Human Capital Investment as a Catalyst for Sustainable Economic Development in Nigeria

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Abstract: Human capital development presupposes investments, activities, and processes facilitating the generation of technical and expert knowledge; skills, health or values that are embodied in people. It implies maintaining an appropriate balance and key massive human resource base and providing an encouraging environment for all individuals to be fully engaged and contribute to organizational or national goals. Human capital development is necessary in order for National development to occur. In addition, human capital development teaches people how to utilize the advantages of diverse thinking styles (analytical and intuitive) so that they achieve the best holistic practical solutions. Human capital development and training are basically the same. This paper aims to examine the meaning of human capital development in relation to nation-building. The authors also took a cursory look at the concept of business education and its roles for sustainable development for nation-building. The study examined human capital investment as a catalyst for sustainable economic environment in Nigeria. The broad objective of the study is to analyze the effect of human capital investment on the Nigerian economy from 1986 to 2017. The data used for the study were sourced from the central bank statistical bulletin and national bureau of Statistics. Ordinary Least Squares (OLS) techniques were used to analyze the data. The findings of the study reveal that there is a positive relationship between government expenditure on health and real gross domestic product. The adjusted coefficient of determination (R2) shows that 97.3% of variations in the real gross domestic product is being accounted for by government expenditure on education, government expenditure on health and gross capital formation while the remaining 2.7% is accounted for by variables not included in the model. The study suggests that Nigerian policymakers should pay more attention to the health sector and increase its yearly budgetary allocation to it. Nevertheless, the key to achieving best results lies not in ordinarily increasing particular budgetary allocation but rather in implementing a public expenditure and revenue and ensuring the usage of the allocated fund as transparently as possible.

Keywords: Human capital formation, Education, Health and implementation.

1. Introduction

Countries all over the world are searching for the way of sustainable economic development. The economic development is mostly achieved through adequate management of human and natural resources. In a bid to promote economic growth, countries try as much as possible to develop their labor, in terms of improving educational and health conditions. Thus, human capital investment is a means through which labor force or the population that is willing and able to work acquires skills and knowledge required for the transformation of the country and bringing about economic development. It is believed that when employees are well trained and educated, the tendency towards innovation and creativity increases, which in turn improves the overall effectiveness and organizational performance, and strengthens the entrepreneurial activity in the country. When there is an increase in entrepreneurship, there will be an increase in goods and services produced as well as employment opportunities. Countries such as Japan, Great Britain, France, the United States of America, and China invest a lot in human capital, and they have done this for years. This is why they remain developed to date.
The British government sends its citizens abroad in order for them to obtain additional working skills they could have not otherwise acquire in their country. This helps them to gain knowledge and put the new expertise to use in their country. This has gone a long way in driving innovation as well as technological advancements that have led to the enhancement of production of a variety of goods and services. Similarly, the citizens of Japan were sent in the past to other countries to acquire knowledge. This also led to the economic development of Japan. China is leading the leading force in today’s world in terms of technological advancement, due to the level of their human capital. China focuses more and more of its efforts on training and development employees, with the notion that the trained labor will bring about development and sustainability, which is the product of training and knowledge. For this reason, the under-developed countries like Nigeria must look up to the best practices utilized by foreign states, in order to learn how to engage in proper human capital education. Since the adequate use of human force is the fastest means of coming out of the poor living situation, those trained for certain positions with accentuated professional skills will yield innovative behavior and raise the level of country’s development.

Development is a process by which people create and recreate themselves, in order to achieve a higher level of effectiveness and act in accordance with their choices, wants and values. Education and health are the basic objectives of development; they are important ends themselves. Health is central to well-being, and education is essential for satisfied and rewarding life: both are fundamental to the broader notion of expanded human capabilities that lie at the heart of the meaning of development (Todaro and Smith, 2009). The Nigerian economy could be said to have enjoyed some macroeconomic stability in recent times, as its rate of economic growth averaged to 2.01 percent within the last two decades.

