# <u>COMPONENTS OF GOVERNMENT SPENDING, SOCIAL</u> <u>WELFARE AND ECONOMIC PERFORMANCE IN</u> <u>NIGERIA</u>

MAKU, E. Olukayode<sup>\*</sup> AMAGHIONYEODIWE, Lloyd, Ph.D.<sup>\*\*</sup> ADESOYE, A. Bolaji, Ph.D.\* ALIMI, Y. Olorunfemi\*

#### Abstract

This paper examines the relationship between government expenditure components and economic performance in Nigeria with emphasis on the subsequent effect on per capita income. The study used data from 1970-2011 and employed an Engel-Granger Cointegration test. The study's findings indicate that government expenditure on social and community services and transfer payments enhance real per capita income significantly. Also, government's spending on social and community services and government spending on transfer payments are partially statistically significant on enhancing and promoting social welfare proxied by real per capita income while government spending on economic services and population growth was found to have an insignificant effect on real per capita income in Nigeria. A policy implication of this is that appropriate reforms aimed at ensuring efficient and effective use of government expenditure would enhance socio-economic performance of the Nigerian economy.

**Keywords:** Government Expenditure, population, per-capita income, social welfare, Nigeria. **JEL Classification:** E62, H51, H52, O47.

International Journal of Physical and Social Sciences http://www.ijmra.us



<sup>&</sup>lt;sup>\*</sup> Olabisi Onabanjo University, Ago-Iwoye, Ogun-Sate, Nigeria

<sup>\*\*</sup> York College, City University of New York, Jamaica, New York.

A Monthly Double-Blind Peer Reviewed Refereed Open Access International e-Journal - Included in the International Serial Directories Indexed & Listed at: Ulrich's Periodicals Directory ©, U.S.A., Open J-Gage, India as well as in Cabell's Directories of Publishing Opportunities, U.S.A.



#### 1.0 Introduction

Fiscal policy is still widely recognized as a potent tool to enhance growth, redistribute income and improve the welfare of the people especially in developing countries including Nigeria. Nonetheless, the trend in the Nigerian case seems to negate this assertion. For instance, despite the huge government spending, the several fiscal measures, and a variety of economic programmes that the Nigerian government had introduced and implemented over the years, it is a dismay that growth has not accelerated and poverty remains widespread and pervasive.

The trend in Nigeria is that of an astronomical increase in government spending since the in late 1970s and this trend have continued ever since leading to huge fiscal crisis, inflation and public debt, among others. This increase in fiscal deficit and its consequent effects on the economy specifically led the Nigerian government to introduce austerity measure in 1982 and the Structural Adjustment Programme (SAP) in 1986. These two policies were part of the efforts by the government to then reduce the fiscal imbalance, make the economy to be self-reliant and stabilize the economy through reducing public spending across the board vis-à-vis strict budget discipline. However, these policies resulted in unacceptable social and economic costs while government spending remains increasingly vast, and the Structural Adjustment Programme could not achieve all the laid down objectives but ignited more economic woes to different sectors of the economy, it was thus discontinued in 1994.

Despite all these, there have been insinuations that some components of government spending have really enhanced economic growth and performance as such there is a need for a componentbased analysis of government spending in Nigeria to help ascertain which of the categories of public spending enhances economic performance than the others. For instance, an essential question asked in the growth literature whether or not increasing public spending (as a component of fiscal policy) stimulates economic performance, especially in developing countries. The responses to this question have been inconclusive based on the empirical evidence provided by the various studies. Some of these studies include Landau (1983), Josaphat *et al.* (2000) for Tanzania, Albala-Bertrand and Mamatzakis (2001) for Chile and South Africa, Joharji and Starr (2010) for Saudi Arabia, Espinoza and Senhadji (2011), and Alshahrani and Alsadiq (2014). For instance, While Landau (1983) indicated that there is an inverse relationship





## <u>ISSN: 2249-5894</u>

between increases in government spending's share in GDP and the growth rate of per capita real GDP, Alshahrani and Alsadiq (2014) study of Saudi Arabia showed, among others, that healthcare expenditure stimulate growth in the long-run while spending in the housing sector can also boost short-run production. This also supports Barro (1991) which opined that government spending on such infrastructure as roads and communications would also raise the rate of private domestic investment, and consequently enhance economic growth.

