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Public Expenditure and Economic Development in Selected African Countries

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Abstract

This study investigated the effects of total public expenditure on economic development in Nigeria, Ghana and South Africa from 1990 - 2022. Government final consumption expenditure (GFCE) and human development index (HDI) were used to measure public expenditure and economic development respectively. Data were sourced from the World Bank and the United Nations Development Programme (UNDP). Descriptive analysis, Johansen co-integration test and Wald test were the tools of analysis. Results revealed that GFCE has no long run relationship with HDI in the countries considered. Also, GFCE granger causes HDI in Ghana and South Africa. In addition, GFCE has a negative effect on HDI in Nigeria but positive effects in Ghana and South Africa; however, the effects in all three countries were statistically significant. Hence, there is the need to further encourage public spending in Africa so as to further enhance the economic development state of African countries.

Keywords: *Public Expenditure, Economic Development, Final Consumption Expenditure, Human Development Index, Wald Test*

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Background to the Study

In Africa, acute shortage of basic and social infrastructure is generally a major theme. One of such infrastructural shortage manifests in form of poor electricity supply which has forced most multinationals to relocate. Aside multinationals, this ugly trend equally affect the private sector a great deal as the cost of doing business in a country like Nigeria keeps increasing and it is a serious challenge to the private sector in particular and output of Africa in general. This scenario has exalted the public sector in the scheme of things. Another scenario that exalted the public sector was the ugly incident that occurred in the thirties, during the great depression, where the market system could not arrest the massive economic downturn experienced then. This marked a watershed in the ideology of the Keynesian School, which emphasizes pronounced intervention on the part of the government to take care of limitations on the supply of an economy. They emphasized public sector activities with respect to inflows and outflows in a bid to stimulate activities in the economy during periods of economic downturns. Thus, the government intervenes by way of resource allocation, price stabilization and regulation of economic activities (Nurudeen, Sani & Adewinle, 2021).

The public sector makes use of taxation and public expenditure as instruments of resource allocation, price stabilization and regulation of economic activities. Public expenditures are majorly classified into capital and recurrent expenditures, which also translate into investment and consumption expenditure. Thus, government final consumption is a class of public expenditure that cuts across expenditure on goods and services made by all tiers of government. In Nigeria, this practically covers expenditure by local, state and federal governments. According to World Bank (2022), this expenditure has been on the increase in African countries due to the ever-increasing responsibilities of the government in meeting the needs of the people. In Nigeria, Ghana and South Africa, this expenditure rose from $0.75 billion, $0.55 billion and $22.76 billion in 1990 to $22.04 billion, $4.94 billion and $82.32 billion in 2022 respectively (World Bank, 2022). This represents 2838.67%, 798.18% and 261.69% increase respectively.

Nevertheless, a major point behind this conspicuous leap in public outflows is to enhance the overall welfare of citizens (Imimole, Imoughele & Okhuese, 2014). In other words, public expenditure is geared towards achieving economic development, which connotes a long-tern upsurge in the actual inflows of a nation laced with northward movements in all round frontiers of the nation. Economic development can be gauged using HDI (Human Development Index), which is a hybrid indicator which covers actual GDP (Gross Domestic Product) per citizen and integrates in human development measures level of education and healthcare, and environmental factors in its computation (Jílková & Skaličková, 2019). This index for Nigeria stood at 0.54 in 2022; 0.63 for Ghana in the same year, and 0.73 for South Africa in the year 2022 (United Nations Development Programme, 2022).

Given the magnified position of government intervention in stabilizing economic activities as suggested by the Keynesians, there exist today a thousand and one studies on public expenditure and growth of economies (Akpan, 2005; Chijioke & Amadi, 2020; Coman, Lupu & Nuta, 2023; Okonkwo, Manasseh, Ojima, Echeta, Ogwuru, Duru & Akamike, 2023; Forte

& Magazzino, 2016). Another group of scholars over the years considered government spending and economic development (Danlami & Umar, 2023; Sharpe, Conrad & Palley, 2022; Shuaib, Mohammed & Igbinosun 2015; Muritala & Taiwo, 2011; Ansari, Khan & Singh, 2022). However, none of these studies and others reviewed considered government expenditure from the perspective of government final consumption expenditure. Also, studies that proxied economic development with human development index are a handful. On this note, one may be tempted to ask: how has government final consumption expenditure affected human development in Nigeria, Ghana and South Africa? Following this general introduction, this work basically consists of review of literature, methodology, data methods and results, and conclusion and recommendations.