However, as a result of the high and rapid growth rate of the population, the per capita growth rate has remained negative and it averaged to -0.851. Nigeria has the potentials to build a prosperous economy, significantly reduce poverty, and provide health care, educational and infrastructure services. Nevertheless, Nigeria belongs to the group of poor countries with a high level of resources, but a low level of productivity and management of abundant God-given resources. Despite the country’s relative oil wealth, poverty is widespread (oil revenue is only about $.50 per capita), and Nigeria’s basic social indicators place it among the twenty poorest countries in the world. (World Bank, 2004) Poverty prevails in all parts of the country, regardless of the geographical boundary, including rural and urban areas. The incidence of poverty is much higher in rural areas than in urban areas. Classified as poor are those who are unable to obtain an adequate income, find a stable job, own a property or maintain healthy living conditions. Poor also lack an adequate level of education and cannot satisfy their basic health needs, and as such, they are often illiterate, of poor health and have a short life span. (Amaghionyeodiri and Osinubi, 2004). Accepted as leading instruments for promoting economic growth, education and health are crucial for the advancement of any nation.

For Nigeria, where growth is essential if the country is to climb out of poverty, education and health are particularly important. For several decades, development agencies have placed great emphasis on primary and, more recently, secondary education. But they have neglected tertiary education as a means to improve economic growth and mitigate poverty. The Dakar Summit on “Education for All” in 2000, for example, advocated only for primary education as a driver of broad social welfare. It left tertiary education on the side. The inattention to higher education within the developmental initiatives lies partially in the shortage of empirical evidence that it may affect economic growth and incite poverty reduction. After the World War II, several economists, including Milton Friedman, Gary Becker, and Jacob Mincer, developed the human capital theory to examine the benefits of education for individuals and the society as a whole. Friedman and his wife Rose originally suggested that there was no evidence that higher education yields social benefits over and above the benefits that accrue to the students themselves. On the contrary, they hypothesized ‘that higher education may promote social unrest and political ‘instability. In contrast to the earlier premises, recent evidence suggests higher education is a determinant of income and can produce public and private benefits. Higher education may generate greater tax revenue, increase savings and investment, and stimulate entrepreneurial activity in society. It can also improve a nation’s health, contribute to reduced population growth, improve technology, and strengthen governance. As the example of higher education influencing country’s economy, in India, it contributed to the presence in the world’s economic stage, as stemming from its decades-long successful efforts to provide high-quality, technically oriented tertiary education to a significant number of its citizens.

Despite the tremendous progress in expanding enrolment and increasing years of schooling since 1960, Nigeria is yet to benefit from such development in terms of increased growth. Schooling in Nigeria has not delivered fully on its promise to drive economic success. The expansion of school attainment, at the center of most development strategies, has not yet
guaranteed better economic conditions (Fadiya, 2010). Scholars attributed the failure of Nigeria’s educational system to promote economic growth to the poor state of the system (1 wan. 2002, (There and Adeoye, 2002; Babatunde and Adefabi 2005) According to Babatunde and Adetabi (2005), the education that most Nigerians receive is not very good. Children attend primary schools for six years, but the education they receive is not sufficient. The pupils to teachers ratio were 37 to 1, and the youth literacy rate was 13% for males and 20% for females up to the late 1990s. In 2002, 33% of the relevant age group attended secondary school and only 4% attended tertiary schools. The low number of students in tertiary school can be easily explained by the fact that spending per student in tertiary schools is 529.8% of the GNP. Furthermore, public spending on education was only 0.9% of the GNP in 2002 (World Bank, 2004).

Health comes next to education in the development of human resources. According to Yesufu (2000), good health policy is a means by which government can at once ensure that manpower is generated in the right mix distributed in accordance with national priorities and ensure the highest level of labor productivity. Health improvement influences mobility and labor force productivity, thereby enhancing the process and speeding up economic development. Most developing countries have paid serious attention to the provision of public health, education, and social welfare services. It is believed that such measures could improve the quality of life of their people and their efficiency as productive agents, thereby accelerating the general socio-economic development of their nation. Since health and education, status affects the individual participation in economic activities, and consequently, the level of the labor force in an economy, a re-examination of the level of investment in human capital and sustainable growth is imperative. According to the literature, the investments in health and education sectors should improve the productivity of an economy.