In Nigeria, many studies have tried to examine the relationship between government expenditure and economic growth and their findings have also not been conclusive. Studies like Essien (1997), Babatunde (2007) and Ighodaro and Oriakhi, 2010 found no relationship between government spending and economic growth in Nigeria while Aregbeyen, 2006, and Oyinlola, and Akinnibosun (2013) did find a positive correlation. Specifically, the result from Oyinlola, and Akinnibosun (2013) indicated that economic growth and development are the main objectives of government expenditure in Nigeria, especially investment in infrastructure and human resources all of which falls under social and community services but does this translate to higher per capita income as a measure of social welfare? This is one question that this study tries to investigate. In doing this, this study will take a step further by examining the various categories of government expenditures and how they affect economic performance with more emphasis on social spending and the society's welfare.

The remainder of this paper is divided into four sections. Section II provides a brief review of the literature. Section III examines some stylized facts on the Nigerian Economy, and Section IV contains the methodology and data analysis while Section V concludes the study.

### 2.0 Brief Review of the Literature

Over the past few decades, there has been a consistent and persistent discourse on how government expenditure enhances a country(s) socio-economic performance. One of the major proponents in the literature was Wagner (1883) whose assertion was that public expenditure is a consequence of economic growth. Wagner's work is based on empirical observations in a number of Western industrializing countries. The basic Wagnerian assumption is that continuously public spending growth is associated with the continuing growth in community

A Monthly Double-Blind Peer Reviewed Refereed Open Access International e-Journal - Included in the International Serial Directories Indexed & Listed at: Ulrich's Periodicals Directory ©, U.S.A., Open J-Gage, India as well as in Cabell's Directories of Publishing Opportunities, U.S.A. International Journal of Physical and Social Sciences http://www.ijmra.us





# <u>ISSN: 2249-5894</u>

output in developing countries. Moreover, public expenditure increases at a rate faster than the growth of community output. He proposed three reasons why the share of government spending would increase as the economy grows. First, as industrialization progresses, public sector activity in terms of state's administrative and protective functions would increase in importance during the industrialization process. Second, state's role in maintaining law and order as well as its role in activities related to economic regulation is likely to become more pronounced due to the increasing complexity of economic life and urbanization which occur during industrialization. Finally, technological change and growing scale of firms would tend to create monopolies whose effects the state will have to offset.

Several researchers have also carried out empirical studies on government expenditure, growth, development and welfare. Expectedly, there exist diverse opinions on the use of government spending components in economic management and this was also reflected in the varied and inconclusive results that were gotten from these studies. Some of these studies include

Landau (1983) study using data for developing countries over 1960-80, found that an inverse relationship between increases in government expenditure's share in real GDP and the growth rate of per capita real GDP. Barro (1989) also found a negative relationship between government consumption expenditure and the growth of real per capita GDP. In their study of Tanzania, Josaphat et al. (2000) using time series data over 1965-96 concluded that government expenditure proxy for physical investment was negatively related to growth while consumption expenditure stimulates growth. Albala-Bertrand, and Mamatzakis (2001) studied government spending on infrastructure and economic growth in South Africa and Chile and their study concluded that government expenditure on infrastructure led to increases in economic growth. Abu et al (2010), using the Keynesian and Endogenous Growth Model, reveals that government total capital expenditure, total recurrent expenditure and growth expenditure on education have a negative effect on economic growth. He also maintained that, on the contrary, rising government expenditure on transport and communication and health results in an increase in economic growth. In their study of Saudi Arabia using time-series data for 1969 to 2005, Joharji and Starr (2010) found that there was a positive relationship between the growth rate of both current and capital expenditure and economic growth while current expenditure had a larger impact on

A Monthly Double-Blind Peer Reviewed Refereed Open Access International e-Journal - Included in the International Serial Directories Indexed & Listed at: Ulrich's Periodicals Directory ©, U.S.A., Open J-Gage, India as well as in Cabell's Directories of Publishing Opportunities, U.S.A. International Journal of Physical and Social Sciences http://www.ijmra.us



economic growth in the non-oil sector. But for Senhadji (2011), their study found the contrary result in that he found that capital expenditure had the largest impact on growth than current expenditure. Alshahrani and Alsadiq (2014) study of Saudi Arabia also indicated that while private domestic and public investments, as well as healthcare expenditure, stimulate growth in the long-run, openness to trade and spending in the housing sector can also boost short-run production.

