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Original Research

PUBLIC EXPENDITURE AND CAPITAL FORMATION: EVIDENCE FROM NIGERIA

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ABSTRACT
The paper examined the relationship between public expenditure and capital formation in Nigeria, 1981-2018.Adopting the Ordinary Least Square Multiple Regression, the study revealed a significant relationship exists between public expenditure and capital formation in Nigeria. Also, the model indicated that three of the public expenditure components namely, total public expenditure on economic services (TES), total public expenditure on social and community services (TSC) and total public expenditure on transfers (TT) were statistically significant with all the explanatory variables meeting the a priori expectation with their positive coefficients. Based on the findings, the study concluded that public expenditure has positively contributed to the level of capital formation in Nigeria, thus the study recommended that proper monitoring should be placed on public expenditure on administration. This recommendation stems from the insignificant contribution of this component of public expenditure; that could be a pointer to misappropriation from this particular component. Overall, these results lend further credence to the Law of increasing state activities by Wagner and his contemporaries.

Keywords: Public expenditure, Capital formation, Ordinary Least Square Multiple Regression approach.
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1.0 INTRODUCTION

The widely accepted truth is that the level of investment necessary to achieve economic growth and development requires huge capital formation over a long period of time, perhaps far longer than the period for which most surplus spending units are willing to stake their capital. This has been the bane of most developing economies of the world, perhaps, Nigeria inclusive. Therefore, central to the attainment of this objective of national development targets is the modernization of the financial system through which money and capital markets could be developed in order to provide the much-needed capital formation necessary to propel economic development to desirable heights. Evidently, substantial capital is required to stimulate growth and thus enhance output and real sector growth of the economy (Asiegbu and Akujuobi, 2010).

Asiegbu and Akujuobi (2010) contend further that this capital is not harnessed properly in the Third World countries either because of weak capital markets or poor institutional infrastructure. However, Charles (2000) asserts that the attainment of national development targets heavily relies on the integrity of the institutions set up to support macroeconomic policies targeted at poverty reduction. It therefore, stands to reason that well-functioning public sector, following Wagner's advocacy of increasing state activities and its multiplier effect, should encourage capital formation and in turn promote economic growth and development. The extent this has been achieved in developing economies and Nigeria in particular remains to be seen.

Overall, economic discourse in public finance is replete with arguments on the nature of relationship between public expenditure and economic growth (Kweka and Morrissey, 2000; Mitchell, 2005; Ofurum, 2005; Oyinlola and Akinnibosun, 2013; Ihejirika and Anyanwu, 2015; Ariole, 2016; Babatunde, 2018; Owui, Asukwuo, Olugbemi, Nkamare and Emefiele, 2020). Even other studies such as Ali, Ahmed and Naz (2016) and Kittisak, Sakapas, Chanathat and Thitinan (2019) still investigated the influence of capital investment on economic growth. Ordinarily, one would have wanted to know the extent public expenditure has affected the level of capital formation, given that adequate capital formation in any economy is the engine that propels economic growth and development. This obvious gap created by past studies is what this present study stands to fill.

1.2 Statement of the Problem

While the neoclassical school of thought expresses little hope that government participation in economic matters would engender growth in the economy, later theories by Wagner and his contemporaries that form the foundation for this present study, emphasize big roles for the state as an engine of economic growth. In line with the fore-going above, the presumption among many academics and policy makers is that public expenditure should aim at poverty reduction and improved economic growth. We argue in this paper that no meaningful growth in the economy will be achieved in the absence of adequate capital formation. Suffice it to say therefore, that any economic development effort worth its name should be directed towards the attainment of a sustainable increase in standard of living accompanied by increased per capita income, better education and health, not forgetting environmental protection, through adequate capital formation. It must have been in recognition of this noble role of public expenditure and by extension, capital formation that Sabatini (2006) observed that "the interaction between the organization of a society and its economic performance was once considered perhaps the fundamental question of political economy". Nor has this perception changed in the modern economic setting?

