

Effect of Human Capital Investment on Economic Growth: Nigeria Perspective

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Abstract

The study was conceptualised to ascertain the effect of human capital investment on economic growth in Nigeria. The ex-post facto research design was adopted because data relating both explained and predictor variables already exist in literature. The data for the study were extracted from CBN statistical bulletin and analysed using descriptive statistic and Ordinary Least Square (OLS) as well as cointegration regression analysis. The result revealed that only capital expenditure on education has a positive and significant association with RGDP. Capital expenditure on health and universal education has a positive but insignificant association with RGDP, recurrent expenditure on education and health have a negative and insignificant association with RGDP. We concluded that human capital investment on economic growth in Nigeria is not significant. The study recommended that Government and policymakers should show concerted and sincere effort in building and developing human capacity through adequate educational funding across all levels.

Keyword

Universal Basic Education, Real Gross Domestic Product, Recurrent Expenditure, Capital Expenditure

1. INTRODUCTION

The wave of change brought about by advancement in technology has altered the eighteenth-century production system and introduce a shift from labour-intensive to capital intensive technique. This necessitated a change from industrial to the knowledge-oriented economy (Ahmadi, Ahmadi & Shakeri 2011, Hung & Wu 2010, Raze 2011, Hsu & Fang, 2010), thus permitting knowledge, technology and expertise as crucial drivers and ingredients necessary for economic growth and development in this twenty-first century. This implies that proper application of expertise, technology and knowledge with physical assets will not only sharpen the competitive edge of an organization or country but will place them on merit over the others (Bornemann, 1999).

In past centuries, physical assets took prominence over intellectual capital, but this was with little growth and development outcome in Nigeria. The nascent publications of the United Nations Development Programme (UNDP) which introduced human development as a trailblazer for developed and developing countries alike have caught the attention of Nigeria especially now with the United Nations Sustainable Development Goals 2030 running for which Nigeria is party (Adedeji & Banidele 2003, World Bank 1995, Barro 1991). Egbiremolen and Anaduaka (2014)

asserted that difference in the socio-economic development across the nation is attributed not so much to National resources and endowment and stock of physical capital but to the quality and quantity of human resources. Danda (2010) and Olajide and Adebayo (1996) identified human resources as crucial factors for growth and development. Egbiremolen, *et al*(2014) pended that wealth and prosperity of nations rest ultimately upon the development of people and the effective commitment of their energies and talents.

Thomas Stewarts defined human capital investment as “something that cannot be touched, although it slowly makes you rich”. It is all of the non-tangible or non-physical assets and resources of an organization as well as its practices, patent and implicit knowledge of its members and their network of patterns and contracts. Human capital investment includes inventions, ideas, general knowledge, design approaches, computer programme and publications (Raza, 2011). It is a property that is based on knowledge (IFAC, 2001). Suffice to say that human capital investment has to do with the management of employees, knowledge, experience, skills, customer relations technologies and innovations.

The existence of a positive relationship between innovation, competitiveness and economic growth has been widely recognised and as a result, in recent decades, fostering innovation has become pivotal to many national and international policies (Sanchez, Salazar &Basilio, 2012). To improve the economy, the government has to invest heavily in the educational, health sectors and of course encourage inventions etc. As this will lead to an increase in per capita income as well as national income and improve the peoples’ standard of living.

It is very derogatory and disheartening that Nigeria government budgets run into trillions of naira every year yet there is nothing to show for it as poor remuneration and welfare package, abandon capital projects, inadequate funding of projects, poor condition of service and others has been the issue of the day (FRN, 2000). Also, most workers in Nigeria civil service are illiterates hence, they make use of outmoded capital equipment and methods of production which leads to low marginal productivity, low real income, low savings, and low investment and of course low rate of capital formation.

Again, the health sector of Nigeria economy has been a mess as it has continued to operate without advanced medical equipment and the attendant effect has been that our politicians now travel abroad for medical checkups and treatments thereby transferring funds which could have been used to develop this nation to other countries of the world and this has boosted the economy there. Furthermore, indigenous or Nigerian medical Doctors now migrate to other countries of the world to practice there for better pay and government regard for their profession. No, wonder Nigeria is still underdeveloped and experiences low Gross Domestic Product (GDP).

