Article

Analysis of Human Capital Development and Output Growth Nexus in Africa's Most Populous Country: A New Evidence from ARDL Approach

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Abstract

This article empirically analysed the impact of human capital development on output growth in Nigeria, Africa's most populous country. The study employed time series data from 1985 to 2018 and adopted the autoregressive distributed lag (ARDL) model bounds test to ascertain the existence of a long-run relationship between human capital development and output growth. The findings of this study revealed that there exists a long-run relationship between human capital development and output growth in Nigeria. Human capital development components such as public expenditure on health and labour force showed significant positive contribution to output growth in Nigeria, while public expenditure on education showed a reverse relationship. Gross capital formation (proxy for stock of physical capital) also showed positive contribution to growth. The study therefore recommended that there is need to re-evaluate the expenditure made on public education to ensure that it is well utilised to fund critical infrastructure that will enhance learning, capacity building and human development, which will ultimately contribute to output growth. Policies should also be enacted to support improvements in the other components of human developments' proxies in order to contribute optimally to output growth continuously.

JEL Classification: E24, J24, O10, F63, F43, O40, O47

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1. Introduction

Human capital has been seen by different economists like Schultz as a crucial factor required for economic growth. Human capital development can be estimated through training, well-being, life

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expectancy and so forth. It has also been argued that one of the important criteria that boosts economic growth is human capital accumulation. The development of this capital ensures a more viable and booming economy (Orji, et al., 2019; Ismali et al., 2010).

Harbison (1962) defines human capital development as the process of training and expanding the number of individuals with skills through education, health services and so on so as to support the economic growth of an economy. According to OECD (2001) as sited in Mba et al. (2013), human capital concerns itself with knowledge acquisition, skills acquisition, competitiveness and attributes embedded in an individual, which, in turn, facilitates the creation of personal, social and economic development.

Adedeji and Bamidele (2003) agreed that for economic growth to occur in any economy, there must be a commitment to develop the nation's human capital. Other economists like Romer (1994) and Lucas (1998) also pointed out the importance of human capital development on economic growth in any nation. less-developed countries (LDCs) were therefore advised to contribute to the development of their human capital, in order to boost economic growth. The role of human capital came into existence when economies realised that physical capital alone was not enough to boost economic growth. Nigeria noticed this fact through its past development plans, which aimed at improving the nation's physical assets to the detriment of its human capital. Nigeria noticed that following its past development plans, there was a little addition to the country's real gross domestic product (GDP). But after United Nations Development Programme (UNDP) started publishing the Human Development Report of various nations since 1990, Nigeria has come to terms with the importance of developing its human capital as it hopes to become one of the 20 leading economies in 2020. Nigeria, in a bid to develop her human capital in order to sustain economic growth, had to embark on some educational programmes in the past. Such programmes include the Universal Basic Education (1967), Universal Primary Education (1976), etc.

According to Torruam et al. (2014), education and health have been said to be two related variables necessary for human capital development. This postulation has been backed up by other economists such as Bloom et al. (2004). Education is the process of imparting knowledge and skill on a person(s). Education is a method used in human capital development. With education, the necessary skills, training and knowledge needed to develop an individual in order to boost economic growth is imparted. Health, on the other hand, is a vital criterion in the aspect of human capital development. An individual who is fit medically would be able to be involved in productive activities, which would, in turn, boost economic growth.

Nigeria is a nation favoured with both natural and human endowment. Unfortunately, these endowments have not translated to sustainable output growth for the economy. In a study carried out by Mba et al. (2013), the study realised that given United Nations Educational Scientific and Cultural Organization's (UNESCO) recommendation that every nation must give at least 26 per cent of its budget to education, Nigeria has not complied with this recommendation. The study explained that between 2005 and 2007, the country's percentage of education on budget were 6.3 per cent, 7.8 per cent and 8.7 per cent, respectively. The effect of this can be seen in the high levels of poor academic standards of the Nigerian educational sector from the primary to the tertiary level, which has translated into high illiteracy levels that can be noticed in the poor performance of a majority of the labour force.

The rate of public expenditure on education (PEE) and public expenditure on health (PEH) as a percentage of GDP has also been in a fluctuating state since 1981 till date. As of 1987, the percentage of PEE on GDP was at 1.81 per cent, while that of PEH was at 0.82 per cent. PEE and PEH increased to 1.29 per cent and 0.52 per cent, respectively, as of 2003 after years of steady decline. Irrespective of the percentage increase, it can be noted that such percentage is of little significance, given the ever-expanding population growth rate of the economy, which is at an average of 2.6 per cent. This is depicted in Figure 1.