



Demographic Change and Economic Growth in Nigeria: Geographical and Health Perspectives



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Abstract



Keywords

*demographic change;
health perspectives;
medical technology;
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textual material;*

This paper examines the link between Demographic change and Economic growth from geographical and health perspectives. It highlighted the medical and social factors that engendered demographic change and how the resultant demographic condition affects economic growth. The paper adopted the qualitative method of analysis of textual material for both data collection and data analysis. The findings are that; improvement in public health and medical technology especially that of vaccination against infectious diseases, improvement in agriculture, better nutrition and general sanitation are factors that brought about a reduction in death rates and facilitated increased fertility rate leading to sustained population growth. The resultant population growth seriously affects economic growth as an investment is concentrated on the provision of basic needs to the detriment of capital investment needed for economic growth. The paper recommends the enactment and implementation of realistic population and economic policies.

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1 Introduction

A major issue of concern in contemporary times is the changing geographic distribution of the world's population and its attendant social and economic implications for the various regions of the world. The current world's demographic trend reveals a discrepancy in the size and composition of the population between the developed countries on the one hand and the developing countries of which Nigeria is a part, on the other hand, (Week 2012; Todaro & Smith, 2011). For that reason, the causes and consequences of the current demographic trend differ in line with variation in the spatial distribution of the population across the region. Demography impinges on virtually every component of human life population change is one of the prime forces behind social and technological change across the globe, hence the saying "demography determines everything". In 2011, the world population was estimated to be 7 billion, while a United Nations estimations placed the figure at 9.2 billion by the year 2050. Out of this whole lot, the majority will occupy the developing and Non-Western parts of the world, thereby presenting overwhelming economic and social implications for growth and development in these parts of the world, Nigeria inclusive (Weeks, 2012).

The problem

The economic well-being of any country is reflected by the proportion of the total population that have access to adequate means of livelihood. The total size of a population viz a viz the available resources speaks volumes about their economic situation. Demographic change can have both positive and negative effects on a country's economic growth (Ludwig et al., 2012; An & Jeon, 2006; Krueger & Ludwig, 2007). A nation with a growing working-age population expectedly should have economic prosperity all things being equal. However, where there is not enough job to go around the working class, low per capita income and the associated problems result as is the case with Nigeria. Nigeria's demographic history reveals that the population has been growing from time to time as each successive census exercise shows a significant increase in population figure over the previous one. From a total population of 30 million, people in the 1952/53 census, Nigeria's population rose to 88,992,220 in 1991 almost triple what was recorded in 1952/53 within 39 years (Umoh, 2001). During the 2006 population and Housing census, the population figure was put at 140,431,790 (Federal Republic of Nigeria Official Gazette, 2009). This sustained population increase raises serious challenges which ought to be tackled to be able to provide the average Nigerian with a decent standard of living. It is against this background that this research article intends to examine the association between Demographic change and Economic growth in Nigeria with the specific objectives of:

- Identifying the causes and consequences of Demographic change in Nigeria;
- Identifying the determinants of Economic growth in Nigeria; and
- Establishing the link between demographic change and economic growth in Nigeria.

2 Theoretical Framework

This research paper adopts one of the foremost population theories that showcase demographic change and its socioeconomic outcomes. The Malthusian theory of population has Robert Malthus (1798), as its proponent. Malthus presented his view as follows: that population growth impact development negatively due to the difference between the pace of population growth and that of economic growth. The theory first identified the tendency of the population to grow as being greater than of the earth to produce sustenance. This phenomenon was premised on the fact that the population grows at a geometrical progression while the food supply only increases at an arithmetic rate. The proponent then predicted that the time will come when the population will utterly out stripe sustenance and that will lead to both physical, social, environmental and health hazards. This article rests on this theory because the increase in population and its different attributes can direct investment to the provision of only basic needs like food that there will be little or nothing left for the capital investment required for economic growth.

Causes of demographic change

On a global scale, the acceleration in population increase can be associated with a decline in the death rate that follows the industrial revolution which first started in Europe and North America and more recently in the rest part at the world (Weeks, 2012). The death rate decreased sooner than the birth rate. The excess of birth over death led to the surplus which triggered off growth. According to Preston & Haines (1991), certain improvements in the human condition helped to lower mortality to the end that people began to survive till adult age. Such development includes improvement in public health and medical technology, especially that of vaccination against infectious diseases (Haines et al., 2006; Leigh-Hunt et al., 2017; Schieppati & Remuzzi, 2005).