At this point, it crucial to ask what is the effect of government capital expenditure, recurrent expenditure, expenditure on education and health on the Gross Domestic Product (GDP) of Nigeria. Hence, this study is fashioned to provide answers to these questions as stated above.

From empirical literature, there exist different studies both developed and developing countries alike on human capital such as Reza (2011) investigated intellectual capital and financial performance in Iran, Iranmahd, Moeinaddin&Heyrani (2014) studied the effect of intellectual capital on the cost of finance and firm value in Tehran, Ahmadi, Ahmadi &Shakeri (2011) examined the survey of the relationship between intellectual capital and organizational performance within the national Iranian South oil company. In Nigeria, The studies of Kanayo (2013), Isola and Alani (2010), Jaiyeoba (2015) were also on intellectual capital. However, the scarcity of literature in Nigeria necessitated the urgent need for this study on the effect of government capital and recurrent expenditures on health and education on economic growth in

Nigeria. This study has a long duration which will enable the researchers to make an informed decision.

2. LITERATURE REVIEW

The concept of human capital investment is derived from the analysis of the economic efficiency of enterprises. Since the early 1990s', human capital investment has undergone extraordinary development (Viedma Marti, 2007). Stewart (1997) opines that human capital investment is the intellectual material that has been formalized, captured and leveraged to create wealth by producing a higher-valued asset. It is anything an enterprise can use to increase its competitive advantage in the market place, including knowledge, information, intellectual property rights and experience Lu & Wang (2010)

2.1. Classification of Intellectual Capital

Human Capital:

This is an integral part intellectual capital investment which comprises of the skill, competence, intellectual agility, innovation, creativity, values and experience of an individual employee within an organization (Bonlis 2002, Cabrita&Bontis 2008). Roose et al (1997) added that human capital can be acquired through increased training of employees and this encourages economic growth (Schulz, 1961). Competence here refers to the skill and education of employees as well as attitude is the behavioural component of employees work. Intellectual agility refers to the process of changing procedures and thought regarding the innovative approaches in problem-solving (Balouei&Ghasemian 2014).

The term human capital can be described as the sum of employees competence, knowledge, skills, innovativeness, attitude, commitment, wisdom and experience. Organizations rely on human capital a lot as it helps organizations to respond to environmental changes innovatively (Kong, 2010,). De Pablos (2003) pointed out that importance of human capital lies in its ability to improve the efficiency and efficiency of organizations and in turn gain a competitive advantage. Human capital consists of the values, attitude and habits or the people in the organization, in addition to the leadership that motivates people to display their potentials in the organization. Worthy of mention here is that human capital differs in organizations which give the characteristics of being inevitable, rare and non-replaceable. Human capital is not fully controlled by the firm or organization which distinguishes it from the other resources available in the firm (Nghah& Ibrahim 2011, Hussi, 2004,). Hence, Chen, Wang & Sim (2012) advised that organizations should continuously invest in their human capital in order to improve their competitive advantage. Human capital theory shows that education leads to improvement in workers' level of cognitive skills and consequently increases their productivity and efficiency. Theodore Schultz, Gory Buckert and Jacob Mineer introduced the motion that people invest in education so as to increase their stocks of human capability which can be formed by combing innate ability with investment in human beings. Instances of such investment include expenditures on health, education, motivation and on-the-job training. However, in order to increase the stock of human capital, in a firm period, the gross investment must exceed, depreciation resulting from intense use or lack of use, with the passage of time (Ogujiuba, 2013). The provision of education is seen as a productive human capital investment, an investment which is considered by the proponent of the human capital theory are equally or even more equally worthwhile than physical capital investment. It is established by human capital theorists that basic literacy enhances the productivity of workers in low skills occupations. Those theorists further asserted that interment which demands logical and analytical reasoning and which productive technical and specialized knowledge increases the marginal productivity of workers in high skill professions and position.