The financing of human capital investment in Nigeria has often been described as inadequate, with budgetary allocations to these sectors (especially health and education) hardly exceeding, on average 4% of the nation’s total budgetary provisions (Orubuloye and Oni, 1996; Riman and Akpan, 2012). For instance, education and health care spending, in Nigeria is segmented into private and public spending. While public health expenditures in Nigeria account for just 20-30% of total health expenditures, private expenditures on health account for 70-80% of total health expenditure. It is expected that budgetary allocations to the health sector would improve health and reduce the overall mortality rate. These findings provide one possible explanation of why public spending often does not yield the expected improvement in human capital development.

Many scholars such as Yesufu, (2000), Riman and Akpan 92012) Orubuloye and Om (1996), Fadiya, (2010), Adeoye, (2002) Johnson, (2008) Ozun, (2015), Emma, (2001), carried out studies on human capital development. The motivation for this study was born out of the cognizance that Nigeria has largely neglected human capital formation and there still exists a gap in the literature on the impact of higher education on the economy. Hence the need for further research highlighting the significance of investing resources in education, training and health care that may bring about growth and innovation.

1.1 Objectives of the Study
The broad objective of the study is to analyze the effect of human capital investment on the Nigerian economy. The specific objectives are to:
- Determine the relationship between public expenditure on education and economic growth in Nigeria.
- Ascertain the relationship between public expenditure on health and economic growth in Nigeria.
- Examine the impact of capital formation on economic growth in Nigeria.
- Draw the policy recommendations to combat the inadequacies in the Nigerian health and education sectors

1.2 Literature Review
There are some related studies conducted by different scholars on human capital formation. The related literature has differing views on the concept of human capital development, the knowledge of human capital organization and rationalizations concerning the contributions of labor and other factors of production that could bring about the stimulating environment for achieving the targets in any industrial setting Agboola (2005). Therefore, human capital development concerns all kinds of labor, coaching, training, internship and human capital management investments. Fundamentally, it is that intangible factor that brings human intellect, skills, and competencies in the production process and allows for the provision of goods and services. It is the human capability and productivity engendered through knowledge and skills acquired from vocational and technical education, training and experience and facilitated by a
Human capital development as a process of increasing human knowledge through improving skills by vocational and technical education aims at enhancing trainees’ productivity and stimulating their resourcefulness should be systematic, sustainable and strategic. According to the Peretomode (2003), the process should be systematic to the extent that there should be a plan for which previous activities will provide support for upcoming activities while facilitating the attainment of set goals (Ubolum, 2006). The process should be sustainable since the product (human capital) must make desired and enduring impact on the organization or society (Osuala, 2005). The process should be strategic to the extent that there are well-defined goals and targets whose attainments are time-bound. It should be dynamic, responsive and result-oriented; continually evolving and proactive when addressing emerging challenges. Enyekiti, Amaehule & Teerah (2011) further stated that there should, therefore, be an effective monitoring system to inform further necessary improvements in the process. Ulinfu (1996) in Agboola (2015) defined Human Capital education as consisting of the total activity that is planned, organized and developed in form of the preparation of youths for responsible economic participation in the community. It is a subject of the entire vocational and technical education often referred to as technology or technical education. Also, the National Policy on Education conceptualizes human Capital education as the aspect of technical education leading to the acquisition of practical and applied skills.

In a related vein, Osuala (2004) in Kulo, effah, and Okudare (2015) observe Human capital as a program of instruction consisting of a vocational program for technological progress and general business education. They refer to it as a program providing students with information and competencies required to manage personal business affairs and to use the services of business organization. The concept is thought of as a type of training with the aim of preparing people for a business career and furthermore, upon entering into an employment relationship, becoming capable of rendering services therein. This will enable them to advance from their present employment to higher level (Atakpa & Okoro, 2009). From the array of the definitions, human capital development could be thought of as that aspect of education that renders students competent and directs their attitude towards work. Furthermore, it can refer to skills acquisition and one’s ability to perform effectively and efficiently as an entrepreneur, shaping one’s attitude towards the work as one of the employers rather than being the employee (Timan, 2012).

