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Impact of Human Capital Development on Poverty Alleviation in Nigeria

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Abstract

The impact of human capital development on poverty alleviation is important, given its policy implications especially with respect to the developing countries particularly Nigeria. The study examines the relationship between some elements of human capital development and poverty alleviation in Nigeria, from 1995-2017. It investigates the causal relationship between the human capital development explicitly measured on health and education and its impact on poverty alleviation measured by per capita income over the period of time stated. The study uses Granger causality test through a vector error correction mechanism (VECM), to determine whether the elements of education and health care of any precedence or effect(s) on per capita income. The result indicates that there is no causality either uni-directional or bi-directional between government expenditure on education and health, infant mortality, gross enrolment ratio and per capita income but cases of uni-directional causality existed for literacy rate, life expectancy, and per capita income. This, therefore, suggests that the federal government should ensure that it invests more in education and health as they are essential factors that can help in alleviating poverty.

Keywords: Human capital development; Education; Health; Per capita income; Poverty alleviation; Causality; Nigeria

Introduction

One of the challenges faced by many nations particularly in the developing countries is the inability to tackle the high rate of poverty. Many countries have therefore made it a significant task to reduce the level at which poverty has eaten deep into their economies causing so much havoc and becoming an impediment to growth and development.

On October 17, 2013, the world celebrated another year of 'International Year of Poverty Eradication,' which helps to draw the attention of the world to the issue of poverty and to showcase pragmatic actions by the world's various stakeholders including government and NGOs. The issue of poverty eradication was also ranked as the first of the eight-point millennium roles, by its declaration; the United Nations gave a challenge to the world to half by 2015. Interestingly, the word poverty halved worldwide in 20 years from 43% in 1990 to 21% in 2010, most of the nations of the world that had pervasive poverty level have made a significant improvement in poverty eradication. For instance the rate fell in China, which had a high proportion of its population in 77% living under less than a dollar a day in 1980 to significantly drop to 14% in 2008, India another country with a huge population and high poverty rate has also witnessed tremendous improvement is bringing down the level of poverty.

Despite the tremendous improvement, the world still faces a big challenge of inequality and poverty. The poorest 40% of the world population still accounts for only 5% of the global income. A much more interesting scenario is the situation in sub-Sahara Africa, where the poverty rate is still at 77%, perhaps it remains the only continent in the world where the poverty rate is going up. Nigeria, the most populous black nation with 44% of West Africa population, contributed to this phenomenon.

According to Ogwunike [1] as cited in Mustaphas [2], it was revealed that the poverty rate in Nigeria has a continuous increasing trend; an instance is the data as presented by the authors stating that poverty rate increase from 27% to 46% between 1980 and 1985 and further to 67% in 1996 and over 70% by 1999. In fact, according to the 2013 human development index, the most impoverished state in Nigeria are predominately in the northeast and northwest Yobe, Borno, Kebbi, Katsina, Bauchi, Jigawa, Gombe, Taraba, Kano, Niger, and Adamawa.

The Nigerian's dimension of poverty is due to hunger, an absence of shelter, lack of access to health care, education and tools to work, displacement due to natural and environmental disaster, high state of insecurity, kidnapping, high level of unemployment, especially youth unemployment, prostitution, slavery, disenfranchisement and child labour. The World Bank in its May 2013 reports stated that the number of Nigerians living in poverty was increasing too rapidly, also that the Nigerian GDP growth rate of between 8% and 10% as impressive as it looks is neither sufficient or capable of reducing poverty in Nigeria. The indicators that measure the quality of life show Nigeria as a country in paradox. According to the human development index which measures standard of living in the 2003 report ranked Nigeria as 153 out of 187 nations.

The term human capital was invented by an economist, Theodore Schultz in the 1960s, to reflect the value of our human capacities. He believed human capital was like any other type of capital; it could be invested in through education, training and enhanced benefits that will lead to an improvement in the quality and level of production. Human capital refers to the "skills, education, health, and training of individuals, it is capital because these skills or education are an integral part of us that is long-lasting, in the way a machine, plant or factory lasts" [3]. 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 derives less and less from natural resources and cheap labour endowment and increasingly from technical innovations and the competitive use of knowledge".

