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GOVERNMENT EXPENDITURE AND THE DEVELOPMENT OF THE EDUCATION SECTOR IN NIGERIA: AN EVALUATION

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Abstract

Overtime, budgetary allocation to the education sector in Nigeria has been inadequate to meet the demands of the education sector. The objective of the paper is to evaluate the influence of government expenditure on the education sector in Nigeria. Hence, it is also intended to examine the effect of education expenditure on the level of literacy in Nigeria. Using a time series Linear forecasting model, this paper evaluates the effects of the allocation to the education sector by the government and its development. The use of co-integration in this work shows there is a long-run relationship between the variables and they are statistically significant. The Granger Causality test shows that the various variables granger causes literacy rate in Nigeria. It is imperative to note that if certain policy measures such as increased funding reduced corruption, teacher's motivation and strategic planning among others are fully implemented, the sector will be appreciably developed. It is recommended that government should enhance the allocation of funds to the education sector, and that the private sector should also contribute towards meeting UNESCO's recommendation of 26% of total budget allocation to the sector.

Keywords: Government Expenditure, Literacy rate, Human capital development, Nigeria.

Introduction

Human capital development is recognized as a major factor of national development in all countries of the world and providing quality education is a major way of improving the quality of human resources. One of the challenges that face any modern economy is the achievement and the sustenance of economic growth and development with the ultimate objective of improving the welfare of its citizens. The society's future depends largely on the quality of its citizen's education because education is the main instrument used by the society to preserve, maintain and upgrade its social equilibrium. The education system is undeniably the major backbone of the

development of any country as it inculcates in the individual, the ability to be a vital part in nation building.

Education enriches peoples understanding of themselves and the world; it improves quality of lives and leads to broad social benefits to individuals and society. Education raises people's productivity, creativity and promotes entrepreneurship and technological advancement as demonstrated in several countries such as Malaysia, Bolivia, China (World Bank 1999). Schumpeter (1954) has similarly stressed the role of innovation which is a byproduct of education in the process of economic growth. Many developing countries have made significant progress in ensuring better access to education as evidenced by improvement in literacy and enrolment rates, higher quality and more equitable distribution of education services.

Public spending on education and training is not an end in itself. The goal of investment in public education is to create the skills and attitudes needed for higher levels of productivity and growth. Whether or not such growth will be achieved will depend not only on the amount of resources invested but also on the efficacy with which the inputs are managed. The body invested with the power of the allocation of resources in Nigeria is the Revenue Mobilization Allocation and Fiscal Commission (RMAFC). Resource allocation to the education sector in Nigeria is achieved through annual budgets. Budgetary allocation to the education sector is channeled through appropriate organs of government and such funds are in turn disbursed to all the levels of education.

Over the past decade, Nigeria has been plagued by frequent political unrest. This political instability has generated negative effects on the education system. Although education has been in crisis for many years, the situation has recently been made worse by frequent strikes by teachers. Much of the difficulty lies in the fact that the sector is poorly funded. These results in shortages of materials and human resources for education: lack of qualified teachers, a brain drain for the public sector; few institutional inputs, shortage of classrooms and a host of other problems. Several of the issues in the financing of education in Nigeria are embedded in virtually endemic problems of fiscal federalism – in particular, the so called vertical and horizontal fiscal imbalances.

The first of these deals with the imbalance between financial responsibilities and financial resources at each level of government, federal, state and local. The second deals with equity across the subunits of each specific level of government such as state, or local government.

Following the enhanced contribution of petroleum to total federally collected revenue in the early 1970s, budgetary allocation to education sector took a rising trend. Education sector allocation as a proportion of total budgetary allocation rose from 0.69% in 1970 to 10.83% in 1976 dropped temporarily to 5.6% the following year as a result of some vagaries in the international price of crude oil. Since then, it has been fluctuating between 1.9% and 9% of total federal government expenditure which is far below the United Nations recommended minimum standard of 26% (UNESCO, 1998). As budgetary allocations to the education sector declined particularly since the introduction of the Structural Adjustment Program (SAP, 1986), school enrolment at all levels recorded an increasing trend and the number of educational institutions increased tremendously. These developments created severe infrastructural gaps in schools, per capita school infrastructures have declined as no new structures are built and old ones are not renovated. These features in the education sector has manifested in several problems. First, the classrooms are overcrowded, teaching aids are generally lacking. The scenario is not different in

secondary and tertiary institutions where in addition to rusty and cranky classroom facilities, science laboratories are either non-existent or dilapidated. Nwaogwu, (1997), Sambo (2002).

