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Abstract: Inadequate human capital is a prominent challenge facing small and medium scale enterprise (SMEs) growth in Nigeria and other developing economies. Despite diverse measures taken overtime to develop and improve human capital, Nigeria still falls short of the standard recommended by United Nations Educational, Scientific and Cultural Organization (UNESCO). This study analyzed the synergistic influence of selected human capital formation indices on small and medium scale enterprises (SMEs) growth in Nigeria between 2001 and 2015. Specifically, the study examined government expenditure on education (GEE), and level of school enrolment (SENR) within the specified period and their influence on SMEs growth was assessed. Data generated was analyzed using Multivariate Regression technique. The result revealed that GEE and SENR had combined significant positive influence on SMEs growth in the study period. The study recommended that government should commit more fund to education as a veritable tool for human capital formation. This is expected to drive SMEs growth to boost the nation's economy in this period of economic downturn.

Keywords: Government expenditure, education, SMEs, GDP, employment, export, economy

1. Introduction

The recent economic diversification drive in Nigeria has caused a shift in focus from oil to other productive sectors as vehicles for driving sustainable national economic development. The small and medium scale enterprises sector is prominent among such sectors. To bring about growth in any business whether small or large scale, it is generally agreed that human capital is the most critical resources, thus underscores the need for continual human capital formation, and the role of education in this process cannot be over-emphasized. Due to the importance attached to the growth of SMEs, successive governments have always put in place one education and training policy or the other specifically directed at SMEs growth (e.g Education for All (EFA), Universal Basic Education (UBE) etc) but many of these programmes have failed to achieve sustainable growth in the SMEs subsector (Weli, 2014).

Primary among the factors responsible for the failure over the years is the fact that, the Nigerian government has only paid lip service to education growth as that sector has always been grossly underfunded. The Nigerian government has consistently failed to meet the 26% minimum budgetary allocation to education sector as recommended by UNESCO. For instance, the budgetary allocations of N390.42billion in the year 2013 and N311.12billion in the year 2014 represented only 10.58 percent and 12.30 percent of the total budgets respectively (Ogunbene & Edogiawere, 2016). However, early education agenda of Nigerian government in particular were quite commendable, as policies and budgetary allocations were quite convincing (Esen, 1986, Weli, 2014) reported by Ekperiware (2016). The situation however changed after sometimes and since 1999, budgetary allocations to education have been reducing instead of the contrary. In the year 2000, the percentage of the budget to education of 9.6%, this reduced to 6.3% in 2005 and 8.7% in 2007 respectively. The allocation witnessed an increase between 2011 and 2014 with 10.13% in the year 2011 and 12.30% in 2014. These were however all below the stipulated 26% benchmark by UNESCO (Ogundele & Edogiawere, 2016).

After independence in 1960, attention to education witnessed giant strides particularly in the area of development of tertiary education in Nigeria, especially the regional universities, polytechnics, and colleges of education (Ashby Commission, 1959). The Universal Primary Education (UPE) programme, the National Policy on Education and the Universal Basic Education (UBE) Programme were major strides for basic education in Nigeria (Taiwo, 1980, Lockheed & Verspoor, 1991). Arising from these developments, between 2009 and 2013, the number of primary schools in Nigeria rose from 58,595 to 61,305, an increase of 5 per cent. At the Junior Secondary School (JSS) level, the number of schools increased from 10,410 in 2009 to 11,874 in 2013. This shows an increase of 1,464 schools, representing 14 per cent. This perhaps portends an increase in number of schools to accommodate pupils from the non-formal sector who may not have been in formal primary schooling (EFA, 2015).