In Nigeria, Omitogun and Ayinla (2007) showed that fiscal policy pursued by the Nigerian government did not achieve its aims of promoting sustainable development and growth, during the period under study. Prior to this study, Adeoye (2003) using a derivative of the Dimension growth accounting model, which was estimated with data covering the period 1970 to 2002 analyzed the contribution and impacts of different tools of fiscal policy on the growth of the Nigerian economy. His findings reveal that the majority of public investments are on unproductive activities that bring about a fragile relationship between investment expenditure and output growth in Nigeria. He observed that an investment in human capital promoted growth which particularly is traceable to the increase in school enrollment.

Some of the studies that investigated government expenditure and economic growth include: Essien (1997) using a two-step procedure of Engle and Granger (2007) and standard causality test found no relationship between government expenditure and economic growth. This result was also supported by Babatunde (2007) who used the bound testing approach and Olopade and Olopade (2010) who investigated the impact of government expenditure on economic growth and development in Nigeria and found no significant relationship between most of the components of expenditure, economic growth and development. But Aregbeyen (2006) found a positive correlation between government expenditure and economic growth. This was similar to the results obtained by Ighodaro and Oriakhi (2010) who found that increase in total government expenditure and specific expenditure on general administration and community and social services had positive effects on economic growth. This tend to buttress Jha (1999) study of India and China, which indicated that that decrease in transfer payments on the average across countries improves the rate of economic growth; while, a reduction in transfer payments worsen the future post-transfer distribution of income. In this study, our emphasis will be more on



components of government spending especially those on economic services and social and community and its impact on per capita income.

### 3.0 Stylized Facts on Nigeria

Available data from the Central Bank of Nigeria have shown that government spending has been increasing persistently and consistently and some of the possible reasons for this include huge receipts from production and sales of crude oil, and the growing demand for public goods like roads, communication, power, education and health, (Abu and Abdullah, 2010). This is also compounded by the increased security concerns in the country as well as increased government size which led to huge extra-budgetary spending.

The trend in total government spending and real gross domestic product from 1990 to 2010 is shown in Figure I.



Source: Computed from the Central Bank of Nigeria Statistical Bulletin (2012).

A Monthly Double-Blind Peer Reviewed Refereed Open Access International e-Journal - Included in the International Serial Directories Indexed & Listed at: Ulrich's Periodicals Directory ©, U.S.A., Open J-Gage, India as well as in Cabell's Directories of Publishing Opportunities, U.S.A.

International Journal of Physical and Social Sciences http://www.ijmra.us

### March 2015



### Volume 5, Issue 3

## <u>ISSN: 2249-5894</u>

The figures indicated that there has been an increase in both real GDP and government spending even though empirical analysis does not really support the existence of a positive relationship between the two variables. With respect to the categories of government spending and emphasising on social, economic and community services, Figure II signposts to the fact that social, economic and community services received the least attention compared to government transfer amongst all various classifications of government expenditure.



The data showed that there was never a year where government recurrent spending on social, economic and community services was up to 20% of total government recurrent spending. This indicates that most of government spending has been geared towards such activities as transfers and general administration. Transfers in this case are dominated mainly by budgetary allocations to unproductive activities rather than income distribution and poverty alleviation. Given that social services are made up of health, education and other social/community activities, it can be deduced that government (public) spending on human development is still low in Nigeria and the consequence of this could be the rampant deprivation amongst the people and the persistent and consistent mass poverty being experienced by the economy.

A Monthly Double-Blind Peer Reviewed Refereed Open Access International e-Journal - Included in the International Serial Directories Indexed & Listed at: Ulrich's Periodicals Directory ©, U.S.A., Open J-Gage, India as well as in Cabell's Directories of Publishing Opportunities, U.S.A. International Journal of Physical and Social Sciences http://www.ijmra.us





One important feature of the table is the fact that the trend in social and community services as well as in economic services are interlinked with varying fluctuations and are moving in the same direction. Also, social community services have the highest value from 1999 to 2009 during the National Economic Empowerment and Development Strategy (NEEDS) era, which was the period 2004 to 2007. Among the target objective of NEEDS is the creation of seven million jobs over the period. This was to be in the sectors like agriculture, manufacturing (small and medium scale industries), services including construction, as well as improvement in power supply to boost productivity of small and medium scale service industries. From available data, this was also not successful despite the massive government spending on it.

