STRATEGIC IMPLICATIONS AND RISKS OF ABANDONED INFRASTRUCTURAL PROJECTS ON ECONOMIC DEVELOPMENT IN AKWA IBOM STATE, NIGERIA

Nnamseh, M. P. ✉

Department of Business Management,
University of Uyo, Akwa Ibom State, Nigeria
michaelnnamseh@uniuyo.edu.ng

Akpan, S. S.

Department of Insurance,
University of Uyo, Akwa Ibom State, Nigeria

Ebito, I. N.

Department of Business Management,
University of Uyo, Akwa Ibom State, Nigeria

Abstract

This study examined the implication and risk of abandoned government infrastructural projects (AGIP) on economic development of Akwa Ibom State (EDAKS) given the spate of abandoned infrastructure observed around the length and breadth of the State. A quantitative research method was employed and secondary data were collected and analyzed using an ordinary least square (OLS) statistical technique. Results show that abandoned Ibaka deep seaport (IDS) and Ibom science pack (ISP) have a significant negative effect on economic growth of the state while abandoned Ibom power plant (IPP) has no effect on the economic growth of the state. Result also shows that abandoned IDS and IPP have a significant negative effect on unemployment in the state while abandoned ISP has no effect on unemployment in state. Finally, the result reveals that ISP significantly affects population growth negatively while other abandoned projects do not. The study concluded that, abandonment of infrastructural projects

has detrimental effect on the economic development of the state. The study recommended among others that the State government should rekindled efforts towards the completion of these projects in order to realize the expected economic gains.

Keywords: Abandoned project, risks, project insurability, economic development, population growth, Gross domestic product, unemployment

INTRODUCTION

Contemporary business and science treat as a project any undertaking, carried out individually or collaboratively and possibly involving research or design, that is carefully planned (usually by a project team) to achieve a particular aim. Matthew and Adams (2016) refer to a project as a piece of planned work or activity that is completed overtime and intended to achieve a particular objective. The frequency and recklessness at which government infrastructural projects are abandoned in Nigeria are becoming too worrisome to be neglected; as it constitute serious risks with multiplier and severe consequences on economic growth and development of any Nigeria. Abandoned projects seem to be more prevalent in Akwa Ibom State, Nigeria than in other parts of the country. Completed or functional projects are meant to enhance the quality of lives of a nations' citizenry by way of job creation, social amenities, poverty reduction and human capital development (Demain & Katz, 2014).

However, the menace of abandoned projects are not only limited to States in Nigeria but seems to wear a global picture with even the super power nations like USA and Germany being victims (Hicks, 2008; Speigel, 2009; Green & Dophin, 2012). Other nations where uncompleted projects are equally noticeable include Malaysia, Saudi Arabia and all African countries (Carrero, Malverez, Navas &Tejeda, 2009). Since a project is a sequence of task, regulated by time and resources to meet its results, its management will require effective monitoring and evaluation from start to finish if its intended objectives must be accomplished. A project is considered abandoned when there is a deliberate or an unconscious discontinuation of any activities or suspension of the work progress most especially at the execution stage, such as refusal or failure to complete a project at the required timeframe.

In Nigeria, the provision of or investment in infrastructural projects such as roads, bridges, hospitals, construction of dams, drainages, electricity, water, telecommunication, railways, airports etc are considered largely a responsibility of government. These lofty projects when conceived, developed and completed are meant to boost economic activities and give a robust standard of living to the citizenry; but sadly, its unabated abandonment littering all the nooks and crannies of Nigeria has drastically undermined the expected dividend of such

investment. Perhaps, this may be the reason why Osemenam (1987) observed that Nigeria has been the worlds' "junk yard" of abandoned projects worth billions of naira, while the nation is blessed with abundant mineral and human resources. Kotangora (1993) collaborating this position reported that about 400 uncompleted or abandoned projects belong to the Federal Government of Nigeria (FGN) with an estimated worth of over N300 billion, a development that has a negative multiplier effect on the national economy.

The immediate and remote causes of project abandonment are not very peculiar to Akwa Ibom State, Nigeria but the factors seem to have a global coloration as reported by Ayodele and Alabi (2011). They include contractors' incompetency, lack of understanding of risk and liability assessment, lack of end users' needs and the users' imposed restrictions on the project development. Olusegun and Michael (2011) mentioned faulty project designs, inadequate funding/inflation, delayed payment, death of contractor, variation in project scope and politicization as contributing factors.

