EFFECTS OF GOVERNMENT RECURRENT AND CAPITAL EXPENDITURE ON HUMAN CAPITAL DEVELOPMENT IN NIGERIA

SAVIOUR S. UDO, Ph.D [1]
JAMES, JAMES UFOT [2]

DEPARTMENT OF ECONOMICS,
COLLEGE OF EDUCATION, AFAHA NSIT
AKWA IBOM STATE, NIGERIA

Abstract
The study evaluated the impact of government recurrent and capital expenditure on human capital development in Nigeria between 1980 and 2023. This study was conducted to find out how recurrent and capital expenditures by government in Nigeria have affected human capital development. This study adopted the multiple linear regression method of analysis to link the variables in the study and Ordinary Least Squares method was adopted to analyze the specified model. This study used secondary data from Central Bank of Nigeria statistical bulletin of various years and other periodicals. The study also used Human Development Index as proxy for human capital development as dependent variable while government capital and recurrent expenditure, corruption index and inflation rate are used as independent variables. The findings from the study revealed that government capital expenditure and inflation have affected human capital development more than recurrent expenditure and it is equally observed that there is no positive effect of corruption on human capital development in Nigeria. The study further revealed that, government recurrent expenditure has a significant positive effect on Human capital Development. From the findings of the study we conclude that since recurrent expenditure does not have much impact on human capital development as capital expenditure, government should spend more on capital projects than recurrent projects as this will provide more opportunities for human capital to be developed in Nigeria.
Keywords: *human capital development, government, capital and recurrent expenditure, corruption, inflation*

1. Introduction

The word human capital development has often been seen by different scholars to mean how human resources can be made useful. Therefore, it can be seen as a strategy to improve human skills, create ways for persons to make better choices that improves a better, longer and rewarding lives that will enhance desired economy. The major reason government of both developed and developing economies spend their resources is to ensure a sustained desired life for her citizens, ensure they are trained to be knowledgeable in areas that will sustain the economy. Expenditure of government be it on human resource or capital resource avails a country the prospect of having an appropriate, capable and educated labour force to contribute meaningfully to development of such economy. This is because the quality of human resource in a country controls the level of sustained economic development of that nation. Worthy of note is that most scholars have measured economic development of a country based on gross domestic product (GDP) or gross national income (GNI) per capita and it should be also noted that this is only restricted to income alone but does not consider parameters such as health, education, physical environment and freedom that constitute human development components as considered by developed nations of the world. Even when the United Nations notes that Human Development Index (HDI) used as measurement for a nation's economic development does not take into cognizance some important human problems such as poverty, empowerment, inequalities, security and safety this does not undermine the use of HDI as a measure for economic development. Let it be pointed out that the United Nations points out that HDI remain the most vibrant aspects of a nation's economy that can lead to development if duly incorporated into national budgets and executed as it should have.

Nigeria has adopted several approaches to develop human resource by past and current administration and yet the expenditure has not produced the desired result. It is on this background; this study tries to find out the effect of government recurrent and capital expenditure on human capital development in Nigeria.

1.1 Objective of the study

The broad objective of this study is to examine the impact of government recurrent and capital expenditure on human capital development in Nigeria and specifically:

i. To evaluate the impact of government recurrent expenditure on human development index (HDI) in Nigeria.
ii. To examine the impact of government capital expenditure on human development index (HDI).
iii. To examine the influence of corruption on HDI in Nigeria.
i. To evaluate the effect of inflation on HDI in Nigeria.

2. 0 Literature Review

2.1 Conceptual Framework

2.1.1 Human Capital Development

Human capital is the capabilities and skills of human resources of a country, which include level of education, expertise and abilities of the labour force, while human capital development is the process of obtaining and increasing the number of persons who possess the competence, knowledge and know-how that are required for economic growth and development of a nation (Okojie, 2005). Human capital is an inherent and attained aptitudes obtained by a workforce through education as the major source (Ilegbunosa, 2013). By this we mean, human skills to work is a function of the level of education an individual acquired over a given period of time. Harbison (1973) looked at human capital development as the cautious and continuous procedure of acquisition of necessary knowledge, skills and experiences that are used to make economic value that will lead to sustainable national development. According to Karl Marx, labour is the most vital factor of production among others, which can study, produce, adjust to changes and adopt to new technologies (Lyakurwa, 2007; Ejere, 2011). According to Ekpo (2020), human capital is seen as the genetic product of learning which translates into special talents, capacities and technical know-how found in a nation's labour force for national economic expansion. By this he sees human capital development as the method of adding standards to labour force in a country so as to have a competent, well-informed and vigorous workers that can provide answers to national economic challenges on a continuous basis in a country.