The poor funding of the education sector in Nigeria is not limited to inadequate infrastructure alone but also on the incentive structure of staff in the school system. Teachers are the least paid in the entire public service in Nigeria; an indication of the nonchalant attitude of government with regards to the education sector.

One of the objectives of the Millennium Development Goals (MDGs) is to eradicate illiteracy; the fourth item on the seven point agenda of the Late Yar'Adua's government was Human Capital Development (Education and Health). Strengthening human capital development according to the plan can be achieved by embarking on a comprehensive reform of tertiary institutions, sustain increased funding of primary and secondary levels of education, sustain increased funding for provision of basic health services and resolve dysfunctional education system.

It is said that the seven point agenda is a document aimed at bringing to reality the goals of the MDGs. If adequate attention is not given to education expenditure by the federal government, the goal of eradicating illiteracy as stipulated in the MDGs will not become a reality by 2015.

Statement Of The Research Problem

The rapid expansion of the education sector over the last three decades was compounded by the more recent global economic crisis and fiscal stringency due to over dependence on oil. This has left both the lower and higher-education institutions in Nigeria short of funds for their operations with respect to the demand imposed on them.

The idea that education is a form of investment in human capital is one of the most important developments in economics and it has had considerable impact on educational planning both in developed and developing countries. For both government and individuals, the choice between different ways of investing resources rest, to a large extent, on an evaluation of the costs and benefits associated with the investments. In Nigeria, the decline in the standard of education at all levels has become a fact of national life. Indeed the most significant event in the sector in the recent past has been the continuing crisis besetting the sector. This crisis is rooted in the degenerating conditions within the citadels of learning, with respect to teaching facilities and other infrastructural facilities, the welfare of those engaged in the teaching profession and the ever increasing cost of education. This has culminated in student unrest and industrial actions by lecturers and teachers through their respective umbrella associations such as Academic Staff Union of Universities (ASUU), Nigerian Union of Teachers (NUT) and so on at their different levels of the educational system.

The study seeks to evaluate the adequacy of government expenditure on the education sector and the impact in terms of development in the education sector which could be reflected on human capital development and the level of literacy in the Nigerian economy.

Objectives of the Study

The broad objective of this study is to evaluate the influence of government expenditure on the education sector in terms of how it has helped in the development of the sector. This study also intends to identify various alternative policy options available with a view to offer the best policy recommendation. Specifically the study intends to:

- Determine if government expenditure has impact on the development of the education sector.
- Assess the various education policies in Nigeria and its effect on the development of the education sector.
- The effect of education expenditure on the level of literacy in Nigeria.

Literature Review

Conceptual Clarifications

For the records, let us take a look at the concepts of the literacy rate and human capital. The literacy rate can be defined as the percentage of the total population who are able to read, write and with understanding a short and simple statement on their everyday life (UNESCO). According to Central Intelligence Agency (CIA, 2013), the adult literacy rate of the Nigerian economy is 61.3% of the total population meaning that almost 40% of the population cannot read, write or understand simple, short statements. On the other hand, the concept of human capital can be interpreted in many ways. One of them could be looking at the person as an asset, as a resource that belongs to an organization and from which we can demand all its capacity and commitment. Human capital represents the value each employee brings to the table, according to his or her studies, knowledge, capabilities and skills. The development of the human capital can only be acquired through education. It should be noted that nothing substitutes the value of human capital in an organization or economy.

