ISSN: Print - 2277 - 078X Online - 2315 - 747X © FUNAAB 2013 Journal of Humanities, Social Sciences and Creative Arts

CAPITAL EXPENDITURE BUDGET SIZE AND POWER INFRASTRUCTURAL DEVELOPMENT IN NIGERIA.

K. E. OKPALA AND J. OLABISI*1

Department of Financial Studies (Accounting) Redeemer's University, Nigeria Department of Accounting, Federal University of Agriculture, Abeokuta, Nigeria **Corresponding Author:** enocharticles@gmail.com **Tel:** +234 08055071683

ABSTRACT

ABSTRACT

The paper investigated the relationship that existed between Capital Expenditure Budget Size (CEBS) and Power Infrastructural Development (PID) in Nigeria. The study adopted a cross sectional survey research design where primary data were collected through a structured questionnaire at a point in time and analyzed using Analysis of Variance and Regression. The results of the analysis showed that there was no significant relationship between CEBS and PID in Nigeria (p>0.05) indicating an acceptance of null hypothesis that there is no significant relationship between CEBS and PID. Also, the correlation coefficient (R) results of .025 showed positive but weak correlation between the variables and R-squared of the regression of -.001 as the fraction of the variation in the dependent variable PID as predicted by independent inference CEBS means -.1%. The study concluded that power infrastructural development in Nigeria was not commensurate with size of capital expenditure budget. This was attributed to poor implementation policy, inadequate budget execution, corruption and weak accountability in Nigerian public sector.

Key words: Government budget, capital expenditure size, infrastructure development, public sector

INTRODUCTION

The achievement of economic development in any country is a function of policymakers' priority and ability to make right economic policies that promote standard of living and economic health in specific areas and effective implementation of chosen strategy (Ajakaiye & Akinbinu, 2000). These roles in shaping the economy is evident in the large number of government owned and funded establishments responsible for the provision of infrastructure services (Aigbokhan, 1999). One of these parasta-

tals is the Power Holding Company of Nigeria Plc (PHCN) that is responsible for generating, transmitting and distributing electricity to users within the period under investigation. Adequacy of power infrastructural services create enabling environment for the productive sector and impacts positively on economic prosperity (Sen & Dreze, 1995). Power infrastructure has played a significant role in recent times in developed countries and the development of such infrastructure is as result of rational planning, proper implementation, well coordinated and harmoni-

J. Hum. Soc. Sci. Crtv. Arts 2013, 8: 39-52

ous path by governments in those coun-With good power infrastructure in tries. place, South Korea and Japan have received a big boost of economic development (Aigbokhan, 1999). Adeola (2005) noted that Africa continent represents 13% of the world's population and produces 7% of global modern energy but consumes only 3% which is a proof of significant electricity supply deficit. According to a recent report by the World Energy Council, "Africa is the least illuminated continent of the world" as eighty per cent (80%) of its population has no access to electricity (Amakom & Nwogwugwu, 2012). This is disturbing, given the huge solar energy and hydro-electric power potential of the region. The economic consequences of poor access to electricity in the region are guite enormous and that of Nigeria is worse considering the level of fund allocated to the sub-sector in the annual budget over the years by various administrations without any visible result (Adeola, 2005; Odia, 2010). The focus of this study is to investigate the level of influence of government capital expenditure size on power infrastructural development in Nigeria. This research objective is contingent on the guestion; to what extent has capital expenditure size influenced the development of power sector in Nigeria? In order to achieve the objective of the study, following the introduction section is the issue followed by review of related literature, methodological issues. While the last section draws conclusion from the study.

THE ISSUE

Empirical studies like those of Omeiza-Michael (2009) and Amakom & Nwogwugwu (2012) have shown that most developing countries of the world and in particular Nigeria have difficulty of inadequate and unreliable power supply. Experts viewed

this issue as a sign of budget failure since public infrastructure provision is one the macro economic objectives meant to be addressed by the national budget (Omeiza-Michael, 2009). Poor power supply is the principal limiting factor confronting the Nigerian economy. This has troubled all sectors within the economy in many ways and also hampered economic development (Amakon & Nwogwugwu, 2012; Ojo, 2012). Adeola (2005) conducted a survey on the cost of infrastructure failure in developing economy and the result obtained showed that 82.7% of the firms in Nigeria regarded poor power infrastructure as a major obstacle to their operations. Generally, extant literature shows that the reported results of budget size on infrastructure development are conflicting (Taiwo and Agbatogun, 2011; Kwanashie, 2013; Basheka & Nabwire, 2013). Previous studies have established relationship between size of capital expenditure and power infrastructure development. Some suggested that the low percentage of capital budget is responsible for inadequate infrastructure service supply in Nigeria while other researchers disagreed (Adedokun, 2004; Onakoya, Tella & Osoba (2012). Therefore, the inconsistent and inconclusive results of previous studies on capital expenditure size and adequate power infrastructural development call for further examination.

