OPEN ACCESS JOURNALS

Indiana Journal of Humanities and Social Sciences
Abbriviate Tittle- Ind J Human Soc Sci
ISSN *(Online)*- 2582-8630
Journal Homepage Link- https://indianapublications.com/journal/IJHSS

INDIANA PUBLICATIONS
PRODUCTIVE AND QUALITY RESEARCH

Research Article

Volume-03|Issue-02|2022

Government Expenditure on Human Capital Development and Its Impact on Economic Growth in Nigeria

Sule Muhammed*[1], Okaforocha Chika Maureen[1], Itodo Christian Itodo[1]

[1]Department of Economics, Nnamdi Azikiwe University, Awka, Nigeria

Article History
Received: 19.01.2022
Accepted: 09.02.2022
Published: 28.02.2022

Citation
Muhammed, S., Maureen, O. C., & Itodo, I. C. (2022). Government Expenditure on Human Capital Development and Its Impact on Economic Growth in Nigeria. *Indiana Journal of Humanities and Social Sciences*, *3*(2), 56-61.

Abstract: *The study is on government expenditure on human capital development and it impact on economic growth in Nigeria from 1970-2011. The variables of study are Real Gross Domestic Product (RGDP), Gross Fix Capital Formation (GFCF), Total School Enrolment (TSCHE) Government Recurrent Expenditure on Health (GREXPH), Government Recurrent Expenditure on Education (GREXPE), Political environment Dummy (PDEMT) and Interactive Government Recurrent Expenditure on Health and Education (DGREEH). Data were sourced from CBN, World Bank and Federal Bureau for Statistics (FBS). The study employed the Ordinary Least Square (OLS) regression model to analyze the data and discovered the growth in RGDP was accounted for by the GFCF, TSCHE, GREXPH, GREXPE, PDEMT, and DGREEH. GFCF and TSCHE are positive and significant while GREXPH, GREXPE, are positive but not significant. Both PDEMT and DGREEH are both negative and insignificant. The study concluded that the positive variables are the ones responsible for economic growth during the period and capital formation should be of topmost priority, education and health sector budget be increased significantly to ensure steady economic growth among others.*

Keywords: *Human Capital, Economic Growth, Human Development Index, Capital Formation, Life Expectancy*.

INTRODUCTION

Naturally, every country is endowed with both human and natural resources which are very critical to their growth and development. The wisdom, will and ability of any nation to make judicious use of these two resources determine the level of its growth and development. The wisdom in human endowment lies in the proper and efficient allocation of the natural resources in production of the right goods and services for human consumption.

For any country either developed or developing, must invest in human capital by providing a working and sound system of education and a functional health system. Development of education and the health sector have been the major topic of discussion among economists, researchers and policy makers as the engine of growth. Education without doubt is an instrument of change as it is responsible for the development of the research sector where ideas and knowledge of modern technology and modern productive methods of production, even with innovation are acquired. Investment in education produces efficient and productive individuals that could bring about better plans which induce growth. Investment in the health sector on the other hand is for wellness of the working population and the general public. A healthy nation is a wealthy nation. The workers are not iron, even the iron does wear out after sometimes. The individuals get sick or tired after working for sometimes and so need maintenance and proper healthcare.

In 1959 seeing the importance of human capital development, the Nigerian government set up a panel to find out the manpower need of the country at the post-secondary and tertiary institutions over the next twenty years. The report of the committee known as the Ashby report (1960) made some projection of enrolment figures into Nigerian universities for a period of one decade (1960 - 1970). The committee made three recommendations as regard human resources planning. It suggested the establishment of the National University Commission (NUC) as university regulatory body to regulate the activities of universities in the country, the National Manpower Board (NMB) and its secretariat responsible for manpower training generally and the Regional Manpower Committee responsible for manpower training at the state or regional level.

Nigerian government has attempted to improve its human capital at various stages of reforms in education. According to Garba (2015), the British colonial rule in 1954 changed the 8-62-3 system to the 6-5-2-3 as a result of agitation from notable Nigerians who were educated at the time. The British system of education was criticized and in September 1969, a conference was held with recommendation that the old system of 6-5-2-3 be replaced with the 6-3-3-4 system. All these were meant to improve the quality of human capital in the country. The trend in the expenditure of government as a percentage of GDP in health has shown a non-stable movement over time.