Clarke, Seng & Whiting (2010) funded that within the value-added intellectual capital model, human capital is defined as the salaries and wages (Public, 1998).

Structural/or Organizational Capital:

This refers to human sources of knowledge whose intrinsic value is greater than its material value. As an intangible asset, it can be traded, reproduced and shared within the firm (Zambon 2002, Dubra 2002). Examples of structural capital include databases, organizational charts, operating process and information system, strategies, organizational culture. Structural and organization capital can be legally protected in the form of patents and trademarks. It can create a strong supportive culture that encourages employees to gain experience. It is an institutionalized knowledge owned by an organization (Yundet, 2000).

Relational/Customer Capital:

This has to do with knowledge embedded in the relationship established within the outside environment (Bontis, 1996, Edvinsson& Sullivan 1996). Relational capital is the value of the current and ongoing relationship with individuals or organization that provides them with service. Customer capital is the potential ability obtained by an organization through external factors.

2.2. Economic Growth

This is a quantitative increase in the country's input and output over a period of time. Sustained economic growth leads to economic development and can only be present when all sectors of the economy are growing at the same time and is sustainable. The Endogenous growth theory advocates the stimulation of economic growth and development through improvement in human capital using policies which aim at increasing expenditure on education.

2.3. Relationship between Human capital investment and economic growth

Knowledge is a major determinant of economic growth. In Nigeria, there is evidence of poor investment in human capital in the educational sector as this has manifested often in strike upon strike both in universities, post-primary and primary schools and has been found to be consistent (Bakare, 2006). The attendant effect of this has been the turnout of half begged graduates and a higher level of illiteracy and low rate of economic growth. Sanusi (2003) asserted that low investment in human capital on the competitiveness of Nigerian labour force in the production of goods and services and low level of skill will certainly reduce the quality and quantity of individual output. Suffice to say that adequate investment in human capital serves as a pathfinder for improved productivity and economic growth. Schultz (1963) and Dension (1962) pointed out that a residual in the united state then was attributed to the level of education of the workers. This goes a long way to say that investment in education and skill of workers is an investment to improve productivity as well as the economy.

2.4. Theoretical Framework

Human Capital Theory: This theory believes that education increases the productivity and efficiency of workers by enhancing their cognitive skill. The theorist hold prima-facia that people invest in education mainly to increase the human capabilities which is a combination of innate abilities with investment in human being (Babalola, 2000, as cited in Adelokun, 2011). It is expedient to state that the stock of human capital increases in a period only when gross investment exceeds depreciation over time, with intense use or lack of use. Investment in

education is a productive investment in human capital which the proponents of human capital theory consider to be worthwhile than in physical capital. This means that basic literacy enhances the productivity of workers.

Additionally, instruction that demands logical and analytical reasoning that provides technical and specialized knowledge to increase with the marginal productivity of workers in high skill or profession and position. The greater investment in education, the better for national productivity and economic growth.

This study will adopt this theory as it upholds that investment in education which is one of the independent variables in this study and has been let down as a concern in Nigeria will improve the economy.

Modernization Theory: This theory holds that education transforms an individual's value, belief and behaviour. Modern attitude and behaviour are acquired through exposure to schools, factories, and mass media. The normative and attitudinal change continues through the life cycle, permanently altering the individual's relationship with social structure. The greater the number of people exposed to modernization institutions, the greater the level of individual modernity attained by society. In a nutshell, improved society is a function of improved people. This study will also adopt this theory because improved society and people will lead to economic growth.

2.5. Empirical Review

Adelakun (2011) investigated human capital development and economic growth in Nigeria. The objectives of the study were to examine the structure of human capital development in the national economic trend, the relative size and trend of human capital development and its possible prospects in the emerging global economic growth. Secondary data was used for the study and Gross Domestic Product (GDP) served as a proxy for economic growth while the proxy for human capital investment was total government expenditure on education and health and the enrolment pattern of primary, secondary and tertiary school. The result of the analysis confirmed that there is a strong positive relationship between human capital and economic growth. The study recommended that stakeholders need to evolve a more pragmatic means of developing human capacities since it is seen as an important tool for economic growth in Nigeria.

