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IMPLICATIONS OF GOVERNMENT CAPITAL EXPENDITURE ON THE MANUFACTURING SECTOR IN NIGERIA.

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ABSTRACT: *Theoretically, both Keynesian and neoclassical economists provided tools for government's intervention, particularly with regard to government capital expenditure. The aim of this project work is to investigate the effect of government capital expenditure on the manufacturing sector output in Nigeria. The study used quantitative time series data and multiple regression techniques in the analysis. The result of the co-integration test indicates long run relationship between dependent and independent variables. It also reveals that capital expenditure on road infrastructure (CEXR) and telecommunication (CEXT) affects the manufacturing sector output in Nigeria significantly while government capital expenditure on power has insignificant effect on manufacturing sector in Nigeria. The implication of this is that manufacturing sector output is clearly affected by factors both exogenous and endogenous to the government capital expenditure in Nigeria. We therefore recommend that, there is need for government to reduce its budgetary allocation to recurrent expenditure on power sector and place more emphasis on the capital expenditures so as accelerate economic growth in Nigeria through manufacturing sector output and that government should also increase spending on road infrastructure, particularly on capital budgeting. As our results showed, road infrastructure capital expenditure has the greatest impact on the long-run with manufacturing sector output in Nigeria.*

KEYWORDS: Manufacturing Sector, Power Sector, Nigeria, Road Infrastructure, Telecommunication, Output

INTRODUCTION

Theoretically, both Keynesian and neoclassical economists provided useful tools for government intervention undertaking fundamental roles of allocation, stabilization, distribution and regulation especially when market proves inefficient or its outcomes is socially unelectable which is government capital expenditure (Usman, 2011).

The term capital expenditure is defined as a spending on assets. It is the purchase of items that will last and be used time and time again in the provision of good or service. In the case of government, examples would be the building of a new hospital, the purchase of new computer equipment or net works, constructing new roads etc. (IMF, 2010). Also according to CBN (2011), Government capital expenditure is the money spent on goods that are classified as investment goods. This means spending on things that last for a period of time. This may include investment in hospitals, schools, power sector, telecommunication and road construction. The role of Government capital expenditure in output and capacity utilization of manufacturing industry in Nigeria has been a growing concern, despite the fact that, the government had embarked on several policies aimed at improving the growth of the Nigerian economy through the contributions of manufacturing industry to the economy and capacity utilization of the sector (Adebayo, 2010; Peter and Simeon 2011 and Loto, 2012).

Manufacturing sector refers to those industries which are involved in the manufacturing and processing of items and indulge or give free rein in either the creation of new commodities or in value addition (Adebayo, 2011). According to Dickson (2010), manufacturing sector accounts for a significant share of the industrial sector in development countries. The final product can either serve as finished goods for sale to customers or as intermediate goods used in the production process. Loto (2012) refers to manufacturing sector as an avenue for increasing productivity in relation to import replacement and per-capita income which causes unrepeatable consumption pattern.

Thus, manufacturing industries are the key variables in an economy and motivates conversion of raw materials into finished goods. In the work of Charles (2012), it is posited that the manufacturing industries create employment which helps to boost agriculture and diversify the economy on the process of helping the nation to increase its foreign exchange earnings.

Manufacturing industries came into being with the occurrence of technological and socio-economic transformations in the western countries in the 18th -19th centuries (CBN, 2011). This period was widely known as industrial revolution. It all began in Britain and replaced the labour intensive textile production with mechanization and use of fuels (Olakunori, and Ejionueme, 1997) introduction to marketing.

Manufacturing sector are categorized into; Engineering sector, construction sector, electronics sector, Chemical sector, Energy sector, Textile sector, food and beverage sector, metal-working sector, plastic sector, transport and telecommunication sector (CBN, 2012).

In recent times, some manufacturing industries in Nigeria have been characterized by declining productivity rate, by extension employment generation which is caused by inadequate electricity supply, smuggling of foreign products into the country, trade liberalization, globalization, high exchange rate and inadequate government investments in infrastructure. It has been argued that the persistent poor performance of the manufacturing sector in Nigeria is mainly due to massive importation of finished goods, inadequate financial support and other variables which has resulted in the reduction in capital utilization and output of the manufacturing sector of the economy (Tomola, Adebisi and Olawale, 2012). Looking at the manufacturing sector share in the GOP in recent years (1990-2010), it has not been relatively stable. In 1990, it was about 5.5% while it dropped to 2.22% in 2010. Also at the same period, the overall manufacturing capacity utilization grew from 40.3% in 1990 to 58. 92% in 2010 (CBN, 2011). This may be contributed to the increase in government capital expenditure in recent times.