***Corresponding Author:** Sule Muhammed

Provision of viable healthcare stimulates productivity as healthy labour spend more time for work and earn more, spend more time in the labour force, invest in education and save for their old age. According to Adebisi *et al.* (2020), there has been a downward movement in government allocation as percentage of the total budget to the health sector. It continues to drop from 7.23% to 6.85% between 2014 and 2015 and dropped to 5.79% in 2018. According to them, government seeing the importance of the sector implemented the National health act which increased the allocation to health between 2018 and 2020 as was approved by the national assembly.

No doubt, Nigeria has all it takes to attain the desired level of development since independence. It has the population and the natural resources needed to achieve it growth. The availability of both federal and state universities and proliferation of private universities all over the country and the little attention to the health sector by both the state and federal government should have impacted on the development of the nation to a reasonable extent. People are graduating every year without job and the country is almost ravaged by abject poverty.

Objective of the Study

The major objective of the research is to investigate government expenditure on human capital development and its impact on economic growth in Nigeria. Specific objectives of the study are;

- To find out the connection between Gross Fixed Capital Formation (GFCF) and economic growth (RGDP)
- To examine the impact of Total School Enrolment (TSCHE) on economic growth
- To study the relationship between Government Recurrent Expenditure on Health (GREXPH) and economic growth
- To investigate the influence of Government Recurrent Expenditure on Education (GREXPE) on economic growth
- Establish a relationship between Political Environment Dummy variable (PDEMT) and economic growth.
- Find out the impact of the interaction Dummy of political era and Gross Recurrent Expenditure on Education and Health (DGREEH) and economic growth.

The study incorporated dummy of political environment and interactive government recurrent expenditure on health and education to ascertain the era of more or greater priority to health and education in terms of expenditure.

REVIEW OF LITERATURE

Human Capital

Human capital is the personnel endowment as found in the individuals that constitute the labour force of any nation and it is made of the physical appearance of persons and their abilities. These abilities include energy, skills and knowledge, innovative and leadership skills, tolerance and endurance.

Human capital is the skills and experience of a country's labour force and its ability to control all other resources. Human capital can be developed through acquiring education, training on the job, spending judiciously in health and proper nutrition. Abubakar *et al.* (2021). Developing human capital is capable of transforming every other resource because of its overhauling nature. When the labour force is improved in skills and knowledge, there will be proper channeling and utilization of other factor toward a productive and efficient use.

Anyanwu *et al.* (2015) saw human capital as one important factor which is capable of manipulating all other factors to the benefit of the populace. To them, it is critical to the socioeconomic growth and development of a nation and encompasses education, health, labour, employment and women affairs. Investment in human capital is necessary as well as important because it is meant to improve knowledge and skills, productivity and sound health to ensure soundness of the labour force in order to achieve the desired growth. To this end, Todaro & Smith (2003) opined that education and health are seen as crucial agents in the process leading to growth and development. They owe their central importance to the dual role they play in the input and output production process in the economy.

According to Sunday (2021), human capital could be defined as the some abilities such as knowledge and skills acquired by the working population during production process which are meant to achieve economic growth. He further explained human capital as reported by Adamu, to be the inherent skills and efforts of human in an economy which is mainly for the purpose of achieving economic growth and that these could be acquired and improved upon through formal or informal education, skill acquisition and other social investments that could increase the productive capacity of the labour force.

Barro (1991) asserted that investment in human capital is tantamount to carrying out socioeconomic and political revolution in a country due to its importance as a major over hauler of other resources targeted at achieving economic development. Commitment to human capital development is considered to be one of the vital elements responsible for the improved performance of most developed and industrialized nations of the world and so should be emulated by the developing countries. Human capital is a very important factor in production. There is need for

***Corresponding Author:** Sule Muhammed

it improvement and empowerment so as to keep the system on. For instance, the circular flow of income, labour is used and paid for its service. It constitute the household which supply the labour and also makes the effective demand that keep the production process on and the system continues to expand as the household increase in size.