2.1.2 Human Development Index (HDI)

The concept of human development index (HDI) as seen by many scholars is a statistical instrument used mostly to evaluate a country's social and economic achievement in all aspects of life. The social and economic scopes of a nation are positioned on the wellbeing of the citizens, their educational achievements and living standard the people of that country Al-Shatti, (2014). The human development index is one of the finest instruments to preserve pathway of the level of development of any nation, as it combines all main social and economic indicators that are responsible for economic development of any country (CBN, 2022).

2.1.3 Government Expenditure

Government expenditures are expenditures made by a nation's government on national needs of its citizens (Muguro, 2017). These expenditures are divided into recurrent and capital expenditures. The recurrent expenditures are government consistent expenditure on a routine basis like wages and salaries for labour, goods and services and other administrative expenses in a country. In the other hand capital expenditures are generally in form of investment into developmental projects such as construction of road and bridges, railways, building of schools, hospitals and other long-term physical projects. Wanjiru (2013) opined that government expenditure on education and health sectors enhances the growth and stockpile of human resource that will be more quick-witted and sufficiently creative to boost economic growth of any country in general and Nigeria specifically.

2.2 Theoretical framework

2.2.1 Endogenous Growth Theory

The Endogenous Growth Theory was put forward by Romer (1994) and this study is anchored on this theory. The theory argued that for any meaningful growth to be experienced by any country they must invest in human capital development and technological development. It encourages government expenditure on human capital development and technological advancement to ensure economic growth of the nation. The theory posits that economic growth is a function of investment in human capital, innovation and management of knowledge that can lead to a great nation.

2.2.2 The Classical Theory of Human Development

This theory was put forward by Adams Smith. The classical school believes that the role of the government in every economy should be restricted to the activities which will provide enabling climate for the market to work well and train people to handle resources of such region. They argued that government should limit itself to the provision of defence which will guarantee law and order in the society together with efficient market operation and education that will develop the mind of the people.

2.3 Empirical Literature

Chandran Govindaraju (2021) carried out a study on the relationship between government expenditure on economic growth in Malaysia. The study covered a time frame of 1970-2006. The paper focused on the impact of aggregate government expenditure on RGDP. It also evaluated specifically the effects of government expenditure on education alone on RGDP. The result of the study revealed that aggregate government expenditure had significant positive relationship with RGDP while the use of single independent variable (education) showed negative impacts on the level of economic growth in Malaysia. The study used Ordinary Least Squares (OLS) method to evaluate the effect of government expenditure on economic growth in Malaysia. Jelilov and Musa (2016) used Ordinary Least Square method to evaluate the effects of government expenditure on economic growth in Nigeria between 1981 and 2012. The result of the study revealed that government expenditure has significantly and positively affected economic growth in Nigeria.

Farooq (2016) studied public expenditures and economic growth in Pakistan where he adopted three staged least squares technique. The scope of the study was from 1971 to 2014. The study used secondary data for the analysis and the findings revealed that both developed and non-developed government expenditures had a strong positive relationship on economic growth measured by Gross Domestic Product.

Muguro (2017) examined the effects of government expenditure on economic growth in Kenya from 1963 to 2015. The study used government capital expenditure and government recurrent expenditure as the independent variables while the dependent variable (economic growth) was measured by real GDP. The results of the analysis revealed that all items of government expenditure had no significant effects on economic growth in Kenyan economy.

Omodero (2018) also carried out a study on the effects of government expenditure on economic growth in Nigeria between 1999 and 2016. The study focused on the effect of selected non-development government expenses like: education, healthcare, defense & security, agriculture and public debt servicing on GDP. The study of the study revealed that government expenditure on servicing of public debt, defense and security had significant positive impacts on GDP but other used variables like government expenditure on agriculture and education had negative effects on GDP which was used as proxy for economic growth. Because of the findings of the study, the study recommended a redirection of government resources to agriculture, education and healthcare which can really help to boost economic growth of the country if applied.

2.4. Research Departure

This study is different from other studies above because it is not only studying the impacts of government expenditure on economic growth in Nigeria but has disaggregated the government expenditure into recurrent and capital government expenditure in Nigeria. The study went further to evaluate how corruption has affected not just GDP measured as economic growth but on human development index in the Nigerian economy due to their essential major effect on economic growth and development in the country. It is mostly observed that other studies measure economic growth and development by using GDP, but this study decides to use human development index as the main component of national development.