Education in the general sense is a form of learning in which knowledge, skills and habits of a group of people are being transferred from one generation to the next through teaching, training or simply by auto dictation. Generally, it occurs through any experience that has a formative effect on the way one thinks, feels or acts. Philip(2013) defined it as a profound philosophical exploration of how we transmit knowledge in human society and how we think about accomplishing that vital task. It is the power of reasoning and judgment, and generally preparing oneself or others intellectually for mature life. We have two types of education, these are formal and informal.

It is important to note that educational expenditure is an aspect of educational finance that deals with how the amount allocated to the education sector is spent. It may be used not only as an instrument for analyzing financial aspects of education, but also as a parameter for projecting the trends of an educational system (Hallak, 1969). Expenditure on education is determined by budgetary allocation. The educational expenditure is categorized or classified by the government under the capital and recurrent expenditure where the capital expenditure on education refers to the investment on real assets such as building of schools, institutions and other facilities that have the life span of more than a year, while recurrent expenditure on education refers to the amount allocated to the education sector for salaries of teachers, maintenance of facilities and so on.

The Significance of Education in an Economy

The significance of education in nation building cannot be overstated since its economic contribution benefits both the individual directly and the society indirectly. A common structural pattern has been given on the basis of monumental definitions of education by various scholars, Farrant (1985), Fafunwa, (1974) and Anyanwu (199). The determination is, improving the individual to be useful and desirable in his society.

In explaining some significant roles of education in nation building, Enueme (1999) opined that formal education has a position to play in developing countries in the appreciation and acceptance of boosters of agricultural production through mechanized farming and the use of fertilizers, crop rotation and so on rather than belief in the gods of harvest. According to her, education also attracts direct financial returns in form of earnings differential among graduates and relatively minimal in comparison to others with lesser educational qualifications. This is mostly found in the organized private and public institutions.

Education also contributes immensely to technological development both in terms of acquisition, adaptation, and capital widening and deepening. An educated man is more efficient with a high degree of efficiency, capacity and least waste. Educations' significance can also be perceived in the socio-political stability of a nation.

The Asian Tigers (Singapore, Taiwan, Hong Kong and South Korea), who are the most rapidly developing nations in the world today, and Japan the only country to join the ranks of this century's most economically and politically powerful nations knows the significance of education, which do not only benefit the people directly but also the economy at large. The effect of education in these economies brought them economic development with unprecedented speed not minding relatively poor endowment of natural resources. The attendant effect of this is overall economic growth and development because they were able to transform their agrarian society into an industrialized one. As noted by Galbrouth (1964), 'No improvement is possible with unimproved people' which supports the saying 'knowledge is power' and that power can only be transmitted through education. It is called 'mental power'.

The Theory of Expenditure Limitation

This theory was propounded by Aaron Wildavsky in 2003. This theory is not about why government should choose to limit spending, the problem of expenditure limitation exists only when there is a public will but not yet a public way to hold down spending. The desire to limit spending, of course does not necessarily mean that citizen or government dislike all or most or even any individual items of expenditure. They may well like each and every one considers separately and yet dislike the totals to which their desires adds up. The people preferences on total may well be at variance with their preferences on individual programs. Most expenditure is approved but total spending is disapproved. Reconciling these incompatible demands constitutes the contemporary political problem of public spending.

The theory of expenditure limitation talks about the doctrine of opportunity costs, which state that the value of an act is measured in terms of opportunities forgone. This means that the spending of government should be based on hierarchy of importance because when you spend more on an item; it will mean spending less on other items. The theory supports the fact that more resources should be spent on productive sectors of the economy and less on unproductive sectors since the long run effect will be positive on the economy generally. Once there is a limit in government expenditure, it will increase cooperation in the society and also an increase in the common interest. Organizations interested in income redistribution will come to understand that the greater the increase in real national product, the more these will be for government to spend on productive purposes. Government regulations that impose financial burdens would not be viewed as desirable, but would be balanced against the loss to the economy on which the size of the social services depends.