The relationship between intellectual capital and financial performance: An empirical investigation in an Iranian company was investigated by Reza (2011) to find out the relationship between intellectual capital performance and financial performance. The study covered a period of thirty years from 1980- 2009. The data for the study is secondary sourced from the annual reports and accounts of one of the Iranian companies. The study employed valued Added intellectual coefficient developed by Ante Public to measure intellectual capital. Productivity, profitability and growth rate in revenue and these proxies were measured as Profitability- Return on Assets (ROA) Employees productivity – net sales for the period divided by the number of employees and growth in sales is measured as changes in firm's current year sales over last year's sales. A descriptive analysis of the data was also carried out. However, multiple regression analysis of the OLS was employed and the result of the analysis showed that the relationship between the performance of a company's intellectual capital and profitability, employees' productivity, and growth rate in sales is informative. The empirical findings suggest that the performance of a company's intellectual capital can explain profitability and productivity.

In 2014, Iranmahd, Moeinaddin, Shahmoradi and Heyrani examined the effect of intellectual capital on cost of finance and firm value. The object of the study was to examine whether or not a relationship exists between intellectual capital, cost of capital and firm value and how strong such a relationship will be. The study covered all firm listed in Tehran stock exchange between

2005- 2012. The data for the study is secondary sourced from annual account and report of the companies listed on Tehran stock exchange for an eight-year period. To measure intellectual capital and valued-added applied were used the calculation of which was performed through Palic's method. The study used the Pearson correlation, univariate and multivariate regression, and Z Wang test. The findings showed that valued-added of capital applied, value-added of intellectual capital and the value-added of intellectual capital coefficient negatively influenced the weighted average cost of capital, yet they did not affect enterprise value.

Ahmadi, Ahmadi and Shakeri (2011) carried out a study the survey of the relationship between intellectual capital and organizational performance within the national Iranian south oil company with an objective to test the relationship between human, structural and relational capitals and organizational performance within the national Iranian south oil company. The study employed the survey approach hence, the sources of data were primary from questionnaires served to 3800 managers, experts and supervisors of the National Iranian South Oil Company out of which 249 managers, experts and supervisors received the questionnaire and 236 responded representing about 94.8%. The study measured intellectual capital by considering the three components of intellectual capital thus human, structural and relational capitals. The organizational performance was measured as organizational performance. The analysis of variance of t-test and Pearson coefficient was used for the test of reliability. The result of the test hypothesis revealed that there is a positive relationship between intellectual and organizational performance.

The human capital development and economic growth: The Nigeria experience was examined in 2014 by Eigbiremolen and Anaduaka. The objective of the study was to find out the effect of intellectual capital on economic growth in Nigeria. The study covered a period of fourteen years from 1999- 2012. The study employed the augmented Solow human capital growth model to investigate the impact of human capital development on the national output a proxy for economic growth using quarterly time-series data. The result of the test hypothesis revealed that human capital in line with theory exhibits significant positive impact on output level. It also revealed a relatively inelastic relationship between human capital development and output level. The study recommended that government and policymakers should be concerted and sincere effort in building and developing human capacity through adequate educational funding across all levels.

Babatunde, Adedayo and Omonike (2014) studied the intellectual capital formation and economic growth in Nigeria with the central objective of examining the contributions of education to growth in Nigeria. Secondary data was used for the study covering the period 1980-2011.the proxy economic growth was the growth rate of real gross domestic product. The independent variable intellectual capital was measured using Total expenditure on education, total school enrolment ratio for primary, secondary and tertiary educations in Nigeria and real capital investment as a proxy for physical capital. The unit root and co-integration tests were conducted and the error correction mechanism was employed. The result of the test showed that investment in education maintains a positive long-run relationship with economic growth while school enrolment and real capital investment exhibit long-run negative relationship with economic growth. The study recommended that policymakers should pay more attention to the education sector in terms of its yearly allocation and disbursement. Also that school enrolment ratio of the population should be increased and that more should be invested by the government in the acquisition of physical capital to stimulate rapid economic growth in Nigeria.