Furthermore, since the early 1990s, capital expenditure on economic activities as a ratio of total capital expenditure increased tremendously without a corresponding decline in poverty, unemployment and cost of living. This calls for a thorough analysis of the effectiveness and productivity of public expenditure. In all, all the huge government spending tend to have failed or been slow in translating to better welfare in terms of the per capita income for the populace.

#### 4.0 Methodology and data Analysis

### 4.1 Model Specification and Estimation Techniques

This study adopted a similar methodology to those used by Adeoye (2003), Omitogun & Ayinla (2003) and Adesoye, Maku and Atanda (2010) to analyze the inter-relationship between public spending and economic growth in Nigeria. For this this we extend our focus to emphasis more on indicators of social welfare in Nigeria. The model is based on the different categories of government spending augmented with the integration of exogenous factors like population growth and government debt. The model is stated as follows:

$$SWI_t = \alpha_0 + \alpha_1 GSF + \alpha_2 X + \mu \tag{4.1}$$

Where: SWI = Social Welfare Indicator (like GDP growth rate, Poverty Head Count, Per Capita Income); GSF = Government Spending by Function (considered the active sectors of the economy); X = Set of exogenous factors such as economic services, transfers, inflation, fiscal

A Monthly Double-Blind Peer Reviewed Refereed Open Access International e-Journal - Included in the International Serial Directories Indexed & Listed at: Ulrich's Periodicals Directory ©, U.S.A., Open J-Gage, India as well as in Cabell's Directories of Publishing Opportunities, U.S.A. International Journal of Physical and Social Sciences http://www.ijmra.us





policy etc.,  $\alpha_0$  = Intercept or constant;  $\alpha_{1-2}$  = Parameters or co-efficient of explanatory variables; and  $\mu$  = Error terms.

Based on non-availability of extensive disaggregated data on government spending by function across several real sectors of the economy, the model for this study incorporates government spending on economic services, social and community services and transfer payments. Also, level of total population is included as one of the exogenous factors of interest, since social welfare status in a developing country like Nigeria is mostly dependent on increase in total population level and its management or control. Therefore, the empirical model for this study is specified as:

$$RPCI_t = \alpha_0 + \alpha_1 GES + \alpha_2 GCS + \alpha_3 GTP + \alpha_4 POP + \mu$$
(4.2)

Where: RPCI = Real Per Capita Income; GES = Government spending on economic services; GCS = Government spending on social and community services; GTP = Government spending on transfer payments; POP = Total population level  $\alpha_0$  = Intercept or constant;  $\alpha_{1-4}$  = Parameters or co-efficient of explanatory variables; and  $\mu$  = Error terms.

The first step in testing Engel-Granger cointegration and long-run relationship is to check the time series variables for their stationarity. Following the agitation made by Engle and Granger (1987), they argued that a linear combination of two non-stationarity series can be stationary and if it thus exists, the time series of such variables are considered to be cointegrated. However, this reveals that the series have the same order of integration. Therefore, this study used the conventional unit root tests i.e. the ADF by Dickey and Fuller (1979, 1981) to confirm the validity of stationarity level (either difference stationary or trend stationary) in the data sets. We further test the null of a unit root against a stationary alternative for all the methods employed. After the unit root test, we used the Engel-Granger test to determine the linear combination of our variables employed for analysis. Moreover, the post-estimation diagnostic tests carried out in this study are the Normality test (Jargua Bera Test) by using the residual diagnostic test, Breuseh Godfrey serial correlation test and White Noise test to check the presence of heteroskedasticity test.