Economic development which is a measure of growth in the standard of living of a people of a given nation is in normal circumstances driven by the level of functional infrastructure. But this do not seems to be the case in Akwa Ibom State as supposedly viable projects are left uncompleted and abandoned for years by successive governments. Given this pitiable scenario, the study selected critical or major multi-billion naira infrastructural/industrial projects, namely, Ibom Sciences Park (ISP), Ibaka Deep Seaport (IDS) and Ibom Power Plant (IPP) which have been abandoned in Akwa Ibom State for investigation.

Therefore, the study purpose is to investigate and examine the strategic implications of abandoned government infrastructural projects on economic development of Akwa Ibom State. Specific objectives of the paper are to:

i.   Investigate and determine the effect of abandoned Ibom Science Park (ISP), Ibaka Deep Seaport (IDS) and Ibom Power Plant (IPP) on Gross Domestic Products (GDP) in Akwa Ibom State

ii.   Examine and determine the effect of abandoned Ibom Science Park (ISP), Ibaka Deep Seaport (IDS) and Ibom Power Plant (IPP) on unemployment in Akwa Ibom State.

iii.   Assess the effect of abandoned Ibom Science Park (ISP), Ibaka Deep Seaport (IDS) and Ibom Power Plan (IPP) on the population of Akwa Ibom State.

GOVERNMENT ABANDONED INFRASTRUCTURAL PROJECT AND THE ECONOMY

Conceptual issues

Government developmental projects or infrastructure are conceived with the intention to improve and sustainably enhance better life in any economy. But unfortunately, these lofty

projects are abandoned without completion for years. Huges (1986) is of the views that improper understanding and utilization of the core project managerial skill such as wrong reward system and the communication of the project goals could be a frustrating factor. Other scholars (Albinu & Jagboro, 2002; Chan, Scott & Lam, 2002, and Akindoyemi, 1989) suggested lack of project team promise; incompetence of the contractors, project politicization and poor funding. It is believed that all infrastructural projects are not in the same classification in terms of cost, design, location, climatic condition, materials required and duration; therefore certain inherent impediments in some projects may lead to its unplanned suspension or incompletion within the specified timeframe.

The above argument is however not sustainable as Ayodele and Alabi (2011), Efenudu (2010), and Aluko (2008) maintained that inconsistency in government policies, persistent community eruption and interference; inappropriate allocation of project funds and lack of proper development timing are the bane of most projects abandonment. A very recent thinking on the causes of project abandonment stressed vehemently on corruption, lack of continuity of government policy and programmes and poor formulation and implementation of policies by successive administrations (Pius, 2017; Moses, 2016; Ekong, 2016). Therefore, a national policy that will support and criminalize abandonment of projects by successive government is advocated. All these factors constitute imperative effect of causing the projects to be abandoned, hence denying the nation of the expected benefits.

As earlier explained, project abandonment refers to a condition of discontinuing tangible activities towards the completion of a project within a specified period. In the event of abandonment of any project, all the social, environmental and economic gains that are expected to be derived from it are forfeited. Since project infrastructure affects all category of persons, scholars from various fields bared their minds on its effects to the economy. Efenudu (2010) observed that project abandonment is a loss on community and neighbourhood aesthetics value which the expected project ought to provide the built environment. Ayodele and Alabi (2011) and Bishop (2016) looked at it in terms of loss of tax revenue to the government. Mercantile (2017) opined that projects abandonment increase the rate of unemployment and crime in the nation.

A discontinued project triggers unplanned workforce retrenchment and propel the victims to take to crime in the absence of a means of livelihood. Commenting on his take on effect of project abandonment, Adeleke (2005) reported that it may result in the lowering of the standard of living of the citizen. People who hitherto earned quality life may be reduced to live below abject poverty line. Apart from the immediate benefits and pleasure denied as infrastructural projects are uncompleted; another angle looks at the escalation in the cost

components by the time the project is reactivated for completion. This may cover payment for idle and unproductive time, arising from contractor's claims, costs of re-mobilization and prices of input materials.