As the author observes, drawing from the extensive literature, the cardinal objectives of human capital development have differing perceptions. Aina (1990) in Ubolum (2006) noted that the traditional objectives of human capital have been to acquire the vocational knowledge and skills favorable for employment and business career. This assertion was also re-echoed by Ojukwu (2000), stating that human capital programs have been generally geared towards preparing the graduates for wage-employment suitable for requirements of large and medium business establishments.

In a related vein, Ihimekpen (2002), and Njoku (2001) observed that the general objectives of education have been to provide training for specific jobs and to develop the ability to use these skills in the business environment. On his view, Igbhami (2003) noted that the objectives of human capital formation have come to mean more than just grooming students for specific entry jobs. The author further states that programs should help to prepare people for occupational changes occurring in recent years. Furthermore, Soyede (2003) and Enyekiti (2017) listed some of the objectives of human capital formation as follows: Training of people for the specific occupation. Providing schooling and imparting the necessary skills leading to the production of craftsmen, technicians, and other entrepreneurial and self-reliant skilled personnel. Acquisition of practical and applied knowledge as well as basic scientific knowledge. Providing basic intellectual information on science, arts, and commerce, forming the key industrial knowledge. Preparing people for a business career; Preparing the individual to earn a living or to be self-reliant.
2. Conceptual Framework

Human Capital: Human capital may be defined as the total stock of knowledge, skills, competencies, and innovative abilities possessed by the population (World Bank 2002). Among the most important changes characterizing the 21st century is, “the increasing importance of knowledge as a driver of economic growth; tile information and communication revolution; the advent of a worldwide labor market and global socio-political transformations” (World Bank 2002). Human capital has also been defined in other ways.

For the purpose of this study, the general definition is given by the United Nations Economic Commission for Africa (1990) was adopted. The concept of human capital refers to the knowledge, skills, attitudes, physical and managerial effort required to manipulate capital, technology, and land among other things, to produce, goods and services for human consumption (UNECA, 1990).

Human capital development has become a core element in the development efforts of developing countries, in the knowledge society of the 21st century. This is because, “comparative advantage among nations derive less and less from natural resources and cheap labor endowment and increasingly from technical innovations and the competitive use of knowledge” (World Bank 2002:8). In the new environment, the learning paradigm has changed. The new paradigm is lifelong learning, in which there is less emphasis on remembering facts and basic data, and more emphasis on process, analytical knowledge, skills, and competences. The emphasis is on the “learning to learn; learning to transform information into new knowledge; and learning to translate new knowledge into applications” (World Bank, 2002:29). In this new paradigm, cooperative education is central. Periods of institution-based learning ‘produce the foundation of knowledge, and the acquisition of work-related skills, competences, and practices in relevant workplaces build on this foundation.

The general understanding has been that technological development is slow and cumulative process involving the movement of knowledge from one part of the world to another in a distinctive step-by-step approach. This linear view of technological development was accompanied by the mechanistic and static outlook of much of economic theory. The outcome of the combined views of technology and economic theory gave rise to policy approaches that failed to recognize the dynamical aspects of technological development. Either technology was equated with the supply of machinery or was reduced to monetary units. The fact that technological development is part of a wider process of the socio-cultural revolution was recognized only by a small sector of those interested in development. Often socioeconomic factors were invoked to explain failed development projects, but not in the planning of new ones. Socio-cultural factors are still seen as potential obstacles to technological development, even though they themselves embody a set of technological solutions to local problems.

Theoretical Framework:
These are the theories that support the need for human capital formation.

Human Capital Theory:
Human Capital theory as postulated by Paul Romer (1986) emphasizes how education increases the productivity and efficiency of workers by increasing the level of their cognitive skills. Schultz (1961), introduced the notion that people who invest in education increase their stock of human capital. Examples of such investments include expenditure on education, on the job training, health, and nutrition. Such expenditures increase future productive capacity at the expense of current consumption. However, the stock of human capital increases only in a period when gross investment exceeds depreciation with a passage of time, with intense use or lack of use. The provision of education is seen as productive investment in human being, an investment which the proponents of human capital theory consider to be equally or even more worthwhile than that of physical capital.

