

Government's Commitment to Capacity Building: A Sine Qua Non For Improved Economic Performance of Nigeria

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Abstract

This study evaluated the nexus between capacity building and economic performance of Nigeria. It examined the interplay between government's commitment to human and community capacity building and the nation's gross domestic product growth rate. Data were sourced from the Central Bank of Nigeria Statistic Bulletin, World Bank reports and Global Data Lab for periods of 1991-2017. Data collected were committed to stationarity test using the Augmented Dickey Fuller and subsequently subjected to Johansen co-integration analysis. The Vector Error Correction Mechanism was employed in establishing significance among the variables. Results revealed that government capital expenditure on economic services has a short-run significant positive effect on real gross domestic product growth rate; a short-run negative but insignificant relationship exists between government capital expenditure on social community services and gross domestic product growth rate; human development index has short-run significant positive relationship with gross domestic product growth rate; and capacity building proxies jointly exert significant effect on real gross domestic product growth rate at both short-run and long-run. It was thus recommended (among others) that governments at all level in Nigeria should give priority to capacity building in terms of human and physical infrastructural development.

Keywords: Capacity building, Government Capital Expenditure, Economic Performance, Real Gross Domestic Product, Human Development Index

INTRODUCTION

The apparent prevalence of poverty in Nigeria today as evidenced by the poor standard of living of the citizens and the nation's pitiable position in the global poverty rating as a country with extreme poverty population of about 86.9 million people; with a disturbing increasing rate of unemployment from 12.31 percent in 2006 to 23.10 percent in 2018 call for concern to any well meaning Nigerian and her well-wishers. Despite the current administration's overblown commitment to the fight against corruption, the Nigerian nation seem not to have fared better; rather, indications abound that the nation's economic performance is in total shamble comparatively with most other nations of the world.

Incidentally, Nigeria is one of the top economies of the world endowed with abundant resources in terms of human and natural resources, which if properly harnessed, have the capacity of placing the country among the first five (5) top economies of the world in terms of development and general economic performance. Thus, it has been severally affirmed that the problem of the country is not necessarily availability of resources; rather, the capacity to harness the abundant resources at her disposal and translate

them into national economic emancipation (Adelakun, 2011). The capacity (in terms of human, structural and material elements) needed to drive a virile economy seems to be wanting. Hence, Ogunleye, Owolabi, Sanyaolu and Lawal (2017) assert that Nigeria as one of Africa's biggest economies has been faced with the problem of human and structural capital development over the years.

Capacity building, according to Osioma (2016), is a process through which people, organisations and society strengthen their knowledge, abilities, skills and behaviour and improve institutional structures and processes such that they can efficiently meet their mission and goals in a sustainable way. This clearly indicates that capacity building has to do with strengthening of knowledge, skills and behaviour of human elements and the structures/processes of a given society (community). Thus, capacity building from the national economy's point of view pertains generally to human capital empowerment and structural/systemic (community infrastructural) development. In this study therefore, capacity building is viewed from the point of view of the rate of human capital development and

community (infrastructural) development in Nigeria. Human capacity building (HCB) according to Kalejaiye and Solaja (2014) is a development paradigm that is of more significance than the rise or fall of national incomes; it is about creating an environment in which people can develop their full potential and lead productive and creative lives in accord with their needs and interests. This entails improvements on such activities that would warrant capacity empowerment of individuals such as improvement in expenditures on education, healthcare and other capacity development of the citizens. These will collectively manifest in the human development rating of the society; hence, the use of human development index to measure human capacity building in this study.

Community/infrastructural development (capacity building) on its part is the improvement in the commitment of the government towards enhancing the provision of well functional physical infrastructural facilities in the community (society or county) which are considered as fundamental structures required for a performing and virile economy; including investment on roads, water supply, sewers, electrical grids, telecommunications, renewable energy, and so on (Amaefule & Umeaka, 2016). Thus, in this study community capacity building (CCB) is measured with public capital investment otherwise referred to as government capital expenditure.

Economic performance on the other hand is used to depict the economic status of Nigeria; that is, the nation's economic disposition with reference to some key macroeconomic indicators (Amaefule, 2018). Osisioma (2016) asserts that the most common of these indicators, often called the fundamentals of an economy, enable us to keep a pulse on the economy and to monitor its vital signs for survival, growth and development; and that a basket of these indicators can well dictate the direction the economy is going, and the focus and thrust of the economic management team. The fundamentals consist of the qualitative and quantitative information that contributes to the economic well-being and the subsequent financial valuation of an economy, and which will aid analysts in developing some judgment as to whether or not it is worthwhile investing in the economy. Some of the indices for measuring economic performance would therefore include statistics regarding real gross domestic product, unemployment rate, inflation rates, interest rates, balance of payments, among others. In this study however, economic performance is measured with growth rate in the real gross domestic product of the nation.

It is unarguable therefore that capacity building offers variety of opportunities for economic emancipation. Embracing capacity building approaches by the

Nigerian government would purposefully minimize the over-reliance on outside experts as sources of knowledge, resources; thus, enhancing local content in technical issues. It also has the tendency of fostering a sense of ownership and empowerment; as such, citizens gain greater control over their own future development. On the one hand, a well targeted approach to human capacity building will certainly change the psyche of many Nigerians (the political class and the ordinary Nigerians alike) thus, checkmating the incidence of perennial corruption bedeviling the country. On the other hand, a sincere commitment in community capacity building (infrastructural development) by the government would surely turnaround the economic fortunes of the country.