EXTANT LITERATURE

The recent revival of interest in growth theory has also refreshed interest among researchers and public administrators in identifying the links among government spending and economic development especially in developing countries visa-vis the composition of the expenditure (Kwanashie, 2013). National budget consist of recurrent and capital expenditure which enable the government to

J. Hum. Soc. Sci. Crtv. Arts 2013, 8: 39-52

CAPITAL EXPENDITURE BUDGET SIZE AND POWER...

carry out the administration of the country's affairs and develop infrastructure. The size of capital budget is the total amount of fund budgeted for appropriation on projects and capital assets (Kwanashie, 2013). According to Bhattacharya, Iqbal and Khan (2009) asserted that the amount set aside in the budget for development has a moderating influence on the extent of assets acquisition and maintenance or improvements of the existing facilities. Therefore the larger the size of capital expenditure budget, the more the projects that an entity is able to execute given a fair level of inflation and some other economic factors (Bhattacharya Igbal and Khan 2009; Abu and Abdullahi, 2010). The size and structure of public expenditure will determine the pattern and form of growth in output of the economy infrastructural development including (Onakoya, Tella and Osoba, 2012). Niloy, Emranul, & Denise, (2003) stated that although, the general view is that public capital expenditure budget on social and economic infrastructure can be growthenhancing if properly implemented with a good level of integrity while Onakoya, et al. (2012), noted that there is a mismatch between the performance of Nigeria's economy and massive increase in government capital expenditure over the years which raises a critical question on the role that the capital budget size performs in promoting economic growth and development.

The theoretical framework of budget expenditure size is based on theory of budget adequacy, new philosophy established in recent times which was propounded by Nouri and Parker in 1990s. Budget adequacy is the degree to which individual perceives that budgeted resources are adequate to execute job requirements or projects (Nouri and Parker, 1998). Nouri and Parker developed three items instrument to measure whether budgeted resources are perceived as adequate for performance of job duties or execution of projects. These include: (i) accurate information of the job or project (ii) subordinates' participation for budget execution and (iii) entity's funds ability. They further argued that budget expenditure size leads to budget adequacy and upon these three instruments, funds size is strategic on the ground that with adequate funding all others instruments can easily be achieved. This means that funding may be the limiting factor that binds the project execution at the lowest possible (Rechnitzer and Stasinski, 2009). Hicks & Curt (2003) used the military budget to explain the theory of budget adequacy and stated that a military budget - defence budget, is the amount of financial resources dedicated by a nation or a state to maintaining armed forces which determines the amount of aggression it wishes to employ. The resources adequacy theory expects that the size of funds allocated to capital expenditure has direct relationship with the level of infrastructure development. The higher the amount budgeted for infrastructure which is a sort resource advantage, the higher the degree of development if properly coordinated implemented without and corruption (Serwach, Flood, Rechnitzer and Stasinski, 2009; Taiwo and Agbatogun, 2011; Basheka and Nabwire, 2013; Kwanashie, 2013).

Easterly & Revelo (1993) carried out an assessment of government budget and economic growth and development. It was reported that size of budget determines to a large extent the level of achievements given proper implementation and effective control. Serwach et al. (2009) conducted a study on budget crises and higher Education. The purpose was to investigate the level of funding and operations of higher education in USA. It was discovered that during the times of decreased State funding, Universities typically raise tuition fees to keep up with the same level of activity which impedes the mission of the public university, specifically relating to access (Keller, 2009). Wayne, Stephen, Andrea, Tomas, (2010) conducted a research on operational budget size and allocation of resources. The objective of the paper was to determine how festivals allocated their funds among various categories of expense. The data suggested that festival size plays an important role when it comes to such allocations. Taiwo & Agbatogun (2011) conducted a survey on the implications of government spending on the growth of Nigeria economy over the period 1980 - 2009. One of the key findings is that government expenditure size has always been at the increase due to the huge demand for public goods or services - key economic infrastructure such as roads, electricity, and education, and health, external and internal security. Kwanashie (2013), noted that the overall budget size in Nigeria continues to rise despite the mounting domestic and foreign debts as a part an expansionary fiscal posture. The view was in line with the Economic Policy Institutes advocated for greater capital spending by all tiers of government as it is believed that the size of public capital budget have significant improvement on infrastructural development. Basheka &