At primary school level, there were 21,857,011 pupils enrolled in 2009 as against 24,071,559 pupil enrolment in 2013 which represents a 10 per cent increase. Students’ enrolment in JS Schools in 2009 was 3,107,287 while that of 2013 was 4,219,679. This represents 35 per cent increase. The shortfall between 2012 and 2013 enrolment has been explained as perhaps arising from disarticulation problems between junior and senior secondary schools. However, the apparent increase in both primary and junior secondary enrolment between 2009 and 2013 were in absolute terms and do not represent any significant progress toward the Universal Basic Education (UBE) target of 2015 (EFA, 2015). All these developments within the education sector of Nigeria have had varying consequences on small and medium scale enterprises growth with long run effect on the overall economy of the country.
Statement of the Problem

Studies on the relationship between human capital development and productivity have gained prominence in literature. While some studies have revealed positive evidence of sizeable returns on investment in human capital in terms of increased productivity, others have documented negative evidence (Victor & Jonathan, 2013). For example, while Hazel (1997) found a positive relationship between training and development practices and firm’s performance in public and private sectors in Israel, Itami (1987) found a negative relationship between training and development practices and business performance in Korea. These findings reveal a diverse relationship from country to country and at different periods. Ilegbibios (2013) posited that accumulation of human capital by countries and industries within is seen as an investment decision, but studies on the adequacy or otherwise of the skills acquired from education and other forms of training for small business growth are few.

This study therefore examined the synergistic influence of selected human capital formation indices (government spending on education, and level of school enrolment) on SMEs growth in Nigeria between 2001 -2015. The findings are expected to have important policy indications for driving SMEs growth in Nigeria at this period of economic downturn. The study hypothesised as follows:

H₀: Government education expenditure and level of school enrolment have no synergistic influence on SMEs growth in Nigeria between 2001 and 2015

2. Literature Review

Education and Its Funding Attention in Nigeria

Education is an important process of transforming human resources. The theory of modernization discusses how education can transform an individual’s value, belief and behaviour. It is a general belief that exposure to channels of education such as schools, mass media and other educational facilities inculcate in people modern values and attitudes; this, in turn, inculcate openness to new idea, independence from traditional authorities, willingness to plan and calculate further exigencies and growing sense of personal and social efficacy. In line with the thought from the modernization theory, the greater the number of people exposed to modernized institutions, the greater the level of individual modernity attained by the society. In conclusion, increase in knowledge resulting from educational expansion has effects on individual values and benefits and thus sets in motion the necessary building blocks for a more productive workforce and a more sustained economic growth (Ojokuku & Lawal, 2015). It was however argued according to Ojokuku & Lawal (2015) that government expenditure on education overtime has been grossly inadequate. Their position is premised on the fact that despite the periodic increases in government expenditure on education, the average expenditure on the sector has been less than 26% of the total annual budget for the nation in accordance with the UNESCO recommendation (UNESCO, 2006). For instance, according to the Central Bank of Nigeria’s Statistical Bulletin (2011) report, the total education budget represents 5.3% of total government expenditure. It increased to 7.9% in 1989, fell to 0.7% in 1992 and increased to all time highest level of 11.6% in the year 2000. This review of the government funding of education over a thirty (30) year period between 1981 and 2011 shows an average level commitment less than 11% of the total budget (Ejiogu, Okezie & Chinedu, 2013).

Aside expenditure on education, government also made moves towards increasing enrolment at the basic level of human capital formation in the country. According to the 2011 State of Education Report, government embarked on basic education policy to ensure a seamless transition from pre-primary to primary school level through its pre-primary education programme. The government has the belief that basic education component of the education system comprising Early Childhood Care and Education, primary and junior secondary remain the most significant foundation years for effective participation in learning. At primary school level, there were 21,857,011 pupils enrolled in 2009 as against 24,071,559 pupil enrolment in 2013 which represents a 10 per cent increase. Students’ enrolment in JS Schools in 2009 was 3,107,287 while that of 2013 was 4,219,679. This represents 35 per cent increase. The shortfall between 2012 and 2013 enrolment has been explained as perhaps arising from disarticulation problems between junior and senior secondary schools (EFA, 2015). These various developments have serious implications on human capital formation activities in the country.