However, even with the raging contentious issue of the relationship between public expenditure, capital formation and economic growth, very little attention appears to have been paid specifically to study on the effect of public expenditure on capital formation. Consequently, this paper investigates, empirically, the effect of public expenditure on capital formation in Nigeria, covering the period 1981-2018.

Given the objectives, the following research questions are therefore, considered relevant for the study;

i. What is the nature of relationship between public expenditure and capital formation in Nigeria?
ii. What is the effect of total administration public expenditure on capital formation in Nigeria?

iii. What is the effect of total economic services public expenditure on capital formation in Nigeria?
iv. To what extent has total social and community services public expenditure affected capital formation in Nigeria?
v. What is the effect of the total transfers of public expenditure on capital formation in Nigeria?

The central objective of this study is to examine the relationship between public expenditure and capital formation in Nigeria. Specifically, the study is to:

i. Explore the nature of relationship between public expenditure and capital formation in Nigeria.
ii. Assess the effect of total administration public expenditure on the level of capital formation in Nigeria.
iii. Examine the effect of total economic services public expenditure on the level of capital formation in Nigeria.
iv. Investigate the effect of total social and community services public expenditure on the level of capital formation in Nigeria.
v. Ascertain the effect of total transfers public expenditure on the level of capital formation in Nigeria.

1.3 Research Hypotheses

On the basis of the study objectives and research questions, the following research hypotheses are therefore, formulated to guide the study;

HO_1: There is no significant relationship between public expenditure and the level of capital formation in Nigeria.

HO_2: Public expenditure on administration has no significant effect on the level of capital formation in Nigeria.

HO_3: Public expenditure on economic services has no significant effect on the level of capital formation in Nigeria.

HO_4: Public expenditure on social and community services has no significant effect on the level of capital formation in Nigeria.

HO_5: Public expenditure on transfers has no significant effect on the level of capital formation in Nigeria.

1.4 Scope of the Study

This study is to examine the nature of relationship between public expenditure and capital formation in Nigeria, covering the period, 1981-2018. Therefore, no attempt is made to study other economies of the world, nor other aspects of the Nigerian economy.

1.5 Significance of the Study

This study will be of importance to a number of people. First, the findings of this study will aid policy makers in decision-making. Others to benefit are the students and other researchers who will find it a useful study material. Overall, the study will open new frontiers of knowledge in the area of public expenditure and capital formation nexus.

2.0 LITERATURE REVIEW

This section focuses on the review of related theories and empirical researches covering the relationship between public expenditure, capital formation and economic growth linkage.

2.1 Theoretical Framework

There abound several theories linking public expenditure and economic performance. However, for the purpose of this study three theories: the Wagner's law of increasing states activity, Wiseman-Peacock and the Critical-Limit hypotheses of public expenditure were reviewed.

2.1.1 Wagner's Law of Increasing State Activities

According to this theory, there are inherent tendencies for the activities of different tiers of a government (for instance, in Nigeria we have the federal, state and local government arms) to continually rise, over time, both intensively and extensively. These increases in state activity necessitate increases in public expenditure, which in turn is expected to propel economic growth.

2.1.2 Wiseman-Peacock Hypothesis

A second explanation on the growth of public expenditure was advanced by Wiseman and Peacock (1961) resulting from their study of public expenditure in the United Kingdom for the period, 1890-1955. They agreed that public expenditure increases in jerks or step-like fashion rather than in a smooth and continuous manner. Part of their conclusion was that at some times, some social or other disturbances take place which at once show the need for increased public expenditure, which the existing public revenue cannot meet.

2.1.3 The Critical-Limit Hypothesis

As in Bhatia (1982), the critical-limit hypothesis is credited to Collin Clerk (1943) who contended that when the share of government sector activity (represented by its expenditure) exceeds 25 percent of the total economic activity of the country, inflation would be the natural result; and this would be so even when the country is operating under a balanced budget. Thus, when the government's share of the aggregate economic activity reaches the critical limit of 25 percent, the income earners would be affected by reduced incentives (owing to apparent high tax incidence), and this would jeopardize their level of productivity.