Nabwire (2013) investigated the relationship between universities' continuous under funding and guality of services rendered and concluded that inadequate government financing has led to the erosion of stakeholders' expectations and confidence which led to series of student unrest, staff strikes and poor quality of educational service delivery. Generally, previous studies have reported conflicting results on the degree of association between the two variables in the public sector. (Onakoya et al., 2012; Khan & Hildreth, 2002). Onakoya, et al. (2012) conducted a survey on impact of public capital expenditure on economic growth in Nigeria. It was concluded that there is a mismatch between the poor performance of Nigerian economy and massive increase in government capital expenditure over the years. This trend raised critical questions on the role of increase capital expenditure in promoting economic development. The gap in the literature is that the relationship between capital budget size and power infrastructural development remains undetermined.

METHODOLOGY

The study employed a cross-sectional survey where primary data were gathered at one point in time from a sample selected to represent the population of the study. The study selected 569 top management staff drawn from accounts / finance departments and internal audit units of the Federal Ministry of Finance, PHCN, NERC, CBN and transmission of staff of PHCN as at April, 2014. Primary data were collected from respondents through a structured questionnaire followed with in-depth interview. A Likert scale questionnaire consisted of 19 items sectionalized into three parts was employed for the study: Section (A) asked questions on personal data of the respondents and Section (B) asked questions on size of capital budget expenditure while Section (C) focused on power infrastructure development. Section B and C focused on inferential factors that dealt with the actual subject matter of the study and their moderating factors. This section generated size of budgeted capital expenditure and power infrastructural development. The questionnaire was validated by experts in measurement and evaluation. Some of the questions were adapted from previous research work and confirmatory factor analysis was conducted to test their suitability. A pilot survey using pre-test of the instrument was carried out in the three (3) selected organizations in which Sixty (60) copies of questionnaire were administered to top management staff that were not part of research respondents and the study reported crobach's alpha 0 .755. Regression analysis was used to measure relationship between the predictor variable - size of capital expenditure budget (CEBS) and the criterion variable - power infrastructural development (PID). The simple linear regression equation was used to specify the relationship between the variables in the hypothesis of the study as follows: Model for H0: Y = f(X) where Y = PID, X =CEBS. The capital budgeted expenditure size was measured by requesting respondents' opinion on adequacy of the expenditure size on power infrastructure in Nigeria while the parameters used to measure power infrastructure development are opinion on the level of power supply. Secondary data from Annual capital expenditure report from Ministry of Finance, Central Bank of Nigeria Statistical Bulletin and Annual Reports and Electricity Production in billion kWh were collected between 2001 and 2010 and was used in testing the hypothesis to collaborate the result of the survey. This was achieved by the use of paired samples

test statistic to reveal the level correlation between the variables.

ANALYSIS AND INTERPRETATION OF RESULTS

Analysis of Respondents' information on Size of Capital Expenditure on Power infrastructure

According to Bhattacharya et. al. (2009) and Abu and Abdullahi (2010), the size of capital budget is the total amount of fund budgeted for appropriation on projects and capital assets hence the larger the size, the more projects to be executed given a fair level of inflation and implementation integrity. In response to the first question on Table 2 below, A total of 112 respondents representing 35.3% agreed that fund allocated to power infrastructure is adequate for acquisition of new facilities with slightly high to rank first while 94 respondents representing 29.7% agreed with high to rank second. The mean score of 5.35 shows that majority of respondents agreed that fund allocated to power infrastructure is slightly adequate. Concerning second question on Table 2, a total of 126 respondents representing 42.0% agreed that electric power equipment maintenance is well funded with high option to rank first while 88 of the respondents representing 27.8% agreed with slightly high to rank second. The mean score of 6.08 showing that majority of respondents agreed that power equipment fund allocated to maintenance is adequate. The third question on Table 2 shows that 133 respondents representing 42% agreed that the yearly budget for public power projects are incremental with high option to rank first while 85 respondents representing 26.8% agreed with slightly high to rank second. The mean score of 6.18