Researchers are also seeing the negative effect of abandoning projects in terms of constituting eyesores within vicinity that should wear attractive and pleasant look. Nations littered with abandoned projects clearly suggest the level of sanitation and poor quality of living of the people. It is against this backdrop that government should always be determined to complete all infrastructural facilities to promote economic wellbeing of the people

Theoretical issues

Many theories have emerged to demonstrate or highlight the essence of investment in infrastructural projects, especially when such projects are intended to meet the crucial needs of the society. The most prominent and relevant theories to this study are the modernization theory of development (MTD) and economic development theory (EDT). Modernization theory essentially concerned with the transformation of older societies to modern societies driven by functional infrastructure that will support economic development of a nation. The theory anchors on the predictability of action and the ability to exercise firm control and monitoring of infrastructural projects to avoid abandonment. A traditional society does not possess the inherent propensity to influence economic growth (Peter, 2014). Modernization theory looks at the continuous calculability and readiness towards projects completion that will rise the standard of living of the people, attract investors and generate employment opportunities in a nation. Modernization theory divides economic growth into five categories, namely, traditional society, transitional or preconditions for takeoff, takeoff, drive to maturity and high mass consumption (Divineson & Philip, 2011).

In traditional society, technology is limited and resource allocation is determined by traditional methods of production and the economy is largely subsistence. At the transitional stage, there is emergence of infrastructure which supports economic transactions. The take-off stage gives way to industrialization with workers being more inclined to manufacturing sector as a consequence of availability of infrastructural facilities. Graduating to the maturity stage, the economy is diversified into new areas due to the provision of modern infrastructural projects which open the windows for diverse investment opportunities. The stage of high mass consumption, signaled the period of unprecedented high rate of business activities and technology occasioned by availability of basic infrastructural facilities. This period witnessed high consumption backed with effective demand. The circle

is completed with the emergence of multinationals presence increase in peoples' income which transcends into basic food, shelter, clothing, and enhanced social welfare. This theory therefore bring to the front-burner the essence for which it is important for policy makers to articulate proper planning and monitoring to facilitate the completion of infrastructural projects for a modern society.

The economic development theory as propounded by Malthus (1936) principally deals with the progress of wealth of a nation (Nax, Abel & Edey, 2014). The theory argues that a significant growth in an economy can be achieved through the provision of adequate infrastructural facilities such as electricity, good roads, telecommunication, transportation etc. Complimenting Malthus postulation, Makins and Piobien (2012) hold the view that the size of a nations' GNP is a function of land, labour, capital, technology, infrastructural facilities which when combined in the right mix stimulate growth in the agricultural and industrial sectors. In a broader perspective, this theory argues for effective project analysis, proper appropriation of funds, use of skilled consultants and adequate monitoring of government infrastructural projects to prevent the unpleasant consequences of abandoning projects (Mevvis, 2014). Drawing from the contention of these se theories, it is therefore imperative to look at the conceptual investigation of the causes of development projects abandonment in Nigeria in the proceeding subsection.

Empirical issues

Several studies have been carried out on infrastructural facilities as key drivers to economic development (Ajah, 2016). In some studies, it is established that functional infrastructures enhances economic growth and improve standard of living of citizens. In a study by Akinyele and Ajagunna (2016) on infrastructural development as a predictor of small and medium enterprises' performance in Nigeria, it was found that there is a significant positive correlation between infrastructures and small and medium enterprises (SMEs) growth and entrepreneurial development. A study by Olufemi (2015) on the effect of electricity consumption on industrial growth and employment generation in Nigeria; findings has it that there exist a significant positive relationship between industrial growth and electricity consumption, employment generation and increase in GDP.

A similar research conducted by Eze, Edem and Akang (2015) on the effect of delayed airport project completion on transnational economic activities in Nigeria shows a strong positive correlation exist between a functional airport and transnational business activities in Nigeria. An empirical investigation was also carried out in Nigeria between the relationship of importance of road infrastructure and economic development (Ivanova & Masarova, 2013). The correlation

analysis shows that a strong dependence exists between the expenditures on road infrastructure and a growth on economic development. Equally, a study in Tunisia by Tahar and Mohammed (2016) on the impact of seaport investment on economic growth revealed that public investment in seaport infrastructure has a positive influence on Tunisian economic growth. The study further revealed that seaport investment serves more of the services and manufacturing sectors than the agricultural sector, which has not benefitted from this expenditure.

Other studies have also been carried out in other parts of the globe where little or no correlation was found between infrastructure and economic development. In a study conducted in Thailand on the effect of decoration of public buildings and economic growth; the conclusion of the research shows a very insignificant relationship between expenditure on external decoration of public buildings and economic growth.