In developing countries, the risk of death has reduced dramatically, however, birth rates remain fairly high and that accounts for the sustained population growth. It is, therefore, safe to conclude that a larger proportion of the increase in population is originating from developing countries, but it somehow spills over to the developed nation via migration (Ekowusi, 2012).

In Nigeria, the reasons for the observed population growth, as it applies to every other developing country results from an interplay of many factors. First, as a trickledown effect of the improvement in medical health technology that first took place in Europe and North America coupled with improved agriculture, better nutrition and general sanitation, the death rate has reduced (Graham & White, 2016; DePierro et al., 2020). Currently death rate is 13 per 1000 people as against a steadily high birthrate of 37 per 1000 people. The offshoot of the combination of these vital rates is that of a large natural increase. Other components that control growth such as Total Fertility Rate (TFR) per woman have remained persistently high. A Total Fertility Rate (TFR) of 5.3 in Nigeria has been linked to the prevalence of early marriages, seeing children as security in the old and helping hand in family enterprises as well as population momentum in Nigeria which is attributable to the prevalence of a youthful population structure (Simona, 2021).

Consequences of demographic change

Demographic change portends a change in the absolute size of a given population as well as its characteristics. Whether the change is positive or negative, it usually has one effect or the other which will either be, demographic, socio-economic or environmental in presentation depending on the demographic situation of the country being investigated (Prokhorets et al., 2015; Hyland, 2008). For the developed countries of Europe and North America whose populations have transited through all the stages of the Demographic Transition Model, the current demographic experience is that of negative growth, a situation where the death rate is higher than the birth. The consequence is that of distortion in their age structure in favour of the aged, with the attendant higher expenditure on the need of the aged, and the depletion of the workforce leading to a shortage of manpower, hence the ageing population narrative across European countries. However, for the less developing countries where about 90% of growth is taking place, and that are still in the early stage of the Demographic Transition Model which is characterized by high birth rate and declining death rate, demographic changes, especially in the direction of growth in the absolute size and composition presents visible social economic and environmental challenges which are inimical to the wellbeing of nations. On a general note, demographic change can influence; living standards, savings rates, employment rate, the underlying growth rate of the economy, current account balances and exchange rate (Mester, 2017)

Determinants of economic growth

Economic growth portends an increase in market values as it relates to goods and services produced in an economy over time. It is measured by the appreciation in a country's GDP. Ekowusi (2012), outlined the major determinants of Economic growth to include Dense population, Human capital, Natural resources, Technology and Capital. While high population density is needful for sustained economic development, the discovery of natural resources like oil or metallic mineral can kick start a production process that will enhance economic growth. Human capital on the other hand expands the chances of higher income for individuals and the larger society. Capital is another production factor presumed to be the oldest determinant of economic growth. Accumulation of capital provides the basis for capital investment which is much needed for

development. The place of technology in driving economic growth cannot be overemphasized. Technology provides the basis for efficiency in the production processes. Economic growth is, therefore, such an important objective to pursue as it improves income and standard of living and it also allows a country to invest in other sectors like education, health care and the agricultural sector.

Demographic change and economic growth

Out of the five component of rapid economic development: Dense population, Human capital, Natural resources, Technology and Capital, Population is the most important of all the resources as it is the human resource that accelerates and drive economic development (Ekwoyusi 2012). The industrial revolution, which started in Britain in 1780-1880 was fuelled by an upsurge in population growth. There is virtually no industrialized and rich country in the world that is not densely populated and conversely, there is no densely populated country in the world that does not have a high rate of sustainable economic development because as the population increases, economic activities increases (Ernawati et al., 2022). An increase in population pressure and density provides the impetus for industrial development. Hence the refrain: No population pressure! No sustainable development

However, suffice to say that the way demographic change affects the economic growth of a county depends on its peculiar demographic condition. For the countries experiencing population ageing and increasing life expectancy as it is in US and European countries, the demographic change affects the labour market in that it leads to a downward trend in Labour participation in the long run since a lower number of younger workers are engaged. For instance, the growth of the U.S labour force has slowed considerably from 2.5% per year in the 1970s to around 0.5% per year from 2010 – to 2016, this rate is expected to subsist over the next decade (Mester, 2017). The implication of demographic change for economic growth is better comprehended from the way it impacts the key determinants of economic growth. i.e. Labour force growth and structural productivity inputs to create outputs. When labour force growth slows, it drags on long-run economic growth (Hall & Klitgaard, 2018). Demographic change also affects the composition of growth by influencing aggregate consumption, saving and investment decision, and it also affects monetary policy. Concerning the developing countries, with a preponderance of youthful age structure occasioned by high birthrate and a consequent high annual growth rate, the burden of large population features in huge investment in basic needs to the detriment of capital investment which would have engendered economic growth. Others are unemployment, underemployment and an increase in the menace of brain drain as skilled and able-bodied young men and women scamper for greener pastures (Musa & Habibu, 2020).