Nigeria is blessed with a pool of human resources but has not been

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able to harness this great potential especially towards eradicating poverty in the country. Human capital is seen as a catalyst for development and if utilized properly could be used as a tool for eradicating poverty in Nigeria. The government has therefore for a very long period of time introduced programmes and policies geared towards alleviating poverty in the country. While some of these programmes and policies have made a little impact in this cause, others seem to have either been ineffective or even aggravating the situation. Some of these policies and programmes include, "Operation Feed the Nation (OFN), Green Revolution, the Directorate of Foods Roads and Rural Infrastructures (DFFRI), the National Directorate for Employment (NDE), Poverty Alleviation Programme (PAP), the National Poverty Eradication Programme (NAPEP), Structural Adjustment Programme (SAP), etc. [4]".

Literature Review

The role of human capital development on poverty alleviation has been a topical issue for researchers over time seeking solutions to the ineffective policies and programmes that have been put in place by the government in order to mitigate and eradicate poverty levels in the country. This paper will, therefore, do a review of some of the existing literatures, thus, making relevant contributions to them.

Conceptual review

Poverty: According to Ekpe [5], "poverty is general scarcity or dearth, or the state of one who lacks a certain amount of material possessions or money." It is a concept with diverse aspects which includes social, economic, and political elements. Poverty has been described to either be temporary or extreme with relations to the concept of inequality.

According to the United Nations, "poverty is the inability of getting choices and opportunities, a violation of human dignity. It means lack of basic capacity to participate effectively in society. It means not having enough to feed and clothe a family, not having a school or clinic to attend. Not having the land on which to grow one's food or a job to earn one's living, not having access to credit. It means insecurity, powerlessness, and exclusion of individuals, households, and communities. It means susceptibility to violence, and it often implies living in marginal or fragile environments, without access to clean water or sanitation."

Poverty according to the World Bank [6] is construed to be a deprivation in the personal well-being of individuals or a group of people. It comprises people with the inability to attain the necessary materials for living and survival resulting from their low incomes. Poverty is also stated to include elements of poor health conditions, low rate of literacy, inaccessibility to drinkable water and safe environment, lack of adequate security and lack of access to life-changing opportunities [7].

Human capital: According to Kayode [8], human capital is construed to pertain to the contributions of humans as a factor of production. It was further posited that human resources comprise a combination of knowledge, abilities, skills, and competencies. Nonetheless, among the factors of production, humans can learn, adapt to changes, innovate and be creative. Besides, human capital formation, as posited by Harbison [9] is regarded as "the deliberate and continuous process of acquiring requisite knowledge, skills, and experiences that are applied to produce economic value for driving sustainable national development."

Human capital accumulation can be derived from investing in individuals or group of individuals via education, training and skill development and social security schemes. However, according to Schultz [10], as cited in Adekoya [11], it is crucial to develop the skills, expertise, and knowledge of people who are value creators. Schultz further some ways for developing human capital which includes: investment in services that are construed to improve life expectancy and general well-being of the people, training, and development (both on-the-job and off-the-job), and formal education at all levels (including adult education) [12].

Causes of poverty: According to Imam [13], Ogwunike, Fafowora [14], McCaston and Rewald [15], Ijaiya [16], the following are the fundamental causes of poverty:

Inadequate access to employment opportunities for the poor. This is caused mainly by the stunted growth of economic activities or growth with labour savings devices. Unemployment is a significant issues, particularly in developing nations. This has been the root of abject poverty in the lives of many individuals arising from the fact that many of these developing nations depend mostly on the good and services provided by the developed nations without having to make effective use of these products. Developing countries are widely known for their act of consuming more than they can produce if at all they have the capacity and ability to produce. For example in Nigeria, the nation consumes more of imported products rather than home-made products, and this has giving rise to the imbalance in the balance of payment (bop) and trade which in the long run has affected the economy to a large extent. Individuals cannot be gainfully employed because the number of unemployed has outgrown the number of companies in existence that is still able to thrive under the harsh government policies. Until recently when the government started to consider small business who serve as the backbone of the country, the policies and business condition of the country has been discouraging leading to the exit of many companies further contributing to unemployment.

Inadequate access to the means of fostering rural development in poor regions. Many rural regions in Nigeria have remained in their state of poverty for a very long period of time resulting from constant neglect from the government. These so-called areas popularly known as 'villages' in the Nigerian context have been condemned by many as areas that are far from being reached. This has been the foundation of poverty in these regions, and as a result, many rural dwellers are bent on finding their ways into the urban centres making room for overpopulation.

It is also a significant problem in the rural areas as there are few or no access to markets for the goods and services that the poor can sell. This is as a result of the geographical location of such areas which because of their distances, bad road network and communication problems have left them in the mud of poverty since they are unable to distribute their products for sales hence causing them into unavoidable hardship just to earn a living.

