

## Human Development Index: a Paradox for the Nigerian Economy

**Maryam Abdu**

*Department of Business  
Administration  
Faculty of Social and  
Management Sciences  
Kaduna State University  
Kaduna*

### Abstract

The human development index evaluates and measures three important aspects of the national economy which are the composite statistics of life expectancy, education, and per capita incomes. Nigeria ranked 152 out of 188 countries in the low index category. Despite the reported growth of the economy and improvements in some sectors, no substantial positive improvements have been achieved. Few researches have been conducted on the human development index in Nigeria and this study intends to investigate composite statistics of the index and improve upon the literature by giving an up to date research. The main objective of the paper is to evaluate the human development index performance in Nigeria. Secondary data was used for the study over a period of 34 years from 1981 to 2015 and State was used to analyse the results. The findings revealed that health and education have no effect on economic growth and security has an effect on economic growth in Nigeria. It was concluded that there was the need to address the issue of health care and education by increasing expenditure so that a sustainable economic growth can be achieved.

### Keywords:

Human development;  
Educational  
attainment,  
Security,  
Life expectancy

*Corresponding Author:*  
Maryam Abdu

## **Background to the Study**

Over the centuries the world has changed. Globalization brought about technology which integrated people, markets and economies. Through research and development, the totality of human development was improved in areas of health, incomes, security and education. The reported development contributed to increase in world population and as reported in the Human Development report (2016) over a 25 year period, world population was estimated at 7 billion people of which one in four of the world population are young.

The human development index developed by ulHaq (1990) measures a country's overall achievements in social and economic dimensions based on health and life expectancy, educational attainment, and standard of living. The index became a composite measure of performance of human development in countries, and was later adopted by the United Nations Development Program (UNDP). Human development is important and necessary to the individual and the economy. To the individual, human development expands opportunities available, and gives freedom to improve the well-being of the person and it is the increase and welfare of human capital development that aids in the improvements of economies. Having the right, capable, educated and healthy workforce contributes to economic performance.

The Nigerian economy is large with an estimated population of over 184 million inhabitants, accounting for 47% of West Africa's population and one of the largest populations of youth in the world (World Bank, 2017). With the diverse multi-cultural and ethnic groups, there is abundance of natural and mineral resources; the country stands to be one of the biggest and largest exporters of oil and natural gas making the economy to have a record of increasing revenue. The Nigerian economic indicators were one which recorded improvements. Gross Domestic Product (GDP) grew to 3.23% as at June, 2017, unemployment rate was 14.2% as at December, 2016, interest rates were 14% September, 2017 and inflation rate was 15.98% as at September, 2017. The National Bureau of Statistics (2017) also adds that the inflation rate or Consumer Price Index (CPI) was an improved position recording a drop from the 16.01% recorded in 2016.

The human development index calculates in depth inequalities in life expectancy, education, security and per capita incomes and makes a comparison between countries. Life expectancy increases with availability of health services. Measurability of health outcomes covers immunization, infant breast feeding, child malnutrition, mortality rates, HIV prevalence in Adults, physicians available per 10,000 people and public health expenditure.

Education is a key to development. Basic education should be available and it is expected that much importance should be attached to the availability of basic education. The expected number of years an individual spends in education explains to a large extent, the level of development of an economy. Over the years enrolment rate of school children especially in countries that are regarded as poor and some developing countries have not been encouraging. Low enrolment rate in schools can be attributed to either poverty or lack of interest in acquiring Western education, but more towards poverty levels. It becomes necessary that in the 21<sup>st</sup> Century, availability of basic and quality education should be the responsibility of nations.

The average incomes earned by households are an important yardstick in measuring poverty levels of any economy. With a growing population worldwide, per capita incomes have reflected the wealth of countries. Per capita incomes increase with or decrease as the case may be in commensurate with level of economic growth and development of countries. Developed countries tend to have high per capita incomes compared with less developed countries thus contributing to poverty levels. Per capita incomes for Nigeria in 2016 were estimated at US\$5,740 per annum which is considered rather low considering the huge potentials.

