do—and so that is what we do. Analogous problems arise in analyzing the effects on allocative efficiency of alternative ways of financing public expenditures. Unsurprisingly, in the traditional economic literature these problems have been resolved, to the extent they have been resolved at all, in a similar fashion—although in this case, unlike that of incidence analysis, most analysts seem to have fewer qualms about positing the existence of an alternative “perfectly efficient” tax system.

Government spending is usually suggested that the net impact on growth (as measured by aggregate output) of the crowding-out effect of public expenditure clearly depends on the relative marginal productivity of the public and private sectors. The externality effect of public expenditure enhances growth by raising private sector productivity. Here, a higher level of such expenditure could achieve a high growth rate.

The opposing natures of the crowding-out and externality effects rest on the proposition that the structure of public expenditure, rather than merely its level, would be of considerable importance.

In analyzing the composition of public expenditure, the traditional approach has been to divide it broadly into the categories of public consumption and public investment. This classification is important in a dynamic framework because it focuses attention on the impact of public expenditure on private savings and investment and, hence, capital accumulation. Another area of interest in the literature has to do with the complementarity or substitution between public and private expenditure as they affect private savings. Like the case of taxation, the empirical evidence of the growth effects of public expenditure (as a share of GDP) is inconclusive (Ram, 1986; Levine and Renelt, 1992; Barro and Sala-i-Martin, 1995). One reason for this inconclusive evidence is that the direction of causation is usually difficult to ascertain. It is sometimes suggested that another reason for this inconclusive evidence is that the relationship between growth and fiscal variables may not be particularly monotonic over the levels of these variables or over income, or both. In fact, it can be argued that increasing levels of public expenditure would first raise and then reduce growth (Tanzi and Zee, 1997).

POLICIES AND PROGRAMMES FOR POVERTY REDUCTION IN RURAL NIGERIA.

Poverty reduction is in the main a task for economic policy and requires some antipoverty programmes directed at the rural poor. In Nigeria, development policy has had three fundamental objectives: economic growth and development; price stability, and social equity. These objectives were to be achieved through national development plans (NDPs) which were designed to alleviate poverty by achieving an improvement in real income of the average citizen, equitable distribution of income and a reduction in the level of unemployment and underemployment. It is therefore, within different theoretical models for development that past policies aimed at bringing development to the rural areas of Nigeria are designed.
Realizing that approximately 70 percent of the poor live in the rural areas, where they depend largely on agricultural pursuit, public policy on agriculture was therefore, expected to impact positively on the rural poor as well as other sectoral policies that have positive rural biases.

From the standpoint of time, the policy-development trends with serious implications on rural poverty in Nigeria can be examined from two main perspectives: before independence and post independence era. The colonial administration prepared and implemented the Ten-Year Plan of Development and Welfare for Nigeria: 1946-1956, essentially with the sole objective of improving cash crop production and urban infrastructure, particularly roads and communications. Little attention was paid to rural development as it had little relevance to the imperial interests. The period before 1954 witnessed the development of the regional export economies-cotton and groundnut in the North; cocoa and rubber in the West and oil palm and kernel in the East. The 1954 Federal constitution and the process of regionalization placed rural development as a residual item and it was therefore treated as a regional responsibility, just like agriculture, education, etc. Nevertheless, the autonomy associated to regionalism gave each of the three regions a free hand to set its own pace for development. Since revenue came mostly from agricultural exports, the regional governments tried to provide basic infrastructures particularly roads to haul commodities from the rural areas. Since the population was largely rural, and the regions were largely supported by the wealth of the rural areas, educational facilities, potable water as well as health facilities were put in place in the rural areas.

Although these were inadequate, they marked a humble beginning and a conscious attempt to improve the lot of the rural people. During this period of internal self-government, which lasted until 1968, the various regional governments operated and based their development plans on the assumptions of perfect knowledge of the problems of the rural people. Some of the schemes undertaken during this period include the Farm settlement/school leavers farms by the three regional governments; the Tree Crop Plantation (developed through the Development Corporations) of the Eastern and Western governments and the Small Farmer Credit Scheme.