A Monthly Double-Blind Peer Reviewed Refereed Open Access International e-Journal - Included in the International Serial Directories Indexed & Listed at: Ulrich's Periodicals Directory ©, U.S.A., Open J-Gage, India as well as in Cabell's Directories of Publishing Opportunities, U.S.A. International Journal of Physical and Social Sciences http://www.ijmra.us



### 4.2 Empirical Results and Discussion

### 4.2.1 Unit Root Test Results

Table 4.1 presents the results of the time-series properties of the variables included in the model. This pre-test was carried out before estimating the long-run relationship between government expenditure and economic growth in Nigeria (1970-2011).

| Variable         | ADF Tau Statistics     | Order                  | of          |  |
|------------------|------------------------|------------------------|-------------|--|
|                  | Intercept              | Linear Trend           | Integration |  |
| GES              | -10.4090*(1) [-3.6156] | -10.8804*(1) [-4.2191] | 1           |  |
| GCS              | -7.2305*(0) [-3.6056]  | -7.1483*(0) [-4.2050]  | 1           |  |
| GTP              | -7.0125*(0) [-3.6056]  | -6.9230*(0) [-4.2050]  | 1           |  |
| POP              | -6.2200*(0) [-3.6056]  | -6.0992*(1) [-4.2119]  | 1           |  |
| RPCI             | -4.4435*(0) [-3.6056]  | -4.8851*(0) [-4.2050]  | 0           |  |
| ect <sub>t</sub> | -3.6057*(0) [-3.6010]  | -35716**(0) [-3.5236]  | 0           |  |

#### Table 4.1: ADF Unit Root Test Results

Source: Authors' Computation, 2014.

Note: \* significant at 1%; \*\* significant at 5%; \*\*\* significant at 10% Mackinnon critical values and are shown in parenthesis. The lagged numbers shown in brackets are selected using the minimum Schwarz and Akaike Information criteria.

The Augmented Dickey Fuller (ADF) unit-root test results in growth rates presented in table 4.1 indicate that all the incorporated government expenditure variables i.e. government spending on economic services (GES), government spending on social and community services (GCS), government spending on transfer payments (GTP) and population growth (POP) are stationary at first difference, while per-capita income (RPCI) is stationary at levels. Thus, GES, GCS, GTP and POP are non-mean reverting at levels and do not converge to their long-run equilibrium until they are first differenced. Nonetheless, the econometric literature argued that regressing a non-stationary series on non-stationary series has severe implications in drawing policy inference. Hence, the long-run association between the series based on generated residual ( $ect_t$ ) was also determined.

A Monthly Double-Blind Peer Reviewed Refereed Open Access International e-Journal - Included in the International Serial Directories Indexed & Listed at: Ulrich's Periodicals Directory ©, U.S.A., Open J-Gage, India as well as in Cabell's Directories of Publishing Opportunities, U.S.A. International Journal of Physical and Social Sciences http://www.ijmra.us



Consequent to the results generated from the Engle-Granger cointegration procedure, the generated residual or error correction term (ECT) confirmed existence of long-run among relationship among government spending on economic services, government spending on social and community services, government spending on transfer payments, population growth and percapita income, where the null hypothesis at level is rejected.

### 4.2.2 Long-Run Estimates and Diagnostic Test Results

The table 4.2 below reports that government spending on economic services (GES), government spending on social and community services (GCS) and government spending on transfer payments (GTP) exert positive influence on social welfare proxy by real per capital income (RPCI) in Nigeria between a decade period after Nigeria's independence and 2010 fiscal year and all of these effects does conform with the theoretical expectation. This implies that a percentage increase in government spending on economic services (GES), government spending on social and community services (GCS) and government spending on transfer payments (GTP), social welfare proxy by real per capital income (RPCI) increases by 0.083, 0.25 and 0.57 percent respectively. The table 4.2 also reports that only population growth (POP) is found to exert negative or adverse effect on real per capital income (RPCI) in Nigeria during the review periods and this does not conform to the a priori expectations. This implies that the percentage increase in population growth (POP) reduces the real per capital income measuring the social welfare with a magnitude of 0.12 percent.