J. Hum. Soc. Sci. Crtv. Arts 2013, 8: 39-52

shows that majority of the respondents agreed that incremental budget is practiced Nigeria with high option. Concerning the fourth question on Table 2, a total of 123 respondents representing 38.8% agreed with high option that the importance of electric power is seen in the amount allocated to the sector in the capital budget to rank first position while 108 respondents representing 34.1% with very high to rank second. The mean score of 6.02 shows that majority of respondents agreed with above high option that importance of power is

seen from the attention given to it financially. Finally, the fifth question on the same Table 2 shows that a total of 122 respondents representing 38.8% agreed that funding is not the problem of public power infrastructure in Nigeria with high option to rank first while 65 respondents representing 20.5% agree with average to rank second. Furthermore, the mean score of 6.01 shows that majority of the respondents are of the opinion that the problem of public power in Nigeria has to do with funds.

Table 1: Analysis of Respondents' information on Size of Capital Expenditure on Power infrastructure (Questions A1 – A5 in Questionnaire)

Variables	1 F(%)	2 F(%)	3 F(%)	4 F(%)	5 F(%)	6 F(%)	7 F(%)	Mean Score
Fund allocated to power infrastructure is adequate for acquisition of new facili- ties.	0 (0)	5 (1.6)	5 (1.6)	53 (16.7)	112 (35.3)	94 (29.7)	48 (15.1)	5.35
Electric power equipment maintenance is well funded.	0 (0)	0 (0)	4 (1.3)	20 (6.3)	88 (27.8)	126 (39.7)	79 (24.9)	6.08
Amounts allocated to Nigeria public power projects are incremental on yearly basis.	0 (0)	1 (.3)	5 (1.6)	12 (3.8)	85 (26.8)	133 (42.0)	81 (25.6)	6.18
The importance of power is seen in the allocation to the sector in the capital budget	0 (0)	0 (0)	1 (.3)	14 (4.4)	71 (22.4)	123 (38.8)	108 (34.1)	6.02
Funding is not the problem of public power infrastructure in Nigeria	0 (0)	2 (.6)	17 (5.4)	65 (20.5)	109 (34.4)	122 (38.5)	2 (.6)	6.01

Source: Authors' computation

Analysis of Respondents' information on the level power infrastructure development

Kessides (1993) stated that power infrastructure also known as electric power system represents an intermediate input to production of public goods and services, therefore changes in its right guality and guantities will affect the profitability of production and invariably the level of income, output, and employment. This will at the long run affect the standard of living (Michas, 1975). In response to the first question on table 3 below, PHCN had adequate facilities to generate,

a total of 79 respondents representing 24.9% agreed that power infrastructure has significantly backed up productive sector in Nigeria ranked first while 66 respondents representing 20.8% agreed with slightly high to rank second. The mean score of 3.51 indicated that majority with above slightly low opinion agreed that power infrastructure had significantly backed up productive sector in Nigeria. Second question on table 3 below showed that a total of 103 respondents representing 32.5% agreed that

44

CAPITAL EXPENDITURE BUDGET SIZE AND POWER...

transmit and distribute the required electric power to users with average to rank first while 97 respondents representing 30.5% agreed with low to rank second. The mean score of 4 shows that majority is in agreement with average option on facility adequacy. On the third question on Table 3, a total of 103 respondents representing 32.5% agreed that the use of generating set has declined considerably with average to rank first while 97 respondents representing 30.5% agreed with low to rank second. The mean score of 3.64 showed that majority of respondents agreed with above slightly low opinion that the use of generator as PHCN alternative had reduced. The forth question on Table 2 showed that a total of 133 re-

average option on power sector reform effectiveness to rank first while 78 respondents representing 24.6% agreed with low to rank second. The mean score of 3.95 showed that majority of the respondents agreed with above slightly low on power sector reform effectiveness. Finally, the fifth question on Table 3 indicated that a total of 87 respondents representing 27.4% agreed that infrastructure investments was made after proper project evaluation in power sector in Nigeria with low option to rank first while 80 respondents representing 25.2% agreed with average to rank second. Furthermore, the mean score of 3.39 confirmed that majority of respondents agreed that proper infrastructure project evaluation was not carspondents representing 42% agreed with ried in Nigeria before investments were