With the attainment of independence in 1960 however, the subject of rural areas assumed greater importance in the scheme of national development. Thus the First National Development Plan: 1962-1968 allocated 13% of the gross capital outlay to agriculture and primary production. However, whatever gains made were wiped off by the civil war. By 1965, the new federal ministry of agriculture was very cautious not to mention agriculture in its plan so as not to hurt the spirit of the 1963 constitution yet, the political powers of the old regions brought out the need to coordinate agriculture at the centre. Consequently, three areas were identified for federal assistance to agriculture in the second National Development Plan- 1970-74. These were:

- grants for the development of agriculture, forestry, and livestock and fishery;
- establishment of a National Credit Institution; and
- Special Agricultural Development Schemes where the federal government enters into both financial and management partnership with state governments in carrying out projects.

The Third National Development Plan: 1975-1980, which allocated 7.2% of the N43.36 billion budget estimates to agriculture and rural development sector was essentially a continuation of the development process and policies begun in the preceding plan. The post 1975 period witnessed series of rather panic measures embarked upon by the Federal Government, including the Operation Feed the Nation (OFN), Agricultural Development Programmes (ADPs), River Basin and Rural Development Authorities (RBRDAs), and the Green Revolution Programme. Of all these, the ADPs received better attention and a systematic approach to project planning while the other schemes mentioned above remained as political slogans.

By the second half of the 1970s and early 1980s, the trickle down development strategy has started to wane. Emphasis shifted towards addressing development and poverty issues at the grassroots in rural areas with believe that the rapid growth in the rural economy is the most promising way to reduce poverty and check rural-urban drift. Nigeria was not left out of this new thinking as several programmes were initiated with varying degrees of successes. As argued by Onimode (2003), the economic policies that have semblance of positive policy initiatives on rural poverty reduction include the followings:
i. Universal Free Primary Education (UPE);
ii. Subsidy programmes for various activities, especially agriculture, social services and credit;
iii. Primary health care including the “health-for-all by year 2000” programme;
iv. Rural water supply scheme;
v. Rural electrification by Rural Electrification Boards (REBs);
vi. Directorate for Food, Roads and Rural Infrastructure (DFRRI);
vii. Credit guidelines, rural and community banking schemes,
viii. National Directorate of Employment (NDE);
ix. Small-and Medium-Scale Enterprises (SME) Programme; and

ASSESSMENT OF PROGRAMME/INSTITUTIONS FOR POVERTY ALLEVIATION

Efforts at improving the rural areas of Nigeria predated the independence of the country in 1960. The major efforts made in pre-independence and the early days of independent Nigeria according to Omale and Molem (2003) were in the area of farm settlement schemes. The aim of these farm settlements was to bring scattered small communities together so that they could take advantage of economies of scale in farm inputs, agro services, marketing, etc. These schemes recorded little or no achievement because those they were affected were not involved at the planning stages. Since then, a number of government programmes have been put in place to improve basic services, infrastructure and housing facilities for the rural population, extending access to credit farm inputs, and creating employment. Most of the programmes were however, not specifically targeted towards the rural poor, though they affect them. Such programmes included specific multi-sector programmes (water and sanitation, environment, etc) as well as sector-specific programmes in agriculture, health, education, transport, housing, finance, industry/manufacturing and nutrition.

Ilori (1999) categorized rural poverty related programmes into three: development programmes, palliative measures popularly known as the Social Dimension of Adjustment (SDA), and the sector-specific poverty related programmes. Examples of development programmes are: rural electrification schemes; rural banking scheme; and Operation Feed the Nation later named Green Revolution. Palliative measures include programmes such as the Directorate of Food, Roads and Rural Infrastructure (DFRRI), the National Directorate of Employment, and Family Support Programme. The major sector-specific poverty related programmes include the National Agricultural Land Development Programme (NALDA), micro credit schemes such as Peoples Bank, Community Bank etc. All the programme put together are meant to provide a catalytic impetus for the take-off and subsequent advancement of the rural areas towards:

a) Linking them to national and international economic systems;
b) Increasing rural household income;
c) Providing basic socio-economic and physical infrastructure;
d) Efficient resource allocation to shift attention and interest of the private sector towards investment in rural areas to enhance rural development; and,

e) Enhancing rural welfare. Some of the programmes that have direct bearing on rural poverty in Nigeria are examined as follows:

The National Agricultural Land Development Authority (NALDA)