| Dependent Variable: RPCI |             |            |        |  |  |  |  |
|--------------------------|-------------|------------|--------|--|--|--|--|
| Method: Least Squares    |             |            |        |  |  |  |  |
| Observation $(n) = 42$   |             |            |        |  |  |  |  |
| Variable                 | Coefficient | Std. Error | Prob.  |  |  |  |  |
| С                        | 0.2188      | 1.0202     | 0.8314 |  |  |  |  |
| LOG(GES)                 | 0.0827      | 0.1002     | 0.4142 |  |  |  |  |
| LOG(GCS)                 | 0.2504      | 0.1085     | 0.0269 |  |  |  |  |
| LOG(GTP)                 | 0.5742      | 0.1284     | 0.0001 |  |  |  |  |

Table 4.2: Estimated Long-Run Model Results and Diagnostic Test

A Monthly Double-Blind Peer Reviewed Refereed Open Access International e-Journal - Included in the International Serial Directories Indexed & Listed at: Ulrich's Periodicals Directory ©, U.S.A., Open J-Gage, India as well as in Cabell's Directories of Publishing Opportunities, U.S.A.

> International Journal of Physical and Social Sciences http://www.ijmra.us



### <u>ISSN: 2249-5894</u>

| РОР  | -0.1180 | 0.3089              | 0.7048  |  |  |  |
|--|---------|---------------------|---------|--|--|--|
| R-squared                                      | 0.84943 | Durbin-Watson stat  | 1.5409  |  |  |  |
| Adjusted R <sup>2</sup>                        | 0.83270 | F-statistic         | 50.7717 |  |  |  |
| S.E. of regression                             | 0.62065 | Prob (F-statistic)  | 0.0000  |  |  |  |
| Residual Normality Test                        |         |                     |         |  |  |  |
| Jarque-Bera                                    | 3.8774  | Prob (J.B)          | 0.1439  |  |  |  |
| Breusch-Godfrey Serial Correlation LM Test     |         |                     |         |  |  |  |
| F-statistic                                    | 10.0720 | Prob. F(1, 36)      | 0.1152  |  |  |  |
| Obs*R-squared                                  | 9.1818  | Prob. Chi-Square(1) | 0.0721  |  |  |  |
| Heteroskedasticity Test: Breusch-Pagan-Godfrey |         |                     |         |  |  |  |
| F-statistic                                    | 1.0816  | Prob. F(4,26)       | 0.3859  |  |  |  |
| Obs*R-squared                                  | 4.4227  | Prob. Chi-Square(4) | 0.3518  |  |  |  |

**Source:** Authors' Computation (2014).

In assessing the partial significance of the estimated parameters for the considered variables, the t-statistics results are presented in the table 4.2. The result shows that the estimated parameter for government spending on social and community services (GCS) and government spending on transfer payments (GTP) were found to be partially statistically significant 1n promoting social welfare proxy by real per capital income (RPCI) at 5% critical level because their *p*-values are less than 0.05. While the estimated parameters for government spending on economic services (GES) and population growth (POP) are found to have an insignificant effect on real per capita income in Nigeria at 5% critical level.

Although, the F-statistic result shows that all the incorporated government spending macroeconomic indicators are simultaneously significant at 5% critical level. Thus, the adjusted R-squared result reveals that 98.34% of the total variation in social welfare measured by the real per capital income (RPCI) is accounted by changes in government spending on economic services (GES), government spending on social and community services (GCS), government spending on transfer payments (GTP) and population growth (POP) during the review period. The Durbin- Watson test result reveals that there is the presence of moderate negative serial

A Monthly Double-Blind Peer Reviewed Refereed Open Access International e-Journal - Included in the International Serial Directories Indexed & Listed at: Ulrich's Periodicals Directory ©, U.S.A., Open J-Gage, India as well as in Cabell's Directories of Publishing Opportunities, U.S.A. International Journal of Physical and Social Sciences http://www.ijmra.us



### IJPSS

### Volume 5, Issue 3

# <u>ISSN: 2249-5894</u>

correlation among the residuals, because of the d-value (0.978472) is less than two. The residuals from the model formulated showed the variability in its error term.

However, the Breusch-Godfrey serial correlation test result from Table 4.2 reported that we do not reject the null hypothesis "no serial correlation" at 5% significance level, and likewise for the Breusch-Pagan-Godfrey heteroskedasticity test, the result indicated that we do not reject the null hypothesis "no heteroskedasticity" at 5% significance level. The table also reports the probability value of the Jarque-Bera statistic (0.1439) shows that the estimated residual series is normally distributed with zero mean and constant variance. This tends to improve the reliability of the estimated parameters and thus, necessitate other residual diagnostic test such as higher order serial correlation and heteroskedasticity tests.