Furthermore, in Nigeria, the level of growth in manufacturing sector has been affected negatively because of high lending rates, which invariably is responsible for high cost of production (Adibiyi, 2001 and Rasheed, 2010). Okafor (2012) further observed that the level of Nigerian manufacturing sector performance has continue to decline because of low implementation of government budget and difficulties in assessing raw materials.

Based on the forgoing relationship between Government capital expenditure and manufacturing sector, a study such as this is necessary. This study, therefore, is designed to investigate the effect of government capital expenditure on the manufacturing sector output of Nigerian economy.

LITERATURE REVIEW

Relationship between Government Capital Expenditure and the Performance of Manufacturing Sector in Nigeria.

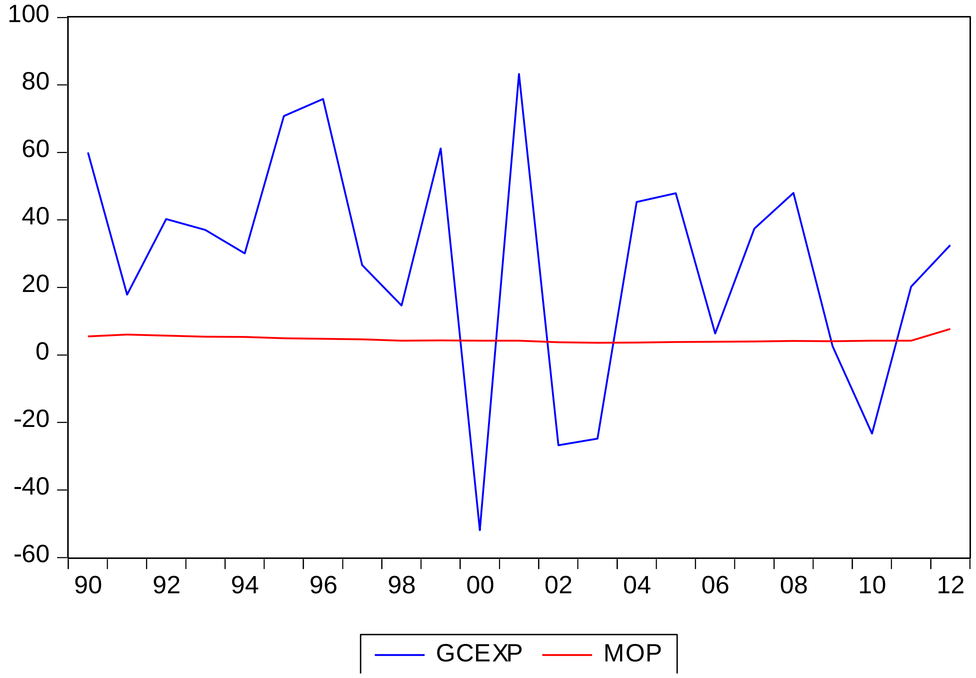
In both developed and developing countries, some scholars have suggested in the literature that government expenditure has an important role in the growth of any nation's economy through manufacturing sector output. Government capital expenditure is an expenditure on assets and it is also the purchase of items that will last and will be used time to time in the provision of a good services. While, manufacturing sector refers to those industries which are involved in the manufacturing and processing of items and indulge or give free rein in either creation of new commodities or in value addition. There has been mixed result in relationship between government capital expenditure and manufacturing sector out in Nigeria looking at their percentage from 1990 to 2012. The manufacturing sector output rate which rose to 6.05% in 1991 was reduced to 5.3% in 1994, from 1995, it has been inconsistence till 2011 to 2012 when it increase from 4.2% to 7.70% respectively. The capital expenditure has been inconsistence since 1990 to 2012. The relationship between government capital expenditure and manufacturing sector output in Nigeria presents a mixed result, as shown in table 1 and figure 1below.