The Concept of Human Capital

According to literature, human capital can be defined as knowledge, skills, education and abilities possessed by individuals that are deployed to productively achieve set goals of the organization in which they serve (Garavan, Morley, Gunnigle & Collins, 2001; Youndt et.al, 2004). Romer (1990), refers to human capital as “a fundamental source of economic productivity while Rosen (1986) sees the human capital as an investment that people make in themselves to increase their productivity”. In production and service provision, human capital acts as a resource and it is created by changes in persons that bring about skills and capabilities that make them able to act in new ways (Coleman, 1988). It is therefore an amalgam of factors such as education, experience, training, intelligence, energy, work habits, trustworthiness and initiative that affect the value of a worker’s marginal product (Frank & Bemanke, 2007).

Human Capital Formation

Human capital formation can be said to be the systematic process of acquiring and increasing the number of people with skills, education and experience that are critical for economic, social and political development of a society (Yesufu, 2000). This phenomenon is associated with investment in human beings and their development as creative and productive process. The various ways of acquiring and developing human capital in persons (human capital investments) may include amongst others, investment in education, training, health care as well as investment in all social services that could influence man’s productive capacities especially motivation in the area of transport, housing and other rewards (Okojie, 1995). Examination of literature in respect of human capital studies has identified education as the most important component of human capital (Laverde, 2017).
Role of Small and Medium Scale Enterprises in Economic Growth
For purpose of the study, Small and Medium Enterprises is defined as an organisation having range of 5-20 employees with operating capital of not less than N2m–N10m excluding cost of land. Small and medium enterprises (SME) performance form a very important part of the Nigerian economy. The SME sector is a major engine which encourages the growth of jobs and wealth creation in the country’s economic system. SMEs performance act as a significant part that is linked to the strengthening and enhancement of the development of the country (Hassan, Maina & Mohammad, 2016). The contributions of SMEs to economic growth of countries have been very significant. SMEs are viewed as an engine of growth that contribute enormously to nation’s Gross Domestic product (GDP), employment generation, industrial output, poverty alleviation, export promotion and self-independence. Statistically, the contribution of SMEs in the Nigerian GDP base on the sector reveals that industry contributes about 41%, agriculture contributes 32%, and service contributes 27% (Weller et al., 2009).

According to Eniola (2014), the performance and growth of small and medium enterprises (SMEs) is a major driver and indices for the level of industrialization, modernization, urbanization, gainful and meaningful employment for all those who are able and willing to work, income per capital, equitable distribution of income, and the welfare and quality of life enjoyed by the citizenry. This is because SMEs contribute to employment growth at a higher rate than larger firms. The SME sector is globally regarded as an important force of driving the economic growth (Farouk & Saleh, 2011).

3. Theoretical Review

Human Capital Development Theory
Kern (2009) hinted that human capital development theory explained that investments in human capital will lead to greater economic outputs. According to him, Garry Becker (1930 – 2014) premised on the earlier work of Williams Putty (1623 – 1687) and Adam Smith (1723 – 1790) as the primary cultivators of human capital theory to postulate that investment in human being leads to increased expertise which improve their productivity. Becker (1964) challenged the prior assumption that the growth of physical capital is paramount to economic success. He argued that people’s learning capacities are of comparable value with other resources involved in the production of goods and services. In his assertion, he viewed that there are different kinds of capital which include schooling, training and expenditure on medical care. He noted that the most valuable of all forms of capital is investment in human being. Becker (1993), later concluded his research and postulated that investment in education and training will result in increased productivity as a result of improved human capital formed in human resource through the process of the investment. The theory postulated three stages of relationship resulting from the investment. The first stage relationship is that investment in education and training will result in increased learning, the second postulating a relationship between increased human capital (improved learning) and high level productivity while the third stage relationship shows increased productivity leading to increased wages and business earnings (Swanson & Hilton, 2001).