Review of Related Literature

Public Expenditure Concept

Government or public expenditure simply means an aggregation of government spending. Put differently, it is any expenditure incurred by the public sector. According to Etim, Nkereuwem and Efanga (2021), "any expenditure incurred by public authorities such as local, state and or central governments to meet the joint social wants of the masses is characterized as public expenditure. It includes such expenditure on the maintenance of government itself, for the society, the economy, external bodies and for other countries; which are regarded as critical roles of a responsible government". Recognizing these roles, Cooray (2009) opined that "government spending is a fiscal instrument which serves useful roles in the process of controlling inflation, unemployment, depression, balance of payment equilibrium and foreign exchange rate stability". Capital and recurrent expenditures are the major classifications of government expenditure. The former is a form of public expenditure that is capital stock augmenting. Such expenditures are undertaken to create or acquire non-current assets such as schools, hospital, roads, bridges, airports, rail-ways etc. (Danlami & Umar, 2023). The latter refers to spending on items like workers' emoluments. It also covers the purchase of commodities and the consumption of fixed assets which aid the execution of government activities on daily basis. Such expenditures are necessary because they help the government to function optimally (Etim, Nkereuwem & Efanga, 2021).

In Nigeria, as a typical African country, public sector expenditures (outflow) spans transfers, administrative, social, community, and economic services. Administrative expenditures by the government are on internal security, defense, and general administration. Expenditures on economic services are centered on communication, transport, construction and agriculture. Education, housing and health expenditures fall under social and community services expenses. Finally, internal and external debt charges payments, gratuities, pensions and the likes are referred to as transfers (CBN, 2022).

Government Final Consumption Expenditure

Public expenditures are as well classified into transfers and resource-using (absorptive or exhaustive) expenditures. Another categorization is between general government final consumption expenditures and non-consumption expenditures (Wazdixon, 2021). The former connotes spending by all levels of governments. With respect to Nigeria, these are

expenditures undertaken by the federal, state and local governments over a period of time. According to the Australian Bureau of Statistics (2021), general government final consumption expenditures

> "*Covers net outlays by general government on goods and services for current purposes; that is, outlays which do not result in the creation of capital assets, or in the acquisition of land and existing buildings or second-hand capital goods. Transfer payments are not included; for example, interest payments on government debt securities and social assistance benefits. The goods and services here are consumed by the general government within the year they are purchased. The expenditures are often made on behalf of households, such as expenditures on health care and education*". This form of public expenditure is as well seen ongoing expenditure by all levels of government on essential services like defence and education (Agochi, Agozie & Bamidele, 2019; Wazdixon, 2021).

Economic Development

In social sciences, economic development is a popular concept that has meaning across many subject areas. This makes the concept a multivariate one that has been variously defined. For instance, Kindleberger and Henrick (1958) stated that:

> *"it covers improvement in material welfare especially for persons with the lowest incomes, the eradication of mass poverty with its correlates of illiteracy, diseases and early death; changes in the consumption of inputs and outputs that generally include shifts in the underlying structure of production away from agricultural towards industrial activities, the organization of the economy in such a way that productive employment is generally among working age population rather than the situation of a privilege minority, and the corresponding greater population of broad based groups in making decisions about the direction, economic and otherwise, in which they should move their welfare in the."*

The above definition suggests amongst other things that economic development is a process. On this ground, Bartik (2003) defined it as "a process where low-income national economies are transformed into modern industrial economies." He added that "it involves qualitative and qualitative improvements in a country's economy. In addition to economic changes, political and social transformations were included in his definition". Accordingly, Okoye, Amahalu, Obi and Iliemna (2019) averred that "economic development include building or improving infrastructure such as roads, bridges; improving our education system through new schools; enhancing public safety through fire and police service; or incentivizing new businesses to open a location in a community." In all, the emphasis is on improving the welfare of the people economically, socially, culturally, technologically, environmentally and otherwise.

Human Development Index (HDI)

A whole lot of indicators have been put forward for measuring economic development but the most acceptable one is human development index. Kairo, Mang, Okeke and Aondo (2017)

stated that "HDI is a composite index which takes into consideration different aspects of development like health, education and standard of living with many sub-variables such as life expectancy, adult literacy rate, gross enrollment ratio and per capita income." Unlike other measures of economic development like gross domestic product, HDI measurement is said to be more comprehensive, which explains its wide acceptability. Hence, Agbonkhese and Asekome (2014) argued "that national policies should be guided not only by improvement in GDP but also by a broader measure of development for which what many economies have adopted is HDI". "Additionally, this indicator of economic development measures average achievements in three basic dimensions which are long and healthy life, access to knowledge and a decent standard of living" (Etim, Nkereuwem & Efanga, 2021).