The development of any nation depends on a number of factors among which is human capital as the most important tool for achieving sustainable economic development and upon which other factors partially or heavily rely on to function appropriately. Emeghara *et al.* (2021) If the working force is well educated, it will earn more and will be able to save so as to invest in physical assets. With the advancement in technology and invention of highly sophisticated machines and new industrialization, there is need for training and skill improvement to be able to cope with globalization.

Concept of Economic Growth

Production of physical goods and the provision of services over certain period are valued in currency of the country, compared with the output of goods and services in the previous year to ascertain whether or not the country is making progress. Thus, growth can be seen as the increase productivity of a country in a year. In Nigeria it is measured using the proxy Gross Domestic Product (GDP). Balami (2006) defined growth as steady process of increasing the output level of goods and services in the economy.

Growth is seen as a concept that is related to quantity. That is sustained increase in the per capita output of a country followed by expansion in manpower and volume of trade. Jhigan (2003). This entails a quantitative increase in output per head of the population and the volume of output traded within and outside the country. It also encompassed the contribution of all the factors of production to the total output. These factors include infrastructure development, technological advancement and human capital development.

Jhingan (2016) viewed economic growth as the increase in real income per head (real per capita income) of a country for a fairly long time period. To him, the factors responsible for economic growth are growth in the size of population, technological know-how, accumulation of capital and mobilization of savings. Todaro (1977) in his version of economic growth explained it as the economy's capacity to produce output of goods and services over stipulated period of time for the main purpose of improving the well being of the people in increasing number and diversity. This entails a steady increased productivity overtime that will lead to increased level of national income.

Economic growth is seen as increase in the production of goods and services over a specified period. Adeyemi & Ogunsola (2020) they viewed the increase in output from the stock market supply as prices of stock rise with businesses able to raise capital for investment and hiring more people. This creates a multiplier effect as more jobs are created and incomes are generated. Growth in output of goods and services is compared between one period and the other and it is measured in nominal or real term. It can be measured in terms Gross National Product (GNP) or Gross Domestic Product (GDP).

Economic growth as put by Lipsey & Crystal (2011) is the increase in the capacity of the economy to produce goods and services after the passage of some times of which the production possibility boundary moves outward during the time duration. It means increase in output overtime when the economy makes effective and efficient use of it productive resources without leaving any of its resources underutilized. They believed that within the production possibility of the economy, all commodities are produced in large quantities.

Going through the various definitions of economic growth, it is a plan towards development which is entirely dependent on human capital for the manipulation of other factors such as both physical capital and natural resource to achieve the desired increase in the output of goods and services. Remember that Adam Smith once said that for a country to develop it must pay attention to productive labour and the major engine of growth is labour through division of labour. So, it means that production must take place with the use of labour. Smith said with division of labour, efficiency and effective use of both resource and time could be achieved.

Theoretical Framework

The idea that formed the basis for this research is the endogenous or the new growth model. The theory explained the responsiveness of growth to internal factors rather than external influence of factors outside the system. It held that investment in human capital certainly brings about improvement in knowledge, skills and innovations that could lead to the desired economic growth. However, it does not undermine the possible positive external and spill over impact from a knowledge based economy that brings about economic development. The theory emphasizes on policy measures that enhance the long run growth rate of the economy, such as subsidies for research and development improve knowledge, skills and innovation thereby increasing output.

The interesting thing about the endogenous growth model is that it modeled technology explicitly as a variable within, what determines it rather than making it exogenous. In the present world of globalization, economic progress of any nation depends on its level of technology and on its ability to effectively and efficiently utilize its productive resources. The working force should be able to brace up with the rapid change in industrialization, learn how to operate the more advanced facilities and introducing innovations that would lead to increased output.

The model assumes that the economy has the capacity to grow so long as it does not run out of innovations and advancement in technology.

Romer developed a production function of the firm as;

Y = A(R) F(R, K, L)

Where Y = output

A = Public stock of Knowledge

R = Result of expenditure on research and development

K = Capital stock of firm

L = Labour stock of firm

The proponents of the endogenous growth model are of the opinion that as government spend reasonably on financing health services, it does not only increase utilization in the country but provision of sound and functional health system that would be accessed by the poor majority. Accessibility to health services is an important element in human capital investment that will induce aggregate economic growth in the economy.