2.2 Empirical Review

The diverse nature of economic researches on the relationship between public expenditure and economic growth is yet to abate. Neither is there any consensus on the results of such studies (Babatunde, 2018). However, studies on developed countries suggest that in such economies, through economic stabilization and stimulation of investment activity, public expenditure maintains a rate of growth which is a smooth one but in underdeveloped economies, public expenditure does not maintain a smooth pattern usually as a result of jerks in the economy (Bhatia, 2002; Akinnibosun, 2013). Public expenditure has an active role to play in reducing regional disparities, developing social overheads, creation of infrastructure for economic growth in the form of transport and communication facilities, education and training, growth of capital goods industries, basic and key industries, research and development and so on (Bhatia, 2002).

Public expenditure on capital projects has a great role to play in the form of stimulating the economy. The mechanism and extent to which government spending on public infrastructure

is expected to affect the pace of economic growth depend largely upon the precise form and size of total public expenditure allocated to each economic and social development project, the source of the funds and the manner of disbursement in the economy. When public expenditure is incurred, it is directed at particular investments or to bring about re-allocation of the investible resources in the private sector of the economy.

Public expenditure on social and economic infrastructures like education, health, transport, communication, waste disposal, electricity, water/sanitation and other social goods have the potential of contributing to the performance of the economy in terms of promotion of infant industries in the economy; reduction in the unemployment rate; stabilization of the general prices in the economy; reduction in the poverty rate and increase in the standard of living of the people; promotes economic growth by attracting foreign investment; and promotes higher productivity (Karras, 2007; Maku,2014;Ariole,2016).

The general view is that public expenditure, notably on physical infrastructure or human capital can be growth-enhancing although the financing of such expenditure can be growth - retarding, owing mainly to the disincentive effects of taxation. This view has been supported by Kweka and Morrissey (2000) when they amplified that public expenditure can influence economic growth whether directly or indirectly through government activities that increase total output through its interaction with the private sector. Accordingly, Lin (1994) has succinctly asserted that the positive effects of public expenditure can readily be felt when government spends to provide public goods and infrastructure, social services and targeted intervention covering such areas as export subsidies.

In Barro's (1990) view, such government spending on investment and productive activities should add positively to economic growth whereas government consumption spending is anticipated to be growth-retarding. The major problem with this line of reasoning stems from the seeming difficulty associated with the empirical determination of which particular item of expenditure should be labeled as investment and which as consumption.

Even with the numerous studies conducted in this area, there still seems to be no agreement and so no consistent evidence exists to tow this line (Oyinlola and Akinnibosun,

2013; Kweka and Morrissey, 2000; Mitchell, 2005; Akpan, 2005). In fact, to say the least, there have been wild results such that evidence differ by country/or region, analytical tool in use as well as categorization of public expenditures (Ihejirika and Anyanwu, 2015).

All told, the relationship between government spending and growth should be of particular importance to the developing countries. For one, most of the developing countries are associated with high levels of public expenditure over time. Again, these increasing levels of public expenditure are often associated with rising fiscal deficits, thus, meaning that these countries lack the ability to generate sufficient revenue necessary to support higher levels of expenditure (Lindauer and Valenchik, 1992; Adesoye, et al., 2010).

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 crowd out private investment, dampen economic stimulus in the short run and reduce capital accumulation in the long run. Strictly speaking, crowding-out is due to fiscal deficits and the associated effects 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 isolated from such. Baro and Sala-l-Martin (1992) have contended that such categorization would imply that productive expenditures have a direct effect on the rate of economic growth while unproductive expenditures would either have an indirect effect or none at all.

This issue of which expenditure items qualify as productive or unproductive is highly debatable and hence may be difficult to define a priori. The pertinent question at this juncture is thus: What is the place of Nigeria? This study therefore, investigates the Nigerian experience as it determines the impact of public expenditure components on the level of capital formation in Nigeria, covering the period, 1981-2018.