Although, Nigerian government has at one time or the other provided opportunities that were targeted at improving the capacity of the citizens; like the Universal Basic Education (UBE), the National Poverty Eradication Program (NAPEP); the Anchor Borrowers Programme, among others. It is however a subject of empirical investigation to establish the extent to which the government has shown commitment in sustaining these programmes and the nexus between the government's investment on them and economic performance of the nation. Indeed, the state of Nigerian nation in the league of countries of the world in terms of the nation's poverty rate, infrastructural deficiencies, poor standard of living of the populace, high infant and maternal mortality rates, etcetera, in the face of abundant natural and human resources at the nation's disposal call for empirical investigation as to the nexus between capacity building and economic performance.

Consequently, the researcher is spurred to believe that human and community (infrastructural) capacity deficiencies in driving economic development in Nigeria may have been lacking; and therefore shares the following concerns: what could be the interplay between human capacity of Nigerian populace and the nation's real gross domestic product growth rate? What is the nexus between structural/community capacity development and the Nigeria's real gross domestic product growth rate? These concerns form the drive for this study.

Besides, the author observes that there appear to be dearth of literature on the nexus between capacity building and economic performance of Nigeria. No empirical study on the subject matter which utilized quantitative data in its development with clear statistical analysis was found during this study. The study by Ikharehon (2007) and Osisioma (2016), which were the only related studies found in the course of the study addressing Nigeria's circumstance, did not embrace any statistical analysis approach. The studies were more of theoretical (qualitative) bases. Most other

related studies at the researcher's disposal at the time of this research were found to have focused on human capital (capacity) development only; yet, none of them utilized data up to 2017. These spell an obvious gap in literature on the subject matter; hence, the current study is developed to fill these gaps.

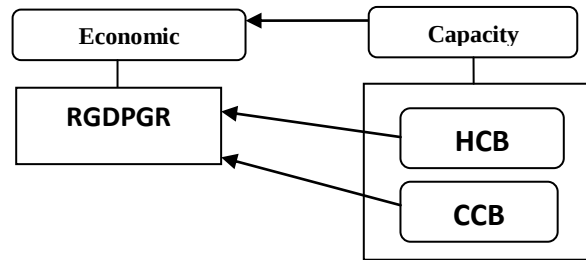
REVIEW OF RELATED LITERATURE

The Concept of Capacity Building and Economic Performance

The term 'capacity', according to United Nations Office for Disaster Risk Reduction (UNDRR) means the combination of all the strengths, attributes and resources available within an organization, community or society to manage and reduce disaster risks and strengthen resilience. Thus, capacity may include infrastructure, institutions, human knowledge and skills, and collective attributes such as social relationships, leadership and management. **Capacity building therefore** is the process by which people, organizations and society systematically stimulate and develop their abilities over time to achieve social and economic goals. It encompasses all aspects of creating and sustaining capacity growth over time. It involves learning and various types of training, but also continuous efforts to develop institutions, political awareness, financial resources, technology systems and the wider enabling environment (UNDRR).

Nwankwo and Olabisi (2017) view capacity building as the process by which individuals and organizations obtain, improve, and retain the skills, knowledge, tools, equipment and other resources needed to do their jobs competently or to a greater capacity (larger scale, larger audience, larger impact, etc.). Capacity building and capacity development are often used interchangeably. It can also be referred to as capacity enhancement. Capacity enhancement can be in the form of human capacity building or community capacity building (structural/infrastructural) capacity building.

The term economic performance on the other hand is used to depict the economic status of Nigeria; that is, assessing the nation's economic disposition with reference to some key macroeconomic (economic development) indicators (Amaefule, 2018). The investopedia.com defines an economic indicator as a piece of economic data, usually of macroeconomic scale, used by analysts to interpret current or future investment possibilities or to judge the overall health of an economy. These two concepts (capacity building and economic performance) form the key conceptual framework of the study. In this study, capacity building is divided into human capacity building (HCB) and community capacity building (CCB). The following diagram depicts the conceptual framework



- **Human Capacity Building (HCB):** Human capital, as viewed by economists, involves a process of investment that enhances human labor productivity by means of advances in knowledge and its applications; it specifically involves investment expenditures on education, training, health, nutrition, and related factors that increase the productivity of the labor force (Arabi & Abdalla, 2013). Oyewole and Adegoke (2018) noted that human capital development consists of numerous activities, including: equal employment opportunity; Job analysis, human resource planning; employee recruitment, selection, motivation, and orientation; performance evaluation and compensation; training and development; labour relations; and Safety, health, and wellness. Human capacity building, from the national economic point of view, refers to all efforts made by the government in improving and upgrading the capacity of the human elements used in the realization of government policies and programmes. It is also referred to as human capital development.