The Theory of Increasing State Activity

Adolph Wagner, a German economist, formulated the law of expanding state activities in 1863, the laws of expanding state activities; it is stated as follows “As the economy develops overtime, the activities and functions of the government increases”. The law is now popularly called Wagner’s law, named after the economist. Although the law was first observed in his country, it was based on an industrial economy. He argued that for any country, the public expenditure rises constantly; it shows an upward sloping trend. The law predicts that the development of an economy is accompanied by an increased share of public expenditure in Gross National Product, and that the increase in state expenditure is needed because of three main reasons, viz:

- Social activities of the state
- Administrative functions and protective actions
- Welfare functions of the state

Wagner cited education and culture as areas in which collective producers are more efficient than private producers because some economic activities require a large scale capital that the only way these capital projects could be financed was if the state participates in the activity.

- **Education Policies In Nigeria**

The education sector is guided by the national policy on education and several coordinating mechanism have been put in place to ensure that the highest standards are maintained in curriculum, infrastructure and manpower development.

In Nigeria education policy at independence was aimed at using the available schools to develop manpower for economic growth and development. The policy was narrow and did not meet the aspiration of Nigerians. The criticism of the policy include, high rate of repetition and drop out, irrelevant curricula, obsolete methods of teaching and the fact that graduates were dependent with low creativities.

The above element led to the lunch of National Policy on Education (NPE) in Nigeria in 1977. The orientation of the policy was geared towards self-realization, individual and national social, cultural, economic and political, scientific and technological development. The policy was revised in 1981 and 1998. The objectives of the policy were broadened to include free primary education among others. Before this period, the structure of education system in Nigeria was six years of primary school; five to seven years post primary school (secondary teachers training and sixth form) and four to six years of tertiary education (colleges of education, polytechnics, colleges of technology and university). During this period, the pattern changed into a 6 – 3 – 3 – 4 system. The system consists of six years of primary education, three years of Junior Secondary School, three years of Senior Secondary School and four years of tertiary education (Anyanwu et, al., 1999).

At the inception of the Obasanjo led administration, a Universal Basic Education (UBE) scheme was launched in 1999. The specific targets of the scheme are a total eradication of illiteracy by 2010 and increase in adult literacy rate from 57% to 70% by 2003. (FRN, 2000, 53). The goal of these program were founding functional universal and quality education for all Nigerians irrespective of age, sex, race, religion, occupation and location. The Universal Basic Education policy program is broader than the Universal Primary Education policy which focused on only providing educational opportunities to primary school age only. The structure of the Universal Basic Education policy is nine years of primary education, three years of secondary education and four years of tertiary education. The guideline for the implementation of U.B.E. outlined the targets of the policy as follows:

- Ensuring that school-age children are in school.

- 100% transition to JSS at the end of six years of primary education.
- Completers of Basic Education to possess literacy, numeracy and basic life skills, as moral and civic values.
- All teachers in Basic Education institutions to possess the Nigerian certificate of education.
- Review of basic education curriculum to conform to the reform agenda.
- Achievement of 100% awareness on HIV/AIDS in schools.
- Establishment of an effective institutional framework for monitoring learning and teaching.
- Active involvement in and participation and eventual ownership of schools by local communities(www.ubec.gov.ng)

It should be noted that as good as a policy may be, without adequate implementation through necessary funding, such policy will amount to nothing even if same policy worked in other countries (where it was well implemented), and the education policy is not an exception.

Government Expenditure and Development of the Education Sector

Research has shown that there is a positive relationship between the development of the education sector and government expenditure. For the education sector to be developed, it means that the human capital is well equipped with knowledge that will drive the economy from a given state to a preferred state. Contemporary discussions on education and the funding of education in particular have continued to receive more attention and this is because education is seen as a powerful vehicle for the equalization of economic opportunity, distribution of income and eradication of poverty.

Adenuga (2002) point to the fact that Nigeria's government spending has been totally inadequate or that the amount purported to have been expended on education was not actually spent, while Olaniyi and Adam (2002) observed that government expenditure on education and the share of total spending to the Gross Domestic Product (GDP) have been declining. For instance, the share of education in Nigeria's total government expenditure between 1980 and 2010 was less than 26 percent of the GDP, which was below the minimum standard recommended by the UNESCO. The poor funding of education in Nigeria is said to be the major reason for the poor performance of the sector and its contribution to GDP, per capita GDP and other human development indicators. Despite the importance of education in an economy, and the benefits a country stands to derive by investing in the education sector, Nigeria has still not been able to invest adequately in the sector. The Asian tigers invested in their education sector and the development of their education sector led to the development of the economy as a whole. Adenuga (2002) posits that education development in Nigeria is constrained by enrolment ratio, funding, policy environment and quality.