3.0 METHODOLOGY

The data set employed was as functionally classified by the Central Bank of Nigeria Statistical Bulletin (2018). Here, the various sources of public expenditure were regressed against the gross fixed capital formation (GFCF) figures for the corresponding period, 1981-2018. The study adopted the co-integration procedures, involving the unit root, co-integration and granger causality tests, culminating in the use of the Ordinary Least Square modeling.

3.1 Model Specification

Here a time series analysis is adopted in examining the effect of public expenditure and its components as independent or explanatory variables on gross fixed capital formation as a proxy capital formation, covering the period, 1981-2018. Therefore, the gross fixed capital formation is regressed against the following public expenditure components:

TAD_t = public expenditure on administration in year t;

TES_t = public expenditure on economic services in year t;

TSC_t = public expenditure on social and community services in year t;

TT_t = public expenditure on transfers in year t;

This study follows the theoretical concept suggested by past and related studies (Egbetunde, 2012; Panizza and Presbitero, 2014). We transform their specification with little modification as follows after converting them to their natural logarithm:

(i) $InGFCFt = \beta 0 + \beta_1 InTAD_t + \beta_2 InTES_t + \beta_3 InTSC_t + \beta_4 InT_t + Ut$……..3.1

Where:

$InGFCF_t$ = Level of gross fixed capital formation in year t.

Ut = Error Term

β_1..... $\beta_4 > 0$

For purpose of avoiding spurious regression, we conducted a unit root test; we then employed Johansen multivariate co-integration technique for long-run relationships among variables as well as the granger causality test to establish the direction of effects between the dependent variable, GFCF and each of the dependent variables (i.e., components of public expenditure; TAD, TES, TSC, TT).

3.2 Method of Analysis

The annual time series data for Nigeria were sourced from the Central Bank of Nigeria on total public expenditure on administration (TAD), total public expenditure on economic services (TES), total public expenditure on social and community services (TSC) and total public expenditure on transfers (TT),all in billions of naira, while the same time series data on gross fixed capital formation(GFCF) were collected from the World Bank publications, also in billions of naira, for the period, 1981-2018.

To permit the application of the Ordinary Least Square (OLS) method and also avoid spurious results, the data set was exposed to three basic estimation methods; the unit root test to confirm the stationarity status of all the variables and their order of integration(see table 1), the co-integration test to establish whether the relationship is in the long or short run(see table 2) and the granger causality test for detecting the direction of effect between each of the pairs of the variables under study (see table 3).

4.0 DATA PRESENTATION

4.1. Unit Root Test Results

From table 1, the unit root test is carried out using both the Augmented Dickey-Fuller and the Philip-Perron tests in order to determine whether the data set is stationary and the order of integration. These results showed that all the variables were stationary at first difference or order 1(1), thus confirming that they are stable and good for the analysis.

Table 1: Unit Root Test for the Variables Employed

Augmented-Dickey Fuller Unit Root Test					Philips-Perron Unit Root Test		
Variable		**T-Statistic**	**Critical Value**	**Order of Integration**	**T-Statistic**	**Critical Value**	**Order of Integration**
1	**GFCF**	**-3.805363**	**-4.540328**	**1(1)**	**-3.732224**	**-3.540328**	**1(1)**
2	**TAD**	**-4.585250**	**-4.5443644**	**1(1)**	**-9.453870**	**-4.234972**	**1(1)**
3	**TES**	**-6.219990**	**-4.234972**	**1(1)**	**-6.217860**	**-4.234972**	**1(1)**
4	**TSC**	**-4.094584**	**-3.552973**	**1(1)**	**-8.297830**	**-4.234972**	**1(1)**
5	**TT**	**-8.337122**	**-4.234972**	**1(1)**	**-10.18346**	**-4.234972**	**1(1)**

Source: E-views 10.0 Econometric Package.

4.2. The Co-Integration Result

With the data set turning out to be stationary, we then applied the Johansen co-integration test which adopts no exogenous variables. The essence of this test is to establish the presence of a short or long-run equilibrium existing between the variables and hence the various estimated regression equation results. These results are presented in table 2.