Inadequate access to education, health, sanitation and water services is also a major problem for the poor in the society. This poses a significant effect on the public arising from high levels of inequality, discrimination, low-income levels and increasing rate of unemployment. As a result, many of the activities of the low-income families in their quest to survive and retaliate has led to the deterioration of the environment from the destruction of natural resources which has further translated into a dwindling state of the economy.

Also, the poor are being left out in the design of development programmes. Until recently, previous governments have only being majorly concerned with developing the urban areas as a result of their selfish interests and at the expense of the rural areas. Many of the development programmes that are supposed to be organized in the rural areas have been neglected causing the wellbeing of rural dwellers to be undermined. This has been the basis for the advents of many insurgencies, particularly in Nigeria. Majority of these insurgents are mainly from the rural areas who are fighting for their rights and in the event have become oppositions of the government, and a number have turned into terrorist groups. Some of these are the Boko Haram insurgency, Niger Delta militancy, Fulani herdsmen killings, Biafra conflict, etc.

Consequences of poverty

Poverty has proved to have adverse effects both on the poor and the society at large. Some of these consequences include:

Threat to national security: Having mentioned earlier that many of the insurgencies that have been recorded in Nigeria are as a result of government negligence and have therefore resulted in violence and terrorism further claiming the lives of thousands and millions of people. It is a societal fact that an idle hand is the devil's workshop and this has been proved beyond doubt. The crime rate in the country has been on the increase resulting from the fact that individuals do not have proper jobs and the nature of man towards survival is definite. If the welfare and rights of the masses are well protected, there will be little or no cause for chaos within the society.

Corruption: This is one of the acts that have eaten deep into all areas in the society starting from the young ones to the matured adults and aged. Corruption has so much bedeviled the society up to the point that it has become a norm and is no longer seen as a crime. Every sector of the economy is not left-out of this parasite called corruption. Even the security agencies are one of the principal perpetrators of the act of corruption as they have at various times misused the power accorded to them in order to carry out their responsibilities to oppress those who they are to protect. Researchers have concluded that such acts are the consequences of not just greed but majorly poverty. Many who are struggling and desperate to earn a living do not mind doing illegitimate businesses or carrying out illegal transactions just to satisfy their numerous needs. Many civil servants whose meager salaries are nothing but peanuts are the major perpetrators of corruption and have also reached the top of the leadership tree where there are records of political leaders who have been involved in various money laundering and perpetuated evil in the name of political power.

Threat to economic growth: Various factors have posed a threat to economic growth in the country. Unemployment is a very critical problem facing the growth of the Nigeria economy and has left its horrible marks on the financial status of the country. Unemployment results in poverty as people do not have the resources to earn a good living resulting in the decrease in individual per capita income and aggregate demand which is one of the factors used to measure economic growth. Also, health is a major measure of economic growth. The rate of mortality and life expectancy in the developing nations are somewhat discouraging; this is because the masses do not have access to standard health facilities and the resources needed to enjoy them are insufficient. There is also a very discouraging effort of the government to revamp the educational sector of the economy. This has paved the way for ignorance and negligence arising from low levels of literacy, insufficient information/ knowledge, and inadequate orientation. As a result of this, the crime rate in the country has been on the increasing side. Furthermore, a large number of small businesses are closing by the day as a result of the unfavorable market conditions which do not prove to be useful to any economy even those that are developed, as they are the major working-hand of the economy.

Environmental degradation: Majority of the environmental hazards are contributions from the poor masses that are ignorant of the effects of their actions. Dumping and burning of refuse when they can easily be decomposed and serve other useful purposes are a great threat to the environment. Deforestation activities are mostly recorded in the rural areas because they do not have the necessary information at hand to enlighten them towards environmental hazards and destruction. The poor are unable to afford facilities that can promote right environmental conditions and as a result, make use of the little that is in their possession which in most cases contributes mostly to global warming effects.

Poverty alleviation policies and programmes in Nigeria: The first civilian administration at the national and regional levels carried out various entrepreneurial development initiatives aimed at combating poverty in Nigeria. These are in addition to the development plans, that are the First Development Plan 1962-1968, the Second Development Plan 1970-1974, the Third Development Plan 1975-1980, the Fourth Development Plan 1981-1985 and the Fifth National Development. Some of these initiatives/programmes set up to tackle poverty in Nigeria include:

Vision 20 – 2020: 1st national implementation plan (NIP): Millennium Development Goals (MDGs): It offers a common and integrated vision on how to tackle some of the major challenges facing the world. A declaration which has resulted in eight Millennium Development Goals (MDGs) focused on reducing (eradicating) extreme poverty, achieving universal primary education, promoting gender equality and empowering women thereby improving the quality of peoples' lives, reducing child mortality, improving maternal health, combating HIV/AIDS, malaria and other diseases, ensuring environmental sustainability, and building partnerships to ensure that globalization becomes a more positive force for all the world's people.