Most schools in Nigeria suffer from overcrowding, poor sanitation, poor management and poor intra-sectorial allocation. The attendant and composite effects of these inconsistencies are production of half-baked graduates, low development in the economy leading from low economic growth. The percentage given to education as a total of public expenditure revealed that Nigeria has no first-rate for education. The poor state of education in Nigeria started from the severe decline in the prices of oil in the market in the early 1980s, combined with the Structural Adjustment Programme (SAP), and these led to the reduction in government spending on education. The result was unpaid teachers, degradation of education at all levels and industrial actions in universities and schools. The end result is the declining literacy rates in the country.

The National Economic Empowerment Development Strategy (NEEDS) document recognized that the delivery of education in Nigeria has suffered neglect through the poor state of funding. The national literacy rate as at 2006 was 57%, there were acute shortages of infrastructure and facilities at all level of education. Literacy level gradually deteriorated and by 1999 the overall literacy rate had declined to 64.1% from 71.9% in 1991. Presently, according to Central Intelligence Agency (CIA, 2013), the literacy rate in Nigeria is 61.3%. This is due, mainly, to the decline continuously encountered in the allocation of education expenditure by the government.

Over the years, the recurrent expenditure on the education sector is more than the capital expenditure, it is time for the government to realize that with the growing rate of population increase, more investment should be, not on the recurrent expenditure alone, but to increase the capital expenditure by provision of more educational facilities, building of more schools and universities in other to avoid overcrowding the available schools and educational facilities. The recurrent expenditure is not enough to go round for what it is meant. The facilities are not well maintained; staff poorly motivated, poor physical infrastructure, and all these leads to decline in literacy rate. Developing countries such as Ghana and Kenya spend up to 20 – 25% of their total budget on education, and their literacy rates are quite appreciable.

According to Human Development Index (2013) for developing countries such as Ghana, Kenya, Angola and the likes, Nigeria ranked 12th among the low human development with indices 0.471. Worldwide, Nigeria ranked 153 out of 186 countries of the world. Countries like Norway, Japan, Canada, Singapore, led the list of the very high Human Development Index ranging from 0.8 to 0.9. These countries invest more than 30% of total expenditure on education. The effect is seen on the development of human capital which is of great benefit not only to the individuals but also to the society. Since 1960, the average of the percentage of total expenditure spent on education is between 6 – 10%, this has a negative effect on the human capital development. There is a positive relationship between education and the development of human capital, if the sector (education) is well funded, the index of human capital development for Nigeria will definitely increase, the value 0.471 has shown that education in Nigeria is not given adequate attention, instead the funds meant to be used for this sector is being expended on irrelevant ceremonial functions of government.

The role of government expenditure on the education sector is necessary for the development of the sector. A developed education sector will be a long term activity and will also attract long term benefit to the society. This therefore is necessary for effective and efficient capital investment in the sector. With the prevailing trend of investment in the sector, one can say that the education sector of Nigeria is underdeveloped. The evidence is everywhere, the available schools are not enough for the population, and they are not well equipped. The equipment available are not functioning properly, and the teachers are underpaid and not motivated to work considering the fact that there are no teaching aids, the environment and buildings are dilapidated due strictly to inadequate funding of the sector.

Shifting resources from low productive sectors such as general administration to education will go a long way in the development of this sector in Nigeria. Also, the vision of eradicating illiteracy and poverty will be achieved. But, with the current status occasioned by the decreasing allocation, the rate of development in the education sector will still be classified as underdeveloped.