Table 1: Percentage Changes in Capital Expenditure and Manufacturing Sector Output

YEAR	GCEXP	MOP
1990	59.96	5.5
1991	17.85	6.05
1992	40.30	5.7
1993	37.07	5.4
1994	30.12	5.3
1995	70.81	4.9
1996	75.81	4.8
1997	26.61	4.64
1998	14.60	4.2
1999	61.17	4.3
2000	-51.92	4.2
2001	83.21	4.2
2002	-26.74	3.79
2003	-24.80	3.63
2004	45.35	3.68
2005	47.88	3.8
2006	6.33	3.9
2007	37.46	4.02
2008	47.96	4.14
2009	2.61	4.1
2010	-23.33	4.2
2011	20.20	4.2
2012	32.5	7.70

Source: Central Bank of Nigeria Statistical Bulletin 2012

Figure 1: Capital Expenditure and Manufacturer Sector



Source: Author's Computation 2015

Table 1 and figure 1 are interpreted together; they reveal that capital expenditure and manufacturing sector output in Nigeria from 1990 to 2012 increased steadily with few fluctuation in some years. Nigeria's government capital expenditure increased from 1990 to 2012. However, in 2000, 2002, 2003 and 2010 capital expenditure fell by 51.92%, 26.74%, 24.80% and 23.33% from the previous year quantum values. Apart from these years, the capital expenditure increased from year to year. The highest increase compared to the previous year was observed in 1990 by there was an 59.96% increase. This was followed by 2001 when the increase was 83.21% and in 1996 when it increased by 75.81%. Again within these periods, the years with the least increase in capital expenditure was in 2009 with government capital expenditure increased by 2.61%, followed by 2006 with an increase of 6.33% and 1998 (14.60%) in ascending order. Manufacturing sector grew from 1990 to 2010, with a single increase in 1991. The highest increase in manufacturing sector within the period was in 2012 when MOP increased by 7.70%, this was followed by 1991 when manufacturing sector growth rate was 6.05%. As revealed from the table and figure above, manufacturing sector output has shown a steady decrease from 1991 to 2006.

EMPIRICAL REVIEW

There have been numerous studies on the effect of government expenditure in the long-term economic growth. But, there is no consistent evidence for a significant relationship between government spending and economic growth through manufacturing sector output, both in positive or negative direction. Results and evidence about the effect of government expenditure differ by country, analytical methods employed and categorization of government expenditures.

Samson (2013) used vector error correction model and granger causality model to investigate the relationship between government expenditure and economic growth through industrial sector in Nigeria. The study observed that there is significant negative relationship between government spending and industrial sector of the economy. The findings suggest that there should be effective channeling of public funds to productive sectors in Nigeria.

Employing three-stage-least square (3SLS) technique and macro-econometric model of simultaneous equations, Onakoya and Somoye (2013) examine the impact of public capital expenditure on economic growth in Nigeria. The study revealed that public capital expenditure contributes positively to economic growth in Nigeria as it promotes the output of oil and infrastructural sectors but it is directly deleterious to the output of manufacturing and agricultural sector.

Employing co-integration, error correction model and ordinary least square method, Eze and Ogiji (2013) investigate the impact of fiscal policy on the manufacturing sector output in Nigeria. The result revealed that government expenditure significantly affect manufacturing sector output based on the level of its co-efficient and p-value and there is long-run relationship between fiscal policy and manufacturing sector output in Nigeria.

Melissa and Dean (2013) examine the effect of public expenditure productivity on manufacturing sector in UUSA cities using simple Cobb-Douglas production function model. It was discovered that there is strong positive and statistically significant relationship between private capital and labour productivity. Using ordinary least square (OLS) method, Loto (2012 investigates the determinants of output expansion in the Nigerian manufacturing industries between 1980 to 2010. It was found that inflation rate play the highest significant role in explaining manufacturing sector output expansion in Nigeria.

Using multivariate model of simultaneous equations and three-stages of least squares method (LSM), Onakoye, Tella and Osoba (2012) examine the relationship between investment in telecommunication infrastructure and economic growth in Nigeria. The study found that telecommunication infrastructural investment has a significant impact on output of the economy directly through its industrial output and indirectly through the output of other sectors such as agriculture, manufacturing, oil and other services.

In line with the above gap as identify in the literature, the study employed all the tools needed to investigate the impact of government capital expenditure on manufacturing sector output in Nigeria and as well identify all factor that affect manufacturing sector in Nigeria.