Table 2: Analysis of respondents' information on the level of power infrastructure development. (Questions B1 – B5 in Questionnaire)

Variables	1	2	3	4	5	6	7	Mean
	F(%)	F(%)	F(%)	F(%)	F(%)	F(%)	F(%)	Score
Electric power infrastructure has signifi-	30	57	64	79	66	18	3	3.51
cantly backed up productive sector in Nigeria	(9.5)	(18.0)	(20.2)	(24.9)	(20.8)	(5.7)	(.9)	
PHCN has adequate facilities to generate,	2	21	97	103	42	52	0	4.00
transmit and distribute the required electric power to users	(.6)	(6.6)	(30.5)	(32.5)	(13.5)	(16.4)	(0)	
The use of generating set as PHCN alterna-	2	21	97	103	42	52	0	3.64
tive to power supply has declined considera- bly	(.6)	(6.6)	(30.6)	(32.5)	(13.2)	(16.4)	(0)	
Reform in the power sector has yielded excel-	1	20	78	133	66	19	0	3.95
lent result	(.3)	(6.3)	(24.6)	(42)	(20.8)	(6)	(0)	
Proper project evaluation is carried out be-	44	71	87	80	28	4	3	3.39
fore embarking on power infrastructure investments	(13.9)	(22.4)	(27.4)	(25.2)	(8.8)	(1.3)	(.9)	

Source: Authors' computation

Test of Hypothesis 1 (Primary Data) Hypothesis: There is no significant relationship between the size of government capital expenditure and power infrastructure devel-

opment in Nigeria. **Model:** Y = f(X) and $y_1 = \beta 0 + \beta_1 x_1 + \varepsilon_1$

A priori expectation: $\beta 0 > 0$.

To test this hypothesis, regression analysis was employed, using SPSS - IBM version 21.

Interpretation: Table 3 shows that there is no statistical relationship between the size of capital budget and power infrastructure development in Nigeria as the probability (or significance) of the t-calculated is equal to 0.658 which is greater than 5%. Hence the null hypothesis which stated that there is no significant relationship between the size of government capital expenditure and

power infrastructure development in Nigeria is hereby accepted. The table also showed the standard error which essentially measured how stable our estimate is. A larger standard error means that the estimated coefficient was not well predicted. The stan-

dard error is equal to .061 which means that we have fairly précised estimate for size of capital budget. The Table 3 below shows Fvalue which is the mean square model (.114) divided by the mean square residential (.549) and yielded F = .196.

Table 3:ANOVAa						
Moc	del	Sum of Squares	df	Mean Square	F	Sig.
1	Regression Residual Total	.114 182.414 182.528	1 315 316	.114 .579	.196	.658b

a. Dependent Variable: PID

b. Predictors: (Constant), X1

Source: Authors' computation

The p-value associated with F-value was large (.0.658) as shown in table 4. The value was used to answer the second question on table 2. The p-value when compared with alpha level (typically.05) is greater at .658. Thus, it can be concluded that the independent inference –CEBS did not reliably predict the dependent variable – PID. Furthermore, Table 6 shows the regression analysis which was used to produce the equation that predicted the dependent variable measure – PID. The table showed an r-

value .025 between the SCEB and PID. A correlation of 0.25 is considered weak, the result showed a very weak positive relation-ship between the variables.

Table 5 also shows R-squared of the regression as -.001 which was the fraction of the variation in the dependent variable - PID that was predicted by the independent inference –SCEB. It means -.1% PID is associated with SCEB.

Tab	le 4:	Coefficients						
Model		Unstandardized Coefficients		Std. Coefficients	t	Sig.		
		B	Std. Error	Beta	_			
1	(Constant)	3.546	.343		10.337	.000		
1	X1	.027	.061	.025	.443	.658		

Source: Authors' computation

a. Dependent Variable: PID

CAPITAL EXPENDITURE BUDGET SIZE AND POWER...