Methodology/Estimation Technique

This research work makes use of econometric approach in estimating the relationship between government expenditure on education (the independent variable) and the development of the education sector (dependent variable).The empirical analysis is being restricted to the period between 1980 and 2011 due to non-availability of needed data. Most of the information and data needed for the study will be gathered from existing literature and from relevant government agencies such as the Central Bank of Nigeria, National Bureau of Statistics (NBS), National Universities Commission (NUC) as well as International Organizations such as World Bank, United Nations Educational, Scientific and Cultural Organization (UNESCO)

This study utilized the Unit Root Test to examine the stationarity or non-stationarity of the individual variable; also, the Johansen Co-integration test is employed to examine the Long run relationship between the respective variables. The E-views 7.0 econometric software was also used in the estimation of the econometric model.

Presentation and Analysis of Unit Root Test Results

Econometric studies have shown that most financial and macro-economic time series variables are non-stationary and using non-stationary variables leads to spurious regression (Engel and Granger, 1987). Unit Root Tests in this study is used to investigate whether or not GRGDP, LRN, TGREE and TGCEE are stationary.

The result of the test reveals that the GRDGP is stationary both at thelevels and at first difference; while the LRN, TGREE and TGCEE are stationary at their first difference. Hence, the result indicates that all the series are stationary.

The null hypothesis of non-stationarity is therefore rejected. Given the findings that the series considered appeared to be stationary at a conventional level of statistical significance as shown in the table below, we are therefore justified to conduct the co-integration and the Granger Causality between LRN, TGREE, TGCEE and GRGDP in determining the long-run and causality relationship between government expenditure and the development of the education sector in Nigeria

LEVELS

| VARIABLES | ADF TEST STATISTIC | 90% CRITICAL VALUE OF ADF | ORDER OF INTEGRATION | REMARKS |
|-----------|--------------------|---------------------------|----------------------|----------------|
| LRN | -1.941918 | -2.619160 | I(0) | NON STATIONARY |
| TGREE | 2.225205 | -2.625121 | I(0) | NON STATIONARY |
| TGCEE | 0.06672 | -2.619160 | I(0) | NON STATIONARY |
| GDPGR | -4.709045 | -2.622989 | I(0) | STATIONARY |

Source: Authors Computation using E-views 7.0

FIRST DIFFERENCE

| VARIABLES | ADF TEST STATISTIC | 90% CRITICAL VALUE OF ADF | ORDER OF INTEGRATION | REMARKS |
|-----------|--------------------|---------------------------|----------------------|---------|
|-----------|--------------------|---------------------------|----------------------|---------|

| | | | | |
|-------|-----------|-----------|------|------------|
| LRN | -5.440114 | -2.625121 | I(1) | STATIONARY |
| TGREE | -8.620075 | -2.621007 | I(1) | STATIONARY |
| TGCEE | -6.513394 | -2.621007 | I(1) | STATIONARY |
| GDPGR | -7.060674 | -2.622989 | I(1) | STATIONARY |

Source: Authors Computation using E-Views 7.0

PRESENTATION AND ANALYSIS OF JOHANSEN COINTEGRATION TEST RESULTS

The result of the multi-variate co-integration test based on Johansen Co-integration technique reveals that the trace statistics and Maximum Eigen Value Statistics confirms the existence of co-integrating equations among the variable of interest. Since the variables are co-integrated, this satisfies the convergence property. The result also shows the evidence of a stable and long-run relationship between the Literacy Rate in Nigeria (LRN), Total Government Recurrent Expenditure on Education (TGREE), Total Government Capital Expenditure on Education (TGCEE) and the Growth rate of the GDP (GRGDP) in Nigeria. This is shown in the table below.

| HYPOTHESIZED NO OF CO- INTEGRATION EQUATION | MAXIMUM 0.05 EIGEN CRITICAL PROBABILITIES VALUE VALUE | | | TRACE STATISTIC | 0.05 CRITICAL PROBABILITIES VALUE | |
|--|---|----------|----------|--------------------|---|----------|
| | NONE | 47.95057 | 27.58434 | | 0.0000 | 107.4255 |
| ATMOST 1 | 26. | 21.13162 | 0.0068 | 59.47497 | 29.79707 | 0.000 |
| ATMOST 2 | 23.61007 | 14.26460 | 0.0013 | 32.53302 | 15.49271 | 0.0001 |
| ATMOST 3 | 8.922951 | 3.841466 | 0.0028 | 8.922951 | 3.841466 | 0.0028 |

Empirical Result of Pairwise Granger Causality Tests

The result has shown that there is a unidirectional causality between Total Government Capital Expenditure on Education in Nigeria and Literacy Rate in Nigeria, bidirectional causality between Total Government Recurrent and Capital Expenditure on Education. This means there is a complete feedback, but for other variables there is no causality.