1. Methodology

The research is an ex-post facto and quantitative research involving secondary data collected mostly from CBN statistical bulletin and United Nations Development Programme (UNDP). Human Development Index (HDI) was used as proxy for human capital development in Nigeria and is the dependent variable. The data on HDI were obtained from the United Nations Development Programme (UNDP) reports. The independent variables include: government recurrent (REX) and capital (CEX) expenditures, corruption perception index (CPI) and inflation (INF). The data on recurrent and capital expenditures were extracted from Central Bank of Nigeria (CBN), Statistical Bulletin, 2021, data on inflation were also collected from CBN while Corruption Perception Index data were sourced from Transparency International annual reports. In order to achieve uniformity of the data sets, all the data were logged except the HDI and inflation rate rate which were already expressed in a logged form. The data were analyzed with E-View 9. The decision rule is that at p-value above 5%, Ho is accepted and rejected if otherwise.

3.1 Model Specification

Model specification of this study used ordinary least square regression models to examine the effect of government capital and recurrent expenditure on human capital development in Nigeria. The model used in this study is a multiple regression model anchored on the classical theory of human development index. The theory opines that the role of government in every economy should be limited to the activities which will provide enabling climate for the market to work well and train people to handle resources of such region like spending on capital and recurrent items. They further argued, that government should limit itself to the provision of defense which will guarantee law and order, this will check and reduce the level of corruption in the society, with efficient market operation and education that will develop the mind of the people. The model is presented thus:

HDI = f (CAPX, RECX, CPI, INF).. (1)

Where,

HDI = Human Development Index

CAPX = Capital Expenditure

RECX = Recurrent Expenditure

CPI = Corruption Perception Index

INF = Inflation rate

$\beta 0$ = Constant

$\beta 1$-$\beta 4$ = Coefficients of the regression

μ = error term

The a priori expectation is that $\beta 1>0$; $\beta_2>0$, $\beta_3<0$; $\beta_4<0$.

Equation (1) above can be written in econometric form thus:

HDI= $\beta 0+\beta 1$(LOGCAPX)+$\beta 2$(LOGRECX) + $\beta 3$(LOGINF) + $\beta 4$(LOGCPI) +...... (2)

Table 3.1 Regression Results

Variable	Coefficient	Standard Error	T-Statistic	Probability
C	0.226	0.052	4.354	0.001
L(CAPX)	– 0.016	0.022	-0.719	0.489
L(RECX)	0.096	0.015	6.579	0.000
L(INF)	-0.026	0.020	-1.302	0.222
L(CPI)	0.033	0.048	0.682	0.511
R^2=0.9593	D.W.=2.27	F-stat = 953.7	Adjusted R^2=0.9232	

Source: E-views / Researcher 2023

The results from the table 3.1 above reveals the R^2 value of 95.9 indicates a strong positive correlation between the dependent variable (HDI) and the independent variables (CAPX, RECX, CPI and INF). This implies that government expenditure influences human capital development in Nigeria to a huge extent and that the government should channel more funds to have a healthy and knowledge-based human capital to enhance economic growth in the Nigerian economy. The adjusted R^2 is 92% and this means all the independent variables explain the variability in Human Development Index. It is only 8%, according to the result from the table that, can be explained by other factors outside the model. This is further confirmed by the Durbin-Watson (DW) Statistics of 2.27 which shows there is no autocorrelation.

The result in Table 3.1 showed the positive value of 0.216 as constant and regression intercept, the independent variables in the study positively affects the dependent variable at constant. The null hypothesis that government capital expenditure does not have significant impact on HDI in Nigeria is tested when considering the t-statistics results of 4.354 on table 3.1 above and p-value of 0.001 at 5% level of significance. To test the hypotheses, we begin from:

Hypothesis I

Ho1: There is no significant impact between Government capital expenditure on Human Development Index in Nigeria.