Ogujiuba (2013) carried out a study on the impact of human capital formation on economic of Nigeria (CBN) annual report, Central Bank of Nigeria Statistical Bulletin, and major Economic, financial and Banking Indicators, federal Office of Statistics' Economic and Statistical Review of various years, covering the period 1970-2010. The estimation procedure followed the two steps procedure of Engle and Granger (1987), Granger (1986) and Henry (1985). The dependent variable

in the study is economic growth measured by real gross domestic product rate (RGDPG), while the independent variable was measured using capital expenditure on education (CE), recurrent expenditure on education (RE), real gross capital formation (RGCF), primary school enrolment (PRYE), post-primary education enrolment (PPE), and tertiary education enrolment (TERE). The result of the test of hypothesis showed that investment in human capital in terms 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. The paper, therefore recommends that educational institutions in Nigeria should be re-structured for quality schooling at the primary, secondary and tertiary levels.

In 2015, Jaiyeoba investigated human capital investment and economic growth in Nigeria. The paper aimed to examine the relationship between investment in education, health and economic growth in Nigeria. The study covered the period 1982- 2011. The trend analysis, Johansen cointegration and ordinary least square technique. The dependent variable in the study is economic growth measured by Real Gross Domestic Product (RGDP). The independent variable human capital investment is measured by Government expenditure on education, health, gross capital formation, primary enrolment, secondary enrolment and tertiary enrolment rate. The findings of the study revealed that there is a long-run relationship between government expenditure on education, health and economic growth with expected positive signs and are statistically significant. The findings of the study showed a strong implication on education and health policies and considering that they are of great debate in the country. The study recommends that to accelerate growth and liberate Nigerians from the vicious cycle of poverty, the government should put in place policies geared towards massive investment in the educational and health sectors.

Sanchez, Salazar and Basilio (2012) investigated intellectual capital and productivity: intellectual management as support for financing innovation in small and medium scale enterprises in Spain. The main objective of the study is to show how both small and medium scale and financial institutions can benefit from using a commonly agreed intellectual capital report for financing innovation activities. The study employed the survey method and about 142 companies were used. The result of the analysis showed that there is a direct relationship between the systematic management of intellectual capital and business successes.

3. METHODS

The research design for this study is ex-post facto. The ex-post facto research design is a method of finding out possible antecedents of event that have happened but cannot be manipulated by the investigator. Kerlingere and Rint (1986) opine that ex-post facto investigation seeks to reveal possible relationship by observing an existing condition or state of affairs and searching back time for a plausible contributing factor. This design allows the researcher to describe observed events using the data derived from such observation to determine the relationship between human capital investment cost and economic growth in Nigeria. The data for this study is sourced from the federal budget office, ministry of finance and United Nations annual publication of various years. The ordinary least square regression technique was used for analysis with the aid of E-view 8 the data was analyzed. The study covered nineteen years that is 2004-2021.

Model specification

$$RGDP = f(CEE, CEH, REE, REH, UBE) \dots\dots\dots 1$$

$$RGDP_{it} = f(\beta_0 + \beta_1 CEE_{it} + \beta_2 CEH_{it} + \beta_3 REE_{it} + \beta_4 REH_{it} + \beta_5 UBE_{it} + et) \dots\dots\dots 2$$

Where RGDP = Real Gross Domestic Product, CEE = Capital Expenditure on Education, REE= Recurrent Expenditure on Education, CEH= Capital Expenditure on Health, REH = Recurrent Expenditure on Health, UBE = Universal Basic Education, and et = Error term

4. RESULTS

H₀: The effect of human capital investment on the economic growth of Nigeria is not significant.

Decision rule: Accept the null hypothesis if the probability value computed utilizing E-view is less or equal to 0.05 (i.e. $P \leq 0.05$).