METHODOLOGY

Research design and data set

The design adopted in this study is an explanatory non-experimental design which approach is quantitative. The research approach that goes with this design and is used in this study is quantitative approach. The design and approach used enables the researcher to identify the underpinning factors that cause changes in the dependent variable without necessarily involving any purposeful manipulation of the independents variables in the model. The design and approach used depends on secondary data, which is captured from different sources including but not limited to Akwa Ibom State Budget, past empirical studies, Federal Office of Statistics (FOS), National Bureau of Statistics (NBS) and other electronic database sources. The data were in the form of time series as they were collected from each project every year as well as economic development indices of the State over a period of seventeen (17) years beginning from 2000 to 2017.

Variable and operationalization

This study involves two (2) categories of variables namely abandoned government infrastructural projects and economic development. In this study, it is assumed that abandoned government infrastructural project represented by the value of each of the three of such projects will affect economic development of the state.

Each category of the variables, their operationalization and a priori expectations are presented in Table 1.

Table 1 Variables of study and expected signs

Variables	Label	Description	Expected Signs		
			GDPGS	**UE**	**POPG**
Dependent variables:					
Gross domestic product	GDPGS	Government expenditure	**+/-**	**+/-**	**+/-**
Unemployment	UE	Number of active but jobless population	**+/-**	**+/-**	**+/-**
Population growth	POPG	Number of increase in population yearly	**+/-**	**+/-**	**+/-**
Independent variables:					
Ibom Science Park	ISP	Yearly cost of the project as budgeted	-	+	-
Ibaka Deep-sea Port	IDP	Yearly cost of the project as budgeted	-	+	-
Ibom Power Plant	IPP	Yearly cost of the project as budgeted	-	+	-

Model Specification and Data analysis

In this study, both descriptive and inferential statistics are employed in analyzing the data collected. The descriptive statics include mean, median, standard deviation, maximum, minimum, bivariate correlation among other while the inferential statistic is OLS - multiple regression analysis. Correspondingly, the model for this study was derived from the modernization theory of development (MTD) and economic development theory (EDT) which emphasized growth through the continuous calculability and readiness towards projects completion and the provision of adequate infrastructural facilities and is thus, consistent with the study. The baseline model used takes the form specified below:

$$Y_t = \alpha_o + \sum_{n=1}^{n} \beta_t X + \varepsilon_t \dots \dots \dots \dots \dots \dots \dots \dots \dots \dots \dots . eqn. 3.1$$

Where: $Y_t =$ measure of various dependent variables (GDPGS, UE, and POPG); $X =$ independent variables (ISP, IDP and IPP); α = a constant, or intercept; $n - 1 = number$ of independent variables numbered *1 to n,* β = coefficient of various independent or explanatory variables; $t =$ time covered (2001 to 2017); ε = error term

The above model is used to test for the direct effect of abandoned government infrastructural projects (AGIP) on economic development of Akwa Ibom State (EDAKS). These models are specified in line with the objectives of the study as follows:

$$EDAKS = f(AGIP) \qquad\qquad Model\ 1$$

$$GDPGS = \alpha_0 + \beta_1 ISP_t + \beta_2 IDP_t + \beta_3 IPP_t + \varepsilon_t \qquad Model\ 1a$$

$$UE \quad = \alpha_0 + \beta_1 ISP_t + \beta_2 IDP_t + \beta_3 IPP_t + \varepsilon_t \qquad Model\ 1b$$

$$POPG = \alpha_0 + \beta_1 ISP_t + \beta_2 IDP_t + \beta_3 IPP_t + \varepsilon_t \qquad Model\ 1c$$

All variables are as defined earlier. Model 1a is used in testing hypothesis 1 in order to achieve objective number. Model 1b is used in testing hypothesis 2 so as to achieve the second objective. And finally, Model 1c is used in the test of hypothesis 3 to achieve the third objective of the study.

RESULTS AND DISCUSSION

Descriptive statistics

The descriptive statistics of this study is presented in Table 2. It shows the mean, standard deviation, minimum and maximum of all variables of the study. For purpose of simplicity and specificity, discussions on these statistics are done on all key variables.