In fact, contemporary knowledge in the United States acknowledges that investment in human capital is three times greater than that in physical capital. Human capital theorists have established that basic literacy enhances the productivity of workers in low skill occupations. They further state that an instruction that requires logical or analytical reasoning or provides technical and specialized knowledge, increases the marginal productivity of workers in high-skilled professional positions. It has been proven that the greater the provisions of schooling, the greater the stocks of human capital in the society, and consequently, the greater the increase in national productivity and economic growth.
The Modernization Theory:
This theory focuses on how education transforms an individual’s value, belief and behavior. Exposure to modernization institutions such as schools, factories, and mass media inculcate modern values and attitudes. The attitude includes openness to new ideas, independence from traditional authorities, willingness to plan and calculate further exigencies and growing sense of personal and social efficacy. According to the modernization theorists, these normative and attitudinal changes continue throughout the life cycle, permanently altering the individual’s relationship with the social structure. The greater the number of people exposed to modernization institutions, the greater the level of individual modernity attained by the society. Once a critical segment of a population changes in this way, the pace of society’s modernization and economic development quickens. Thus, educational expansion through its effects on individual values and benefits sets in motion the necessary building blocks for a more productive workforce and a more sustained economic growth. It is on this premise that this paper bases its study. This is because of the concept of the theory. Considering the fact that human transformation will promote creativity that could bring about development that will lead to modernization which is the dream of any nation.

Empirical Review:
Odo et. al. (2016) examined that the effect of expenditure on education and on health has significant effect on economic growth in Nigeria. Using co integration techniques, the results revealed that, from the VECM, 1% increase in the government expenditure on education (TEDU), on the average led to 23.8% increase in GDP, while, 1% increase in the government expenditure on health (THEA) caused 37.6% decrease in GDP. The two variables as human capital development factor were found to have significant effect on economic growth. However, government expenditure on education has a positive relationship with GDP. Therefore, efforts should be made by government to address the agitations by the health workers which always make them to resort to frequent strike actions. If these worrying issues are addressed, the instability experienced in the health sector will be solved. This will go a long way promoting the economy. More so, efforts should be made to equip the health sector so that capital flight in the name of foreign medical treatment is reduced.

Aminu (2011) investigated the relationship between government expenditure on education and health on the growth and development of the Nigerian economy between 1977 and 2007 through the application of Augmented Dickey-Fuller techniques to examine the unit root property of the series after which cointegration test was conducted through the application of Johansen cointegration technique. The results indicate that expenditure on education and health impacted positively on economic growth and development during the period of study and a long-run relationship exists between them as confirmed by the cointegration test. The paper recommends improvement in government expenditure on human capital development (education and health), so as to boost economic growth and development.

Dauda (2010) carried out an empirical investigation on the relationship between investment in education and economic growth in Nigeria, using annual time series data from 1977 to 2007. He employed Johansen cointegration technique and error correction methodology. Empirical results indicate that there is, indeed a long-run relationship between investment in education and economic growth. All the variables including, labour force, gross fixed capital formation and educational capital appear with the expected positive signs and are statistically significant (except labour force) in the Nigerian economy. The study suggested that a concerted effort should be made by policy makers to enhance educational investment in order to accelerate growth, which would engender economic development in Nigeria.

3. Human Capital and Sustainable Development
Development pertains to the ability of man to take control of his environment, to manipulate and manage progressively, everything in that environment, to increase his production and productivity to enhance a qualitatively better life. In the quest to develop, the question remains; can the development be sustained? Sustainable development on the other hand, is development that meets the needs of the present generation without compromising the needs of the future generation (Wikipedia, 2007). Sustainable development according to Ascher and Healy (1990) and Silas-Dikbo & Vinazor (2011) emphasizes not the need to limit development, but the need to develop in other to be able to conserve. It also extends more than what the government of the day might think, but for continuous and concurrent ideologies that project and enhance the betterment of the entire society. Sustainable development therefore calls for adequate Human Capital development.
This involves investing on human capital to strengthen the weakness of public policies, so as to promote common good of the society in the resent. The same time, these efforts are expected not to harm or obstruct the ability of the further generations to achieve their development needs.