This test the $H0_1$ which states that government capital expenditure does not have significant effect on HDI. The result shows that the t-statistic of -0. 719 for CAPX with the p-value of 0.489 > 0.05. The result from the above table shows that CAPX has insignificant negative impact on HDI, by this we accept the Ho1 at the instance of the alternative which states otherwise. Hence, CAPX does not meet research a priori economic expectation. The inference of this result is that government capital expenditure on human development items like education and health do not have significant impacts on the national budget, which will also in the long run affect HDI. A unit change in capital expenditure by the government would lead to -0.16% change in HDI. This shows that capital expenditure by the government could have negative long term effect on HDI in Nigeria by -0.016. Also, a unit change in recurrent expenditure by government would lead to 0.96% increase in HDI. This revealed that recurrent expenditure by government would increase HDI in the long run. Further it is equally seen that a unit change in inflation rate would lead to -0.96% decrease in HDI. The result further revealed that a unit change in corruption perception index will lead to 0.033 increase in HDI. The result also reveals that government capital expenditure on human capital development in Nigeria is not proportionate with the global standard for economic growth of any nation. This means that, by policy implication, there is not enough capital budget for human capital development over the years to drive economic growth and development in Nigeria.

Hypothesis II

Ho2: The second hypothesis states that there is no significant impact of government recurrent expenditure on HDI in Nigeria.

The result from Table 3.1 above shows the value of t-statistics as 6.579 with the p-value of 0.000 < 0.05. By this trend it reveals that government recurrent expenditure has a strong and significant positive impact on HDI. This means null hypothesis two is rejected while we accept the alternative. The policy implication of the result means that government expenditure on HDI related administrative costs like salaries and wages of academic workers and health workers is much while they ignore main investments on human development that would produce revenues that have better implication on the country's economic growth and development. These include: building of schools, hospitals, skill acquisition centers, information technology training center, research and development centers are some of the capital expenses that have external spill overs to determine the economy of Nigeria.

Hypothesis III

Ho3: The third hypothesis states that corruption has no significant impact on HDI in Nigeria.

The result of the study as seen on Table 3.1 shows that corruption has insignificant positive impact on HDI. By this, therefore we accept the Ho3 and reject the alternative hypothesis. This particular variable has made the a priori expectation since CPI is not expected to affect HDI. By implication, investments on Human Development by the government should not be joked with if they intend to grow.

Hypothesis IV

Ho4: The last hypothesis to be tested here is that Inflation does not significantly affect HDI in Nigeria.

As seen from the result on Table 3.1 above, inflation has affected Human Development Index negatively. Thus, we accept the Ho and reject the alternative hypothesis. Also, it is seen that a priori expectation is met. This may not be unconnected to the fact that appropriate people responsible for policy formation in the country do everything possible to put this ugly economic situation under control for economic activities to succeed. Worthy of note is that if inflation is allowed exist and grow without check will destroy the economy. However, in this case, though negative but it not substantial, so the influence is not felt much on Human Development Index.

Conclusion and Recommendations

The broad objective of this study was to evaluate how government expenditure has affected human capital development in Nigeria and specifically how disaggregate government expenditure (recurrent and capital) has affected human capital development. The study examined how the disaggregated components of government expenditure has affected human capital development. A laborious procedure has been adopted in this study to compare other studies on effects of government expenditure on economic development in Nigeria. From the study it was discovered that in Nigeria that, government use the public sector resources to reward political supporters. Rather than use the funds to provide essential goods and services to the Nigerian populace and develop human capital, the political supporters sidetrack the funds to their private use. This is the reason for the poor service delivery by workers and organizations in Nigeria. It was equally discovered that most studies in government expenditure in Nigeria used aggregate government expenditure as seen in the literature review and such studies offer partial evidence on how government expenditure has affected human capital development. Based on the findings, it was established that human development index in Nigeria was influenced by government expenditure on capital than government recurrent expenditure. The findings from the study also reveals that government capital expenditure and inflation have affected human capital development more than recurrent expenditure and it is equally observed that there are no positive effects of corruption on human capital development in Nigeria. The study further reveals that, government recurrent expenditure has a strong positive effect on Human capital Development. From the findings of the study we conclude that since recurrent expenditure does not have much impact on human capital development as capital expenditure, government should reduce her expenditure on recurrent items and increase her expenditure on capital items as this will provide more opportunities for human capital to be developed in Nigeria. Exodus movement of trained human resource in Nigeria has been associated to inadequate management of human resource in Nigeria and this has been equally seen as problems that confront Nigerian economy today. In view of the above, the study suggest government should exaggerate efforts at improving domestic policies that can encourage training human resource and putting policies in place to ameliorate inflation as productive human resource will appreciates the real gross domestic product in Nigeria. It is obvious that productive human resource will increase our productive capacity in the economy and this will in turn will reduce the level of inflation and improve our GDP. The study also recommends that if Nigeria must ensure growth sustainability, she must reconsider her expenditure programmes in human resource by improving the sectors that will influence the development of the human resource. This is not to say that government should distant herself completely from other sectors but should ensure profit-oriented sectors should be left in hands of the private entrepreneurs but supervised by the government.