### **Table 4.3:** Variance Inflation Factors

|          | Coefficient | Uncentered              | Centered |
|----------|-------------|-------------------------|----------|
| Variable | Variance    | VIF                     | VIF      |
| GES      | 0.000866    | 17.05785                | 1.892002 |
| GCS      | 327.9014    | 72.35877                | 5.034976 |
| GTP      | 12.98661    | 138.4248                | 12.15615 |
| POP      | 0.213332    | 11. <mark>52</mark> 733 | 4.836370 |
| С        | 6315313.    | 25.97960                | NA       |

Source: Authors' computation, 2014.

Thus, Table 4.3 below shows that there is no multi-collinearity among the explanatory variables incorporated except for government spending on transfer payments with a small variation from 10 in the estimated cointegrating model as evaluated by the centered Variance Inflation Factor (VIF).

### 5.0 Conclusion

This paper examines the relationship between government expenditure components and economic performance in Nigeria with emphasis on the subsequent effect on per capita income. The empirical findings from the study indicate that government spending on social and

A Monthly Double-Blind Peer Reviewed Refereed Open Access International e-Journal - Included in the International Serial Directories Indexed & Listed at: Ulrich's Periodicals Directory ©, U.S.A., Open J-Gage, India as well as in Cabell's Directories of Publishing Opportunities, U.S.A. International Journal of Physical and Social Sciences http://www.ijmra.us





# <u>ISSN: 2249-5894</u>

community services and transfer payments enhance real per capita income significantly. The result shows that the estimated parameter for government spending on social and community services and government spending on transfer payments are partially statistically significant in enhancing and promoting social welfare proxied by real per capital income. While the estimated parameters for public spending on economic services and population growth was found to have an insignificant effect on real per capita income in Nigeria. Also, changes in government spending on economic services, government spending on social and community services, government spending on social and community services, government spending on transfer payments and population growth are responsible for a significant total variation in social welfare measured by the real per capita income during the review period. The policy implication of this is that appropriate reforms aimed at ensuring efficient and effective use of government expenditure would enhance socio-economic performance of the Nigerian economy.



A Monthly Double-Blind Peer Reviewed Refereed Open Access International e-Journal - Included in the International Serial Directories Indexed & Listed at: Ulrich's Periodicals Directory ©, U.S.A., Open J-Gage, India as well as in Cabell's Directories of Publishing Opportunities, U.S.A.





#### References

Abu, N. and U. Abdullahi. (2010) "Government Expenditure and Economic Growth in Nigeria, 1970-2008: A Disaggregated Analysis", *Business and Economics Journal*, Volume 4 pages 2-4

Adeoye, T (2003). Fiscal policy and Growth: Empirical evidence from Nigeria. Economic development department, *Nigerian institute of Social and Economics Research (NISER)*, Ibadan. Volume 45, No 1&2.

Adesoye, A. B., Maku, E. O. and Atanda, A, A. (2010). Dynamic analysis of government spending and economic growth in Nigeria. *Journal of Management and Society*, 1(2), pp. 27-37.

Aigbokan B.E (1998). Poverty, Growth and inequity in Nigeria, A case study AERC Research papers. No: 102. *African Economic Research Consortium*, Nairobi, Kenya.

Akpan, L. (2006). Public Expenditure and Human Development in Nigeria. Faculty of Management Sciences, Cross River University of Technology, Ogoja, Nigeria.

Albala-Bertrand, J., and Mamatzakis, E. (2001). "Is Public Infrastructure Productive? Evidence from Chile," *Applied Economics Letters*, 8, 195-98.

Alshahrani, Saad A. and Ali J. Alsadiq (2014) "Economic Growth and Government Spending in Saudi Arabia: an Empirical Investigation". *IMF Working Paper* WP/14/3. (Washington, DC: International Monetary Fund).

Aregbeyen, O. (2006). "Cointegration, causality and Wagner's law: a test for Nigeria". *Central Bank of Nigeria, Economic and Financial Review*. 44 (2):1-7

Babatunde, M. A. (2007). "A bound testing analysis of Wagner's law in Nigeria: 1970-2006". *Appl. Econ.* pp.1-8.