Table 2 Descriptive statistics of variables

	GDPGS	POPG	UE	IDS	IPP	ISP
Mean	4.19	144288.8	1074786.	2.35	3.49	1.14
Median	4.26	119717.8	1119072.	1.78	1.08	5.00
Maximum	8.72	447050.9	2074767.	1.20	2.50	5.00
Minimum	1.19	105259.7	422248.2	0.00	0.00	57750000
Std. Dev.	1.70	81017.61	535586.1	3.17	6.64	1.47
Skewness	0.67	3.335556	0.253566	1.84	2.37	1.58
Kurtosis	4.43	12.97390	1.704040	6.05	7.78	4.30
Jarque-Bera	2.71	101.99	1.371825	16.19	32.02	8.25
Probability	0.26	0.00	0.503630	0.00	0.00	0.02
Sum	7.12	2452909.	18271359	3.99	5.93	1.93
Sum Sq. Dev.	4.61	1.05	4.59	1.61	7.06	3.45
Observations	17	17	17	17	17	17

As presented below, on average, gross domestic product (GDP), population growth (POPG), and unemployment (UE) as dependent variables showed a reasonable volume of 4.19 billion, 144,288 thousand and 1,074,786 million with standard deviation of 1.70, 81017.61 and 535,586.1 respectively. This indicates that among all variables POPG and UE exhibited high level of variance indicating high changes in their trend. GDP showed some level of stable

steady-state growth trend over the period. On the other hand, IDS, IPP and ISP had reasonable volume of billion of naira in the region of 2.35, 3.49 and 1.14 with standard error of 3.17, 6.64 and 1.47 respectively.

Correlation statistics

Table 3 presents the result of this statistics. From the result above, correlations among explanatory variables do not reach the threshold, as they are all less than 80%. It can be said that the variables used in this study are not significantly correlated Directionally, while some explanatory variables show a negative relationship with the responsive variables other showed positive relationship. All of these reveal that the variables used in this study are not substitute to the other and can well establish or register their respective effects in the model as would be tested later in this study

Table 3 correlation statistics of variables

	GDPGS	POPG	UE	IDS	IPP	ISP
GDPGS	1.000					
POPG	0.032	1.000				
UE	-0.190	0.523	1.000			
IDS	-0.261	-0.018	0.334	1.000		
IPP	0.229	-0.093	-0.126	0.192	1.000	
ISP	-0.694	-0.255	-0.273	0.213	-0.024	1.000

Regression results

Abandoned projects and state's economic growth

The first regression result for the first hypothesis is presented in Table 4. From the regression result above, average GDPGS for the period reviewed was N13.454 million. However, The result indicates that one Naira increase in the cost of Ibom Science park (ISP) led to about -21.3% reduction in GDPGS; A naira increase in the cost of Ibaka deep sea port (IDS) led to about -0.5% reduction in GDPGS; while a naira increase in the cost of Ibom power plant (IPP) led to about 0.4% increase in GDPGS. As the prob. F-statistic value of 0.0373 < 0.05, the researcher do not reject the hypothesis that: "There is a significant relationship between gross domestic product (GDP) and abandoned Ibom science park (ISP), abandoned Ibaka deep seaport (IDS) and abandoned Ibom power plant (IPP) in the State.

The t-test result of the statistical significance of the independent variables and their respective probabilities, showed that of the ISP (t: -2.404, p: 0.031), IDS (t: -0.386, p: 0.706) and

IPP (t: 0.436, p: 0.670) only ISP was statistically significant in the model while IDS and IPP are not. This means that costs of ISP significantly influence gross domestic product of the State negatively. The economic implication of this is that more expenses on ISP led to a huge decline in GDP. The R^2 value of .4667% shows that the regression model has a good fit, though not remarkable since the remaining 53.33% may be explained by variables not included in this model.

Table 4 Regression results on GDPGS and ISP, IDS, & IPP

(Eviews output - testing of hypothesis I)

Dependent Variable: LNGDPGS

Method: Least Squares

Date: 11/07/18   Time: 05:50

Sample: 2001 2017

Included observations: 17

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LNISP	-0.213268	0.088700	-2.404387	0.0318
LNIDS	-0.004916	0.012740	-0.385881	0.7058
LNIPP	0.004479	0.010263	0.436405	0.6697
C	13.45446	0.751148	17.91186	0.0000
R-squared	0.466721	Mean dependent var		11.58410
Adjusted R-squared	0.343657	S.D. dependent var		0.200195
S.E. of regression	0.162188	Akaike info criterion		-0.597796
Sum squared resid	0.341964	Schwarz criterion		-0.401746
Log likelihood	9.081270	Hannan-Quinn criter.		-0.578309
F-statistic	3.792495	Durbin-Watson stat		2.021725
Prob(F-statistic)	0.037376			