To solve the problems of low utilization of farmlands, increase farm sizes and hence productivity to alleviate rural poverty, the Federal Government initiated a national agricultural land development programme under the National Agricultural Land Development Authority (NALDA) in 1991. NALDA as an executing agency was empowered to develop between 30,000 and 50,000 hectares of land in each state of the federation during the 1992-94 National Rolling Plan periods. It was also to see to the placement of at least 7,500-12,500 farmers within the area developed such that each participating farmer member lives within 3km-5km radius of his farmland. The programme on the whole was to:

a). provide strategic public support for land development;
b). promote and support optimum utilization of the nation’s land resources for the accelerated production of food and fibre;
c). encourage and support economic size farm holdings and promote the consolidation of fragmented farm holdings;
d). encourage the evolution of economic size villages;
Better Life Programme (BLP)
In 1987, the Better Life Programme was first introduced as a programme mainly for rural women by the then First Lady, Mrs. Maryam Babangida. The programme was generally aimed at complementing the existing Federal Government policy to develop the rural areas. The programme’s objectives were:

a) The desire to stimulate and motivate women in rural areas towards achieving a better and higher standard of life, as well as sensitize the general populace to the plight of rural women;
b) Educate women on simple hygiene, family planning, importance of childcare and to increase literacy;

As the implementation of the programme progressed, it was realized that the scope of the programme had to be widened to include urban women and cooperatives where men were members. Thus, the name was changed from Better Life Programme for Rural Women to Better Life Programme (BLP). The programme generally covered many areas that relate to enhancing labour productivity and entrepreneurship development. Areas covered include: health, agriculture, education, social welfare and cooperatives. The formation of cooperatives in the programme has direct bearing to entrepreneurial development. Numerous fishing, farming, marketing, weaving and sundry craft cooperatives were set-up. The cooperatives were supported in terms of access to credit facilities from People’s Bank, which owes its existence partly to the Better Life Programme. Thus, a linkage was effectively created between the two agencies.

During the Abacha regime, the programme appeared to narrow down its activities and was re-named Family Support Programme (FSP) with greater emphasis on the health component. However, in an attempt to create a more embracing socio-economic poverty alleviation programme by the regime, a new agency called Family Economic Advancement Programme (FEAP) was established. The FEAP was established to stimulate economic activities by providing loans directly to Nigerians through cooperative societies and informal associations.

People’s Bank of Nigeria (PBN)
The PBN was set-up by Decree No. 22 of 1990 with the following mandate:

a) the provision of basic credit requirements to the under privileged Nigerians who are involved in legitimate economic activities in both rural and urban areas and who cannot normally benefit from the services of orthodox banking systems due to their inability to provide collateral securities; and
b) the acceptance of savings from the same group of customers and make repayment of such savings together with any interest thereon, after placing the money, in bulk sums, on short-term deposits with Commercial and Merchant Banks.

The Agricultural Credit Guarantee Scheme
In 1977, the Agricultural Credit Guarantee Scheme Fund Decree, whose objective was to provide cover in respect of loans granted for agricultural purposes, was promulgated. It was believed that this would encourage commercial banks to loan investment funds to the agricultural sector including the small-scale rural dwellers. However, the main beneficiaries of this programme were the large scale and educated farmers.
The River Basin Development Authorities
In addition, in 1977, eleven River Basin Development Authorities were established to undertake food production and the provision of rural infrastructure. In 1986, they were re-organized and directed to focus on land and water resources development.

The National Poverty Eradication Programme (NAPEP)
Introduced early in 2001, NAPEP is the current Programme which focuses on the provision of “strategies for the eradication of absolute poverty in Nigeria” (FRN, 2001:3) NAPEP is complemented by the National Poverty Eradication Council (NAPEC) which is to coordinate the poverty-reduction related activities of all the relevant Ministries, Parastatals and Agencies. It has the mandate to ensure that the wide range of activities are centrally planned, coordinated and complement one another so that the objectives of policy continuity and sustainability are achieved.
Thirty-seven (37) core poverty alleviation institutions, agencies and programmes were identified. The poverty reduction-related activities of the relevant institutions under NAPEP have been classified into four, namely:

(i) **Youth Empowerment Scheme (YES)** which deals with capacity acquisition, mandatory attachment, productivity improvement, credit delivery, technology development and enterprise promotion;

(ii) **Rural Infrastructure Development Scheme (RIDS)** which deals with the provision of potable and irrigation water, transport (rural and urban), rural energy and power support;

(iii) **Social Welfare Service Scheme (SOWESS)** which deals with special education, primary healthcare services, establishment and maintenance of recreational centres, public awareness facilities, youth and student hostel development, environmental protection facilities, food security provisions, micro and macro credits delivery, rural telecommunications facilities, provision of mass transit, and maintenance culture; and

(iv) **Natural Resource Development and Conservation Scheme (NRDCS)** Which deals with the harnessing of the agricultural, water, solid mineral resources, conservation of land and space (beaches, reclaimed land, etc) particularly for the convenient and effective utilization by small-scale operators and the immediate community.