Summary and Analysis of Pairwise Granger Causality Test

| VARIABLES | NATURE OF CAUSALTIY | SIGNIFICANCE LEVEL | REMARKS |
|---------------|---------------------|--------------------|-------------------|
| TGREE & LRN | No causality | 5% | No feedback |
| GDPGR & LRN | No causality | 5% | No feedback |
| TGCEE & LRN | Unidirectional | 10% | Partial feedback |
| GDPGR & TGREE | No causality | 5% | No feedback |
| TGCEE & TGREE | Bidirectional | 5% | Complete feedback |
| TGCEE & GDPGR | Bidirectional | 5% | Complete feedback |

Policy Implications

The following are the policy implications of the study.

1. Literacy Rate in Nigeria since 1980 to 2011 has a mean rate of 49.95 per cent which is relatively low. This shows that literacy rate in Nigeria over the years has been fluctuating, increasing and decreasing without a constant rate.
2. The co-integration analysis shows that there is a meaningful long-run relationship between the variables. The result was positive, implying that all the variables directly and indirectly affect the growth of the education sector. This means that:
3. The government should increase capital expenditure on education for increased development of the sector.
4. The recurrent expenditure on education also should be increased since it covers payment of teachers' salaries and maintenance of already existing equipment and buildings.
5. The growth rate of the GDP also has implications on the development of the education sector because, if the GDP grows, it will enable government spend more on the education sector and if the education sector is developed, it will also lead to more manpower or labor and that will also cause an increase in the GDP.
6. The government should also know that the capital expenditure on education when increased will also trigger a corresponding increase in the recurrent expenditure on education, so that already existing infrastructures and equipment will not wear out due to lack of maintenance.
7. The percentage of total government expenditure allocated to the education sector should be increased so as to facilitate quick development in the education sector.

Recommendations

Based on the analysis of the result obtained, the following recommendations are proffered:

1. The Federal government of Nigeria should increase the allocation of funds to the education sector. This should be extended beyond the 12% which has been the highest over the years to between 18% and 22%. Though this recommendation is not in consonance with UNESCO 26% of total expenditure, it could trigger huge improvement in the sector.
2. Strategic planning should be a major component of policy initiatives for education and enacted policies should be feasible and well implemented within specific time frame. Moreover, there is the need to minimize policy inconsistencies in the sector.
3. Government should increase capital investment on the education sector such as new schools (building), provision of basic equipment (educational) needed for the students to learn, and maintenance of the ones already available. This will aid continuous development in the sector.
4. The need to reduce corrupt practices in the education sector cannot be overemphasized. This will ensure that the expenditure on the sector yields significant effect in the development of the sector. This can be done through effective monitoring and supervision of earmarked projects. This will go a long way in the reduction of white elephant projects and increase rapid growth in the sector.
5. Considering that frequent strikes in educational institutions are caused by lack of motivation for teachers, who receive low salary, low benefits and lack basic support for the enhancement of their profession. The government should motivate the teachers through various schemes, for example, grant them vacation and training leaves, increase salary, and

make more allowances available. Such perks will motivate them to put in more effort in their work.

Conclusion

The status of the Nigerian education sector at the moment is unattractive, low in quality, limited in its reach and troubling in its future. Nigeria is a country that needs to get its priorities right. Investment in the education sector has a long run economic effect as it plays vital role in other sectors of the economy as well as protecting the environment and controlling population growth. Education is recognized as one of the best financial investments states can make as it helps increase productivity in the economy. It is pathetic that the song on everybody's lips in the country nowadays is that of poor educational standard in Nigeria.