Theoretical Framework

According to Etim, Nkereuwem and Efanga (2021), major front**-line** public expenditure theories include "the Keynesian theory, Wagner's law of increasing state activity and Musgrave theory". Nevertheless, this study revolves around the public expenditure theory put forward by John Maynard Keynes; otherwise known as the Keynesian theory of government expenditure**.** According to Okonkwo, Manasseh, Ojima, Echeta, Ogwuru, Duru & Akamike (2023), "the Keynesian theory of public expenditure is founded on the idea that overall expenditure, or aggregate demand, encourages businesses to provide goods and services. Hence, if overall expenditure in an economy decreases due to increased saving or pessimism about the future state of the economy, business enterprises will respond by reducing their output. Hence, decreased spending causes decreased output. Naturally, this causes many other macroeconomic factors to decrease." In essence, Ekperiware and Oladeji (2014) submitted that "…the theory advocates the government must interfere in the economy through taxation and government spending in order to foster output, growth and employment in order to address persistent unemployment and depression". According to Imimole, Imoughele and Okhuese (2014), "the Keynesians in addition believe that markets may not completely self-regulate at times and that government intervention can be beneficial in a number of ways such as creating jobs, funding public works projects, or providing social safety nets during recessionary periods. Thus, government spending can help jump-start an economy out of recession by increasing demand." Given the increasing volume of public consumption expenditure in Africa, this study is anchored on the Keynesian theory of public expenditure, which preaches that the public sector remains a major actor in every economy. This role is majorly to stabilize the economy during depression and boon by way of public expenditure and taxation respectively.

Empirical Review

A lot of studies exist in the study area but a few will suffice. Danlami and Umar (2023) studied the influence of public expenditure on infrastructural and economic development in Nigeria from 1986 to 2022 with Autoregressive Distributed Lag (ARDL) analytical technique as the major tool of analysis. The study demonstrated that while public expenditures on communication, education, transportation, and economic services have direct influences on economic development in the Nigeria, the same cannot be said of public expenditures on health and construction infrastructures that have the opposite influences on economic

development in Nigeria. Okonkwo, Manasseh, Ojima, Echeta, Ogwuru, Duru and Akamike (2023) in like manner reviewed the extent to which capital expenditure by the government has affected economic growth in Nigeria from 1981 to 2021. Adopting the Autoregressive Distributed Lag (ARDL) model, the study submitted that in the short and long runs, capital expenditure by the government have positive effects economic growth in Nigeria.

Ansari, Khan and Singh (2022) examined the impact of government expenditure on economic growth in selected Asian and South American countries for a period of twenty-nine years, (1991 – 2019). Using the fully modified Ordinary Least Square (OLS) tool of analysis, they reported that a long run relationship subsists between government expenditure and economic growth in the selected countries. Etim, Nkereuwem and Efanga (2021) sought to determine the effects of government expenditure on Nigeria's economic development by also using the Fully Modified Least Squares (FMOLS) Model for data analysis. The study amongst other things revealed that government expenditures, which comprises of recurrent and capital expenditures, have significant positive effects on the country's economic development state.

Dim, Okafor, Eneh and Amahalu (2021) studied the relationship between public expenditure and economic development between 1999 and 2020 in Nigeria. Using series of analytical tools, they submitted specifically that education and security expenditures have positive but insignificant effects on economic development while expenditure on healthcare has the opposite effect. Asiagwu, Ugherughe and Ezeabasili (2019) examined the nexus between public expenditure and economic development in a typical developing country like Nigeria between 1981 and 2021; the outcome of the study pointed that public expenditure has a long-term nexus with economic development in Nigeria.

In a similar study, Ewa and Okoi (2018) investigated the impact of government expenditure on economic development in Nigeria by using the popular Ordinary Least Square (OLS) multiple regression analytical technique. Results demonstrated that capital and recurrent expenditures on administration, economic, social and community services exert varying effects on Nigeria's state of economic development. Shuaib, Mohammed and Igbinosun did a study in 2015 that was aimed at determining the influence of public expenditures on economic development in Nigeria between 1960 and 2013. They discovered that public expenditure has a positive and meaningful influence on economic development in Nigeria.