Table 5:		Model Summary						
Model	R	R Square Adjusted R	Std. Error of	Durbin-				
		Square	the Estimate	Watson				
1	.025a	.001003	.76098	1.221				

a. Predictors: (Constant), X1

b. Dependent Variable: PID

Source: Authors' computation

SECONDARY DATA ANALYSIS

[DataSet1] C:\Users\KENNETH OPALA\Documents\Article - CEBS and PHCN KWh generated. sav

 Table 6: Paired Samples Statistics

		Mean	Ν	Std. Deviation	Std. Error Mean
Dain 1	A1	65.5090	10	32.46230	11.3253
Pair 1	B1	15.6580	10	1.80739	.54777

Table 7: Paired Samples Correlations

		Ν	Correlation	Sig.	
Pair 1	A1 & B1	10	.531	.192	

Table 8: Paired Samples Test

	Paired D	oifferences	5			t	df	Sig. (2-
	Mean	Std. Deviatio	Std. Error on Mean	95% Confic the Differer Lower	dence Interval nce Upper	of		tailed)
Pair 1 A1 - B1	45.75100	0 27.3077	5 9.45866	32.66755	87.03445	4.487	9	.000

** Correlation is significant at the 0.05 level (2-tailed). **Source:** Authors' computation, (SPSS –IBM 21)

T-TEST PAIRS=A1 WITH B1 (PAIRED) /CRITERIA=CI (.9500) /MISSING=ANALYSIS.

Secondary data on budgetary allocations to Power infrastructure and Electricity Production in billion kWh collected and used in testing hypothesis 1

Years	Federal	Power Sector	Power Sector	Total Federal	Power Sector
	Spending	total spend-	Capital Spend-	Capital Spend-	Spending as a %
	(=N=b)	ing (=N=b)	ing	ing	of Total Fed.
		C	(=N=b)	(=N=b)	Capital Budget
2001	851.75	80.41	78.40	496.36	15.79%
2002	840.85	69.96	63.44	486.71	13.04%
2003	765.13	46.68	40.59	382.35	10.62%
2004	918.30	58.94	54.62	349.87	15.61%
2005	1,617.63	93.29	91.11	617.28	14.76%
2006	1,876.30	75.85	73.51	539.23	13.63%
2007	2,266.39	104.65	100.78	781.53	12.90%
2008	2,492.08	139.78	114.38	673.16	16.99%
2009	2,870.51	93.44	88.47	796.74	11.10%
2010	4,608.62	194.52	189.78	1,853.91	10.24%
Total	19,107.60	957.52	895.08	6,977.14	100%

Table 9: Analysis of budgetary allocations to Power infrastructure (2001-2010)

Source: Amakon & Nwogwugu (2012).

Table 10: Electricity Production, Consumption and Loss in Nigeria 2001 to 2010 (billion kWh)

Year	Generation in billion	Consumption	Loss in billion	Consumption as % of Genera-
	kWh	in billion kWh	kWh	tion
2001	18.70	17.37	1.33	92.89%
2002	15.90	14.77	1.13	92.89%
2003	15.67	14.55	1.12	92.85%
2004	15.67	14.55	1.20	92.85%
2005	19.85	18.43	1.42	92.85%
2006	15.59	14.46	1.30	92.75%
2007	19.06	17.71	1.35	92.92%
2008	22.11	15.85	6.26	71.69%
2009	22.11	15.85	6.26	71.69%
2010	21.92	19.21	2.71	87.64%
Total	186.58	162.75	24.08	87.23%

Source: Ofoegbu & Emengini. (2013)

Index Mundi, http://www.indexmundi.com/g/.g.aspx?c=ni&v=79

Analysis of secondary data (Interpretation)

Secondary data for the period of ten (10) years of the study between 2001 and 2010 was collected to test the practical relationship between capital expenditure on power infrastructure and the level of electricity KWh in billion generated in Nigeria. The essence of this test is to support or refute the result of primary data collected from the field and analyzed concerning hypothesis 1 size of government capital expenditure and power infrastructure development in Nigeria. The size of capital expenditure budget is represented by capital expenditure on power while power infrastructure development represented electricity KWh in billion generated. Karl Pearson's Product-Moment Correlation Co-efficient (r) was employed to determine the level of correlation between two set of data using statistical package for social sciences (SPSS) IBM version 21. From Tables 6 to 8 show the analysis of the causal comparative relationship. It revealed that power capital expenditure have no statistically significant relationship with electricity KWh in billion generated at P < 0.192, r = 0.531. Both variables correlates positively as r = 0.531 but not significant at P = 0.192 at .05 level of significance which confirmed the report of the primary data analyzed. The analysis from descriptive statistics corroborated with the result of the analysis of data relating to the objective, question and the hypothesis stated above. Since the secondary data, suggests that capispending on power tal facilities (government spending) have no significant relationship with electricity KWh generated (power infrastructure development), the implication of the result is that budgetary activities positively correlated power production and should had no moderating influence on PID therefore, did not have sig-

nificant effect hence the capital spending could not translate into adequacy and reliability of electric power supply to Nigerians.