Oboh, Rahmah and Abu (2010) believe that human capital development is a way to fulfill the potentials of people by enlarging their capabilities, and this necessarily implies empowerment of people, enabling them to participate actively in their own development. It enhances the skills, knowledge, productivity, creativity and inventiveness of people. The authors assert further that human capital development is the empowerment of people to identify their own priorities and to implement programmes and projects of direct benefit to them. This in turn implies the active participation of people in the development process and the consequent need to establish institutions that permit and indeed encourage that participation. Ekemenah (2004) in Ikharehon (2007) asserts that the 2003 UNDP Human Development Report found out that despite being the world's sixth largest exporter of petroleum, Nigeria ranks extremely low in terms of human development making it impossible to attain the benefits of globalization. In this study, human capacity building is measured with the human

capital index (HDI). HDI is a summary measure for assessing long-term progress in three basic dimensions of human development: a long and healthy life, access to knowledge and a decent standard of living. A long and healthy life is measured by life expectancy and access to knowledge; which is measured by: (i) mean years of schooling for the adult population, which is the average number of years of education received in a life-time by people aged 25 years and older; and (ii) expected years of schooling for children of school-entrance age, which is the total number of years of schooling a child of school-entrance age can expect to receive if prevailing patterns of age-specific enrolment rates stay the same throughout the child's life. Standard of living is measured by Gross National Income (GNI) per capita (Human Development Report, 2013).

- **Community Capacity Building (CCB):** Community capacity building is a conceptual approach to social, structural and behavioral change and leads to infrastructure development. It simultaneously focuses on understanding the obstacles that inhibit people, governments, international organizations and non-governmental organizations (NGOs) from realizing their development goals and enhancing the abilities that will allow them to achieve measurable and sustainable results. Thus, it could be safely said that enhancing the capacity of the community or society would entail government's commitment towards investing on infrastructural projects (otherwise referred to as capital investment) within that society. The Cambridge Dictionary defines public investment as the money that a government spends on public services. Public capital investment therefore refers to the expenditures on long term infrastructural projects undertaken by the government for the benefit of the people. It is that the monetary commitment of government on infrastructures which are considered as fundamental structures that are required for the functioning of an economy (that is, community capacity development) like roads, water supply, sewers, electrical grids, telecommunications, renewable energy, and so on (Amaefule & Umeaka, 2016).

Thus, capital projects like roads, airports, health, education, telecommunication, electricity generation etc., are referred to as capital expenditure (Nworji & Oluwalaiye, 2012). Public capital investment is also referred to as government capital expenditure. The Central Bank Statistic Bulletin (2017) reported that between 2000 and 2016, the capital expenditure (capital investment) of Nigerian federal government

increased from ₦239.45 billion to ₦1,163.2 billion; recoding a total increase of about 385.8%.

- **Real Gross Domestic Product (GDP):** Most studies on economic growth or development used the gross domestic product (in real terms) as a key measure of economic growth. For instance, Pritzker, Arnold and Moyer (2015) opine that GDP is the economic indicator which measures the value of the goods and services produced in an economy in a given period of time. They stated that GDP is a measure of the economy's output which measures current production, not necessarily sales. Kromtit, Kanadi, Ndingra and Lado (2017) on their part assert that GDP is the market value of all final goods and services produced in a country in a given time period and it indicates an economy's performance. The authors further observed that when GDP is measured using the current market prices it is called a nominal GDP, but when a certain base year is used for the calculation of a GDP, it is called a real GDP. Consequently, Anyanwu and Oaikhenan (1995) cited in Okwori and Sule (2016) asserted that economic growth refers to the increase, over time, of a country's or an economic capacity to produce those goods and services needed to improve the well-being of the citizens in increasing numbers and diversity. This view is corroborated by CBN (2010) which stated that economic growth is the increase in the amount of goods and services produced in an economy over time. It is conventionally measured as the percent rate of increase in Real Gross Domestic Product (RGDP).

Theoretical Framework: The Augmented Solow Human-Capital-Growth Model

This study shares from the postulations of the augmented Solow human-capital-growth model which is an improvement on the Solow's neoclassical exogenous growth model. The neoclassical exogenous growth model was originally credited to the MIT economist, Robert Solow, for which he won the Nobel Prize in Economics in 1987. Solow employed the well-known Cobb-Douglas production function to establish labour, capital, and technical progress (which is exogenously determined) as important agents of growth while also stressing the importance of savings and capital formation for economic development. Mathematically, the relationship is written with the assumption of constant returns to scale thus: $Y = AK\alpha L^{1-\alpha}$ ($0 < \alpha < 1$) Where: Y is given as output (or income), A is the level of technology (and the value is determined outside the model), and K and L are the physical stock of capital and units of labour respectively. The author believes that when perfect competition hold in addition to the previous assumption, α and $1-\alpha$ are the parameters each of which measures the responsiveness of output with respect to

capital and labour respectively. A (the measure of technical progress) raises output from a given combination of inputs and with the assumption of diminishing returns, increment in income (output) falls with each successive change in variable input (Adekola, 2014). However, Solow's original model did not explicitly incorporate human capital; hence, Mankiw, Romer and Weil (1992) as cited in Eigbiremolen and Anaduaka (2014) came up with the augmented Solow human-capital-growth model specified as: $Y = AK^\alpha (hL)^\beta$; Where, Y= Output level or economic growth; K=Stock of physical capital; h=Level of Human Capital; L=Labour, measured by number of workers; A=Level of Total Factor Productivity; α = Elasticity of capital input with respect to output; while β = Elasticity of labour input with respect to output. The current study however focuses on the interplay of capacity building (in terms of human and physical infrastructure) and economic performance (in terms of output/productivity level, otherwise referred to as real gross domestic product) and level of utilization of available human capital, otherwise referred to as employment rate). Consequently, the augmented Solow human-capital-growth model is modified in this study to capture the main objective of this study. The postulation of human development index in this study to represent the labour element of Solow's model overlaps the literacy rate and life expectancy rate as used by Isola and Alani (2005).