Egunjobi (2013) carried out a similar study with the caption "Re-Engineering Public Expenditure Patterns for Economic Development in Nigeria between 1977 and 2008." Adopting multiple regression estimation technique, the study submitted that both public expenditure and private investment have positive contribution on economic development in a country like Nigeria Muritala and Taiwo (2011) considered the association between government expenditure and economic development in Nigeria for the period 1970 – 2008. Results indicated that economic development has a positive association with government's recurrent and capital expenditures.

Methodology

Research Design

This study adopted the quasi-experimental research design given the nature of the topic considered.

Sources of Data

The study used yearly time series data which were sourced from UNDP (United Nations Development Programme) and the World Bank databases.

Model Specification

Given that the Johansen cointegration technique is geared towards establishing the association that subsists among variables, simple regression models were used to demonstrate the association between the variables under study in the different countries. These models are functionally expressed below:

$HDI_n = F(GFCE_n)$ ..... (1)
$HDI_g = F(GFCE_g)$ ..... (2)
$HDI_s = F(GFCE_s)$ ..... (3)

These models can further be expressed as;

$HDI_n = a_0 + a_1 GFCE_n + \mu_1$ ..... (4)
$HDI_g = b_0 + b_1 GFCE_g + \mu_2$ ..... (5)
$HDI_s = \alpha_0 + \alpha_1 GFCE_s + \mu_3$ ..... (6)

Where;

HDI_n = Human Development Index for Nigeria
HDI_g = Human Development Index for Ghana
HDI_s = Human Development Index for South Africa
$GFCE_n$ = Government Final Consumption Expenditure in Nigeria
$GFCE_g$ = Government Final Consumption Expenditure in Ghana
$GFCE_s$ = Government Final Consumption Expenditure in South Africa
a_0, b_0, α_0 = Intercepts of the models
a_1, b_1, α_1 = Slopes of the models
μ_1, μ_2, μ_3 = Error terms

A priori Expectations: $a_1, b_1, \alpha_1 > 0$

Data Analytical Techniques

Johansen Cointegration Test

Engel and Granger (1987) opined that "…the Johansen test approaches the testing for cointegration by examining the number of independent linear combinations (k) for an m time series variable set that yields a stationary process". According to Maddala (2012), "Johansson cointegration test is a vector autoregression (VAR) based model of order *p* given by:

$$y_t = A_1 y_{t-1} + \cdots + A_p y_{t-p} + \beta x_t + \varepsilon_t \quad \text{..... (7)}$$

Where Y_t is a k-vector of non-stationary variables I(1), X_t is a d–vector of deterministic variables, and ε_t is a vector of innovations".

The Johansen test has two variants, viz.: "the Trace Test and the Maximum Eigenvalue test. Both tests address the cointegration presence hypothesis, but each asks very different questions" (Gujarati & Porter, 2009).

Trace Test

According to Engel and Granger (1987), "the trace test examines the number of linear combinations (i.e η) to be equal to a given value (η_0), and the alternative hypothesis for η to be greater than η_0. They added that "To test for the existence of cointegration using the trace test, we set $K_0 = 0$ (no cointegration), and examine whether the null hypothesis can be rejected. If this is the case, then we conclude there is at least one cointegration relationship. In this case, we need to reject the null hypothesis to establish the presence of Cointegration between the variables".

Maximum Eigenvalue Test

According to Engel and Granger (1987), "…with the maximum eigenvalue test, we ask the same central question as the Johansen Trace test. The difference, however, is an alternate hypothesis: Starting with $K_0 = 0$ and rejecting the null hypothesis implies that there is only one possible combination of the non-stationary variables to yield a stationary process. A special case for using the maximum eigenvalue test is when $K_0 = m - 1$, where rejecting the null hypothesis implies the existence of m possible linear combinations. This is impossible, unless all input time series variables are stationary (I(0)) to start with η_0".