Abandoned projects and state's unemployment

The result for the second thrust of this study is presented in Table 5. The result show that unemployment for the period covered was 7.94% of the population. Further, a naira increase in the cost of Ibom Science park (ISP) led to about -25.5% reduction in unemployment; A naira increase in the cost of Ibaka deep sea port (IDS) led to about 4.2% increase in unemployment; while a naira increase in the cost of Ibom power plant (IPP) reduced unemployment by about 0.5%. Additionally, the F-statistic value of 0.030, which is < 0.05 means that the researcher do not reject the hypothesis that: "There is a significant relationship between unemployment and abandoned Ibom science park (ISP), abandoned Ibaka deep seaport (IDS) and abandoned

Ibom power plant (IPP) in Akwa Ibom State". The t-test and the corresponding p. values are showed to be: -2.504 (0.0264) for ISP; 2.903 (0.0123) for IDS and -0.431 (0.673) for IPP.

This result reveals that of all the variables, only ISP and IDS are statistically significant in the model while IPP is not. This means that the costs of ISP and IDS significantly influenced unemployment in the state. However, while ISP relates negatively, IDS related positively with unemployment in the state while IPP is has insignificant relationship with unemployment in the state. The economic implication of this is that while more expenses on ISP reduced unemployment that of IDS increase unemployment. With R^2 value of .4856, the model is said to have less goodness of fit and thus said to lack remarkable predictive power as it only explains 48.56% of the variations in unemployment while the remaining 51.44% of the variations may be explained by other variables not included in the model.

Table 5 Regression results of on UEM and ISP, IDS, & IPP

(Eviews output - testing of hypothesis II)

Dependent Variable: LNUEM

Method: Least Squares

Date: 11/07/18   Time: 05:48

Sample: 2001 2017

Included observations: 17

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LNISP	-0.254937	0.101828	-2.503602	0.0264
LNIDS	0.042464	0.014625	2.903456	0.0123
LNIPP	-0.005081	0.011782	-0.431251	0.6734
C	7.946768	0.862328	9.215482	0.0000
R-squared	0.485569	Mean dependent var		5.974936
Adjusted R-squared	0.366855	S.D. dependent var		0.233999
S.E. of regression	0.186194	Akaike info criterion		-0.321731
Sum squared resid	0.450687	Schwarz criterion		-0.125681
Log likelihood	6.734714	Hannan-Quinn criter.		-0.302243
F-statistic	4.090220	Durbin-Watson stat		1.712601
Prob(F-statistic)	0.030033			

Abandoned projects and state's population growth

The result for the third and last thrust of this study is presented in table 6. The regression result below shows that within the period under review, average population growth was by about

6.72%. A naira increase in cost of abandoned Ibom Science Park (ISP) reduced population by about -0.26%, and that reduction is significant. A naira increase in the cost of abandoned Ibaka deep seaport (IDS) increased population by about 0.02%, and that increase is not significant while a naira increase in the cost of abandoned Ibom power plant (IPP) increased population by about 0.004%, and that increase is not also significant.

Table 6 Regression results of on LNPOG and ISP, IDS, & IPP
(Eviews output - testing of hypothesis III)

Dependent Variable: LNPOG
Method: Least Squares
Date: 11/07/18   Time: 05:46
Sample: 2001 2017
Included observations: 17

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LNISP	-0.195949	0.061602	-3.180905	0.0072
LNIDS	0.015347	0.008848	1.734553	0.1065
LNIPP	0.003908	0.007128	0.548294	0.5928
C	6.715002	0.521670	12.87211	0.0000
R-squared	0.545930	Mean dependent var		5.125459
Adjusted R-squared	0.441145	S.D. dependent var		0.150675
S.E. of regression	0.112639	Akaike info criterion		-1.326930
Sum squared resid	0.164939	Schwarz criterion		-1.130880
Log likelihood	15.27891	Hannan-Quinn criter.		-1.307442
F-statistic	5.209985	Durbin-Watson stat		1.661331
Prob(F-statistic)	0.013966			

Nevertheless, with the f-test statistics value of 5.210 (p = 0.0140) which is less 0.05 the researcher failed to reject the hypothesis that: There is a significant relationship between population growth and abandoned Ibom science park (ISP), abandoned Ibaka deep seaport (IDS) and abandoned Ibom power plant (IPP) in Akwa Ibom State. The t-test statistics for ISP, IDS and IPP are -3.181 (0.007), 1.735 (0.107), and 0.548 (0.593) respectively. And only ISP is statistically significant but negative in the model while IDS and IPP are not. In other words, ISP exerts a significant negative effect on population growth. This means increase in ISP significantly reduced POPG.