Empirical Review

The literature provides evidence of empirical studies around the subject matter of this research. Some of the empirical works reviewed in the course of this study are reported as follows:

Dibie, Edoho and Dibie (2015) analyzed the effect of capacity building on economic growth in Sub-Saharan Africa. The authors adopted a cross sectional study design employing both quantitative and qualitative methods of data collection in purposively selected sub-Saharan African counties. They obtained secondary data through an in-depth desk review and content analysis of relevant published and grey material (unpublished studies), policy and programs documents, regulations and laws of the selected countries in Africa. The findings reveal that there is a negative correlation between the nations' educational system and the kind of skills needed to achieve sustainable development. In addition, government policies have not been able to effectively galvanize the private sector and NGOs to create more technical skills and jobs for citizens.

Adelakun (2011) examined the relevance of human capital development to the growth of the economy. The study evaluated human capital development and economic growth in Nigeria by adopting conceptual analytical framework that employs the theoretical and

ordinary least square (OLS) to analyze the relationship using the GDP as proxy for economic growth; total government expenditure on education and health, and the enrolment pattern of tertiary, secondary and primary schools as proxy for human capital. Findings from the analysis revealed that there is a positive relationship between government expenditure on education, tertiary school enrollment and gross domestic product while a negative relationship exists between government expenditure on health, secondary/primary school enrollment and gross domestic product. The combined result however showed a strong positive relationship between human capital development and economic growth.

Adekola (2014) carried out an investigation into the relationship subsisting between public investment in human capital and economic growth between 1961 and 2012. The study conducted a shift regime analysis of the empirical relationship between the independent and dependent variables for the periods of military and civilian regimes. The author while trying to validate the data used for the analysis tested the data for the unit root properties and verified cointegration among the variables before estimation. These verifications were conducted with the tools of Augmented Dickey Fuller test, Johansen's Cointegration technique and Parsimonious Error Correction procedure. Empirical findings established the fact that federal and states governments' spending on human capital (education and health) impacted positively on economic growth in Nigeria individually and collectively.

Ogunlana, Yaqub and Alhassan (2016) analyzed the effect of public and private investment on infrastructures and its impact on economic growth in Nigeria during the period 1970 to 2014. The study employed Engel-Granger cointegration and Error correction mechanism (ECM) to analyze the unit root procedures, ascertain the long run relationship and establish the values of long run parameters. Empirical results show that infrastructure components exert positive contribution on economic growth in Nigeria. Domestic investment on infrastructure and total labour force correlated with economic growth negatively. Nigeria's experience in terms of infrastructure development show that government needs to design an economic policy that would raise the quality of infrastructures and at the same time makes provisions for human capital development for sustained growth.

Isola and Alani (2005) evaluated the contribution of different measures of human capital development to economic growth in Nigeria. Relevant data on the variables of study were collected from Central Bank of Nigeria's Statistical Bulletin. Data analyses were carried out using descriptive analysis and multiple regression models. Result from the analysis reveals that

though little commitment had been accorded health compare to education, empirical analysis showed that both education and health components of human capital development are crucial to economic growth in Nigeria.

Arabi and Abdalla (2013) empirically investigated the impact of human capital on economic growth in Sudan for the period 1982-2009. The authors used a simultaneous equation model that links human capital proxied with school attainment; and investment in education and health to economic growth, total productivity, foreign direct investment, and human development index. The study adopted three-stage least squares technique in its analysis; the empirical results from the analysis show that quality of the education has a determinant role in the economic growth; health quality factor has a positive impact on economic growth as expected and total factor productivity which mainly represents the state of technology has adverse effect on economic growth and human development due to the obsolete and old fashion technology.

Oluwabunmi (2017) used the Auto Regressive Distributed Lag (ARDL) approach in carrying out a quantitative analysis of the effect of human capital in stimulating employment in Nigeria for the period 1970-2014. The study found that the level of human capital was not sufficient to stimulate employment or reduce unemployment in Nigeria; and that population growth is really not the challenge for employment in Nigeria especially if human capital can be harnessed productively, and channeled towards viable and rewarding sectors of the economy. Hence, human capacity building is a necessity.

Adeyemi and Ogunsola (2016) examined the impact of human capital development on economic growth in Nigeria using time series data spanning from 1980 to 2013. The study employed ARDL Co-integration analysis to estimate the relationship among the variables used in the study. The study established long-run co-integration among the variables. The findings from the study revealed that there is positive long-run relationship between secondary school enrolments, public expenditure on education, life expectancy rate, gross capital formation and economic growth but it is statistically insignificant. The results also showed that there is negative long-run relationship among primary, tertiary school enrolment, public expenditure on health and economic growth.