4.1 Descriptive Statistics

Table 1. Descriptive Statistics

Variable	CEE	CEH	REE	REH	UBE	RGDP
Mean	4.500000	4.331053	4.857368	3.920526	4.605789	4.936842
Median	4.550000	4.580000	4.810000	4.420000	4.580000	4.980000
Maximum	4.790000	4.700000	5.480000	4.700000	4.890000	6.970000
Minimum	3.960000	2.680000	4.540000	1.540000	4.040000	2.360000
Std. Dev.	0.217358	0.526423	0.293936	1.106820	0.201282	1.613640

Evidence from descriptive statistics showed that the mean value of 4.500000 is indicated capital expenditure on education (CEE). This implies that a good amount of government expenditure is invested in the acquisition of equipment for education. This is validated by an std. deviation value of 0.217358. Also, the minimum and maximum value of 3.96000 and 4.790000 was observed for CEE.

Capital expenditure on health indicated a mean value of 4.331055. Meaning that the Government also invest in the acquisition of equipment in the health sector of Nigeria economy, this is supported with an std. deviation value of 0.526423. The minimum and maximum value of CEH is 2.68000 and 4.700000.

Recurrent expenditure on education (REE) showed a mean value of 4.857368, indicating that Government recurrent expenditure on education is good as affirmed by an std. deviation of 0.293936. REE also indicated a minimum and maximum value of 4.540000 and 5.480000.

The mean value of 3.920526 was indicated for recurrent expenditure on health. This value is positive and implies that Government expenditure on health is not too meagre. This is validated by an std. deviation value of 1.106820. The minimum and maximum value of 1.540000 and 4.700000 was also shown for recurrent expenditure on health (REH).

Universal basic education (UBE) is indicated to have a mean value of 4.605789. This also means that the Nigerian Government has spent a good amount on UBE. The minimum and maximum value of UBE is 4.040000 and 4.890000. The standard deviation value of 0.201282 was also recorded for UBE.

From Table 4.1 there is an indication of 4.936842 mean value for Real Gross Domestic Product (RGDP). This value is positive and it implies that RGDP is a determinant of human capital development in Nigeria. The std. deviation of 1.613640 was noticed for RGDP. The minimum and maximum value of 2.360000 and 6.970000 was also recorded.

Table 2. Unit Root Test

variable	RGDP	CEE	CEH	REE	REH	UBE
ADF test statisti	-3.837134 **** *** **	-4.632383 **** *** **	-5.231591 **** *** **	-5.795296 **** *** **	-2.923266 **** *** **	-3.886653 **
Order of integratio n	I(1)	I(0)	I(1)	I(0)	I(II)	I(II)
Remarks	Stationer y	Stationer y	Stationer y	Stationer y	Stationer y	Stationer y

Table 4.2 above presents the unit root test summary conducted in order to ascertain the stationarity of the data using Augmented Dickey Fuller (ADF). As shown above, Real Gross Domestic Product (RGDP) is stationary at 1%, 5% and 10% first difference and same with capital expenditure on health (CEH), Capital expenditure on education and recurrent expenditure on education are stationary at 1%, 5% and 10% at levels while recurrent expenditure on health is stationery at second difference but universal basic education is stationery at 10% at the second difference. However, according to Box and Henkins (1978), non-stationary time series in levels may be made stationary by taking their first differences. A given series is said to be integrated of order d (denoted $I(d)$) if it attains stationarity after differencing d times. If the series is $I(1)$ it is deemed to have a unit root. This situation arises if the first difference of the series is $I(0)$. We take the first differences of the respective variables and perform the unit root test on each of the resultant time series. Hence, the stationarity of the variables has been ascertained.

Test of Hypothesis

The effect of capital expenditure on education, capital expenditure on health, recurrent expenditure on education, recurrent expenditure on health and universal basic education is not significant on the real gross domestic product in Nigeria.