Barro, R. (1990). "Government Spending in a Simple Model of Endogenous Growth," *Journal of Political Economy*, 98, 103-25.

Central Bank of Nigeria (CBN), (2013). "Central Bank of Nigeria Statistical Bulletin". Retrieved from: http://cenbank.org/documents/annualreports.asp?beginrec=1&endrec=20

Dickey, D. and Fuller, W. (1979). Distribution of the estimators for autoregressive time series with a unit root. *Journal of American Statistical Associations* 74, pp. 427–431.

Dickey, D. A. and Fuller, W. A. (1981). Likelihood ratio statistics for autoregressive time series with a unit root. *Econometrica: Journal of the Econometric Society*, 1057-1072.

Engle, R .F. and Granger, C. W. (1987). Cointegration and error correction: representation, estimation and testing. Econometrica 55, pp. 251–276.

Espinoza, R., and Senhadji, A. (2011). "How Strong Are Fiscal Multipliers in the GCC? An

A Monthly Double-Blind Peer Reviewed Refereed Open Access International e-Journal - Included in the International Serial Directories Indexed & Listed at: Ulrich's Periodicals Directory ©, U.S.A., Open J-Gage, India as well as in Cabell's Directories of Publishing Opportunities, U.S.A. International Journal of Physical and Social Sciences http://www.ijmra.us





Empirical Investigation," *IMF Working Paper* WP/11/61 (Washington, DC: International Monetary Fund).

Essien EA (1997). "Public sector growth, an econometric test of Wagner's law". *Central Bank of Nigeria, Economic and Financial Review*. 35:3

Ighodaro CAU, and Oriakhi DE (2010). "Does the relationship between government expenditure and economic growth follow Wagner's law in Nigeria?" *Annals of the University of Petrosani, Economics* 10(2):185-198.

Jha, R. (1999a). India's Public Finances: Current Position and Some Suggested Reforms, in K. Parikh (ed.) *India Development Report: 1999-2000*, New Delhi: Oxford University Press.

Jha, R. (1999b). Some Rudimentary Macroeconomics of the Budget Deficit and Debt in India" in A. Vasudevan, Nachane, D. and A. Karnik (eds.) *Fifty Years of Development Economics*, Mumbai: Himalaya Publishing Company.

Joharji, G. A., and Starr, M. (2010). "Fiscal Policy and Growth in Saudi Arabia," *Review of Middle East Economics and Finance*: 6(3), Article 2.

Josaphat, P. K., and Oliver, M. (2000). "Government Spending and Economic Growth in Tanzania," 1965-1996: *CREDIT Research Paper* (Nottingham, United Kingdom: University of Nottingham).

Landau, D. (1983). "Government Expenditure and Economic Growth: A Cross-Country Study," *Southern Economic Journal*, 49, 783-97.

Olopade D.O and Olopade B.C (2010). "Impact of Government expenditure on economic growth in developing countries: Nigeria as a case study". Accessed on 01/03/2014, from: http://ecomod.net/sites/default/files/document-conference/ecomod2010/1369.pdf

Omitogun, O. and Ayinla, T. (2007). Fiscal policy and Nigeria Economics growth. *Nigeria Journal of Research in National Development*, 5(2).

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

Perotti, R. (1993). Political equilibrium, income distribution, and growth. *The Review of Economic Studies*, 60(4), 755-776.

Wagner, A. (1939). Speech on the Social Question (abridged), in Donald O. Wagner, ed. *Social Reformers. Adam Smith to John Dewey*. New York: Macmillan, pp. 489–506.

Wright, H. R. (1993). Adolph Wagner and the Plural Society. *The South African Journal of Economics*, vol. 61, no. 1, pp. 59–66.

http://www.ijmra.us



A Monthly Double-Blind Peer Reviewed Refereed Open Access International e-Journal - Included in the International Serial Directories Indexed & Listed at: Ulrich's Periodicals Directory ©, U.S.A., Open J-Gage, India as well as in Cabell's Directories of Publishing Opportunities, U.S.A. International Journal of Physical and Social Sciences