Ogunleye, et al (2017) employs the ordinary least square regression analysis to examine the impact of human capital development on economic growth of Nigeria, using annual time series data from 1981 to 2015. Findings revealed that human capital development indicators namely secondary school

enrolment, tertiary school enrolment, total government expenditure on health and total government expenditure on education exhibit positive and statistically significant impact on economic growth of Nigeria. However, life expectancy and primary school enrolment exhibit a negative and statistically insignificant impact on economic growth of Nigeria. The result revealed a significant combined effect of the human capital development indices on the indicator of economic growth (GDP).

Eigbiremolen and Anaduaka (2014) investigated the impact of human capital development on economic growth, with national output as a proxy for economic growth; using quarterly time-series data from 1999-2012. The study employed Ordinary least square regression via the augmented Solow human-capital-growth model in its analysis. Findings show that human capital development exhibits significant positive impact on output level which implies that human capital development is indispensable in the achievement of sustainable economic growth in Nigeria.

Ogujiuba (2013) used the Error Correction Model of regression analysis as an analytical tool in evaluating empirically the relationship between human capital development and economic growth of Nigeria. Findings also showed that investment in human capital in the form of education and capacity building at the primary and secondary levels impact significantly on economic growth, while capital expenditure on education was insignificant to the growth process.

Oluwatobi and Ogunrinola (2011) examined the relationship between human capital development efforts of the Government and economic growth in Nigeria. The authors evaluated the impact of government recurrent and capital expenditures on education and health in Nigeria and their effect on economic growth and utilized secondary data in developing the study. Multiple regression analysis based on the augmented Solow model was adopted. The result of the analysis shows that there exists a positive relationship between government recurrent expenditure on human capital development and the level of real output; while capital expenditure on human capital development is negatively related to the level of real output.

METHODOLOGY

The thrust of this study is to examine the effect of Nigerian government's commitment to capacity building on the performance of the nation's economy. Capacity building is measured in terms of human capacity (measured with human development index – HDI) and community/infrastructural capacity status (measured with government capital expenditure on economic and social community services) while

economic performance is measured with volume of output (typified in real gross domestic product) and level of utilization of available human capital (measured with unemployment rate). Consequently, ex-post facto research design was adopted in carrying out the study. Ex-post facto design is appropriate in any after-the-fact research in which case an investigation or evaluation is carried out using already existing data (information) from the past event. This study utilized data from the publications of Central Bank of Nigeria (CBN) statistical bulletin, World Bank Reports and Global Data Lab. reports for a period covering 1998 – 2017. Data collected were subjected to stationarity test using Augmented Dickey Fuller (ADF) unit root test to ascertain the reliability of the result of the analysis. Vector Error Correction Mechanism (VECM) was employed in analyzing the models formulated to achieve the objective of the study. Decision on the individual significance of the independent variables on the dependent variable and combined (joint) significance are based on 5% level of significance.

The regression models formulated for this study in their explicit form are as follows:

$$Y = F(K, L) \quad 1$$

Where: Y represents Output (performance indicator) in terms of real gross domestic product growth rate.

K represents the capital investment of the government on physical infrastructure (Government capital expenditure)

L represents human (labour) capacity status

The above equation is thus written explicitly in line with the variables of the study as follows:

$$RGDPGR = F(GCE, HDI) \quad 2$$

Where: RGDPGR is Real Gross Domestic Product Growth Rate

GCE is Government Capital Expenditure

HDI is Human Development Index

But GCE is measured with GCEES and GCESCS (where GCEES means government capital expenditure on economic services and GCESCS means government capital expenditure on social community services)

Expressing equations (2) in econometric form, we have:

$$RGDPGR = \lambda_0 + \lambda_1 GCEES + \lambda_2 GCESCS + \lambda_3 HDI + E \dots\dots\dots 3$$

Where:

λ_0 represents the intercept of the regression line

$\lambda_1, \lambda_2, \lambda_3$ represents the coefficients of the three independent variable proxies

E represents the error term or the stochastic variable of the regression model

This study believes that expenditures on capacity building would amount to injecting money into the economy which could lead to rise in inflation rate in the economy. As such, inflation rate for the periods covered in this study is incorporated in the model as a control or moderating variable; hence, equation 4.

$$RGDPGR = \lambda_0 + \lambda_1 GCEES + \lambda_2 GCESCS + \lambda_3 HDI + \lambda_4 INFR + E \dots\dots\dots 4$$

Where: INFR represents Inflation Rate.

To ensure comparability and standardized measurability of the variables, data for GCEES and GCESCS were logged (natural Logarithm) before used for the analysis; hence the following model: $RGDPGR = \lambda_0 + \lambda_1 \ln GCEES + \lambda_2 \ln GCESCS + \lambda_3 HDI + \lambda_4 INFR + E \dots\dots\dots 5$

RESULTS AND DISCUSSION

Test for Stationarity of Data

The result of Augmented Dickey Fuller (ADF) unit root test conducted on each of the sets of data used in the analysis is summarized as follows:

Table 1: Result of ADF Unit Root Test

Variable	ADF Test Statistic	Test Critical Value @ 1%	Test Critical Value @ 5%	P-value	Order of Integration
RGDPGR	-4.810495	-3.857386	-3.040391	0.0014	I(1) / Stationary
LnGCEES	-6.378936	-3.857386	-3.040391	0.0001	I(1) / Stationary
LnGCESCS	-6.014942	-3.857386	-3.040391	0.0001	I(1) / Stationary
HDI	-5.776404	-3.886751	-3.052169	0.0003	I(1) / Stationary
INFR	-4.392158	-4.004425	-3.098896	0.0050	I(1) / Stationary

Source: E-View (Version 11) Statistical Result, 2019.