RESEARCH METHOD

Model Specification

The Ordinary Least Square (OLS) multiple regression models was adopted for this research. The model is a modification of the Solow growth model. It was modified to accommodate the recurrent expenditure of government on health and education and the other variables of study. RGDP = F(GFCF, TSE, GREXPH, GREXPE, PDEMT, DREEH)

$RGDP = \alpha_0 + \alpha_1 GFCF + \alpha_2 TSCHE + \alpha_3 GREXPH + \alpha_4 GREXPE + \alpha_5 PDEMT + \alpha_6 DREEH + \mu$

Where, RGDP = Real Gross Domestic Product

GCAPF = Gross Capital Formation

TSCHE = Total school enrolment

GREXPH = Government recurrent expenditure on health

GREXPE = Government recurrent expenditure on education

PDEMT = Political environment dummy. 0 = military regime, 1 = civilian regime

DREEH = Interaction Dummy for recurrent expenditure on education and health during military regime.

α_0 = the intercept

$\alpha_1 – \alpha_6$ = the parameters

μ = error term

Priori Expectation

From principles and economic theories, it is a known fact that when government spend judiciously on education and health, growth and development will be greatly achieved without doubt except for other inhibiting factors. So, it is expected that economic growth and human capital investment should have a positive relationship.

RESULTS AND DISCUSSION

The data was analyzed with Stata 11 and the regression outputs are shown in Table 1 below;

Table 1. Results of OLS Regression

Variable	Coefficient	T-value	Prob.
C	-12839.2600	-1.17	0.250
GFCF	0.0444	3.40	0.002***
TSCHE	59073.9800	14.98	0.000***
GREXPH	1.7564	1.22	0.232
GREXPE	0.1927	1.10	0.921
PDEMT	-5793.9200	-0.33	0.743
DREEH	-0.5452	-0.43	0.673

R-squared = 0.9836, Adjusted R-squared = 0.9918, F-statistic =47.5911***

Note: *** indicates 1% level of significance

Source: Author's extractions from E-view results

The results in Table 1 showed that R-squared is 0.9836. This means that about 98% of the variation in real gross domestic product was accounted by the explanatory variables. That is the variation in economic growth in the country was caused by the combined impacts of the independent variables. The F-statistic of 47.5911 at 1% level of significance indicated that the model was adequate.

GFCPF was positive and having a direct relationship with RGDP at 1% level of significance. This shows the degree of importance of capital formation in an economy. It contribution to economic growth in Nigeria during the coverage was found to be significant and hence the need for more government priority in that area. Total school enrolment was observed to have a positive and fairly large value of coefficient. The relationship between TSCHE and RGDP is significant at 1% with the implication that it has the potential to contribute to economic growth with such a large coefficient and at 1% level of significance. GREXPH and GREXPE were both having positive relationship with RGDP but are not significant. They really do contribute to economic growth by being positive but, their contribution does not make much impact on RGDP. The reason for this might be due to lack of attention from the government. PDEMT showed a negative and insignificant relationship with RGDP. This implies that growth of RGDP with respect to human capital development does not depend on the type or era of government. There relationship between DGREEH (combined effect of recurrent expenditure on health and education) and RGDP is negative and insignificant. The implication of this is that the interaction between government recurrent expenditure

***Corresponding Author:** Sule Muhammed

on health and education Contribute positively to economic growth. It moves the same direction with economic growth.

DISCOVERIES

Findings from the research showed that about 98% of the change in RGDP was due to the aggregate effect of the independent variables. The significance of the F-statistic at 1% is a confirmation of the adequacy of the model.

It was discovered that GFCF, TSCHE, GREXPH and GREXPE are the major variables that positively related to economic growth in Nigeria within the period of study. Among these variables that are positively related to RGDP, only GFCF and TSCHE are significant at 1%. GREXPH and GREXPE are not significant because their probability values 0.921 and 0.232 respectively are greater than 5%.

PDEMT and DGREEH had negative and insignificant relationship with RGDP. The probability of PDEMT is 0.743 while that of DGREEH is 0. 673. These values are above 0.05. Apart from their negative signs, the value of the probabilities also renders them insignificant.