THEORETICAL FRAMEWORK

Theory of Public Expenditure

Public expenditure is spending made by the government of a country on collective needs and wants such as pension, provision, infrastructure, etc. Until the 19th century, public expenditure was limited as laissez faire philosophies believed that money left in private hands could bring better returns. In the 20th century, John Maynard Keynes argued the role of public expenditure in determining levels of income and distribution in the economy. Governments at all levels (national, regional and local) need to raise revenue from a variety of sources to finance public-sector expenditures. The details of taxation are guided by two principles: who will benefit, and who can pay. This theory believed that maximum satisfaction should be yield by striking a balance between public revenue and expenditure by the government.

Musgrave Theory of Public Expenditure

This theory was propounded by Musgrave (1964) as he found changes in the income elasticity of demand for public services in three ranges of per capita income. He posits that at low levels of per capita income, demand for public services tends to be very low. This is so because according to him such income is devoted to satisfying primary needs and that when per capita income starts to rise above these levels of low income, the demand for services supplied by the public sector such as health, education and transport starts to rise, thereby forcing government to increase expenditure on them. He observes that at the high levels of per capita income, typical of developed economics, the rate of public sector growth tends to fall as the more basic wants are being satisfied.

The Keynesian Theory

Of all economists who discussed the relation between public expenditures and economic growth through industrial sector output, Keynes was among the most noted with his apparently contrasting viewpoint on this relation. Keynes regards public expenditures as an exogenous factor which can be utilized as a policy instruments promote economic growth. From the Keynesian thought, public expenditure can contribute positively to economic growth. Hence, an increase in the government consumption is likely to lead to an increase in employment, profitability and investment through multiplier effects on aggregate demand. As a result, government expenditure augments the aggregate demand, which provokes an increased output depending on expenditure multipliers. Keynesian economics was very influential for several decades and dominated public policy from the 1930s to the 1970s. The theory has since fallen out of favour. But it still influences policy discussion particularly on whether or not changes in government spending have transitory economic effects. For instance, some policymakers still use Keynesian analysis to argue that higher or lower level of government spending will stimulate or dampen economic growth.

METHODOLOGY

The data used in this study come from secondary sources. The data generated are quantitative time series data on Manufacturing Sector Output, Total Capital Expenditure on Road Infrastructure, Total Capital Expenditure on Health and Total Capital Expenditure on Communication from the central bank of Nigeria publications and those of the Federal Bureau of Statistics for the period between 1990 and 2012. This period chosen for the study encompasses the phases when government capital expenditure is inconsistency.

Model Specification

To examine the effect of public capital expenditure on manufacturing sector output in Nigeria, we adopt Co-integration test and ordinary least square approach using Error Correction Model (VECM) approach. The multiple linear regression analysis based on the classical regression methodology was the main procedure to be followed in this work. The OLS technique is chosen not only because of its computational simplicity but because it possesses some desirable statistical properties such as linearity, unbiasedness, minimum

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variance, zero mean value of the random term etc (Koutsoyiannis, 2003 and Gujarati, 2005). However, we shall first ascertain the long-run reliability of the variables in the model through unit root test. The Augmented Dickey Fuller test shall be used for this exercise.

We have reviewed the models used by various authors in the empirical literature section in chapter two of this work. This work therefore shall adopt the model used by some of the work reviewed. In this model MOP is the dependent variable while the independent variables include: Total Road Infrastructure Expenditure (TRIE), Total Health Sector Capital Expenditure (THSEX) and Total Capital Expenditure on Telecommunication (TEXC). These variables shall be used in the current work subject to stationarity. The model is as stated below:

MOP/GDP = f (TRIE, THSEX, TEXC)

i.e. $MOP/GDP = Bo + B_1TRIE + B_2THSEX + B_3TEXC + u_t$.

WHERE;

MOP/GDP = Manufacturing Sector Output/GDP X 100/1

TRIE = Total Road Infrastructural Capital Expenditure

THSEX = Total Health Sector Capital Expenditure

TEXC = Total Capital Expenditure on Telecommunication

u = Stochastic error term

Unit Root Test: Test of stationarity aimed at determining whether the variables have dependable means and variances. The Augmented Dickey-Fuller unit-root test was used to test whether the variables are stationary or non-stationary in levels, first or second differencing. Damodar (2005) states that the essence of unit-root test is to allow both the levels and first difference of the relevant variables to enter growth regression and as well as to avoid spurious regression and give accurate results.