Decision rule: Accept the null hypothesis if the probability value computed by means of SPSS software is less than or equal to 0.05 (i.e. $p \leq 0.05$)

Table 3. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.817 ^a	.668	.540	1.09481	1.129

a. Predictors: (Constant), UBE, CEH, REE, CEE, REH

b. Dependent Variable: RGDP

Source: Author computation from SPSS 23 result

From table 3above, the correlation (R) is 81.7% which signifies a strong positive relationship between the RGDP and the explanatory variables. The coefficient of determination of 66.8% is equally very high and suggests that independent variables (CEE, CEH, REE, REH and UBE) could explain about 66.8% of the variations in RGDP. It is only 33.2% that relates to other variables outside the model. This result indicates that real Gross Domestic product is a function of human capital investment in Nigeria to a greater extent. In other words, the more increase in human capital investment, the higher the economic growth. The standard error is employed to check the correctness of the estimates represented by the regression line measuring the exactitude of the predicted figures. When it is very small, that is less than 1 or 0, it is perfect. Thus, the Standard

error of the Estimate has the value of 1.09481 which is not far from the point of zero implies that the regression line and the correlation, as well as the predicted values, are accurate. The Durbin-Watson of 1.129 indicates absence of autocorrelation in the distribution.

Table 4.ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	31.287	5	6.257	5.221	.008 ^b
	Residual	15.582	13	1.199		
	Total	46.869	18			

a. Dependent Variable: RGDP

b. Predictors: (Constant), UBE, CEH, REE, CEE, REH

Source: Authors computation from SPSS 23 Result, 2020

The F Statistics on table 4 above is 5.221 while the significant value is $0.000 < 0.05$ level of significance. This result is statistically significant and indicates that the model is a good fit. Thus, the independent variable jointly and significantly impacts on the dependent variable (RGDP).

Table 5. Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		Collinearity Statistics		
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	-25.339	10.461		-2.422	.031		
	CEE	4.797	1.279	.645	3.749	.002	.864	1.158
	CEH	.438	.581	.143	.753	.465	.712	1.405
	REE	-.585	1.015	-.107	-.576	.575	.742	1.347
	REH	-.069	.285	-.047	-.242	.812	.668	1.497
	UBE	2.151	1.380	.269	1.558	.143	.858	1.166

a. Dependent variable RGDP

Source: Author's computation from SPSS 23 result, 2020

As contained in table 3 the tolerance value of 0.864, 0.818, 0.712, 0.742, 0.668 and 0.858 is less than 0.10, hence, indicates that we have not violated the multicollinearity assumptions. This means that there is no collinearity between the independent variables in our study. This is well supported by the variance inflation factor (VIF) value of 1.158, 1.405, 1.347, 1.497, and 1.166 which is far below the cut-off of 10 (Pallant, 2001).

The t-statistics are employed to test the level of effect the independent variables have on the Real Gross

Domestic Product (RGDP). From the Table, it can be observed that capital expenditure on education (CEE) has a positive and significant impact on real gross domestic product as evidenced by (t-statistics value of 3.749, P-value of $.002 < 0.05$). This result is corroborated by the findings of Ogujiuba (2013). Capital expenditure on health is shown to have a positive but insignificant relationship with the real gross domestic product as validated by (t-statistic value of 0.753, P-value of $0.465 > 0.05$). The implication is that the Nigerian government has not invested much in the health sector of the economy, no wonder the collapse and massive exodus of Nigerian Medical Doctors to abroad for practices and politicians for medical attention. Recurrent expenditure on education (REE) is shown to have a negative and insignificant relationship with the real gross domestic product (t-statistic value $-.576$, P-value of $0.575 > 0.05$). This accounts for

incessant strike embarked upon by the teachers and lecturers in our educational institutions. This finding is validated by the study of Jaiyeoba (2015). Recurrent expenditure on health is indicated to have a negative and insignificant association with the real gross domestic product as validated by the t-statistic value of -0.242 and a probability value of 0.812 which is greater than 0.05 level. Again, this validated the cogent reason for the collapse of the health sector and the lamentations of health workers for better remuneration. Universal basic education (UBE) is shown to have a positive but negative association with real gross domestic product. Meaning that government investment or spending on UBE is very insignificant when compared with economic growth in Nigeria. This implies that education for all as embedded in UBE is not realisable at the rate of government expenditure for it at present.