Transformation agenda: The policies and programmes directed at addressing governance challenges focus on: Public service, security, law, and order; the legislative; anti-corruption measures and institutions, the judiciary; economic coordination; and support for private investment. Human capital development policies, programmes, and projects (Education, health, labour and employment and women affairs).

Poverty alleviation programme (PAP): Ekpe stated that PAP was a temporary initiative established in the early 2000's to resolve the incessant increases in crime rates which were a significant contribution of rising unemployment among the Nigeria youths. According to him, the main objectives of the programme were to reduce the increasing rate of unemployment coupled with ensuring an increase in effective economic demand; creating an enabling environment to increase economic productivity and increasing the country's security by tackling the alarming crime rate.

National poverty eradication programme (NAPEP): NAPEP was established to complement the National Poverty Eradication Council (NAPEC) which was saddled with the responsibility of reducing poverty in relations with the activities of agencies and ministries within the government administration [17]. The commission was mandated to ensure a centrally planned and complementary range of activities within the affected bodies to ensure the continuity and sustainability of the objectives of the programme.

To achieve its objectives, NAPEP implemented several activities and programmes some of which include: Youth Empowerment Scheme (YES) which was aimed at empowering the youths through capacity building, innovation, and creativity schemes; Rural Infrastructure Development Scheme (RIDS) which was aimed at providing the rural areas within the country with basic infrastructure such as road, drinkable water, power supply etc.; Social Welfare Service Scheme (SOWESS) which was established to cater for the improvement in the social well-being of the citizens such as providing free and low-cost education, medical centres, recreation facilities, credit financing etc.

In summary, NAPEP was primarily focused on empowering the youths, providing incentives for rural development and improving the social well-being of the targeted population.

Theoretical review

The classical theory of human capital: One of the greatest economic writings to date was authored by Adam Smith who is considered to be the leader of the Classical school of economic thought. In his book "*An Inquiry into the Nature and Causes of The Wealth of Nations-Book 2; Of the Nature, Accumulation, and Employment of Stock"* [18] he wrote "Fourthly, of the acquired and useful abilities of all the inhabitants or members of the society. The acquisition of such talents, by the maintenance of the acquirer during his education, study or apprenticeship always costs a real expense which is a capital fixed and realized, as it were, in his person. Those talents, as they make a part of his fortune, so do them likewise that of the society to which he belongs. The improved dexterity of a workman may be considered in the same light as a machine or instrument of trade which facilitates and abridges labour, and which, though it costs a certain expense, repays that expense with a profit."

Also within his work, a fascinating relationship, though the complex is displayed between the division of labor and human capital. The relationship was borne out of the blend observed in the level of productivity of different labourers depending on each human capital development index.

Marxist opinion on human capital: Human Capital in Marxist opinion can be linked to the concept of labour power. Karl Marx opined that in a capitalist system, labourers in exchange for money (wages or salaries) sold their labour power. Prior to the modern theories on Human Capital, Marx disagreed with two conflicting theories that construed the interest of human capital in relation to the wages and salaries received. The first was that work must actually be done. Implying that the worker must actually work either in the form of exerting the body or the mind to earn his 'interest'. He made a strong distinction between one's capacity to work (labour power) and the working activity. On the other hand, he was of the opinion that a free worker could not sell his human capital at once since it is not a liquid asset like shares or inventories. He posited that "a worker does not necessarily sell his skills but contracts to utilize those skills." In the same way, an industrialist sells what he produces, not his machinery. Although an exception was made here on account of slaves because they could sell their human capital even without exchange for any source of income.

Marx felt that an employer must be receiving a profit from his operations; this he felt was termed as 'surplus value.' This relates to sustaining their labour power by doing more work to create a new value. The presence of human capital has its benefits however a disadvantage would be that they still depend on non-human wealth owners to earn a living [19,20].

Guaranteed minimum income: Guaranteed minimum income (GMI), also called minimum income refers to a system of improving the social well-being of the citizens of a country. It relates to the fact that individuals and their families based on meeting a set of conditions are eligible to benefit from an income that is self-sustaining. The eligibility criteria are determined by citizenship, ability or inability to be sustained with the available resources, and an option of labour market availability or the willingness to engage in community services. The fundamental goal of the GMI is to mitigate poverty. However, if the only requirement is citizenship, the system becomes a universal basic income.