With reports of impressive progress of human development, increase in literacy rates, increase in school enrolment rates, increase in per capita incomes and life expectancy, decrease in poverty rates, improved standard of living, and the digital revolution which has contributed to building the capabilities of individuals, the Nigerian position of human capital development has not been encouraging. Availability of jobs is quite low, the need for education and health services have been on the increase and has proved to be difficult for the average Nigerian, making the country to remain low in ranking of human development. Few researches have been conducted on the human development index and economic growth and there is the need to update the literature. It therefore becomes important to investigate the human development index and its performance in the Nigerian economy. The questions before the research are whether expenditure on health has an effect on economic growth in Nigeria? Whether expenditure on education has an effect on economic growth in Nigeria, and to what extent is expenditure on security having an effect on economic growth in Nigeria?

### **Objectives of the Study**

The main objective of the paper is to evaluate the human development index on economic growth in Nigeria. The specific objectives are:

- a. To examine the effect of health on economic growth in Nigeria
- b. To evaluate the effect of education on economic growth in Nigeria
- c. To investigate the effect of security on economic growth in Nigeria

### **Research Hypotheses**

In line with the research questions and objectives of study, the hypotheses are formulated in null form:

- $H_{01}$ : Health has no effect on economic growth in Nigeria  
 $H_{02}$ : Education has no effect on economic growth in Nigeria  
 $H_{03}$ : Security has no effect on economic growth in Nigeria

The scope of the study covers a period of 34 years from 1981 to 2015. The variables used in the study are three main components of human development index identified as health, education, and security, which were used to evaluate their effects on economic growth in Nigeria. The study is divided into five sections. Section one is the introduction which includes the background of the study, statement of the problem, research questions, objectives, hypotheses and scope of the study. Section two is the literature review and looks at the performance of human development indices on the economy. The methodology is in section three, data analysis in section four, while the conclusion and recommendations are in section five.

## Literature Review

In reviewing the literature, the performance of human development index is evaluated where the components of the index are closely examined to determine their effect on Nigerian economic growth. Life expectancy, the expected years of schooling, mean years of schooling and the gross national incomes are the key components of which the human development report (2016) ranked Nigeria as a low profile category in position 152. This position reflects that no meaningful development is taking place in the country to address basic issues of life expectancy, educational attainment, security and per capita incomes.

**Table 1: Human Development Index and its Components**

HDI rank/country	HDI index (value)	Life expectancy at birth (years)	Expected years of schooling (years)	Mean years of schooling (years)	Gross national income (per capita)	GNI per capita rank minus HDI rank	HDI rank
	2015	2015	2015	2015	2015	2015	2014
<b>Very High Human Development: 51 Countries</b>							
1 Norway	0.949	81.7	17.7	12.7	67,614	5	1
51 Kuwait	0.800	74.5	13.3	7.3	76,075	-48	50
<b>High Human Development: 55 Countries</b>							
52 Belarus	0.796	71.5	15.7	12.0	15,629	50	19
106 Uzbekistan	0.701	69.4	12.2	12.0	5,748	21	108
<b>Medium Human Development: 41 Countries</b>							
105 Republic of Moldavia	0.699	71.7	11.8	11.9	5,026	31	105
147 Pakistan	0.550	66.4	8.1	5.1	5,031	-10	148
<b>Low Human Development: 38 Countries</b>							
148 Swaziland	0.541	48.9	11.4	6.8	7,522	-33	149
152 Nigeria	0.527	53.1	10.0	6.0	5,443	-23	151
185 Burkina Faso	0.402	59.0	7.7	1.4	1,537	-8	185

**Source:** Human Development Report, 2016

From table 1, Nigeria's ranking of 152 is a drop in statistics from 151 rank recorded in 2014. The ranking for Nigeria is in the Low Human Development category. The human development index value according to Human Development Report (2016) was 0.541. 48.9 years was recorded as life expectancy at birth, 11.4 years as expected years of schooling, 6.0 as mean years of schooling, and gross national incomes per capita was \$5,443. Years of life expectancy at birth in Nigeria was estimated as 53.1 years however, with current trends in Nigeria of the growth in crime rates this value stands to be threatened. In the contrary, a wider view of the value is that as a result of improvements in health and security, longevity is increasing with an

estimated projected life expectancy of 90 years for some developed countries by the year 2030.