Co-integration Test: Co-integration aimed at ascertaining whether there is long-run relationship between the variables. The Johansen co-integration test will be employed to test for the presence of first order auto-correlation and co-integration of variables in the model. The R^2 and adjusted R^2 shall be used to measure the degree to which the explanatory variables are responsible for the change in the dependent variable and the goodness of fit as a result of addition of explanatory variables. The F-statistic shall be used to test for the linearity assumption at 5% level of significance.

Error Correction Mechanism (ECM): The purpose of error correction model is to indicate the speed of adjustment from the short-run equilibrium to the long-run equilibrium state. The greater the coefficient of the parameter, the higher the speed of adjustment of the model from the short-run to the long-run equilibrium.

Descriptive Results

In this chapter, we analyze the time series characteristics of the chosen data during the period of 1990-2012. We had undertaken some econometrics tests on the variables of our model to ascertain their assumptions prior to estimation. Viz: Stationarity, Cointegration tests and Ordinary Least Square (OLS).

Unit Root Test

The Augmented Dickey-Fuller (ADF) unit-root test was employed to test for stationarity or the existence of unit roots in the data. The results of the unit-root tests are presented below:

Table 2: UNIT ROOT RESULT

Augmented Dickey-Fuller Unit Root Test
Trend and Intercept

Variable	ADF Test Statistic	5% critical values	10% critical values	Order	Remark
MOP	-4.991513	-3.012363	-2.646119	1(1)	Stationary
CEXR	-4.596404	-3.234861	-2.642242	1(1)	Stationary
CEXP	-4.682056	-3.012363	-2.646119	1(1)	Stationary
CEXT	-6.120769	-3.012363	-2.646119	1(1)	Stationary

Source: E-view 7.0

The above empirical test shows that MOP, CEXR, CEXP and CEXT are integrated of order one. They are integrated of the same order; 1(1). From the above tables 2 above, it was discovered that ADF with trend and intercept are integrated of the same order. Considering the ADF test statistics at 5% and 10% critical values, it is observed that test statistics are greater than the critical values. Thus, the series are said to be stationary at that first difference.

Co-integration Test

Co-integration test is used to test for the long run relationship between dependent and independent variables. From the table 2 below, there is a long run relationship between the manufacturing sector output and the explanatory variables (MOP, CEXR, CEXP and CEXT) in Nigerian within the period under study 1990-2012. Firstly, the summary of the Johansen Co-integration test indicates that the explanatory variables: CEXR, CEXP and CEXT are co-integrated of order one. The test below indicates one co-integrating equation at 5% level of significance. The model with lag 1 was chosen with the linear deterministic test assumption. The variables can therefore be said to have reliable long-run relationship among them with dependent variable coefficient of co-integration of 0.811021. Johansen co-integration test for the series; MOP, CEXR, CEXP and CEXT are presented in **Table 3** below.

Table 3: CO-INTEGRATION RESULT

Eigenvalue	Trace Statistic	0.05 critical value	Prob.**	Hypothesized No. of CE(s)
0.811021	64.15496	47.85613	0.0007	None
0.518452	29.16640	23.16640	0.0000	At most 1
0.330576	13.82067	11.49471	0.0000	At most 2
0.226469	5.392578	3.841466	0.0002	At most 3

*denotes rejection of the hypothesis at 5% significance level. L.R test indicates 1 co-integrating equation(s) at 5% level of significance.

There is a long run relationship between the MOP and the explanatory variables; CEXR, CEXP and CEXT. Firstly, the summary of the Johansen Co-integration Test is shown in the Table above. The model with lag 1 was chosen with the linear deterministic test assumption. Under the Johansen Co-integration Test, there are three co-integrated vectors. In Johansen's Method, the Eigenvalue statistic is used to determine whether co-integrated variables exist.