To avert the impending ruin on Nigeria's future, the nation requires a conscious and fast groundbreaking rescue of her education system. The decay is so deep that nothing short of massive mobilization of funds through the public and private sectors and a large barrage of institutional policy and legislative reforms can be an adequate remedy.

If the recommended solutions are put in place, Nigeria will to a large extent control an education sector with high standards that is not only effective in teaching and learning but efficient as well. Since such development strides have been achieved by several developed countries of the world, there is a likelihood that it is also possible in Nigeria.

References

- Aaron Wildavsky (2003). *Controlling Public Expenditure: The Theory of Expenditure Limitation. OECD Journal of Budgeting, Vol. 2, No 4*
- Adam P. A. (2002). *The Impact of Human Capital on Economic growth in Nigeria in Human Resource Development in Africa, Proceedings of the Nigeria Economic Society, Ibadan Pp 53 – 78*
- Adenuga, A. O (2002). Educational Expenditure and Performance in Nigeria (1970-2000) *'In Human resources Development in Africa, Proceedings of the Nigeria Economic Society Annual Conference, Ibadan Pp. 199-222*
- Anyanwu J. C, A. Oyefusi, H. Oaikhenan and F.A. Dimowo (1999). *Structure of the Nigerian Economy* Onitsha Joanee Education publishers
- CBN, (2003). *Annual Report and Statement of Account, Abuja, Nigeria.*
- Central Bank of Nigeria (2002). *Statistical Bulletin, Abuja.*
- Central Bank of Nigeria (2000). *Statistical Bulletin, Abuja.*
- Central Intelligence Agency (2013). Historical Collections and Publications.*

- Engel R.F. and C.W.I Granger (1987). "Co-integration and Error Correction: Representation, Estimation and Testing". *Econometrica*, 55(2): 251
- Enueme, Chika (1999). *Education and Technology: Implications for Economic*; Delta state University, Abraka
- E-views 7.0 Econometric software
- Fafunwa, A. B. (1974). *History of Education in Nigeria*, London .Allen and Unwin Publisher
- Farrant; I. S. (1985). *Principles and Practice of Education*, London; Longman Publishing limited.
- Federal Republic of Nigeria (2000). *Federal Ministry of Education Bulletin Abuja: Federal Ministry of Education.*
- Galbraith. J. K. (1964). *Economic Development*, London O.U.P
- Granger, C.W.I, (1986). *Developments in the Study of Co-integrated Economic Variables: Oxford Bulletin and Statistics*, Vol48(3): 213 – 228
- Hallak, J. (1969). *The Analysis of Education Costs and Expenditure Fundamentals of Educational Planning Paris:UNESCO/ International Institute for Education planning. IIEP, P 20*
- Nwaogwu C. C. (1997). *The Environment of Crisis in the Nigerian Education System. Comparative Education* 33 (1): 87 – 95
- Olaniyi, O. O. and Adam J.A (2002). *Public Expenditure and Human Development in Nigeria Economic Society Annual Conference, Ibadan* Pp. 157-198
- Philip G. Altbach, (2013). *The International Imperative in Higher Education*. Rotterdam, the Netherlands: Sense Publishers.
- Sambo, A.A (2002). *The Nigerian Education System : A Brief History*. National Freedom, 1 (6): 8 – 9. UNDP 2009 Report
- Schumpeter .J. (1954). *The History of Economic Analysis*, Oxford, Oxford University Press.
- Structural Adjustment Program (1986), Abuja
- Tahir, G. (2006, January 3) *Universal Basic Education: A Flagship Programme of the Federal Government of Nigeria*. Vanguard Newspaper (p.24). www.ubec.gov.ng
- UNESCO. (1998-a) *World Science Report*, UNESCO, Paris
- Wagner, Adolph (1863). *Grundlegung der Politischen Okonomie*
- World Bank (1997). *The State in a Changing World, World Development Report*, New York: Oxford University Press.

World Bank(1998). *Viewing Development from the Perspective of knowledge. Bulletin vol 9 No 1 pp 1- 16*