Globally, longevity in lives are recorded, school enrolment rates are increasing and health conditions improving with access to clean water and basic sanitation. Human development contributed to increase in per capita incomes, better standards of living with a sense of dignity and opportunity to engage fully in society. With the recorded improvements, the main barriers and challenges faced remain the persistent poverty and inequalities which in some areas accounts for the rising crime rate and insecurity, which becomes a concern especially for the growing younger generation.

Table 2 shows the Human Development Index (HDI) for Nigeria from 2003 to 2015.

**Table 2: Human Development Index Value**

Year	HDI	Year	HDI	Year	HDI
2001	-	2006	0.477	2011	0.507
2002	-	2007	0.481	2012	0.514
2003	0.445	2008	0.481	2013	0.521
2004	0.463	2009	0.487	2014	0.525
2005	0.466	2010	0.500	2015	0.527

**Source:** Human Development Report, 2016

Over a thirteen year period, the index showed a slight growth of 18.43% from 0.445 recorded in 2003 to 0.527 recorded in 2015. Considering economic activities and growth in the Nigerian economy over the years, the trends in the HDI value was not encouraging.

The Human Development Report (2016) in addressing inequalities of human development argues that if the potential of all people is harnessed through appropriate strategies and proper policies, human progress would be accelerated and human development deficits reduced. Five key messages highlighted by the report were that

- i. Universalism is the key to human development, and human development for everyone is attainable.
- ii. Various groups of people suffer from basic deprivations and face substantial barriers to overcoming them.
- iii. Human development for all calls for refocusing on some analytical issues and assessment perspectives.
- iv. Policy options exist and if implemented would go a long way in contributing to achieving human development for everyone.
- v. Reformed global governance with fairer multilateralism would help attain human development for everyone.

Human development concerns with enlarging freedoms so that valued choices can be pursued and when evaluating human development, the issue of life expectancy, education and security should be seen as the basic components a country should offer its population.

### **Life Expectancy**

Life expectancy 53.1 years for Nigeria estimated at 2015 was an improvement from previous years. Ogundipe (2017) stated that average life expectancy in Nigeria was increasing slowly

but remained lower than many poorer countries in Africa. He further adds that poor nutrition and high maternal and infant mortality are the major contributors to the relatively low average life expectancy in Nigeria. The World Health Organization (WHO) however inform that life expectancy at birth and at age 65 is improving globally as a result of better adult and child health as well as improved maternal care. The WHO further explain that while the average life expectancy for women at birth will most likely exceed 85 years, women in African countries like Nigeria may not fare as well as Asian and European counterparts, despite the shrink in the gap in life expectancy between males and females. Developed countries witness rapid increases in life expectancy than developing countries mainly due to slower growth, problems related to economic, social and developmental.

The relationship between longevity and health were explained by the studies of Robine, Saito and Jagger (2009), where they opined that a healthy, robust people will live on average, longer than frail people, thus associating a positive relationship between longevity and health; and the research of Jaba, Balan and Robu (2014) who informed that the output of a healthy system is expressed either by longevity indicators such as life expectancy at birth, life expectancy at age 65 years, healthy life expectancy, for total population by gender or by mortality.

Health outcomes are therefore important in considering and evaluating life expectancy of the economy. Immunizations are done at infant stage to ensure that the child has a healthy life and the most important inoculations are Diptheria, Pertusis and Tetanus (DPT) and measles vaccines. The table of health outcomes are illustrated in table 3.