Unfortunately, the reverse is the case in the trend in Nigeria environment as the political leaders do not have vision and passion to encourage human capital. Morris (2002) had asserted that most discussions (and actions) of sustainable development have to give due attention to meeting the needs of the present and indeed of the future generations through human capital development. The strides should be noticed in both educational and health, thus sustainable development cut across and transcend to all spheres of life. Sustainable development strategies allow drawing natural resources assets, and utilization of environmental services through human knowledge and innovation which is the outcome of human capital formation.

Sustainable development in human society is not a one-sided process rather multi-sided issues; individuals perceive development as increase in the skill and ability, it is viewed as maximum freedom, the ability to create responsibility. Seer (1977) in Enyekit (2017) states that sustainable development involves capital accumulation and economic growth only but the condition in which people in a country have adequate food, job and income inequality among them is great. It is the process of bringing fundamental and sustainable changes in the society with high level of technical know-how. It encompasses growth and embraces the quality of life as social justice, equality of opportunity for all citizens, equitable distribution of income and the democratization of development processes. It is the capacity of members of the society to actualize them by participating actively in the social engineering of their destiny. It entails the ability of individuals to influence and manipulate the forces of nature for their enhancement and that of humanity. Economic, political or social development implies more changes in the technical and institutional arrangement by which it is produced. In spite of various concepts, sustainable development is a multi-dimensional and is basically about the process of changes around the spheres of societal life. However human capital formation is the engine through which the development is carried out. This implies that labour development is the bedrock of any nation.

4. Methodology

For the purpose of this study, the ox-post facto research design is used. The annual time series data were collected from secondary source from 1986-2017. The data were collected principally from Central Bank of Nigeria (CBN), Nigerian Stock Exchange (NSE), Statistical Bulletins 2017. The variables used for the Work includes. Real Gross Domestic Product, Government Expenditure on Education, Government Expenditure on Health and Gross Capital Formation.

5. Mode Specification

The econometric modeling procedure adopted for this paper is ordinary least square (O.L.S) The specification is being guided by existing theory or empirical evidence from previous studies. The model is specified as follows:

\[ Y = f(GEE, GEH, GCF). \ldots \text{equ (i)} \]

\[ Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \mu \ldots \text{equ (ii)} \]

\[ Y = \beta_0 + \beta_1 \text{GEE} + \beta_2 \text{GEH} + \beta_3 \text{GCF} + \mu \text{t} \ldots \text{eq (iii)} \]

Where

RGDP – Real Gross Domestic Product (Proxy for economic growth)  
GEE – Gover Expenditure on Education  
GEH – Government Expenditure on Health  
GCF- Gross Capital Formation

a Prior expectation are \( \beta_1, \beta_2, \beta_3 > 0 \). This implies that all these independent variables in the model have positive relationship with economic growth.

6. Data Presentation

Table 1: Data on Real Gross Domestic Product (RGDP), Government Expenditure on induction (GEE), Government Expenditure on Health (GEH) and Gross Capital Formation (GCF) in Nigeria from 1986 to 2017.

<table>
<thead>
<tr>
<th>Year</th>
<th>RGDP</th>
<th>GEE</th>
<th>GEH</th>
<th>GCF</th>
</tr>
</thead>
<tbody>
<tr>
<td>1986</td>
<td>15,237.99</td>
<td>608.94</td>
<td>360.4</td>
<td>5471.8</td>
</tr>
<tr>
<td>1987</td>
<td>15,263.93</td>
<td>584.65</td>
<td>236.4</td>
<td>4819.9</td>
</tr>
<tr>
<td>1988</td>
<td>16,215.37</td>
<td>508.35</td>
<td>443.2</td>
<td>4368.4</td>
</tr>
<tr>
<td>1989</td>
<td>17,294.68</td>
<td>392.46</td>
<td>452.6</td>
<td>4455.7</td>
</tr>
<tr>
<td>1990</td>
<td>19,305.63</td>
<td>365.4</td>
<td>658.1</td>
<td>6177.8</td>
</tr>
</tbody>
</table>
### 7. Data Analysis