Under the Johansen co-integration test, it is observed that there are one co-integrating equations. In Johansen's Method, the Eigenvalue statistic is used to determine whether co-integrated variables exist. Co-integration is said to exist if the values of computed statistics are significant different from zero. The Trace Statistics is higher than 5% critical value and the Eigenvalue are found as (0.811021, 0.518452, 0.330576 and 0.226469). The Trace Statistics of MOP, CEXR, CEXP and CEXT are greater than the critical value at both 5% level of significance. Also, the Eigenvalues of MOP, CEXR, CEXP and CEXT are significantly greater than zero. In other words, the null hypothesis of no co-integration among the variables is rejected in at least one equation. The test result shows the existence of a long-run equilibrium relationship in one co-integrating equations at 5% significance level.

The Nigerian manufacturing sector output is affected by the indicators of Nigerian capital expenditure. Therefore, government capital expenditure on road infrastructure with other specified variables in the model, changes the manufacturing sector output value and the propensity to grow.

In any case, the existence of a long-run co-integrating equilibrium also provides for short-term fluctuations. In order to straighten out or absolve these fluctuations, an attempt was made to apply the Ordinary Least Square (OLS).

Ordinary Least Square (OLS)

The existence of long-run co-integrating equilibrium provides for short fluctuations. In order to straighten out or absolve these fluctuations, an attempt was made to apply the Ordinary Least Square (OLS).

As noted, the OLS is meant to tie the short-run dynamics of the co-integrating equations to their long-run static dispositions. Below is the OLS test for the given data:

Table 4: Ordinary Least Square (OLS) RESULT

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4.672288	0.286017	16.33573	0.0000
CEXT	0.120640	0.093428	-1.291263	0.0001
CEXR	0.150309	0.086553	1.736613	0.0086
CEXP	0.038773	0.078102	-0.496440	0.6253
R-squared	0.953678	Mean dependent var		4.623913
Adjusted R-squared	0.920049	S.D. dependent var		0.959222
S.E. of regression	0.949558	Akaike info criterion		2.891130
Sum squared resid	17.13154	Schwarz criterion		3.088607
Log likelihood	-29.24799	F-statistic		60.47635
Durbin-Watson stat	1.906957	Prob(F-statistic)		0.000000

Source: E-View 7.0

The figures from the OLS are quite revealing. That is, the coefficient estimates of the constant and explanatory variables have alternated their signs as against the long-run relationship found in the normalized co-integrating table 3 above. This shows exactly what is needed to be done in order to absolve the short-run dynamics of relationships. Again, the significance of OLS holds that a negative and statistically significant error correction model coefficient is a necessary condition for the variables to be co-integrated.

More so, it is concluded that the Ordinary Least Square (OLS) is not a spurious model as the computed R^2 value of 0.953678 is lower than 1.91 (Durbin Watson Statistics). However, the R^2 shows that 95.37% of the total variations in MOP are accounted for, by the explanatory variables. Since the calculated Durbin Watson statistics is greater than the upper limit, there is no evidence of the presence of the first order serial correlation or autocorrelation in the model. Finally, the results of the study do provide support for the hypotheses that Nigeria capital expenditure has a significant impact on the growth of Nigerian manufacturing sector output, hence, acting as a blood vain to the enhancement of economic growth.

DISCUSSION

This research work sought to examine the impact of government capital expenditure on manufacturing sector output in Nigeria from 1990 to 2012. The government capital expenditure were captured using total capital expenditure on road infrastructure (CEXR), power sector (CEXP) and telecommunication (CEXT).

On the application of advanced econometric techniques (Augmented Dickey Fuller Unit Roots Test, Johansen co-integration Test and Ordinary Least Square), the following information surfaced;

None of the variables was stationary at zero level. This means they all have unit roots. That is, there were all differenced before stationarity was achieved. The essence is to avoid spurious result.

The four variables became stationary at first difference by ADF application. There exists a long-run equilibrium relationship between capital expenditure and manufacturing sector output in Nigeria. This was achieved through the use of co-integration test.

Government capital expenditure on power was negatively correlated with manufacturing sector output (by -0.038773), while Government capital expenditure on road infrastructure and telecommunication were positively related with manufacturing sector output in Nigeria (by 0.150309 and 0.120640) respectively based on the short-run test.

The joint influence of the explanatory variables is statistically significant. This was very well echoed by the F-statistics gotten as 60.47635 (table 3), which tested the entire regression plane. There was no evidence of first-order serial correlation (autocorrelation). It implies that the power of the explanatory model is high. The short-run dynamics adjusts to the long-run equilibrium.