Conclusively the study revealed that human development matters have not been satisfactorily given appropriate consideration in the national budget for capital projects, therefore the contrary effect of capital expenditure by the government on Human

Development Index of the country. Therefore, the study suggests the following:
i. The government should increase its capital expenditure on human development, and this is
embedded in endogenous growth theory which states that investment in human capital has
external spillovers that lead to economic growth.
ii. The resources on recurrent expenditures for HDI should be minimized and more money directed to HDI capital investments.
iii. The government should attempt to maintain anti-graft fight particularly in the public sector
for real and efficient use of resources to develop human capital of the nation.
iv. The CBN as monetary policy authority should be given extreme support to put inflation under control, as this can make government's budgets for human capital development in the country futile.

References

Al-Shatti, A.S. (2014). The impact of public expenditures on economic growth in Jordan. *International Journal of Economics and Finance, 6(10), 157-167.*

Chandran Govindaraju, V.G.R., Rao, R. & Anwar, S. (2011). Economic growth and government Spending in Malaysia: A re-examination of Wagner and Keynesian views. *Econ Changer Restrict, 44(2)*

Ekpo, H(2020). Human Capital formation as catalyst for national development: Nigeria in Perspective. *International Business and Management, 2(2), 98-104.*

Farooq, N. (2016). Public expenditures and economic growth: A case study of Pakistan. *American Journal of Social and Management Sciences, 7(2), 33-41.*

Gangal, V.L.N. & Gupta, H. (2013). Public expenditure and economic growth: A case study of India. *Global Journal of Management and Business Studies, 3(2)*

Harbison, F.H. (1973). *Human resources as the Wealth of Nations.* New York: Oxford University Press.

Jelilov, G. & Musa, M. (2016). The impact of government expenditure on economic growth in Nigeria. *Sacha Journal of Policy and Strategic Studies, 5(1), 15-23.*

Lyakurwa, W.M. (2007). Human Capital and technology for development. Lesson for Africa, AFDB.

Muguro, J.W. (2017). *Effect of public expenditure on economic growth in Kenya: 1963-2015.* M.sc Degree Thesis submitted to the School of Business and Public Management, KCA University.

Okojie, C.E.E. (2005). Human capital formation for productivity growth in Nigeria. *Nigerian Economic and Financial Review: 44-5.*

Omodero, C.O. (2018). *Public sector recurrent expenditure and national development in Nigeria.* A paper presented at The National Conference organized by Faculty of Management Sciences (FMS), University of Port Harcourt, Nigeria with the theme: Institutional Restructuring and Reforms for National Development on 28-29 August, 2018. Proceedings of the FMS National Conference, pages 71-83.

Romer, P. M. (1994). The origins of Endogenous Growth. *The Journal of Economic Perspectives, 8(1), 3-22. JSTOR*

UNDP (2018). *Human development index trends, 1990-2017.* Human Development Report Office (HDRO), United Nations Development Programme. Retrieved from http://hdr.undp.org/ on January 10, 2020.

Wanjiru, M.R. (2013). *Does the composition of public expenditure affect economic growth? Evidence from Nigeria.*

World Bank (2021). World development indicators 2021. Washington

World Economic Forum (2021). Global economic prospects and the developing countries. World Bank Washington D.C.

World Economic Forum, (2021). Globalization, growth, and poverty: building an inclusive world economy. Washington, DC: Oxford university press.

APPENDIX

Dependent Variable: HDI
Method: Least Squares Date: 10/30/23
Time: 05:35
Sample: 1980 2022
Included observations: 43

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.226024	0.052181	4.354314	0.0014
LCAPX	-0.016128	0.022133	-0.719225	0.4890
LRECX	0.962186	0.015455	6.579372	0.0000
LINF	-0.026312	0.020010	-1.302161	0.2222
LCPI	0.033433	0.048232	0.682059	0.5114

R-squared	0.959329	Mean dependent var	0.460033
Adjusted R-squared	0.923202	S.D. dependent var	0.076916
S.E. of regression	0.013896	Akaike info criterion	-5.605497
Sum squared resid	0.007338	Schwarz criterion	-5.400707
Log likelihood	125.5182	Hannan-Quinn criter.	-5.529977
F-statistic	953.7247	Durbin-Watson stat	2.273012
Prob(F-statistic)	0.000000		