**Table 3: Health Outcomes**

<b>Infants Exclusively Breast Fed</b> UNICEF (2016)	Ages 0-5 months	17.4(%)
<b>Infants Lacking Immunization</b> WHO and UNICEF (2016)	DTP (One-year olds) : 2014	25(%)
	Measles (% of one-year olds) : 2014	49(%)
<b>Child Mal Nutrition</b> UNICEF (2016)	Stunting moderate or severe (under age 5)	32.9(%)
<b>Mortality Rate</b> UN Inter-agency Group for Child Mortality Estimation (2015) World Bank (2016)	Infant (Per 1,000 live births) 2015	69.4
	Under five (Per 1,000 live births) : 2015	108.8
	Female Adult ( Per 1,000 people) : 2014	346
	Male Adult (Per 1,000 people) : 2014	379
<b>Deaths due to</b> United Nations Statistics Division (2016)	Malaria (Per 100,000 people) : 2012	106.6
	Tuberculosis (Per 100,000 people) : 2012	97.0
<b>HIV prevalence Adult</b> World Bank (2016)	(Ages 15-49) : 2015	3.1(%)
<b>Life expectancy at age 60</b> UNDESA (2015)	2010/2015	13.7 (%)
<b>Physicians Per 10,000 people : 2001-2014</b> World Bank (2016)		4.0
<b>Public Health expenditure (% of GDP) : 2014</b> World Bank (2016)		0.9 %

**Source:** Human Development Report, 2016

From the table, the outcome of health related matters showed that the percentage of infants from birth to 5 months who were fed exclusively with breast milk was 17.4 %. The percentage of surviving infants who did not receive the first dose of DPT and measles vaccines in 2014 was 25% and 49% respectively. The probability of dying between birth and 1 year expressed per 1,000 live births was 69.4 whilst that of between birth and age 5 was 108.8. The probability that a 15 year old will die before reaching 60 years expresses per 1,000 was high estimated for male and female adults at 379 and 346. Deaths arising from malaria and tuberculosis per 100,000 people were reported at 106.6 and 97 people respectively. HIV prevalent for an adult aged 15 to 49 years in 2015 was 3.1 % and life expectancy at age 60 years for the period 2010/2015 was estimated at 13.7%. The report identified that the number of medical doctors both generalists and specialists was 4 per 10,000 people which is considered extremely low for any meaningful value of life expectancy to improve. Public health expenditure which consists of current and capital spending on health from government (central and local) budgets, external borrowing and grants (Including donations from international agencies and non-governmental organizations) and social (or compulsory) health insurance funds to be 0.9 % of GDP (Human development Report, 2016).

### Educational Attainment

Education is core for human development. An educated population grows an economy. Uhbogbo, Akwemoh, and Omoegie (2013) pointed out the importance of education in national development by identifying the dimensions to include technology, industry, health, law, security and agriculture. They further state that education played a role in economic transformation in Nigeria by improving the standard of living of the populace, creating growth of the socio economic environment, contributed to political stability, infrastructural development, and the provision of basic amenities.

**Table 4: Education Achievements (2005-2015)**

Description		Value	
<b>Literacy rate</b> UNESCO Institute for Statistics (2016)	Adult (% ages 15 and older)	59.6	
	Youth (% ages 15-24)	Female	65.3
		Male	79.9
<b>Population with at least some secondary education</b> UNESCO Institute for Statistics (2016)	(% ages 25 and older)	-	
<b>Gross enrolment ratio</b> UNESCO Institute for Statistics (2016)	Pre-primary (% of preschool age children)	13	
	Primary (% of primary school age population)	85	
	Secondary (% of secondary school-age population)	44	
	Tertiary (% of tertiary school-age population)	-	
<b>Primary School dropout rate</b> UNESCO Institute for Statistics (2016)	% of primary school cohort	20.7	
<b>Education Quality</b> UNESCO Institute for Statistics (2016)	Primary school teachers trained to teach (% of primary school cohort)	66	
	Pupil teacher ratio, primary school (% of primary school cohort)	38	
<b>Government expenditure on education</b> World Bank (2016)	% of GDP	-	

**Source:** Human Development Report, 2016

Table 4 looks at achievements in education for Nigeria and highlights areas of literacy rates, the population with at least some secondary education, gross enrolment ratio into schools, primary school dropout rates, and education quality and government expenditure on education.