5. CONCLUSION

The study examined the effect of human capital investment on economic growth in Nigeria intending to find out if human capital investment affect economic growth significantly and positively in Nigeria. Data for the study was sourced from CBN statistical Bulletin. Descriptive statistic, unit root test, multicollinearity test, and multiple regressions of the OLS were all conducted. The test of hypotheses was carried out with the aid of solution package for social sciences version 23 and our findings revealed that Capital expenditure on education (CEE) has a positive and significant relationship with the real gross domestic product as supported by the studies of Babatunde, Adedayo and Omonike (2014) and Ahmadi, Ahmadi and Shakeri (2011). Capital expenditure on health and universal basic education have a positive but insignificant relationship with the real gross domestic product. This finding does not corroborate the finding of Jaiyoba (2015). The reason could be based on the scope of the study and data used for the study. Recurrent expenditure on education and recurrent expenditure on health has negative and insignificant relationship with real gross domestic product. Again, our finding disagrees with the study of Jaiyobab (2015). From the result obtained from the test of hypotheses, we conclude that the effect of human capital investment on economic growth in Nigeria is not significant. This implies that Nigerian government has not invested much in ensuring the development of the people, no wonder the chronic poverty creeping the people which has manifested not just in increased crime rate but also poor economic growth in Nigeria.

6. RECOMMENDATIONS

This study examined the effect of human capital investment and economic growth in Nigeria and find out that human capital investment does not have a significant relationship with economic growth in Nigeria, hence the following recommendations:

- ✓ Government and policymakers should show concerted and sincere effort in building and developing human capacity through adequate educational funding across all levels. This is in line with the recommendation of Egbiremolen and Anaduaka (2014),
- ✓ That educational institutions in Nigeria should be re-structured for quality schooling at all levels.
- ✓ That the amount budgeted for capital expenditure on education and health should be both revisited in the national budget as this is not adequate.
- ✓ That the government should properly implement the national budget to enable improved performance of various measures of human capital investment as evidenced in our results.

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Table 1 Descriptive statistics

Variable	CEE	CEH	REE	REH	UBE	RGDP
Mean	4.500000	4.331053	4.857368	3.920526	4.605789	4.936842
Median	4.550000	4.580000	4.810000	4.420000	4.580000	4.980000
Maximum	4.790000	4.700000	5.480000	4.700000	4.890000	6.970000
Minimum	3.960000	2.680000	4.540000	1.540000	4.040000	2.360000
Std. Dev.	0.217358	0.526423	0.293936	1.106820	0.201282	1.613640

Unit Root Test.(Table 2)

variable	RGDP	CEE	CEH	REE	REH	UBE
ADF test statisti	-3.837134 **** *** **	-4.632383 **** *** **	-5.231591 **** *** **	-5.795296 **** *** **	-2.923266 **** *** **	-3.886653 **
Order of integratio n	I(1)	I(0)	I(1)	I(0)	I(II)	I(II)
Remarks	Stationer y	Stationer y	Stationer y	Stationer y	Stationer y	Stationer y

NOTE: **** significant at 1% ***Significant at 5 % **Significant at 10%

Table 3. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.817 ^a	.668	.540	1.09481	1.129

a. Predictors: (Constant), UBE, CEH, REE, CEE, REH

b. Dependent Variable: RGDP

Source: Author computation from SPSS 23 result

Table 4.ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	31.287	5	6.257	5.221	.008 ^b
	Residual	15.582	13	1.199		
	Total	46.869	18			

a. Dependent Variable: RGDP

b. Predictors: (Constant), UBE, CEH, REE, CEE, REH

Source: Authors computation from SPSS 23 Result, 2020

Table 5 Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-25.339	10.461		-2.422	.031		
	CEE	4.797	1.279	.645	3.749	.002	.864	1.158
	CEH	.438	.581	.143	.753	.465	.712	1.405
	REE	-.585	1.015	-.107	-.576	.575	.742	1.347
	REH	-.069	.285	-.047	-.242	.812	.668	1.497
	UBE	2.151	1.380	.269	1.558	.143	.858	1.166

a. Dependent variable RGDP