The modernization theory: This theory discusses the influence of education on the behaviour, norms, values, and beliefs of individuals. It posits that when individuals are exposed to modernized facilities or activities, their values and beliefs tend to change or become affected. As a result of a changed attitude, they become open to new ideas, become less dependent on local authorities, engage in more productive activities particularly with the changing trends in technology, etc. [21].

The modernization theorists assert that the changes which may be normative and attitudinal are bound to continue over a long period of time and even throughout some generations. However, as this occurs, individual relationships with social structure may be altered. Therefore, increases in the levels of societal, individual modernity are primarily caused by increases in the number of individuals who have been exposed to the modernized institutions. As these occur, the rate of economic growth and development increases at a constant rate.

Human development theory: The human development theory was made popular by Amartya Sen, Mahbubul Haq and UnerKirdar and. The theory is known for its measurement of human welfare and probing the effects of uneconomic growth on human health. Nonetheless, the theory seeks to measure and ensure optimality in human well-being via the integration between instructional capital and social capital deployment to further translate into an optimal value of human capital forming a part of an ecological system. Individualistic roles within the ecological system are therefore essential to determine the level of adaptation of within the system.

Human capital theory: According to Schultz, et al. as cited in Holden and Biddle [22], human capital is an important factor in increasing labour efficiency and productivity. The theory reveals the influence of education on workers' level of cognitive skills and how such skills translate into improving the level of productivity of workers. According to the scholars, individuals invest in themselves in the form of attaining good educational standards aimed at enhancing their level of knowledge, skills, and capabilities. It was also posited that many individuals combine their inherent abilities with the already invested knowledge to increase their capabilities, therefore, creating a form of competitive advantage over those without the required skills and knowledge. For instance, people invest in their education, health, nutrition, training (both on-the-job and off-the-job), and self-development activities. Nonetheless, to increase and sustain the deposits of already stored human capital, the amount of gross investment is expected to exceed depreciation. Therefore, a worker will always need to make more investments particularly with the advent of constant changes within the business world today [23].

These scholars further asserted that specific instructions demanding logical and analytical reasoning enhance the efficiency of workers, therefore, providing technically specialized knowledge particularly for workers who have attained high levels of human capital.

Research Methodology

The empirical relationship between human capital development and poverty alleviation has been investigated through some approaches for a long time. Some of the notable methodological techniques that are used in estimating such relationships are Vector Error Correction Mechanism (VECM) based causality test, Johansen cointegration test, etc. Studies like Sikander amongst others used Augmented Dickey-Fuller (ADF), causality and Johansen cointegration tests to establish the relationship between the variables of concern. Other techniques used are regression analysis.

Since the main focus of this study is to determine the effect of human capital development on poverty alleviation, the following economic techniques shall be used which includes cointegration tests (Johansen cointegration approach) and unit root tests (Augumented Dickey-Fuller test and Philips – Perron test), Granger causality test and the vector error correction model.

The research employs the use of two models which is an attempt to capture the human capital development using education and health. The first model is theoretically stated as Per Capita Income (PCI) which is a proxy for poverty alleviation which depends on government Expenditure on Health (GEH), Life Expectancy (LE) and Infant Mortality (INF), as a proxy for health. Therefore;

$$PCI=f\ (GEH, LE, INF) \quad (1)$$

The second model is stated as Per Capita Income (PCI) which is a proxy for poverty alleviation which depends on government Expenditure on Education (GEE), Gross Enrolment Rate (GER) and Literacy Rate (LIT), as a proxy for education. Therefore;

$$PCI=f\ (GEE, GER, LIT) \quad (2)$$

The multiple linear regression can be stated as;

$$PCI=\beta_0+\beta_1 GEH+\beta_2 LE+\beta_3 INF+\mu \quad (3)$$

$$PCI=\alpha_0+\alpha_1 GEE+\alpha_2 GER+\alpha_3 LIT+\mu \quad (4)$$

Where;

f=Functional Relationship; β_0, β_1, β_2, β_3, α_0, $\alpha_1\alpha_2$, and α_3=Coefficient Parameters; GEH=Government Expenditure on Health; LE=Life Expectancy; INF=Infant Mortality; GEE=Government Expenditure on Education; GER=Gross Enrolment Rate; LIT=Literacy Rate; PCI=Per Capita Income; μ=error term.