From the table, literacy rate showed that adults aged 15 and older were 59.6% literate and for youths aged 14 to 24 years 65.3% were female and 79.9% were male. The population with at least some secondary education that is enrolment ratio for pre-primary school, primary school, secondary school and tertiary institution was 13%, 85%, 44%, and nil, respectively. Primary school dropout rate was 20.7% which was not encouraging, and looking at quality education which is paramount for education, 66% of primary school teachers were trained to teach, while the pupil teacher ratio was 38%.

### **Human Security**

Human security is necessary for existence. Security in this context looks at issues related to violence against women, wife beating, suicide rate, crimes, orphaned children, homeless people due to natural disaster, internally displaced persons and refugees by country, depth of food deficit, and birth registration. For any meaningful development to take place there has to be adequate security. Provision of security encourages investment and economic growth. Ogoh, Ayatse, Orbunde and Obadahun (2013) in their study expressed concern on the security situation in Nigeria consisting mainly of political unrest to incessant religious and terrorist groups contributing to the slow growth of economic activities. They concluded by giving an outline on the role and importance of security agents in achieving national and economic development. The paper looks at human security from the perspective of public expenditure on security. The amount of funds allocated for security and defence is expected to provide the needed protection in the country to attract investment and grow the economy. Table 5 looks at human security issues for Nigeria.



**Table 5: Human Security**

Description		Classification/Year	Value
<b>Birth Registration</b> UNICEF (2016)	% under age 5	2010-2015	30
<b>Refugees by Country</b> UNHCR (2016)	'000	2015	152.1
<b>Internally Displaced person</b> IDMC (2016)	'000	2015	2,096.0
<b>Homeless People due to Natural Disaster</b> CRED EMDAT (2016) and UNDESA (2015)	average annual per million people	2005/2015	8
<b>Orphaned Children</b> UNICEF (2016)	'000	2014	9,900
<b>Prison Population</b> ICPS (2016)	per 100,000 people	2004-2015	31
<b>Homicide Rate</b> UNODC (2016)	per 100,000 people	2010-2014	10.1
<b>Suicide Rate</b> WHO (2016)	Per 100,000 people	Female 2012	2.9
		Male 2012	10.3
<b>Justification of Wife Beating</b> UNICEF (2016)	% ages 15-49	Female 2010-2015	35.0
		Male 2010-2015	25.0
<b>Violence against Women ever experienced</b> UN Women (2016)	%	Intimate Partner 2005-2015	16.2
		Non-intimate Partner 2005-2015	1.5
<b>Depth of Food Deficit</b> UNICEF (2016)	Kilocalories per person per day	2013/2015	40

**Source:** Human Development Report, 2016

From the table 30% of children under age 5 were recorded to have been registered. One of the biggest problems confronting the country is the issue of refugees. The number of people that fled their country because of persecution due to race, religion, nationality, political opinion or membership in a particular social group and who do not want to return to their country of origin was recorded as 152,100. The internally displaced persons were recorded as 2,096,000 and the homeless people due to natural disaster was annually on the average 8 per million people. The number of orphaned children ranging from 0 to 17 years was 9,900,000. The prison population which accounts for the number of adult juvenile prisoners including pre-trial detainees was 31 per 100,000 people. Homicide rates were recorded 10.1 per 100,000 people, while suicide rates were recorded as 10.3 per 100,000 in males and 2.9 per 100,000 people in females. Percentage for justification in wife beating between the ages 15-49 was 35% in female and 25% in male. Violence against women ages 15 and above by intimate partners was recorded at 16.2% whilst that between non-intimate partners was 1.5%. The depth of food

deficit which explains the number of kilocalories needed to lift the undernourished from their status, holding all other factors constant was recorded as 40 kilocalories per person per day (Human development Report, 2016).