Discussions of empirical results

Results of the study first showed that of all the abandoned government projects, Ibom Science Park had a significant negative effect while other projects considered in this study have no significant effect on the gross domestic product of the state. This means that as this project is abandoned, the gross domestic product of this state is reduced. This finding is supported by past empirical studies conducted by Ayodele and Alabi (2011), Ubani and Onomyu (2013) and Ologundudi (2014) among others. For instance, Ayodele and Alabi (2011) found that, infrastructural projects provide new products and services that will improve standard of living and at the same time promote the beauty of the build environment. Similarly, Ubani and Onomyu (2013) opinioned that the completion of abandoned infrastructural projects in a country enhances reduction in waste of fund, human and material as well as enhanced physical and socio-economic development of the country amongst others. This implies that completing government infrastructural projects can expand the economy and foster rapid economic growth. All things being equal, abandoned government infrastructural project would have negative effect on the economy, and this finding is evidential.

For the unemployment, results show that abandoned Ibaka Deep Seaport (IDS) and Ibom Science Park (ISP) have a significant effect on unemployment in the state. Whereas, IDS had positive, ISP had negative effect on unemployment in the state. This means that the abandoned IDS increases unemployment while abandoned ISP reduces unemployment in the state. This could be attributed to the location and cosmopolitism of the area that these projects are cited. For example, ISP is located in an urban area where there are other alternative means of meaningful engagement other than being employed to work in the project site: individuals and corporate bodies are embarking on projects of different nature and there is also many close locations where several other projects are undertaken (possibly not by government) or by government but a different project that provide alternative avenues for employment. The negative finding found in this study is supported by past empirical finding by Anuobi (1997), who maintained that the excessive prevalence of abandoned projects due to political instability in the country has contributed to the woes of the economy. Also, this finding is supported by that of is Ivanova and Masarova (2013).

Finally, results show that of all the abandoned government projects, Ibom Science Park had a significant negative effect while other have no significant effect on population growth in the state. This means that as this project is abandoned, the population of this state reduced. Although there is no direct reference, rather an inference could be made from the statement by Ivanova and Masarova (2013) who explained that there is some sort of association between infrastructure and peoples' standard of living in a state. What can be inferred from this is that

when a project is abandoned, the standard of people in that vicinity will reduce and this will lead to death and migration. When these happen, the population will also reduce as found in this study.

CONCLUSIONS AND RECOMMENDATIONS

Infrastructural projects are those indisputable tools that drive economic development of any state. This study established a link between abandoned infrastructural projects and each of GDP, unemployment and poverty rate in Akwa Ibom State. From the result and discussion in this study, it is concluded that abandonment of infrastructural projects has detrimental effect on GDP unemployment and poverty in the state. Therefore, it is recommended that government should among others avoid or reduce the spate of project abandonment in the state in order to achieve the desired level of economic growth. Specifically, the following are recommended:

i.   Government of Akwa Ibom State should ensure the process of selection of all parties involved in the execution of infrastructural projects are characterized by accountability, transparency, honesty and integrity.

ii.   Government of Akwa Ibom State should minimize delay in the release of fund for the completion of infrastructural projects to avoid the abandonment.

iii.   Government of Akwa Ibom State should conduct adequate feasibility study and make adequate plans for the project at starting to finishing point and ensure sufficient funding are available as provided for in the budget.

Iv   Provision of infrastructures should not be politicised as it may lead to abandoning the project at the detriment of the people.