This study considers the annual time series data on human capital development indices and poverty rate covering the period 1980-2013. This period is selected because time series data is only available for this period. The variables of interest are government expenditure on health, government expenditure on education, and per capita income. The data for this study were obtained from a secondary source notably the World Bank (World Development Indicators), for the period 1980-2013.

Data Analysis

The Figure 1 above reveals a relatively positive trend in two variables - life expectancy rate and per capita income. Other variables such as government expenditure on education, government expenditure on education and gross enrolment rate experienced a fluctuating trend over the years while infant mortality rate experienced a continuous fall and the literacy rate was at first increasing but began to decrease at a particular period.

Government expenditure on health seemed was at a staggering trend over the period examined. In the case of government expenditure on education, it could be noticed that the government despite the standard rate which is to be accorded to education did not match the rate at any point in time but was somewhat fluctuating.

The rate of gross enrolment showcased a gradual decrease until the about 1998 when it fell rose tremendously for a period then dived back into a decreasing trend in the mid-2000. While other variables kept on increasing or fluctuating, infant mortality rate had a continually decreasing rate while life expectancy rate moved in an upward trend indicating that the number of deaths reduced overtime. The per capita income was not left behind as it also started on a relatively positive trend over time.

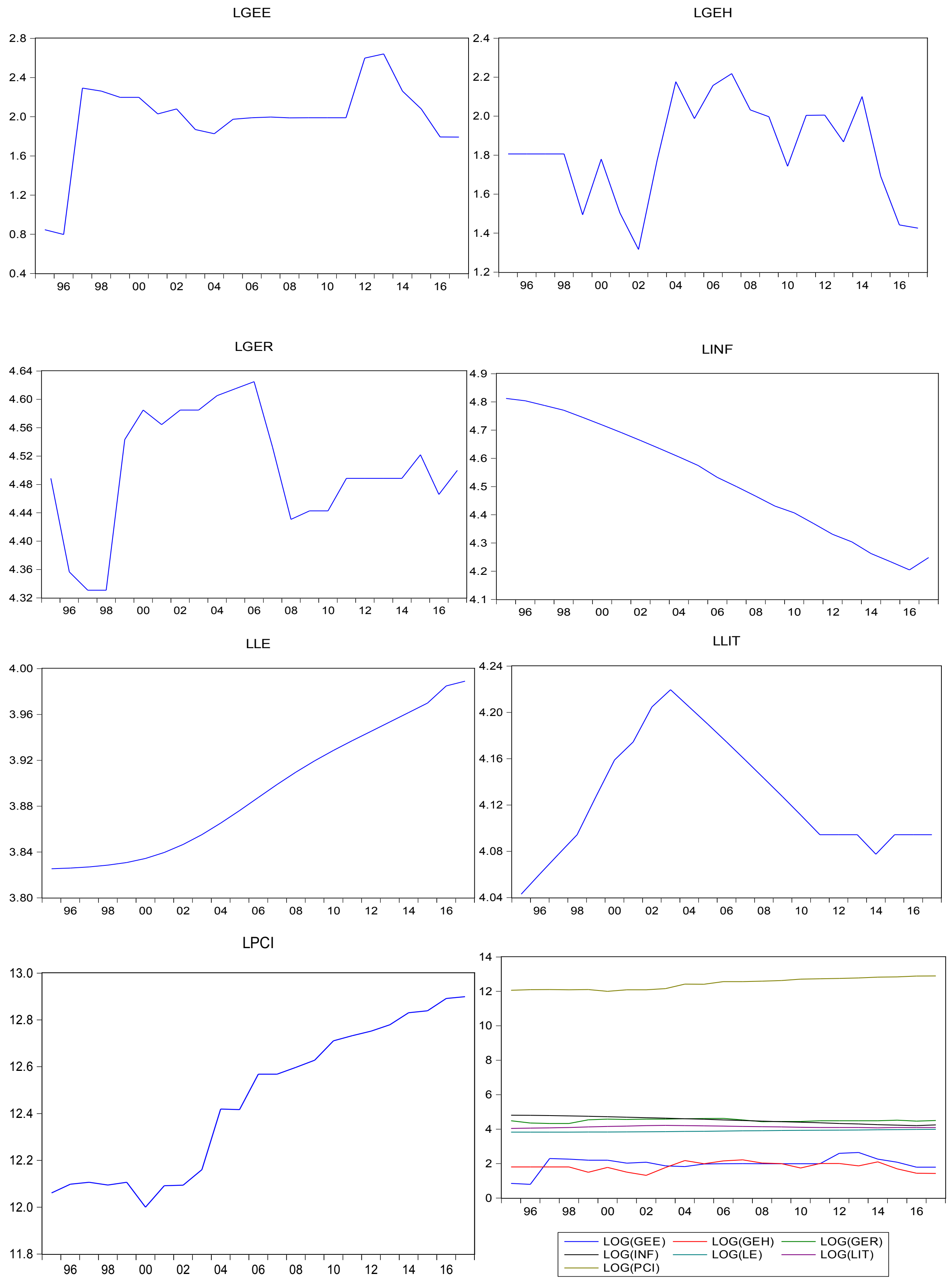
Unit root test

The Table 1 below shows the unit root of each variable at level and first difference. Two methods of test of stationarity are used that is, the Augmented Dickey-Fuller test and Phillip-Perron test. Both