In effect, the current poverty eradication programme of the country is centered on youth empowerment, rural infrastructure development, provision of social welfare services and natural resource development and conservation. Details about these are provided in the Blueprint for the schemes under the National Poverty Eradication programme (as revised in June 2001). In the attempt to overcome the inadequacies of previous programmes, the NAPEP Blueprint has the following features (Aliu, 2001:12 13):

- it adopts the participatory bottom-up approach in programme implementation and monitoring;
- it provides for rational framework which lays emphasis on appropriate and sustainable institutional arrangement;
- it provides for pro-active and affirmative actions deliberately targeted at women, youths, farmers and the disabled;
- it provides for inter-ministerial and inter-agency cooperation;
- it provides for the participation of all registered political parties, traditional rulers, and the communities;
- it provides for technology acquisition and development particularly for agriculture and industry;

**EMPIRICAL LITERATURE**

The size of government expenditures and its effect on long-run economic growth, and vice versa, has been an issue of sustained interest for decades. The received literature, essentially of an empirical nature, has proceeded at two levels. One set of studies has explored the principal causes of growth in the public sector. Wagner’s Law -the “Law of increasing expansion of public and particularly state activities” (Wagner, 1893) - is one of the earliest attempts that emphasize economic growth as the fundamental determinant of public sector growth. Empirical tests of this hypothesis, either in the form of standard regression analysis (Ganti and Kolluri, 1979; and Georgakopoulos and Loizides, 1994, to cite only a few) or in the form of error-correction regression (see, for instance, Kolluri, Panik and Wanab, 2000, and the literature cited therein), have yielded results that differ considerably from country to country.

The other set of studies has been directed towards assessing the effects of the general flow of government services on private decision making and, more specifically, on the impact of government spending on long-run economic growth. Macroeconomics, especially the Keynesian school of thought, suggests that government spending accelerates economic growth. Thus, government expenditure is regarded as an exogenous force that changes aggregate output. Here, again, empirical work, either in standard regression forms (Landau, 1983) or error-correction regressions (see, for instance, Ghali, 1998, and the literature cited therein) finds diverse results. Although each line of enquiry has thrown interesting light on the phenomena, in neither case has the assumed causative process been subjected to rigorous empirical pre-testing. Purely a priori judgements for choosing between the two competing postulates are rendered difficult for at least three reasons: Firstly, there is the possibility of feedback in macro relations, which tend to obscure both the direction and the nature of causality. Secondly, as demonstrated by Ahsan, Kwan and Sahni (1992), in the public expenditure national income nexus, failure to account for omitted variables can give rise to misleading causal ordering among variables and, in general, yields biased results.
Singh and Sahni (1984) initially examined the causal link between government expenditure and national income. Subsequently, their work has generated many other studies, the results of which range the full continuum from no causality to bi-directional causality between these two variables.

The provision of social and physical infrastructure through public investment and expenditure on some goods and services theoretically can indirectly improve productivity in the private sector through a more efficient allocation of resources. Other benefits of government expenditure include the correction of market failure and the preservation of property rights through legislation and the provision of security services. Conversely from an accounting perspective, an increase in government consumption is achieved at the expense of capital formation or private consumption. Some developmental economists of the structuralist school posit that some categories of government expenditure are necessary to overcome constraints to economic growth. Chenery and Syrquin(1975).

The findings of Landau (1983) that the share of government consumption to GDP reduced economic growth was consistent with the pro-market view that the growth in government constrains overall economic growth. These findings were robust to varying sample periods, weighting by population and mix of both developed and developing countries (104 countries). The conclusions were germane to growth in per capita output and do not necessarily speak to increases in economic welfare. Economic growth was also found to be positively related to total investment in education. In a later study, Landau (1986) extends the analysis to include human and physical capital, political, international conditions as well as a three year lag on government spending in GDP. Government spending was disaggregated to include investment, transfers, education, defense and other government consumption. The results in part mirrored the earlier study in that general government consumption was significant and had a negative influence on growth. Education spending was positive but not significant. It was unclear why lagged variables were included given that the channels through which government influence growth suggest a contemporaneous relationship.