DISCUSSION, FINDINGS AND RECOMMENDATIONS

Wayne, Stephen, Andrea and Tomas (2010), conducted a research on operational budget size and allocation of resources. The objective of the paper is to determine how festivals allocated their funds among various expense categories. The data analyzed suggested that festival size plays an important role in such allocations. Basheka & Nabwire (2013) investigated budging and the quality of educational services in Uganda public universities. The Objective was to determine the relationship between universities' continuous inadequate government financing and the erosion of stakeholders' expectations and confidence which resulted in series of student unrest and staff strikes, poor quantity of educational services offered using Kyambogo University as a case study. Kwanashie (2013) advocated for greater capital spending by the Federal and State governments. He selectively used the earlier research findings to make case for greater public capital investment because it is believed that the size of public capital budget may have significant improvement on infrastructure development. Onakoya et. al. (2012) conducted a survey on the relationship between increase in capital expenditure size and economic growth. It was concluded that there is a mismatch between the performance of Nigeria's economy and massive increase in government capital expenditure over the years which raised a critical question on the role of capital expenditure size in promoting economic growth and development.

The study discovered that:

i. huge investment had been made by the government in power sector in

Nigeria;

- ii. the funds invested had not translated into power sector development in recent time;
- iii. the effect of lack of development in the power infrastructure has adverse effect on the entire economy and to a great extent has negatively affected the real sector revenue of the economy; and
- iv. this has also increased unemployment rate, poverty level and the associated social vises.

The study concluded that Capital Expenditure Budget Size (CEBS) did not influence power infrastructure development in Nigeria. The result of this study was in agreement with Khan & Hildreth (2002) and Onakoya, et. al. (2012). The negative relationship between CEBS and PID was perceived to be due to poor budget implementation policy, lack of budget execution experienced in Nigeria (Olomola, 2009), ineffective budgetary control, corruption in the system and poor fiscal accountability of fund (Appah & Onuorah, 2012). Finally, corruption in the system at all levels of governance may largely be responsible for the under development of power sector (Rose-Ackerman, 1999). The study then recommended that government should review its budget implementation policy to strengthen control parameters for effectiveness and put machineries in place to curb corruption in Nigeria power sector. However, the just concluded partial privatization of PHCN may bring about power infrastructure Improvement in Nigeria.

REFERENCES

Abu, N., & Abdullahi, U. 2010. Government expenditure and economic growth in Nigeria, 1970-

2008: A disaggregated analysis. *Business and Economic Journal*, 4, 1-11.

Adedokun, A .A 2004. The development of local government in Nigeria since precolonial era to 1999 constitution. *Polycom*, 2 (2), 2004.

Adeola, A. 2005. Analysis of the cost of infrastructure failures in the developing economy: the case of the electricity sector in Nigeria. Nairobi: African Economic Research Consortium. Retrieved May 22, 2014, from: www.dspace.cigilibrary.org/jspui/ bitstream/123456789/32040/1/RP148.pdf? 1

Aigbokhan, B. E. 1999. Evaluating investment on basic infrastructure in Nigeria. Central Bank of Nigeria, Kaduna. June 11-15:

Ajakaiye, O., & Akinbinu, B. 2000. Strategic issues in Nigeria development: A globalizing and liberalizing world. Nigeria Institute of Social and Economic Research (NISER), Ibadan

Amakon, U., & Nwogwugu, U. C. 2012. Financing energy development in Nigeria: Analysis of Impact on the Electricity Sector. *Australian Journal of Business and Management Research,2* (3), 54-61.