The Modernization Theory
Modernization theory as postulated by Max Weber (1864 – 1920) provided basis for the modernization paradigm developed by Parsons (2003) to explain a model of progressive transition from a “pre-modern” or “traditional” to a “modern” society. The theory attempts to identify the internal social variables that contribute to social progress and development of societies, and seeks to explain the process of social evolution with specific focus on education as basis for urbanization and industrialization. It explains that the diffusion of scientific and technical knowledge by modern educational institutions can help in the creation of skilled manpower to play the occupational roles demanded by the industrial economy.

The theory focuses on how education transforms an individual’s value, belief and behaviour thereby promoting universalistic values, achievement motivation, increasing mobility both social and geographic, increasing literacy, urbanization and the decline of traditional authority. Once a critical segment of a population changes in this way, the pace of society modernization and economic development through various sectors quickens. The implication here is that educational and capacity building expansion impact on individual values and beliefs thereby setting in motion the necessary building blocks for a more productive workforce and a more sustained economic growth.

Empirical Review
The idea of the linkage between education and human capital formation resulting in higher growth and productivity in human endeavour (business and other activities), and its consequent effects of higher earnings, dated back to the period of Adam Smith and culminating in the recent literatures (Ojokuku & Lawal, 2014). In a review of various changes in the business cycle, it can be concluded that firms which embrace the notion of human capital investment usually will have good competitive advantage that will promote higher performance. Result from most studies showed positive relationship between human capital investment and performance (Lynham, 2000; Lopez, Peon & Ordas, 2005), while Katou (2009) also corroborated by concluding that “there is a large and growing body of evidence that demonstrated a positive linkage between the development of human capital and firm performance.

Christopher & Oluseyi (2011) investigated the challenges confronting human capital development in Small and Medium Scale Enterprises in Nigeria by employing survey research design method with 165 responses gotten through questionnaire administered. Their findings showed that most businesses in Nigeria have a negative culture of human capital development with 79% of the respondents favouring this position. They however concluded that businesses should embrace a positive human capital development philosophy with provision of both formal and informal training opportunities for their workforce. Gerry, Boergia & Schoenfeld (2014) using Crunbach’s Alpha and Survey method in their study concluded that the human capital of
entrepreneurs plays significant role in the performance of their firms. They argued further that the potent, synergistic combination of education with industry managerial experience has the competencies and capabilities to manifest better results.

4. Methodology

Time series data between 2001 and 2015 on government expenditure on education and level of school enrolment (primary and junior secondary school) in Nigeria were used. The data were obtained from the Central Bank of Nigeria (CBN) Statistical Bulletin, Nigeria Bureau of Statistics (NBS) and World Bank Data Base. Multivariate regression technique was used to test the data gathered to examine the synergistic influence of government education expenditure, and school enrolment on SMEs growth in Nigeria between 2001 and 2015. The study used contribution to employment, share of GDP and share of export as indices for SMEs growth while government expenditure on education and level of school enrolment were used as indices for human capital formation.

Hypothesis Testing

H0: Government education expenditure, and level of school enrolment have no significant synergistic influence on SMEs growth in Nigeria between 2001 and 2015.

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5. Discussion of Findings

Multivariate regression model was used in the study to examine government education expenditure, and level of school enrolment and their combined influence on SMEs growth in Nigeria between 2001 – 2015. The result showed that a combined positive relationship exists between the synergy of government education expenditure and level of school enrolment on one part and SMEs growth on the other hand (EG =0.872 + 0.815EE + 0.441SENR + e) at ≤ 0.001 level of significance. Findings from the regression analysis also showed that government expenditure on education had negative Coefficient value of β = - 0.038 and t = - 2.006 on Contribution to Employment and β = - 0.045 and t = - 3.806 on Share of Export but had a positive Coefficient value of β = 0.032 and t = 4.121 on Share of GDP. On the other hand, level of School Enrolment had a Coefficient of β = 0.002 and t = 3.100 on Contribution to Employment, β = 0.002 and t = 11.000 on Share of GDP and β = 0.000 and t = 1.627 on Share of Export.