Barro (1991) further notes that for a broad group of 98 countries that growth in real per capita GDP was positively related to initial human capital and negatively related to share of government consumption in GDP. The work by Ashauer (1989) focussed on a demand side hypothesis that a high marginal productivity of government spending would yield multiple expansions in output. To the extent that these expenditures are productive, a reduction in expenditures may affect longer term movements in productivity. The income effects arising from government expenditures feed into Wagner’s Law that addresses the income elasticity of public goods. Although, his findings which employed U.S. data indicate that non-military public capital and in particular ‘core’ infrastructure were important to productivity they did not support Wagner’s hypothesis.

Ram (1986) marked a rigorous attempt to incorporate a theoretical basis for tracing the impacts of government expenditure to growth through the use of production functions specified for both public and private sectors. The data spanned 115 countries sufficient to derive broad generalizations for the market economies investigated. The impact of government spending on growth acted through two channels, the externality and the distortion taxes.

Cashin (1995) incorporates the impact of distortionary taxes on growth through use of an endogenous growth model encompassing public investment and transfers. The inclusion of taxes was based on the notion that the size of government is limited by the need to finance such spending through taxes. Distortionary taxes were found to be inimical to growth while public transfers and capital were growth enhancing. The positive impact of transfers on growth represent a new finding in panel data estimations. The policy implications suggest that those categories of government spending that are complementary inputs to private production functions are growth enhancing.

Most studies that utilize government consumption as a ratio generally find a negative correlation with growth while those that utilize the rate of growth in government spending generally find positive correlations. The broad range of variable used in the studies suggests no clear theoretical basis for the specifications which are in the main very ad hoc. The research agenda therefore needs to depart from the
neoclassical models of Solow (1956) and Swan (1956) that linked long run growth to exogenous technical change.

**Model Specification**

In this study, hypothesis has been stated with the view of ascertaining impact of the Government Spending on Poverty Reduction in Nigeria. In capturing study, these variables were used as proxy. Thus, the model is represented in a functional form. It is shown as below:

\[ PL = F(ACGSF, GEA)\]  

Where

\[ PL \] = Poverty Level (Dependent variable)

\[ ACGSF \] = Agricultural Credit Guarantee Scheme Fund (Independent variable)

\[ GEA \] = Government Expenditure on Agriculture (Independent variable)

In a linear function, it is represented as follows,

\[ PL = b_0 + b_1 ACGSF + b_2 GEA + U_t \]  

Where

\[ b_0 \] = Constant term

\[ b_1 \] = Regression coefficient of ACGSF

\[ b_2 \] = Regression coefficient of GEA

\[ U_t \] = Error Term

**Presentation of Results**

This research work employed the use of multiple regression model based on Ordinary Least Square (OLS) method.

Modeling LPL by OLS

\[ LPL = +3.988 -0.0644 LACGSF +0.1074 LGEA \]

\[ T^{*} = (12.431) (-1.797) (4.653) \]

\[ S.E = (0.3208) (0.0358) (0.0231) \]

\[ t_{0.025} = 2.056 \]

\[ F (2, 26) = 20.56 \]

\[ F_{0.05} = 3.37 \]

\[ R^2 = 0.6126 \]

\[ DW = 0.433 \]

**Analysis of Results**

T-test: It is used to test for the statistical significance of the individual estimated parameters. The calculated t-value for the regression coefficients of LACGSF and LGEA are -1.797 and 4.653 respectively. The tabulated t-value is 2.056. Since the calculated t-value of LGEA is greater than the tabulated t-value at 5% level of significance; we conclude that its regression coefficient is statistically significant. However, the calculated t-value of LACGSF is less than the tabulated t-value. Therefore, its estimated parameter is statistically insignificant.

Standard Error test: It is used to test for statistical reliability of the coefficient estimates.

\[ S(b1) = 0.0358 \]

\[ S(b2) = 0.0231 \]

\[ b_1/\sqrt{S(b1)} = 0.0322 \]

\[ b_2/\sqrt{S(b2)} = 0.0537 \]

Since \( S(b1) > b_1/\sqrt{S(b1)} \), we conclude that the coefficient estimate of \( S(b1) \) is statistically insignificant. However, \( S(b2) < b_2/\sqrt{S(b2)} \), hence its coefficient estimate of \( S(b2) \) is statistically significant.