Data and Results

Table 1: Descriptive Analysis

	Nigeria		Ghana		South Africa	
Statistics	**HDI**	**GFCE**	**HDI**	**GFCE**	**HDI**	**GFCE**
Mean	0.471212	15.33364	0.540909	2.506061	0.664242	50.12121
Median	0.470000	12.10000	0.530000	1.810000	0.650000	48.19000
Maximum	0.540000	37.80000	0.630000	6.370000	0.740000	83.37000
Minimum	0.330000	0.490000	0.460000	0.510000	0.610000	21.66000
Std. Dev.	0.055383	14.57331	0.057520	1.968750	0.039924	23.10494
Skewness	-0.788914	0.278825	0.256509	0.523376	0.579625	0.133894
Kurtosis	3.136460	1.426221	1.580343	1.649949	1.985835	1.369331
Jarque-Bera	3.448726	3.833163	3.133094	4.012702	3.262037	3.754837
Probability	0.178287	0.147109	0.208765	0.134479	0.195730	0.152985
Sum	15.55000	506.0100	17.85000	82.70000	21.92000	1654.000
Sum Sq. Dev.	0.098152	6796.205	0.105873	124.0312	0.051006	17082.83
Observations	33	33	33	33	33	33

Source: Extracts from E-Views Output

The table 1 above houses the descriptive properties of the data used for the study. It explains that between 1990 and 2022, HDI for Nigeria averaged 0.47 and varied from 0.33 to 0.54 with

a standard deviation of 0.055; while GFCE for Nigeria averaged $15.33 billion and varied from $0.49 billion to 37.80 billion with a standard deviation of $14.57 billion. Within the same period, the mean values of HDI and GFCE for Ghana are 0.54 and $2.51 billion respectively. Similarly, the mean of HDI and GFCE for South Africa are 0.66 and $50.12 billion for the same period. In addition, the table shows that all the variables except HDI for Nigeria were positively skewed (to the right). Also, the variable HDI for Nigeria, can be described as a normally distributed variable, while the other variables the variables are flat (platykurtic) relative to a normal distribution. This is because the kurtosis of the normal distribution is 3.

Table 2: Unit Root Test

Variables	ADF Test Statistic	Critical Value			P-value	Order of Integration
		1%	5%	10%		
Nigeria						
HDI	-12.98620	-3.661661	-2.960411	-2.619160	0.0000	I(1)
GFCE	-5.114754	-3.661661	-2.960411	-2.619160	0.0002	I(1)
Ghana						
HDI	-8.253809	-3.661661	-2.960411	-2.619160	0.0000	I(1)
GFCE	-5.196207	-3.661661	-2.960411	-2.619160	0.0002	I(1)
South Africa						
HDI	-6.055172	-3.661661	-2.960411	-2.619160	0.0000	I(1)
GFCE	-3.891710	-3.661661	-2.960411	-2.619160	0.0057	I(1)

Source: Extracts from E-Views Output

Adopting the Augmented Dickey Fuller (ADF) technique, the table above shows that, all the variables used for the study were stationary after differencing for the first time. This necessitated the need to adopt Johansen co-integration technique.

Johansen Co-integration Test

Table 3: For Nigeria

Trace Criterion				
No. of Cointegrating Equations	Eigenvalue	Trace Statistic	0.05 Critical Value	Probability Value
None	0.171612	7.750822	15.49471	0.4924
At most 1	0.059885	1.914343	3.841466	0.1665
Maximum Eigenvalue Criterion				
No. of Cointegrating Equations	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Probability Value
None	0.171612	5.836478	14.26460	0.6343
At most 1	0.059885	1.914343	3.841466	0.1665
Trace test indicates no cointegration at the 0.05 level				
Max-eigenvalue test indicates no cointegration at the 0.05 level				

Source: Extracts from E-Views Output

Table 4: For Ghana

Trace Criterion				
No. of Cointegrating Equations	Eigenvalue	Trace Statistic	0.05 Critical Value	Probability Value
None	0.278052	10.13735	15.49471	0.2703
At most 1	0.001209	0.037496	3.841466	0.8464
Maximum Eigenvalue Criterion				
No. of Cointegrating Equations	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Probability Value
None	0.278052	10.09986	14.26460	0.2055
At most 1	0.001209	0.037496	3.841466	0.8464
Trace test indicates no cointegration at the 0.05 level				
Max-eigenvalue test indicates no cointegration at the 0.05 level				

Source: Extracts from E-Views Output

Table 5: For South Africa

Trace Criterion				
No. of Cointegrating Equations	Eigenvalue	Trace Statistic	0.05 Critical Value	Probability Value
None	0.224183	9.133289	15.49471	0.3532
At most 1	0.039963	1.264295	3.841466	0.2608
Maximum Eigenvalue Criterion				
No. of Cointegrating Equations	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Probability Value
None	0.224183	7.868994	14.26460	0.3921
At most 1	0.039963	1.264295	3.841466	0.2608
Trace test indicates no cointegration at the 0.05 level				
Max-eigenvalue test indicates no cointegration at the 0.05 level				

Source: Extracts from E-Views Output

Johansen co-integration test, based on Trace and Maximum-Eigen value criteria, indicated no cointegration at 5% level of significance. In other words, there is no long run relationship between government expenditure and economic development in Nigeria, Ghana and South Africa.