Table 2: Co-integration and Test Results

Unrestricted Cointegration Rank Test (Trace)					
Hypothesized		Trace	0.05		
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**	
None *	0.714459	91.93700	69.81889	0.0003	
At most 1	0.456540	46.81575	47.85613	0.0624	
At most 2	0.305276	24.86298	29.79707	0.1664	
At most 3	0.200808	11.75030	15.49471	0.1693	
At most 4	0.097191	3.680775	3.841466	0.0550	
Trace test indicates 1 cointegrating eqn(s) at the 0.05 level					
* denotes rejection of the hypothesis at the 0.05 level					
**MacKinnon-Haug-Michelis (1999) p-values					
Unrestricted Cointegration Rank Test (Maximum Eigenvalue)					
Hypothesized		Max-Eigen	0.05		
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**	
None *	0.714459	45.12125	33.87687	0.0015	
At most 1	0.456540	21.95277	27.58434	0.2228	
At most 2	0.305276	13.11268	21.13162	0.4419	
At most 3	0.200808	8.069528	14.26460	0.3717	
At most 4	0.097191	3.680775	3.841466	0.0550	

Source: E-views 10.0 Econometric Package.

Table 2 on Johansson co-integration tests revealed evidence of 1 co-integrating equation for the model. This helped us in establishing that a possible long-run equilibrium exists between the variables and hence the various estimated regression equation.

Table 3: Granger Causality Test Results

Null Hypothesis:	Obs	F-Statistic	Prob.
INTAD does not Granger Cause INGFCF	36	6.24235	0.0053
INGFCF does not Granger Cause INTAD		2.89535	0.0703
INTES does not Granger Cause INGFCF	36	1.26104	0.2975
INGFCF does not Granger Cause INTES		5.27505	0.0107
INTSC does not Granger Cause INGFCF	36	2.37901	0.1093
INGFCF does not Granger Cause INTSC		4.92001	0.0139
INTT does not Granger Cause INGFCF	36	11.7895	0.0002
INGFCF does not Granger Cause INTT		0.14516	0.8655

Source: E-views 10.0 Econometric Package.

The results from table 3 indicate that while the GFCF granger causes both the TES and TSC, both the TT and TAD, each granger causes the GFCF.

4.3. The Influence of Public Expenditure on Capital Formation in Nigeria

In order to determine the relationship between public expenditure and capital formation, proxied by the level of gross fixed capital formation in Nigeria, the Ordinary Least Square(OLS) multiple regression analysis was carried out as summarized in table 4 From table 4, the F-ratio calculates 728.81 with a P-value < 0.01 or 1%, we reject the null hypothesis and accept the alternate and thus conclude that there is a significant relationship between public expenditure and the level of capital formation in Nigeria, at least within the period under study, 1981-2018.

Simply put, the model was statistically significant at 1% with good fit and Durbin-Watson value of 2.16 attesting to their robustness of the model for prediction purposes. Generally, the model also indicate that the changes in the explanatory variables taken together have been able to explain the variations in the dependent variables to very high extents; at least 98.8% and 98.7% after adjusting for possible errors in the estimates. Also, the model indicated that three of the public expenditure components namely, TES, TSC and TT were statistically significant with all the explanatory variables meeting the a priori expectation with their positive coefficients.

Table 4: Analysis of variance (ANOVA) Results

Dependent Variable: INGFCF				
Method: Least Squares				
Date: 11/19/20 Time: 13:28				
Sample: 1981 2018				
Included observations: 38				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	24.47072	0.185439	131.9607	0.0000
INTAD	0.019477	0.139476	0.139648	0.8898
INTES	0.193956	0.070717	2.742731	0.0098
INTSC	0.268002	0.098764	2.713571	0.0105
INTT	0.332732	0.099149	3.355891	0.0020
R-squared	0.988807	Mean dependent var		28.12566
Adjusted R-squared	0.987450	S.D. dependent var		1.847861
S.E. of regression	0.207008	Akaike info criterion		-0.190041
Sum squared resid	1.414124	Schwarz criterion		0.025431
Log likelihood	8.610777	Hannan-Quinn criter.		-0.113378
F-statistic	728.8165	Durbin-Watson stat		2.163367
Prob(F-statistic)	0.000000			