Appah, E., & Appiah, K.Z.A. 2010. Fraud and development of sound financial institutions in Nigeria. *Nigerian Journal for Development Research*, 1(1), 49 -56

Basheka, B.C., & Nabwire, A. 2013. Budget planning and the quality of educational services in Uganda public u n i versities: A case study of Kyambogo University, *Educational Research and Reviews*, 8(21), 2026 – 2035. DOI:10.5897/ERR09.195 Bhattacharya, D., Iqbal, M. A., & Khan, T. I. 2009. Delivering on budget FY 2009 -2010: A set of implementation issues. Centre for Policy Dialogue (CPD), Bangladesh. Retrieved from: http://www. bangladeshstudies.org/2009-plain.html

Easterly, W., & Rebelo, S. 1993. Fiscal policy and economic growth: An empirical investigation. *Journal of Monetary Economics*, 32, 417 - 458.

Hicks, L., & Curt, R 2003. The Social Impact of Military Growth in St. Mary's County, Maryland, 1940-1995. *Armed Forces* & Society, 29 (3), 353–371

Keller, C.M. 2009. Coping strategies of public universities during the economic recession of 2009: Results of a survey on the impact of the financial crisis on university campuses. Retrieved fromhttp://www.aplu.org/NetCommunity/Document.Doc?id = 1998

Kessides, C. 1993. The contribution of infrastructure to economic development: A review of experience and policy implication. World Bank Discussion Paper No 213, World Bank

Khan, A., & Hildreth, W. B. 2002. Budget theory in public sector: Quorum Booksaman. Retrieved on June 12, 2014 from: books.google.cm/...out/ Budget_Theory_in_the_Public...

Kwanashie, M. 2013. Capital budget and national development. A paper presented at 43rd Annual Accountants Conference of the Institute of Chartered Accountants of Nigeria, Abuja. Retrieved on 20th December, 2013 from: www.icanig.org/ documents/Prof- Kwanashie.pdf

Michas, N. A., 1975. Wagner's law of public expenditures: What is the appropriate? Measurement for a valid test? *Public Finance/Finances Publishers*, 30(1), 77-84

Niloy, B., Emranul. M. H. & Denise. R.O. 2003. Public expenditure and economic growth: A disaggregated analysis for developing countries. London: JEL Publication.

Nouri, H., Parker, R.J., 1998. The relationship between budget participation and job performance: The roles of budget adequacy and organizational commitment. *Accounting*, *Organisational and Society*, 23 (5/6), 467-483.

Odia, R. 2010. Manufacturers need 2,000MW of electricity to stay afloat, Paper delivered by chairman, Infrastructure Committee, Manufacturers Association of Nigeria, *Business Day Newspaper, 25th December.*

Ojo, E. O. 2012. Constraints on budgeting and development plan implementation in Nigeria: An overview. *European Journal of Sustainable Development*, 1(3), 445- 456

Olomola, **A. S. 2009**. Strategies and consequences of budgetary reforms in Nigeria. A Paper for resented at the 65th Annual Congress of the Institute of International Public Finance (IIPF), Cape Town, South Africa

Omeiza-Michael, S. 2009. Government's efforts at halting smuggling: Why they are ineffective. *Business Day, Newspaper*, p.14

Onakoya, A. B., Tella S. A., & Osoba, A. M. 2012. Investment in telecommunications infrastructure and Nigerian economic growth. *British Journal of Economics, Management & Trade, 2(4), 309-326*

Rose-Ackerman, S. 1999. Corruption and

J. Hum. Soc. Sci. Crtv. Arts 2013, 8: 39-52

government: causes, consequences, and reform. New York: Cambridge University Press Sen, A., & Dreze, J. 1995. India: Economic development and social opportunity. Oxford: Clarendon Press.

Serwach, J.J., Flood, M., Rechnitzer, S., & Stasinski, A. 2009 Budget crises and higher education: Can leadership make a difference? *The Journal of Higher Education*, 71 (4), 411- 431 **Taiwo, A. S., & Agbatogun, K. K. 2011.** Government expenditure in Nigeria: A sine qua non for economic growth and development. *Transcampus Journal*, 9(2), 155 – 162

Wayne W. S., Stephen W. L., Andrea C. S., & Tomas, R. 2010. Setting parameters: Operationalbudget size and allocation of resources. *International Journal of Event and Festival Management*, 1(3), 238 – 2

(Manuscript received: 23rd October, 2014; accepted: 25th February, 2015).