Wald Test

Table 6: For Nigeria

Test Statistic	Critical Value	Degree of Freedom	Probability value
t-statistic	-41.35658	31	0.0000
F-statistic	1710.367	(1, 31)	0.0000
Chi-square	1710.367	1	0.0000
Normalized Restriction	Value	Standard Error	-
C(1)	-0.858343	0.020755	

Source: Extracts from E-Views Output

Table 7: For Ghana

Test Statistic	Critical Value	Degree of Freedom	Probability value
t-statistic	79.52415	31	0.0000
F-statistic	6324.091	(1, 31)	0.0000
Chi-square	6324.091	1	0.0000
Normalized Restriction	Value	Standard Error	-
C(1)	0.472527	0.005942	

Source: Extracts from E-Views Output

Table 8: For South Africa

Test Statistic	Critical Value	Degree of Freedom	Probability value
t-statistic	59.58538	31	0.0000
F-statistic	3550.418	(1, 31)	0.0000
Chi-square	3550.418	1	0.0000
Normalized Restriction	Value	Standard Error	-
C(1)	0.593906	0.009967	

Source: Extracts from E-Views Output

Wald test results above shows that the probability values of t-statistic are 0.0000 respectively while Normalized Restriction (=0) of C(1) are -0.858343, 0.472527 and 0.593906. These implies that government final consumption expenditure have significant effects on human development index (HDI) in Nigeria, Ghana and South Africa. Secondly, government final consumption expenditure has a negative effect on HDI; while in Ghana and South Africa, the effects on HDI are negative.

Table 9: Pairwise Granger Causality Test

Null Hypothesis	Observations	F-Statistic	Prob.
For Nigeria			
Government final consumption expenditure does not granger cause human development index	31	0.68813	0.5114
Human development index does not granger cause government final consumption expenditure		0.37792	0.6890
For Ghana			
Government final consumption expenditure does not granger cause human development index	31	3.59848	0.0417
Human development index does not granger cause government final consumption expenditure		2.92579	0.0714
For South Africa			
Government final consumption expenditure does not granger cause human development index	31	3.44400	0.0471
Human development index does not granger cause government final consumption expenditure		0.22631	0.7990

Source: Extracts from E-Views Output

Granger causality test results for the three countries revealed that government final consumption expenditure granger causes HDI in Ghana and South Africa. This is because their probability values (0.0417 and 0.0471) are less than 0.05(5%) significance level.

Table 10: Diagnostics Test

Tests	Criteria	p-values		
		Nigeria	Ghana	South Africa
Normality test	Jarque Bera	0.132373	0.625286	0.380011
Ramzy Reset	X^2	0.9591	0.1988	0.1106

Source: Extracts from E-Views Output

Diagnostic test results revealed amongst other things that the models' residuals (errors) were normally distributed and the models have the right functional form and were correctly specified.

Conclusion and Recommendations

Amongst other things, this study revealed that South Africa has the highest average government final consumption expenditure and HDI within the period studied. Secondly, there is a short run relationship between government final consumption expenditure and human development index in all three countries. Thirdly, in Nigeria, government final consumption expenditure has an inverse influence on human development index, but positive effects in Ghana and South Africa. Fourthly, there is a uni-directional relationship between government final consumption expenditure and HDI in Ghana and South Africa only. On this backdrop, it was concluded that public expenditure has meaningful effects on economic

development in Nigeria, Ghana and South Africa. On this note, we recommended that:

1. There is the need to further encourage public spending in Africa in order to further move development northwards in Africa.
2. Going forward, there is need to implement fiscal discipline in the way government at all levels spend in this part of the world as most of these spending is not necessary.
3. Irrespective of the clamor for significant public sector involvement in the running of economies, there is need for African countries to copy the United States' model that is geared towards providing an enabling environment that allows the private sector to thrive.
4. Transparency, probity and accountability should be encouraged in the public sector in Africa for more meaningful effects of government expenditure.

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