Variables	ADF				Variables	PP			
	Level	5% Critical value	First Difference	5% Critical value		Level	5% Critical value	First Difference	5% Critical value
LGEE	-2.38	-2.96	-5.9	-2.96	LGEE	-2.4	-2.96	-6.35	-2.96
	(0.16)		0			-0.15		0	
LGEH	-1.73	-2.96	-7.53	-2.96	LGEH	-1.58	-2.96	-7.86	-2.96
	-0.41		0			-0.48		0	
LGER	-2.94	-2.96	-4.3	-2.96	LGER	-2.07	-2.96	-5.09	-2.96
	-0.04		0			-0.26		0	
LINF	-1.09	-2.96	-4.03	-2.96	LINF	3.83	-2.96	-3.07	-2.96
	-0.71		0			-1		0	
LLE	2.85	-2.96	-3.01	-2.96	LLE	2.43	-2.96	-6.9	-2.96
	-1		0			-0.99		0	
LLIT	-1.4	-2.96	-3.1	-2.96	LLIT	-1.55	-2.96	-3.55	-2.96
	-0.57		0			-0.5		0	
LPCI	-0.05	-2.96	-4.68	-2.96	LPCI	-0.48	-2.96	-4.67	-2.96
	-0.95		0			-0.89		0	

Source: E-views 7 computation by author.

Table 1: Results of unit root test.



Source: Author's Eviews 7 Computation.

Figure 1: Relatively positive trend in two variables – life expectancy rate and per capita income.

tests give the same result about the stationarity of the variables. All variables are found to be non-stationary at levels but stationary at first difference in both the Augumented Dickey-Fuller and Philip-Perron tests. Since all the variables are stationary at first difference, we applied the cointegration and vector autoregressive based modeling techniques which enabled the possible autoregressive relationships in the set of variables.

From the above Granger causality test in Table 2, using a 0.05 level of significance, it is discovered that government expenditure on education does not Granger cause per capita income nor does per capita income Granger cause government expenditure on health. That is, there is a no direction of causality between both variables as they act independently of one another. It is also revealed that there is no direction of causality between government expenditure on health and per capita income. That is, both variables are independent of each other.

There is also no direction of causality between gross enrolment rate and per capita income as revealed by the causality test. The causality test also reveals no direction of causality between infant mortality and per capita income causing them to act independently.

It is also revealed that life expectancy rate Granger causes per capita income, but per capita income do not Granger cause life expectancy rate. Therefore there is also uni-directional causality between both variables running from life expectancy rate to per capita income.

The test also indicates that literacy rate Granger causes per capita income, but per capita income does not Granger cause literacy rate. This establishes a uni-directional causality running from literacy rate to per capita income.

This result shows that the poverty level is very much related to the rate of educational attainment and life expectancy rate. The amount of government expenditure on health and education seems not to have any effect on the level of poverty in Nigeria likewise the infant mortality rate.

Conclusion and Recommendations

The study has revealed that there exists a positive long-run relationship between government expenditure on health and gross enrolment rate on the per capita income of Nigeria, while a negative long-run relationship exists between government expenditure on education, infant mortality rate, life expectancy and literacy rate on the per capita income of Nigeria. It was also established that there are cases of uni-directional causality between life expectancy and per capita income and literacy rate and per capita income. Result also showed instances of no causality between government expenditure on health and government expenditure on education on per capita income and even infant mortality rate and per capita income.

Null Hypothesis:	Obs	F-Statistic	Prob.
LGEE does not Granger Cause LPCI	32	0.13079	0.878
LPCI does not Granger Cause LGEE		1.31387	0.2854
LGEH does not Granger Cause LPCI	32	0.5338	0.5924
LPCI does not Granger Cause LGEH		1.8322	0.1794
LGER does not Granger Cause LPCI	32	2.33183	0.1164
LPCI does not Granger Cause LGER		1.16282	0.3278
LINF does not Granger Cause LPCI	32	6.56834	0.0047
LPCI does not Granger Cause LINF		2.13894	0.1373
LLE does not Granger Cause LPCI	32	7.68436	0.0023
LPCI does not Granger Cause LLE		1.98042	0.1576
LLIT does not Granger Cause LPCI	32	5.99787	0.007
LPCI does not Granger Cause LLIT		1.37135	0.2709

Source: E-views 7 computation by author.