### Methodology

The research is a quantitative research ex-post facto and time series. Data was extracted from the 2015 Central Bank of Nigeria Statistical Bulletin. The data gathered were gross domestic product (GDP), expenditure on health (HLTH), expenditure on education (EDU), and expenditure on security (SEC). GDP is the dependent variable, whilst the independent variables are HLTH, EDU and SEC.

The multiple regression model adopted is:

$$GDP = \alpha + \beta_1(HLTH)_t + \beta_2(EDU)_t + \beta_3(SEC)_t + \varepsilon$$

Where,

*GDP* = gross domestic product

*HLTH* = expenditure on health

*EDU* = expenditure on education

*SEC* = expenditure on security

$\alpha$  = constant

$\beta_1, \dots, \beta_3$  = coefficients of the regresses

$t$  = the time period

$\varepsilon$  = error term

The A priori expectation of the research is explained the table 4

**Table 6: A Priori Expectation**

<i>HLTH</i>	Positive
<i>EDU</i>	Positive
<i>SEC</i>	Positive

### Data Analysis and Results

Normality Test

**Table 7: Shapiro-Wilk Test**

Variable	Obs	Z	Prob> z
<i>GDP</i>	35	4.797	0.00000
<i>HLTH</i>	35	4.919	0.00000
<i>EDU</i>	35	4.768	0.00000
<i>SEC</i>	35	4.431	0.00000

**Source:** STATA version 13.0, output generated from secondary data

From the Shapiro-wilk test all the data are normally distributed and eligible with the prob> z values of 0.00. The highest Z value was *HLTH* with 4.919, and the least was *SEC* with 4.431.

**Table 8: Descriptive Statistics**

	Min	Max	Mean	Std. Dev.	Obs
<i>GDP</i>	144.83	94144.96	19842.05	28752.08	35
<i>HLTH</i>	.04	257.72	49.68743	74.7764	35
<i>EDU</i>	.16	390.42	85.91714	120.6731	35
<i>SEC</i>	1	740.79	155.9129	218.5118	35

**Source:** STATA version 13.0, output generated from secondary data

From the descriptive statistics table in table 6, of the 35 observations, the highest average value was *GDP* with 19842.05 and the least mean value was *HLTH* with 49.68743. *GDP* had the highest standard deviation of 28752.08 followed by *SEC* with 218.5118, *EDU* with 120.6731 and *HLTH* with 74.7764.

**Table 9: Correlation Matrix**

	<i>GDP</i>	<i>HLTH</i>	<i>EDU</i>	<i>SEC</i>
<i>GDP</i>	1.0000			
<i>HLTH</i>	0.9704* 0.0000	1.0000		
<i>EDU</i>	0.9706* 0.0000	0.9764* 0.0000	1.0000	
<i>SEC</i>	0.9803* 0.0000	0.9858* 0.0000	0.9786* 0.0000	1.0000

\*Correlation is significant at 0.05 levels

**Source:** STATA version 13.0, output generated from secondary data

From the correlations in table 7, the dependent and independent variables are significantly correlated at 0.05 levels. The highest significant correlation is between *HLTH* and *SEC*, followed by *GDP* and *SEC*. the variables with the least correlations are *GDP* and *SEC*

**Table 10: Regression Results**

Parameters	Coefficient	T	P
Constant	-327.1213		
<i>HLTH</i>	14.37692	0.17	0.864
<i>EDU</i>	60.77064	1.45	0.158
<i>SEC</i>	91.29186	3.06	0.005
R <sup>2</sup>	0.9639		
Adj R <sup>2</sup>	0.9605		
F Stat	276.3		
Obs	35		