Table 1 reveals that the sets of data for all the variables of the study are all non-stationary at level but all became stationary after first order difference. This gives indication of possible cointegration among the variables in the long run. The fact that all the variables are stationary at one particular order (first difference in particular) satisfies the condition for estimating the cointegration model. To establish the existence of long

run relationship among the variables, a cointegration test is performed using the Johansen's cointegration test.

Result of Cointegration Test using Johansen Cointegration

The E-view result out for the Johansen cointegration test is presented on tables 2:

Table 2: Unrestricted Cointegration Rank Test (Trace)

Unrestricted Cointegration Rank Test (Trace)				
Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05Critical Value	Prob.**
None *	0.917101	112.2077	69.81889	0.0000
At most 1 *	0.853581	67.38533	47.85613	0.0003
At most 2 *	0.700489	32.80225	29.79707	0.0219
At most 3	0.313192	11.10138	15.49471	0.2054
At most 4 *	0.214192	4.338782	3.841466	0.0372

Trace test indicates 3 cointegrating eqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level **MacKinnon-Haug-Michelis (1999) p-values

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0.917101	44.82240	33.87687	0.0017
At most 1 *	0.853581	34.58308	27.58434	0.0054
At most 2 *	0.700489	21.70087	21.13162	0.0416
At most 3	0.313192	6.762600	14.26460	0.5176
At most 4 *	0.214192	4.338782	3.841466	0.0372

Max-eigenvalue test indicates 3 cointegrating eqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level **MacKinnon-Haug-Michelis (1999) p-values

Source: E-View (Version 11) Statistical Result, 2019.

From the results on tables 2, both the trace statics and Maximum Eigen statistics reveal the presence of 3 cointegration equations each. This implies that there is a short run and long run relationships between the independent variable (capacity building) proxies and the dependent variable (economic performance). However, to establish the nature of the long run relationship, the Vector Error Correction Model (VECM) was conducted; the result of which is presented on table 3.

Vector Error Correction Mechanism

Table 3: Vector error Correction Model (VECM) Result

Standard errors in () & t-statistics in []

Error Correction:	D(RGDPGR)	D(LNGCEES)	D(LNGCESCS)	D(HDI)	D(INFR)
CointEq1	-0.757877 (0.14004) [-5.41188]	0.042637 (0.03991) [1.06824]	-0.060228 (0.04387) [-1.37295]	-0.000877 (0.00289) [-0.30386]	-1.152778 (0.32522) [-3.54461]

Source: E-View (Version 11) Statistical Result, 2019.

The result on table 3 shows the short-run adjustment relationship between the capacity building variables and the growth rate in real gross domestic product of Nigeria. The error correction term coefficient has negative sign with a value of -0.757877 which lies between -1 and 0. This implies that the error term is rightly signed and the model correctly specified. The result shows about 76% adjustment speed to long run

Given the existence of co-integrating equations in the model employed in this study, it becomes necessary to carry out the Error Correction Mechanism (ECM) test so as to determine the short-run dynamics of the relationship between the independent variable (capacity building) proxies and the dependent variable (economic performance measure). Consequently, the Vector error Correction Model (VECM) was conducted to determine the speed of adjustment capacity building and real gross domestic product growth rate in Nigeria. Table 3 summarizes the VECM test result.

equilibrium in a year. The result also gives indication that the short-run adjustment to long-run equilibrium is statistically significant. This is indicated in the value of t-statistics of -5.41188 which is greater than 2 in absolute terms. The rule of thumb states that if t-value is less than or equal to 2, it signifies that the short-run adjustment to long-run equilibrium is insignificant while t-value that is greater than 2 suggests a significant speed in short-run adjustment to long-run.

Therefore, this study holds that capacity building has significant equilibrium relationship with real gross domestic product growth rate.

To further confirm the long-run and short-run effect of capacity building on economic performance (measured

with RGDGPGR), Least Squares (Gauss-Newton / Marquardt steps) and Wald tests were conducted for long-run and short-run equilibrium tests respectively. The results are presented in table 4 and 5.

Table 4: Short-Run & Long Run Equilibrium Test using Gauss-Newton / Marquardt steps