**Dependent variable:** Real Gross Domestic Product  
**Method:** Ordinary Least Square  
**Sample:** 1986 – 2017

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>T-Statistic</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>5.303048</td>
<td>0.332877</td>
<td>15.93094</td>
<td></td>
</tr>
<tr>
<td>LOG(GEH)</td>
<td>0.092402</td>
<td>0.010703</td>
<td>8.633239</td>
<td>1.855940</td>
</tr>
<tr>
<td>LOG(GEE)</td>
<td>0.111926</td>
<td>0.029919</td>
<td>3.740931</td>
<td>5.238127</td>
</tr>
<tr>
<td>LOG(GCF)</td>
<td>0.377129</td>
<td>0.056986</td>
<td>6.617888</td>
<td>5.960415</td>
</tr>
</tbody>
</table>

**Source:** Regression Result (2017)

R² (Coefficient of determination) 0.975278  
R² (Adjusted coefficient of determination) = 0.972629  
Durbin Watson 1.193457  
F – value = 368.1909

### 8. Summary of Findings

The study examined the impact of Human Capital Investment and Economic Growth in Nigeria from 1986 to 2017. The ordinary least square (OLS) method was used in analyzing data. The findings of the study reveal that:

There is a positive relationship between government expenditure on education and real gross domestic product. There is also a positive relationship between government expenditure on health and real gross domestic product. While there is a positive relationship between gross capital formation and real gross domestic product. The t-test showed that; government expenditure on education has a significant impact on real gross domestic product in Nigeria. Government expenditure on health has a significant impact on real gross domestic product in Nigeria. Gross capital formation also has a significant impact on real gross domestic product in Nigeria.
The f-test shows government expenditure on education, government expenditure on health and gross capital formation jointly have a significant impact on real gross domestic product in Nigeria, at 5% level of significance. The adjusted coefficient of determination (R) show that 97.3% variations in real gross domestic product is being accounted for by government expenditure on education, government expenditure on health and gross capital formation, 97.3% shows a good fit for the model. From the regression result, Durbin Watson (DW) value is 1.193457. This value is closer to zero than two and it indicates that there is perfect positive autocorrelation in the model. The variance inflation factors of the variables are less than 10 implying that, there is no multicollinearity among the explanatory variables.

9. Conclusion

Appropriate investment in education and health is fundamental to any meaningful economic development programme that must be pursued by any developing nation especially like ours. It takes into account all the opportunities and strategies and challenges that might face the process of human development. Nigeria can only reposition herself as a potent force through the quantity and quality of the products from the primary, secondary and tertiary schools’ systems, and by making her manpower relevant in the highly competitive and globalize economy through a structured well-funded, appropriate, profitable investment in health and education in the right direction and strategies planning of her health and educational institutions.

Recommendations

In the light of the analysis and findings of this study, the following recommendations are considered necessary for the short, medium- and long-term implementations. The recommendations shall be outlined with respect to the objectives of the study. They are:

- There is need for Nigerian policy makers to pay more attention to the health sector and increased its yearly budgetary allocation to it. Nevertheless, the key to good results lies not in ordinarily increasing particular budgetary allocation but rather in implementing a public finance-system that, to the extent possible, links specific expenditure and revenue decisions and ensure the usage of the allocated fund as transparently as possible.
- Improved conditions of service for workers in the educational sector. This will help reduce the current brain drain in educational sector and more competent hands that will help improve productivity of the sector and the national economy at large.
- Government should strengthen its core functions by creating - strong macroeconomic policies to checkmate corrupt top government officials and politicians to embezzle or loot government fund in the name of providing infrastructural developments, jumbo projects and white elephant project that resulted in fund misappropriation which cannot translate to economic development in Nigeria.
- There should be vocational education that will produce practical oriented labour for entrepreneurship development. This should be enhanced by the government.
- Government should provide adequate -infrastructure services that support the full mobilization of all economic decision especially educational sector.
- There should be workable government policy on environmental sustainability and development that could promote conducive working environment that will bring about efficiency of labour as well as high level of productivity.

References

- Orubuloye, I. 0. and Oni, J. B. (1996). Health transition research in Nigeria in the era of the structural adjustment programme. Health Transition Review (Supplement), 6,
Amadi Kelvin Chijioke, Alolote Ibin Amadi
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