**Source:** STATA version 13.0, output generated from secondary data

From the summary of OLS regression results is shown in table 8, the R<sup>2</sup> iso.9605, indicating that there is a model fit. 96.05% of the independent variables are explained in the dependent variable. *HLTH* and *EDU* have has insignificant parameter with *P* values > 0.05, while *SEC* has a significant parameter of *P* values < 0.05. Substituting the coefficients into the regression equation reveals the following:

$$GDP = -327.1213 + 14.37692HLTH + 60.77064EDU + 91.29186SEC$$

If expenditure on *HLTH* were to increase by 14.37692, *GDP* will increase by 1%, a corresponding increase in *EDU* of 60.77064 will lead to increase in *GDP* by 1% and similarly a 1% increase in *GDP* will lead to an increase of 91.29186 increases in *SEC*.

### Decision Rule

The decision rule is that if  $p < 0.05$  and t-value is  $> 1.96$  we reject the null hypothesis, otherwise we fail to reject the null hypothesis.

### Test of Hypotheses

**H<sub>01</sub>:** Health has no effect on economic growth in Nigeria

From the summary of regression results, the  $p$  value is 0.864 ( $0.864 > 0.05$ ) and t-value is 0.17 ( $0.17 < 1.96$ ). The study fails to reject the null hypothesis and conclude that health has no effect on economic growth in Nigeria. The outcome of the study did not provide evidence in support of health as a determinant factor on economic growth in Nigeria. The results did not conform to the A priori expectation of the study. The findings did not conform to the research of Bloom, Canning, and Sevilla (2003) who found statistical significance of health on economic growth. The implication of this result is that the amount of budgetary expenditure on health is having no effect on gross domestic product. The findings however conform to the findings of Well (2007) who found statistical significance of health on economic growth.

**H<sub>02</sub>:** Education has no effect on economic growth in Nigeria

From the summary of regression results, the  $p$  value is 0.158 ( $0.158 > 0.05$ ) and t-value is 1.45 ( $1.45 < 1.96$ ). The study fails to reject the null hypothesis and conclude that education has no effect on economic growth in Nigeria. The outcome of the study did not provide evidence in support of education as a determining factor on economic growth in Nigeria. The results did not conform to the A priori expectation of the study. The implication of this result is that the amount of budgetary expenditure on education is having no effect and not contributing to gross domestic product in Nigeria. The findings of the research conform to the study of Hanushek and Woessman (2016) who found that school attainment was not powerfully related to economic growth but rather cognitive skills of the population. Gylfason (2001) found inverse relationship of school enrolment rate to national wealth.

**H<sub>03</sub>:** Security has no effect on economic growth in Nigeria

From the summary of regression results, the  $p$  value is 0.005 ( $0.005 < 0.05$ ) and t-value is 3.06 ( $3.06 > 1.96$ ). The study rejects the null hypothesis and concludes that security has a significant effect on gross domestic product in Nigeria. The outcome of the study found evidence in support of security as a determining factor on economic growth in Nigeria. The findings of the results conform to the A priori expectation of the results.

### Conclusion and Recommendations

From the results of findings, health has no significant effect on gross domestic product in Nigeria; education has no significant effect on gross domestic product in Nigeria; but security however has a significant effect on gross domestic product in Nigeria.

With no significant effect of health on gross domestic product, the implication is that expenditure on health is not meaningful enough to have an effect on economic growth in Nigeria. There is therefore the need for more government expenditure on health services for accelerated growth of the economy. Considering the increase in population there should be increase in health services.

With no significant effect of education on economic growth, the implication of findings is that the government is not expending the needed amount to have an effect on economic growth in Nigeria. Education is essential and necessary for human development hence more expenditure should be made on education. Security has an effect on economic growth in Nigeria. The implication of this result is that security is necessary for economic development. Availability of security ensures and brings investment and investors in to the country. With the security challenges in the country, there is need for government to continue to provide adequate security.

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