Dependent Variable: D(RGDGPGR) Method: Least Squares (Gauss-Newton / Marquardt steps)				
Date: 06/09/19 Time: 04:11 Sample (adjusted): 2000 2017 Included observations: 18 after adjustments				
D(RGDGPGR) = C(1)*(RGDGPGR(-1) - 0.598059295706*LNGCEES(-1) -2.15373876459*LNGCESCS(-1) + 40.7216997414*HDI(-1) - 0.0481622325447*INFR(-1) + 37.6034399002) + C(2)*D(RGDGPGR(-1)) + C(3)*D(LNGCEES(-1)) + C(4)*D(LNGCESCS(-1)) + C(5)*D(HDI(-1)) + C(6)*D(INFR(-1)) + C(7)				
	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	-0.757877	0.140040	-5.411878	0.0002
C(2)	0.282471	0.151074	1.869755	0.0884
C(3)	2.966492	1.216977	2.437591	0.0330
C(4)	-0.260473	1.177762	-0.221159	0.8290
C(5)	31.64833	9.760167	3.242601	0.0078
C(6)	0.111936	0.097349	1.149842	0.2746
C(7)	-0.420558	0.360510	-1.166563	0.2681
R-squared	0.839247	Mean dependent var		0.016567
Adjusted R-squared	0.751563	S.D. dependent var		2.910332
S.E. of regression	1.450610	Akaike info criterion		3.867147
Sum squared resid	23.14697	Schwarz criterion		4.213403
Log likelihood	-27.80432	Hannan-Quinn criter.		3.914891
F-statistic	9.571295	Durbin-Watson stat		2.406840
Prob(F-statistic)	0.000784			

Source: E-View (Version 11) Statistical Result, 2019.

From the result on table 4, the long-run equilibrium result is confirmed in the coefficient and probability value of C1. The rule of thumb requires the value of the coefficient of C1 (the speed of adjustment) to be negative and statistically significant for it to retain its economic interpretation. The result satisfies this requirement with the coefficient value of -0.757877 and P-value of 0.0002. It indicates that about 76% of departures from long-run equilibrium is corrected each period; and the P-value of 0.0002 means that the explanatory variable (capacity building measures) in the specification granger causes the dependent variables (economic performance measured with real GDP growth rate) in the long-run. The R^2 and adjusted R^2 of 84% and 75% respectively indicate a jointly strong long-run influence on capacity building proxies on economic performance measure; this is corroborated by the joint significance result of F-statistic (prob.) of 0.0008. The Durbin-Watson (DW) statistic of 2.4 (which is approximately 2) indicates that the series in the model is free from autocorrelation; thus support valid results of the analysis.

Table 4 also reveals the short-run individual relationship between each of the measures of capacity building and the gross domestic product growth rate.

The coefficients of C(3), C(4), C(5) and C(6) which are 2.9665, -0.2605, 31.6483 and 0.1119 with their corresponding P-values of 0.03, 0.83, 0.01 and 0.27 in respect of GCEES, GCESCS, HDI and INFR respectively. The positive signs of the coefficients of GCEES, HDI and INFR with their respective P-values indicate that each of GCEES and HDI exerts a short-run positive and significant effect on RGDGPGR while INFR exerts positive but insignificant effect on RGDGPGR. On the other hand, the negative sign of the coefficient of GCESCS with its P-value of 0.83 shows a negative but insignificant effect on RGDGPGR in the short-run. The joint short-run significance relationship among the variables is determined through the Wald Test; the result of which is presented on table 5.

Table 5: Short-Run Joint Equilibrium Test Using Wald Test

Wald Test:

Equation: Untitled

Test Statistic	Value	Df	Probability
F-statistic	6.807209	(4, 11)	0.0052
Chi-square	27.22883	4	0.0000

Source: E-View (Version 11) Statistical Result, 2019.

From table 5, the P-value of both Chi-Square and F-Statistics is significant at 1%; therefore the null hypothesis which asserts that capacity building does not influence economic performance in the short run is rejected. We thus conclude that capacity building granger causes economic performance measured with real GDP growth rate even in the short-run.

SUMMARY AND DISCUSSION OF FINDINGS

The findings from the analysis are summarized as follows:

1. Government capital expenditure on economic services has a significant positive effect on gross domestic product growth rate. This finding agrees with Ogunlana, Yaqub and Alhassan (2016) to the extent of their finding that infrastructure components exert positive contribution on economic growth in Nigeria but sharply disagrees with them to the extent of their finding that domestic investment on infrastructure and total labour force correlated with economic growth negatively.
2. There is short-run negative but insignificant relationship between government capital expenditure on social community services and gross domestic product growth rate. This finding does not agree with Adekola (2014) who found that governments' spending on human capital (education and health) impacted positively on economic growth in Nigeria individually and collectively. The finding also runs contrary to Ogunleye, et al (2017) to the extent of their findings that government expenditure on education exhibit positive and statistically significant impact on economic growth of Nigeria. It however agrees with Ogujiuba (2014) to the extent of his finding that capital expenditure on education was insignificant to the growth process. It also aligns with Oluwatobi and Ogunrinola (2011) who found that capital expenditure on human capital development is negatively related to the level of real output.
3. Human development index has short-run significant positive relationship with gross domestic product growth rate. This finding disagrees to the finding of Ogunleye, et al (2017) to the extent of their finding that life expectancy and primary school enrolments (which form part of human development index measures) exhibit a negative and statistically insignificant impact on economic growth of Nigeria. This finding however (by implication) aligns with Isola1 and Alani (2005) whose study showed that both education and health components of human capital development are crucial to economic growth in Nigeria. It is also in agreement with Eigbiremolen and Anaduaka (2014) who investigated the impact of human capital development on economic

growth, with national output as a proxy for economic growth and found that human capital development exhibits significant positive impact on output level which implies that human capital development is indispensable in the achievement of sustainable economic growth in Nigeria. The findings of Ogujiuba (2014) that investment in human capital in the form of education and capacity building at the primary and secondary levels impact significantly on economic growth is also in agreement with this finding.