The result of the test of hypothesis revealed that government expenditure on education had significant effect on contribution to employment at p=0.047, on contribution to GDP at p=0.000, and on contribution to export at p=0.000. Also, the calculated F-value of 4.024 for contribution to employment, F= 16.984 for share of GDP and F= 14.489 for share of export as shown in the result were greater than the critical F – value at 5% level of significance. Also, on the other hand, the result of test of hypothesis revealed that level of school enrolment had significant effect on contribution to employment at p=0.002, on contribution to GDP at p=0.000, while it has no significant effect on contribution to export at p=0.106. Also, the calculated F-value of 9.612 for contribution to employment, F= 120.994 for share of GDP as shown in the result were greater than the critical F – value while F= 2.648 for share of export was lesser than the critical F-value at 5% level of significance.

Also, the coefficient of determination (R^2) value of 80.1% for contribution to employment, 89.2% for contribution to GDP, 22% and 78.1% for contribution to export shown in the regression result further confirm the significance of government expenditure on education and level of school enrolment for SMEs growth.

This position is supported by Bartel & Lichtenberg (1987) who stressed the role of education in decoding and understanding information in performing a job. They posit that a higher level of education resulting from increased government expenditure increases the ability to discriminate between more and less profitable innovations and reduces the uncertainty about investment decisions with regard to new processes and products.

Odukoya (2009), also supported the argument by concluding that education has continued to be a question of critical concern as a tool for growth and development. They argue further that the relation between education and growth and development has been established, such that education is now internationally accepted as a key growth and development index and that it is in recognition of this importance that government all over the world have made
commitments in their countries educational policies for their citizens to have access to education with a view to growing entrepreneurship in their land.

In further support of the findings of this study, Dauda, (2010), argues that investment in education being an important component of human capital stock leads to human capital development to produce skills and values embodied in individuals for stimulating resourcefulness and increasing productivity in individuals. Developing human capital means sustaining economic growth by reducing poverty and improving productivity. In the word of Erhurua (2007), human capital development necessitates investments in education. So, investment in education not only helps to supply the essential human capital, but is also seen as a key to poverty reduction through entrepreneurship but also helps to supply the essential human capital. An investment in education therefore, has both direct and indirect positive effects on individuals and the society.

As enunciated by Chikwe, Ogodi & Nwachukwu (2015), the more a nation has knowledgeable, skilled and resourceful individuals contributing to national growth and development, the higher the value of the human capital of that nation. The value of the human capital assets of a nation according to them is a function of quantity, quality as well as the operating environment. A country of high population can only have higher potentials for human capital development in terms of number of people in and out of schools or available for training. The broad interpretation of these findings in the context of economic growth using entrepreneurship development as basis, is that raising the general level of educational attainment, skill and experience acquired, interact positively with other forces, among them, the accumulation of complementary physical capital and the application of new technologies. Higher human capital intensity thus permits countries to accelerate their productivity growth rate and narrow the relative size of the per capita real income gap separating them from the leading economies (Ogujuba & Adeniyi, 2010).

6. Conclusion and Recommendation

Based on the findings of the study, it was concluded that the synergy of government expenditure on education and level of school enrolment had a significant influence on SMEs growth in Nigeria between 2001 and 2015. It was revealed that the synergy brought about provision of modern teaching aids, improved learning environment, increased welfare for tutors and increasing skills resulting from increased level of school enrolment. This culminated in improved environment for human skills, competencies and capabilities development with attendant positive effect on SMEs growth.

This study contributes to the notion that human capital formation remains the centerpiece and very central to the promotion of efficiency and productivity in the entrepreneurial sector of the Nigerian economy, as it encourages small and medium scale enterprises to evolve a process of expanding and innovating new ideas towards SMEs growth. The study therefore recommends that government should ensure provision of adequate funds and conducive environment for improved education. This will facilitate increased human capital formation for the promotion of SMEs growth in Nigeria.

References