F-Test: This is used to test for the joint influence of the explanatory variables on the dependent variable. The \( F_{calculated} \) value is 20.56 while the \( F_{tabulated} \) value is 3.37 at 5% level of significance. Since the \( F_{calculated} \) value is greater than the \( F_{tabulated} \) value, we conclude that the entire regression plane is statistically significant. This means that the joint influence of the explanatory variables (ACGSF and LGEA) on the dependent variable (PL) is statistically significant.

Coefficient of Multiple Determination (\( R^2 \)) It is used to measure the proportion of variations in the dependent variable which is explained by the explanatory variable. The computed coefficient of determination (\( R^2 = 0.6126 \)) shows that 61.26% of the total variations in the dependent variable (LPL) is influenced by the explanatory variables namely: Agricultural Credit Guarantee Scheme Fund (ACGSF) and Government Expenditure on Agriculture (GEA) while 38.74% of the total variation in the dependent variable is attributable to the influence of other factors not included in the regression model.
Durbin Watson statistics: It is used to test for the presence of positive first order serial correlation. The computed DW is 0.433. At 5% level of significance with two explanatory variables and 29 observations, the tabulated DW for $d_L$ and $d_u$ are 1.270 and 1.563 respectively. The value of DW is less than the lower limit. Therefore, we conclude that there is evidence of positive first order serial correlation.

**Implication of the Result**
The regression result above shows public spending has significant impact on Poverty reduction in Nigeria. It is estimated from the result that 1% increase in Agricultural Credit Guarantee Scheme Fund (AGCSF) will, on the average lead to decrease by 0.06% in Poverty Level. The sign borne by the parameter estimates is in conformity with the economic a priori expectation. The result is in conformity with the assertion of Ravallion, (2002) which states that “public spending contributes to poverty reduction which is sometimes thought to be small, because its relative economic importance usually falls when low-income countries successfully develop”.

However, the sign borne by the parameter estimate of GEA does not conform to the a priori expectation. There existed a positive relationship between Poverty level and GEA. Government Expenditure on Agriculture increases while poverty is on the increase. This can be attributed to the inability of farmers to benefit directly from the opportunities surrounding government expenditure on agriculture.

**Conclusion**
There can be no meaningful Poverty Reduction without adequate spending by the government. In government expenditure, there is need to fund the agricultural sector. Such people in the sector are;

- Predominance of small scale producers with little asset base and working capital.
- Need to cultivate a new set of agricultural entrepreneurs to drive technological change in agricultural production.
- Long gestation periods for agricultural production.
- Public subsidies for critical agricultural infrastructure with spill-over effects on the economy.
- Risks and Uncertainties from natural causes.

Agriculture is fundamental to the sustenance of life and is the bedrock of economic development, especially in the provision of adequate and nutritious food so vital for human development and industrial raw materials for industry.

The importance of poverty reduction is reminiscent in the roles played by the poverty alleviation programme as a means of understanding, controlling, altering and redesigning of economic growth (Olufemi 2001). Agricultural financing has a link with poverty reduction. As once remarked by Roseboom (1994), “In a developing economy, poverty reduction cannot be dealt without agricultural financing”. Thus, this research work examines agricultural funding as a means of poverty reduction in Nigeria.

**Recommendations**
- In the bid to achieve poverty reduction through public spending, the annual budget by the federal government should be considered with utmost care so as to enhance the adequate funding of the agricultural sector.
- Government funding on agriculture should be channeled to farm mechanization. This will help to create employment and boost food production, thereby reducing poverty.
- Effort should be made by the Government to see that rural farmers benefit the opportunities surrounding her expenditures as this will also contribute to Poverty Reduction in Nigeria.
- The CBN can as well advise commercial banks to allocate a reasonable percent of their lending to agriculture so as to reduce poverty in the society.
- There is need to understand the endemic problems of the agricultural sector. This will help to ascertain the allocation of funds by government and private individuals for better financing.
- Increase on Salaries/wages most at times makes work attractive. This should be the case in the agricultural sectors. As the income or wages of farmers increase, this will cause an inducement on unemployed youths in engaging themselves in the agricultural activities thereby contributing to poverty in the society.
REFERENCES