Based on the objectives of the, three empirical results emerged. The conclusion arising from the impact of capital expenditure on manufacturing sector output in Nigeria shows that the regression coefficient of government capital expenditure on the road sector (GCEXRS) carries positive sign and its t-value (-1.291263) is statistically significant at 5% level. This implies that capital expenditure on road infrastructure (CEXR) affects the manufacturing sector output in Nigeria significantly. The computed value of R^2 = 0.953678 shows that 95.36% of the total variation in the manufacturing sector output (MOP) is accounted for by the explanatory variable (CEXR); the second variable government capital expenditure on the power sector (GCEXPS) shows that the regression coefficient of GCEXPS carries negative sign and its p-value (0.6253) is statistically significant at 5% level. This implies that government capital expenditure (GCEXPS) affects the MOP negatively and insignificant. The computed value of R^2 = 0.953678 shows that 95.36% of the total variation in the manufacturing sector output (MOP) is accounted for by the explanatory variable (GCEXPS) and that the regression coefficient of government capital expenditure on telecommunication (GCEXT) carries positive sign and its p-value (0.0001) is statistically significant at 5% level. This implies that GCEXT affects the MOP significantly. It is estimated from the result that 1% increase in GCEXT, on the average, will lead to 12.06% increase in MOP. The computed value of R^2 = 0.953678 shows that 95.36% of the total variation in the manufacturing sector output (MOP) is accounted for by the explanatory variable (GCEXT).

CONCLUSION

This study contributes to the literature on the effect of public capital expenditure on manufacturing sector output in Nigerian by using the actual functioning types of public capital expenditure data to examine manufacturing sector output in Nigeria. This is because manufacturing sector accounts for a significant share of the industrial sector in developed countries. The final products can either serve as finished goods for sale to customers or as intermediate goods used in the production process. Government expenditure is deemed to be essential for widening the base at which developing countries could grow their economy rapidly. It follows that, to achieve accelerated economic growth and sustainable development through manufacturing sector output, government capital expenditure should be allocated optimally in such way that it will stimulate and create conducive environment for the private sector led economic development and rectify market failures.

From the research findings, the study concludes with empirical evidence that total capital expenditure on road infrastructure and telecommunication has positive and significant impact on manufacturing sector output in Nigeria while total capital expenditure on power has indeed impacted negatively and insignificantly on manufacturing sector output in Nigeria

From the analysis done in this study, we can conclude that manufacturing sector output are clearly impacted by factors both exogenous and endogenous to the public capital expenditure in Nigeria, this study has focused on highlighting the exogenous factor which if controlled, are most likely to have the largest effects in increasing economic growth in Nigeria.

Finally, the result of the ordinary least square indicates that the extent of government capital expenditure on road infrastructure, power and telecommunication promotes manufacturing sector output in both long-run and short run adjustment of manufacturing sector output in Nigeria. The above unveils the effects of the composition of government capital expenditure on road, power and telecommunication in promoting economic growth in Nigeria through manufacturing sector output which as it stands may not engender the much needed stimulus for economic growth in the country. The result has an important implication in terms of policy making that will help budget implementation in Nigerian.

RECOMMENDATIONS

Based on the above analysis and the implications, the following recommendations were made:

i. There is need for government to reduce its budgetary allocation to recurrent expenditure on power sector and place more emphasis on the capital expenditures so as accelerate economic growth in Nigeria through manufacturing sector output.

ii. Government should also increase spending on road infrastructure, particularly on capital expenditure. As our results shows that road infrastructure capital expenditure has the greatest impact on the long-run with manufacturing sector output in Nigeria.

iii. There should be effective channeling of public funds to productive sectors of the economy so as to have significant impact on economic growth in Nigeria.

iv. Finally, this study also recommends that the government consumption spending should be reduced by all ties of government in Nigeria. This is because government has a bigger responsibility of creating stable and conducive economic and political environment, building general confidence and mobilizing its people in development endeavor, if the country has to direct itself into long-run economic growth by focusing more on capital expenditure.

v. Government economic policies should be on diversification of the economy to enhance the performance of manufacturing sector, so as to create more employment opportunities because it may be a more effective way of reducing the level of unemployment and increasing the growth of the economy.

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