3 Empirical Review

Bloom et al. (2010), tackle Nigeria's economic growth outlook: a demographic perspective, quantifying the economic growth opportunities created by Nigeria's demographic transition. Made policy recommendations. In this regard, we will achieve growth with a particular focus on investing in Nigeria's human capital. Using a cross-country growth model, they discovered the estimated size of the demographic dividend that Nigeria can enjoy. How will it increase through health and institutional improvements? And how does it affect poverty? Next, we will use our own analysis of Nigeria's economic life cycle to try to understand the conditions needed to achieve dividends. In particular, we will focus on the challenges and opportunities in improving labor productivity in Nigeria and investing in health and education. Conclude with Policy Recommendation.

Borji et al. (2019), Addressed Nigeria's demographic changes and economic performance: empirical research. This study evaluated the impact of demographic structure on Nigeria's economic growth during the period 1981-2016. Using the autoregressive distribution lag (ARDL) framework and the Granger causality test, this study was conducted with dependents and independent variables. The results further show that while the elderly population impedes economic growth, the child population and the workforce stimulate growth in the Nigerian economy both in the short and long term, supporting the existence of the demographic dividend hypothesis. On the other hand, there is a two-way relationship between the aging population of Nigeria and economic growth, and there is a one-way causal relationship between the child population and the labor force to real GDP, but economic growth is total fixed capital formation (equipment). Invest) and generate enrollment rate. Therefore, the study concludes that the elderly population, child population,

workforce, total fixed capital formation and secondary school enrollment are important determinants of Nigeria's economic growth. Therefore, this study recommends that the Nigerian government provide incentives and platforms to encourage older people to engage in productive activities and continuously develop human capital for children and the workforce. This is because it increases labor efficiency and has a growth-promoting effect on the Nigerian economy. The direction of the interaction between the country and Nigeria's population change and economic production from 1970 to 2016. To achieve this, studies usually employ least squares (OLS) and autoregressive models (VARs) and find that fertility rates remain reasonably high. Mortality rates, especially infant mortality rates, have declined. Meanwhile, Nigeria's population is growing. Based on the findings, the study recommends that the government enact strict laws prohibiting premature sex and marriage in adolescents. The newspaper argues that this early approach to sex and marriage will increase Nigeria's mortality from sexual transmission and unwanted pregnancies and reduce the country's economic production. In addition, conduct full-scale public education campaigns by government agencies, mass media, radio, television, chiefs, churches, schools, mosques, home videos, etc. to emphasize and improve the need and importance of sound family planning. You need to send the message that was sent. Living conditions of people by population management.

Reed & Mberu (2014), conducted a survey on leveraging the Nigerian demographic dividend: harvesting profits and reducing burdens. In this study, Nigeria is ranked as the most populous country in Africa and the eighth most populous country in the world, but there is a lack of published research on its demographics. As Nigeria enters a period of potentially rapid economic growth due to an increase in the working-age population, it is important to understand the demographic trends of the country. In this paper, we use the latest two Nigerian demographics and data from the Health Survey (2003 and 2008) and the 2006 Census to illustrate the age and gender composition of Nigeria related to different demographic characteristics. I looked it up. Demographics Use UN demographic data to uncover composition and trends and the impact on countries that are earning demographic dividends. Finally, it draws some conclusions and makes some policy recommendations based on the findings.

4 Conclusion

Suffice it to say that a dichotomy exists between the More Developed Countries and the Less Developed Countries in terms of the impact of Demographics on Economic growth. Nigeria's demographic situation is prototypical of the Less Developed Countries, therefore the approach will be such that will seek to address the peculiar demographic challenges confronting the country for the furtherance of our economic development. This should perceptibly take the form of realistic population and economic policies

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Biography of Author

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