Table 2: Granger causality test.

Some major recommendations for policy can be drawn from the analysis:

1. The government should increase its expenditure on education as this would improve the standard of living of the citizens. Increased investment in education will help in promoting entrepreneurship as graduates would not solely depend on the government for jobs but would become job creators. Investment in education would also enhance the productive capacity of graduates which would, in turn, result in an increase in income and provide a basis for the value of healthcare and personal hygiene. The government should also increase the standard of education by making education not merely theoretical but practical oriented. This would ensure that a large portion of Nigerian graduates is employable.
2. The government should also increase its expenditure on health. It is a fact that health is wealth and therefore there is the need to provide a good environment, health facilities, and increased rate of doctor to patient ratio, health workers motivation and increased remuneration amongst others.
3. The government should make it their sole responsibility to involve its citizens in developing policies that affect their lives. The government should take into account the number of the poor, area of residence and the reason of their being poor in order to tackle the problems of poverty in a well-coordinated manner.
4. It has been found out that a large number of government policies are actually either not been implemented or are not adequately implemented. Therefore the government should also create new policies and strengthen its existing policies to combat poverty in Nigeria.

References

1. Ogwumike FO, Ozughala U (2001) Growth, poverty and environment. The Nigerian economy society. Natural resource use, the environment and sustainable development. Kenbim Press Ltd, Ibadan.
2. Mustaphas M (2011) Poverty alleviation as a machinery for economic reconstruction in Nigeria.
3. Becker G (1962) Investment in human capital: A theoretical analysis. Journal of Political Economy 70: 9-49.
4. Ogujiuba K (2013) The impact of human capital formation on economic growth in Nigeria. Journal of Economics 4: 121-132.
5. Ekpe AE (2011) Poverty alleviation in Nigeria through capitalism economic framework: problems and challenges. Journal of Sustainable Development in Africa 13: 181-192.
6. World Bank Report (2013) Human capital index.
7. Melio MS (2015) The challenges of poverty measurement in the Arab Region. International Association for Income and Wealth Conference.
8. Kayode A (2012) Human capital development and poverty alleviation in Nigeria: A symbiotic overview. Journal of Public Administration and Governance, pp: 1-15.
9. Harbison FH (1973) Human resources as the wealth of nations. Oxford University Press, New York, USA.
10. Schultz TW (1961) Investment in Human Capital. The American Economic Review 1: 1-17.
11. Adekoya O (2017) An examination of the effect of entrepreneurial capabilities

on the prospects and challenges of setting-up a small-scale business in Nigeria: A case study of Bank of Industry, Nigeria. International Journal of Entrepreneurship, Innovation, and Management 2: 55-67.

12. Ejere SI (2011) Human capital development as a catalyst for national development: Nigeria in perspective. Journal of International Business & Management 2: 98-104.
13. Imam H (1998) Why poverty defines solution. Business Times Monday, p: 5.
14. Fafowora O (2002) Global prosperity and poverty. The Comet, p: 34
15. McCaston MK, Rewald M (2005) Conceptual overview of underlying causes of poverty, pp: 1-27.
16. Ijaiya GT (2007) Poverty alleviation programmes. In: Saliu H, Amali E, Olawepo R (eds.) Nigeria's reform programme: Issues and Challenges. Concept Publishing, Lagos.
17. Adelakun OJ (2011) Human capital development and economic growth in Nigeria. European Journal of Business and Management 3: 21-30.
18. Smith A (1776) The wealth of nations. Modern Library, New York: USA.
19. Marx K (1859) A Contribution to the Critique of Political Economy.
20. Marx K, Engels F (2015) The Communist Manifesto. Penguin Classics, p: 6.
21. Hout W (2016) Classical approaches to development: Modernisation and dependency. The Palgrave Handbook of International Development, pp: 21-39.
22. Holding L, Biddle J (2016) The introduction of human capital theory into education policy in the United States. Michigan State University Press.
23. Ilesanmi OA, Lasisi FA (2015) The interface between government policies, human capital development and poverty reduction in Nigeria. European Journal of Business and Innovation Research 3: 11-25.