4. Capacity building proxies jointly exert significant effect on real gross domestic product growth rate at both short-run and long-run. This finding agrees with Adeyemi and Ogunsola (2016) to the extent of their findings that there is long-run relationship between secondary school enrolments, public expenditure on education, life expectancy rate, gross capital formation and economic growth. It also agrees with Ogunleye, et al (2017) to the extent of their finding that there is a significant combined effect of the human capital development indices on the indicator of economic growth (GDP).

CONCLUSION AND RECOMMENDATIONS

Based on the findings from the analysis of this study, it is concluded that capacity building drives economic performance of Nigeria. Indeed, government's commitment to well targeted programmes that would boost the human and infrastructural capacity in the economy is the sine qua non for better economic performance of the nation. The hope of the country to join the league of 20 top economies of the world will simply be an illusion if the nation's government does not show sustained commitment to capacity building in Nigeria.

Sequel to the foregoing, the study proffers the following recommendation:

- i. Governments at all level in Nigeria should give priority to capacity building in terms of human and physical infrastructural development.
- ii. The executive arm of government should endeavor to commit more resources to capacity build in raising the annual budget and should ensure that budgetary provision of capacity building is judiciously implemented.
- iii. The legislative arm of the government should show commitment towards ensuring that annual budgetary estimates presented to it for passages substantially reflects clear commitment to sustaining capacity building.
- iv. Private sector of the economy should complement the government's efforts towards human and community capacity development by undertaking sustaining corporate social

responsibilities targeted at improving the capacity of human and infrastructural elements in the society.

- v. Families and religious bodies should show commitment in ensuring that their members are adequately sensitized and encouraged to embrace programmes and policies that will enhance their individual capacities.

LIMITATIONS OF THE STUDY

This study was confronted with the challenge of data accessibility for some of the variables identified in the study. The researcher, at the inception of the study, proposed to source all the data from the Central Bank of Nigeria (CBN) Statistics Bulletin but later discovered that data on human development index and inflation rate were not readily available in the various CBN bulletins. The Data for these variables were thus sourced from World Bank reports for various years and Global Data Lab (an online data repository). The researcher believes that these data maintain the true view of the indices (variables) measured. Besides, the researcher also proposed to use multiple measures for economic performance (the dependent variable of the study); as such, unemployment rate was earlier included to complement real gross domestic product growth rate (RGDPGR) as measures of economic performance of Nigeria. However, after diagnostic analysis for the stationarity of the data used in the study, it was found that data series for unemployment rate for the period covered in the study were not stationary up to first order difference and attempt to clean up the data and make it stationary at least at first difference failed. Consequently, the variable was eliminated from the model and the study utilized only RGDPGR as the measure of economic performance. It is therefore expected that further researchers in this area of study should incorporate such measures as determinants of the nation's economic performance since unemployment rate is our key indicator of how well an economy is doing.

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APPENDIX: DATA USED FOR ANALYSIS

YEAR	RGDP (N'B)	RGDPGR (%)	GCEES (N'B)	LnGCEES	GCESCS (N'B)	LnGCESCS	HDI	INFR (%)
1998	22,332.87	2.4348	200.86	5.3026	23.37	3.1515	0.41	11.9
1999	22,449.41	0.5191	323.58	5.7794	17.25	2.8478	0.41	0.2
2000	23,688.28	5.2299	111.51	4.7141	27.97	3.3311	0.42	14.5
2001	25,267.54	6.2502	259.76	5.5598	53.34	3.9767	0.46	16.5
2002	28,957.71	12.7433	215.33	5.3722	32.47	3.4803	0.40	12.2
2003	31,709.45	8.678	97.98	4.5848	55.74	4.0207	0.442	23.8
2004	35,020.55	9.4547	167.72	5.1223	30.03	3.4022	0.461	10
2005	37,474.95	6.5494	265.03	5.5798	71.36	4.2677	0.464	11.6
2006	39,995.50	6.3021	262.21	5.5691	78.68	4.3654	0.474	8.5
2007	42,922.41	6.8191	358.38	5.8816	150.90	5.0166	0.478	5.4
2008	46,012.52	6.7158	504.29	6.2232	152.17	5.025	0.484	11.6
2009	49,856.10	7.7094	506.01	6.2266	144.93	4.9763	0.49	12.5
2010	54,612.26	8.709	412.20	6.0215	151.77	5.0224	0.484	13.7
2011	57,511.04	5.0404	386.40	5.9569	92.85	4.531	0.494	10.8
2012	59,929.89	4.0361	320.90	5.7711	97.40	4.5788	0.511	12.2
2013	63,218.72	5.2023	505.77	6.2261	154.71	5.0416	0.519	8.5
2014	67,152.79	5.8584	393.45	5.975	111.29	4.7121	0.523	8
2015	69,023.93	2.7109	348.75	5.8544	82.98	4.4186	0.528	9
2016	67,931.24	-1.6085	261.28	5.5656	79.63	4.3774	0.53	15.7
2017	68,490.98	0.8173	522.40	6.2584	147.90	4.9965	0.533	16.5

Source: Central Bank of Nigeria Statistics Bulletin 2017, World Bank Reports and Global Data Lab