CONCLUSIONS

The following conclusions are made from the study in accordance with the findings;

- The variables with positive signs are the ones that contributed to economic growth in Nigeria. They are GFCF, TSCHE, GREXPH and GREXPE.
- Of these variables that are positively related to RGDP, the ones with significant impact are GFCF and TSCHE.
- PDEMT and GDREEH both have negative relationship with RGDP and are also insignificant.

Recommendations

From this study, GFCF was found to be significant and positive which serves as a proof on the importance of capital formation in the economy. Capital accumulation starts from empowerment in form of employment and providing an enabling environment for business to thrive. The government should make loans available to businesses at low lending rates. Employment should be created so that people will be empowered financially to be able to generate savings for investment. Investment should be encouraged in the economy to allow for capital formation which will bring about economic growth.

Spending of government on education and health should be increased by significant amounts in the budget to ensure the production of skilled, experienced and healthy workers that will bring about the innovations the country needs to produce at its optimum level of output. Science and technology should be developed and research grants and training organized to brace up with globalization.

Lastly, corruption is one of the obstacles the renders the efforts of government towards achieving economic development ineffective. Huge amount of money spent on development project will not commensurate what is physically seeing on ground. Moreover, there should be proper supervision of public projects. Close monitoring of education and health project should be done by government monitoring team. Accountability is one element that should be taken serious in public services.

REFERENCE

1. Abubakar, A, B., Bala, A, S., & Musa, A, A. (2020). To what extent does human capital development impact on economic growth? *Empirical evidence from Nigeria. Journal of Sustainable Development*, *4*(3).
2. Adebisi, Y. A., Umah, J. O., Olaoye, O. C., Alaran, A. J., Sina-Odunsi, A. B., & Iii, D. E. L. (2020). Assessment of health budgetary allocation and expenditure toward achieving universal health coverage in Nigeria. *Int J Health Life Sci*, *6*(2), e102552.
3. Adeyemi, P, A., & Ogunsola, A, J. (2020). Impact of human capital development on economic growth in Nigeria: ARDL approach. *IOSR Journal of Humanity and Social Science (IOSR-JHSS)*, *21*(3), 1-7.
4. Anyanwu, S. O., Adam, J. A., Obi, B., & Yelwa, M. (2015). Human capital development and economic growth in Nigeria. *Journal of Economics and Sustainable Development*, *6*(14), 16-26.
5. Balami, D, H. (2006). *Macroeconomic Theory and Practice*. Salawe print, off Leventies, Maiduguri.Borno state.
6. Barro, R. (1991). Economic growth in a cross section of countries. *Quarterly Journal of Economics*, *106*(2), 407-443.
7. Emeghara, C. D., Okafor, S., Orji, O., & Ahamba, K. (2021). Human Capital Investment and Economic Development: The Nigerian Experience. *Emeghara, CD, Okafor, SO, Orji, OI & Ahamba, KO (2021). Human capital investment and economic development: The Nigerian experience. International Journal of Research in Engineering, IT and Social Sciences*, *2*(1), 46-56.
8. Garba, A. (2012). Secondary Education in Nigeria: A synthesis of basic student-specific concerns from guidance and counselling perspective. *Journal of International Cooperation in Education*, *15*(2), 195-205.
9. Jhingan, M, L. (2003). *Economics of Development and Planning* (36th Rev. Ed.), Vrindapublication (P) Ltd, Delhi, India.
10. Jhingan, M, L. (2016). Macroeconomics Theory (13th Ed.). Vrinda Publication Ltd, Delhi, India

***Corresponding Author:** Sule Muhammed

11. Keji, S. A. (2021). Human capital and economic growth in Nigeria. *Future Business Journal*, *7*(1), 1-8.
12. Lipsey, R. & Crystal, A. (2011). *Economics* (12th Ed.). Oxford University Press ltd, London
13. Todaro, M, P. (1977). *Economic Development in the Third World*. Pearson Education Ltd, London.
14. Todaro, M, P., & Smith, S, C. (2003). *Economic Development* (8th Ed.). Pearson Education, Pte Ltd, New Delhi, India
15. World Bank (2020). *Nigeria GDP 1960-2022*. Retrieved from https://www.macrotrends.net/countries/NGA/nigeria/gdp-gross-domestic-product

***Corresponding Author:** Sule Muhammed