For purposes of ensuring that there are sufficient literature in the area of project management to guide policy makers in fostering economic growth, more research are needed in this area to complement the findings of this study. In brief, the scope for future studies should involve more projects, extended time frame, more sample size, project success drivers amongst others. For instance, the present study covers only three (3) projects that are classified as abandoned project in Akwa Ibom State. Future studies should consider the integration of more abandoned projects. Again, the period covered in the present study is 17 years spanning from 2000 to 2017. However, between 2017 and 2020, there have been serious catastrophic events and global pandemic which has led to shortfalls in government revenue and subsequent spending. Future research in this area should extend the period to 2020 in order to take into consideration the effect of the shocks in the global economy on the link between infrastructural project abandonments and economic development at State, National and possibly international research space. Inadvertently, the sample size in future studies should be increased. Future

studies could consider project insurability conundrum in relation to project success trajectories in States and nations suffering from the menace of abandoned project and how the attendant risks could be mitigated.

REFERENCES

Adeleke S.A. 2005. Abandonment of federal government low-cost housing estate. An unpublished HND project submitted to Department of Building Technology, Federal Polytechnic, Offa.

Aibinu, A. A., Jagboro, G. O. 2002. The Effects of Construction Delays on Project Delivery in Nigeria Construction Industry; *International Journal of Project Management,* 20, 593-599

Akindoyemi, A. 1989. The Management of Abandoned Project, Journal *of Nigerian Institute of Building,* 1(2), 27

Akinyele, S. T., Akinyele, F. E., Ajagunna, O. D. 2016. Infrastructure development as predictor to small and medium enterprises performance in Nigeria. *Kuwait chapter of Arabian Journal of Business Management review, 6* (3), 41-53.

Aluko, O. O. 2006. Physical planning and community participation in design: A panacea to health environment in Nigeria *The Nigeria Academic Forum,11* (2), 76-77.

Anuuobi, A. I. 1997. Construction in the context of the national economy. *Aarches Journal,* 1 (4) 4-6.

Ayodele, E. O., Alibi, O. M. 2011. Abandonment of construction projects in Nigeria: Causes and effects. *Journal of Emerging Trends in Economics and Management Sciences (JETEMS), 2*(2): 142-145.

Carrero, R., Malvárez, G., Navas, F., Tejada, M. 2009. Negative impacts of abandoned urbanisation projects in the Spanish coast and its regulation in the Law. *Journal of Coastal Research*, 1120-1124.

Chan, A.P.C., Scott, D., Lam, E.W.M. 2002. Framework of Success Criteria for Design/Build Projects. *Journal of Management in Engineering, 18* (3), 122-8.

Efenudu, F. O. 2010. *Causes and Effect of Abandonment of Project on Property Value; A Case of Port Harcourt;* Unpublished First Degree Dissertation, Department of Estate Management, Faculty of Environmental Sciences, Rivers State University of Science and Technology, Nigeria

Hicks, M. 2008. Project Abandonment: Separate Legal Concept. *An article placed on internet under Google search on project abandonment*.

Hughes, M.W. 1986. Why projects fail: The effects of ignoring the obvious" IndEng, 18, 14-18.

Ivanava, E., Masarova, J. 2013. Importance of road infrastructure in the economic development and competitiveness. *Journal of Economic and Management, 18* (3), 263-274.

Kotangora, O. O. 1993. Project Abandonment, *Nigerian Tribune*

Malthus, T. R. 1936. Principle of economy: History of political economy though and methodology. University of Cambridge press.

Ologundudu, M. M. 2014. The epileptic nature of electricity supply and its consequences on industrial and economic performance in Nigeria. *Global Journal of Research in Engineering: General Engineering, 14*(4): 26-41.

Olufemi, O. J. 2015. The effects of electricity consumption on industrial growth in Nigeria. *Journal of Economic and Sustainable development, 6 (*3), 54-60.

Olusegun A.E, Michael A.O. 2011. Abandoned of construction project in Nigeria: Causes and effects. *Journal of Emerging Trends in Economics and Management Sciences (JETEMS), 2, (*2), 142-145.

Osemenan, I. 1987. Project Abandonment. *New Watch Magazine*, 1(15).

Tahar, M., Mohamed, A. 2016. Impacts of seaport investment on the economic growth. *International Journal of Management Research and Development, 4(*4), 25-33.

Ubani, E. C., Ononuju, C. N. 2013. A study of failure and abandonment of public sector-driven civil engineering projects in Nigeria: An empirical review. *American Journal of Scientific and Industrial Research, 4*(1), 75-82.

Umeh, U. F. 2009. *The Role of small and medium enterprises in the Nigerian economy*. Enugu: University Press.