The estimated regression result is presented thus;

$$GFCF_t = 24.47072 + 0.019477TAD_t + 0.193956TES_t + 0.268002TSC_t + 0.332732TT_t \quad \ldots\ldots\ldots\ldots\ldots 3.1$$

5.0 CONCLUSION

The conclusion of this study therefore, is that public expenditure has positively contributed to the level of capital formation in Nigeria. However, more needs to be done in order to improve public expenditure contributions to national economic performance through capital formation.

6.0 RECOMMENDATIONS

On the basis of the findings and conclusion, the study therefore, recommends as follows:

- ✓ There is a need for proper monitoring of the public expenditure on administration. This recommendation stems from the insignificant contribution of this component of public expenditure which could be a pointer to misappropriation from this particular component. Overall, these results lend further credence to the Law of increasing state activities by Wagner and his contemporaries.
- ✓ Similarly, the monetary authorities like the Central Bank of Nigeria (CBN) need to live up to their responsibilities of monitoring and supervision of both the assessment and actual employment of public borrowed funds to ensure that misappropriation is reduced if not completely eliminated.
- ✓ In the same vein, public officers who misuse and abuse their offices in this regard should be fished out and appropriate sanctions given to them to serve as deterrent to others who may be tempted to behave in this same way.

REFERENCES

Ali,S.A., Ahmed, Q.M. and Naz, L. (2016). Public spending on human capital formation and economic growth in Pakistan.*Asian-Pacific Development Journal*. 23(1).

Ariole, C.J. (2005). Public expenditure and economic development in Nigeria *Unpublished Ph.D. dissertation,* Federal University of Technology, Owerri.

Asiegbu, B.C. and Akujuobi, A.B.C.(2010) Performance indicators of capital market and economic development. *Journal of Contemporary Research in Business*. 2(6):325-409.

Babatunde,S.A.(2018). Government spending on infrastructure and economic growth in Nigeria. *Economic Research,* 31:1: 997-1014.

Barro, R.J. (1990). Government spending in simple model of endogenous growth. *Journal of Political Economy,*20(2):221-247.

Barro, R.J. and Sala-I-Martin (1990). Technology diffusion, convergence and growth. *Journal of Economics* .2:1-26.

Diamond, J. (1989). "Fiscal indicators for economic growth: An illusory search" *IMF Working Paper,* August, Washinton.

Kittisak, J., Sakapas,S., Chanathat, B. and Thitinan, C. (2019). The impact of government expenditure, gross fixed capital formation, trade and portfolio investment on economic growth of Asian economies, *Journal of Security and Sustainability Issues*, 9(2)

Kweka, J.P. and Morrissey, O.(2000). Government spending and economic growth in Tanzania, 1965- 1996. *Center for Research in Economic Development and Trade*, University of Nottingham.

Lin, S. (1994). Government spending and economic growth, *Applied Economics*, 26: 83- 94.

Lindauer, D.L. and Velechik, A.D. (1992). Government spending in developing countries: Trends, causes and consequences. *The World Bank Research Observer* 7(1): 59-78.

Mitchell, D.J. (2005). Academic evidence: A growing consensus against big government, supplement to Daniel, J. Mitchell, The impact of government spending on economic growth, *Heritage Foundation Backgrounder. No. 1831 at www.heritage.org/research/budget/bg1831suppl.cfm*

Ofurum, C.O. (2005). The impact of public expenditure on economic growth: A comparative analysis of selected countries (1970-2000) *Unpublished Ph.D. dissertation,* Federal University of Technology, Owerri.

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

Owui, H.O., Asukwuo, I.J., Olugbemi, M.D., Nkamare, S.E. and Emefiele, C.C. (2020). Government capital expenditure and economic growth in Nigeria, *International Journal of Economics and Financial Management* 5(2).