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Harnessing Nigeria's demographic dividend for socioeconomic development

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Abstract

Nigeria, with a population of over 200 million people, is experiencing a youth bulge. This paper relies on Demography Transition Theory to argue that the country's favourable demographic structure, if properly harnessed, can propel Nigeria to higher levels of economic prosperity. The paper reviews the demographic trends in Nigeria; highlighting the opportunities, challenges that come with a youthful population and explores the policies and strategies that Nigeria may implement to leverage its demographic structure to drive economic growth, reduce poverty, and improve standard of living. The strategies include policy (re)framing, drafting of the active population into productive activities, diversification of the economy, improvement in education and healthcare, investment in rural infrastructure, encouraging entrepreneurship among the youth, and emphasizing the importance of sexual and reproductive health in realizing the demographic dividend. By focusing on policies that promote human capital development and inclusive growth, Nigeria can harness its demographic dividend and achieve long-term development goals, with concomitant effects on the economy.

Keywords: Development; Dividend; Economy; Population; Youth Bulge; Nigeria

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1. Introduction

According to United Nations (2015), the concept of "demographic dividend" was coined following the United Nations' International Conference on Population and Development (ICPD) held in Cairo in 1994. The concept came to the fore at a time when the world was focusing on the interplay among population structure changes, economic growth, and development. The crux of the concept is demographic contribution to accelerated economic growth. The concept has been defined by the United Nations Population Fund (2014) as "the economic growth potential that can result from shifts in a population's age structure, mainly when the share of the working age population (15-64) is larger than the non-working age share of the population (14 and younger, and 65 and older). While James and John (2015), define demographic dividend as the accelerated economic growth that may result from a decline in a country's mortality and fertility and subsequent change in the age structure of the population.

The concept of demographic dividend came out of the notion that as mortality rate reduces, people would desire to have fewer children, leading to an increase in the population groups. The increase in the number of working-age adults lays the foundation for demographic dividends and also affects economic growth (Omoju and Abraham, 2014; Bloom and Williamson, 1998). The reduction in the number of children allows families to invest more in their children's education and health, increasing skills and human capital. Besides, working adults have the opportunity to save more for retirement as dependency ratio reduces. Women would also work as the time used for child rearing reduces, thereby boosting the labour force (Canning and Schultz, 2012). These developments are expected to have positive effects on the economy, although a new study by Bloom et al. (2009) shows that lower fertility can also lead to higher inequality in the short term.

Demographic dividend has also been defined as a boost in economic productivity that occurs when there is a growing number of people in the workforce relative to the number of dependents. United Nations Population Fund stated that a country with both increased number of young people and declining fertility has the potential to reap a demographic dividend (UNFPA, 2014; Bloom et al., 2001; Rainer et al., 2020). Demographic dividend usually takes a period – usually 20 to 30 years (Abio et al., 2017) while Tolstikhina et al. (2013) opined that the transition time for countries is dependent on the amount of production and consumption of people at each age - when fertility rates fall due to significant reductions in child and infant mortality rate, this fall is often accompanied by an extension of the population that is in the working age group. This cut spending on dependents and spurs economic growth. The initial stages of this transition are characterized by a rapid fall in fertility rates leading to a labor force that is temporarily growing faster than the population dependent on it, thus releasing resources for investment in economic development and family welfare, which this ultimately results in rapid increase in per capita income (Bloom and Williamson, 1998, Bloom, et al., 2010; Lee, 2002; Akokuwebe and Okunola, 2015). In effect, a demographic dividend occurs due to a demographic transition whereby falling birth rates change the age distribution of a country so that fewer investments are required to meet the needs of the younger sector of the population (Lee, 2002). This dividend period is not permanent; rather it lasts approximately five decades or more, reason being that the reduced birth rate reduces the labor force growth. Meanwhile, improvements in medicine and better health practices lead to an ever-expanding elderly population, sapping additional income and putting an end to the demographic dividend.

This demographic dividend is not automatic, countries that take advantage of the released resources and use them effectively will receive greater benefits than others (Tolstikhina et al., 2013). Those that do not

capitalize on the opportunity may in fact be in a weaker position and faced with the problem of a youth bulge - a demographic trend where the proportion of persons aged 15-24 in the population increases significantly compared to other age groups - which combined with limited employment opportunities may contribute to increased poverty, hunger, malnutrition, poorer health, lower educational outcomes, child labour, unsupervised and abandoned children, and rising rates of domestic violence (Singh and Kumar, 2021). This paper therefore foregrounds the institutional and policy changes critical to the conversion of Nigeria's youth bulge to social and economic progress.

2. Background: Nigeria's demographic profile

Nigeria is situated in the western part of Africa, a federal constitutional republic, governed through 3 tiers of government: the central federal government, 36 states divided into 6 geopolitical zones, the FCT and 774 local government areas. Nigeria is bordered by Benin to the West, Chad and Cameroon to the east and Niger to the north. The country is viewed as a multinational state as over 500 ethnic groups exist which contribute to the distinct identity of the country of which the three largest are the Hausa, Igbo and Yoruba.

Nigeria has a population of 177,155,754 people (which comprises 87,578,699 males and 86,928,840 females), with the rate of 38.03 births per 1000, the rate of 13.6 deaths per 1000, net migration rate of 0.35 percent, contraceptive prevalence rate of 14.1 percent, total dependency ratio of 89.2 percent (of which the youth dependency rate is 84 percent and elderly dependency rate is 5.2 percent) and the potential support ratio is 19.3 percent (Index Mundi, 2015).

As of 2015, Nigeria is the world's 20th largest economy, worth more than \$500 billion and \$1 trillion in terms of nominal GDP and purchasing power parity respectively, thus making it the largest economy in Africa (United Nations, 2012). While Nigeria has become Africa's largest economy based on GDP, the economic growth has not been equitable or broadly shared, with almost 60% of the population living on \$1 a day. However, the country has made significant progress in reducing child mortality rates, achieving universal primary education, combating diseases, and improving maternal health.

Nigeria is Africa's most populous nation with an estimated population of more than 170 million, having grown at 2.7-3.2% annually for the past several decades. According to Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat (2008), Nigeria is the world's eighth largest country, and by 2030, it will have an additional 68 million people. The country has a very youthful age structure, with nearly three-quarters of its population under the age of 30. Even if its fertility and mortality rates decline substantially, Nigeria will still have a youthful age structure, which is projected to increase by 40% by 2025 and without effective population policy to reduce the high fertility rate, Nigeria will add a further 63 million by 2050, making it the fifth most populous nation in the world after India, the United States, China and Pakistan (Library of Congress, 2008). It must also be noted that the projected increase in population, if not well managed, will put pressure on the environment and may create health and safety problems for the people.

This demographic trend has implications on Nigeria's economic development because the youth population is made up of dependent individuals who need access to education, healthcare, and other services. It would mean that rapid population growth will put substantial pressure on the country's capacity to provide quality social services such as new schools, more clinics, adequate sanitation, as well as food and provisions to meet basic needs. Most importantly, the economy will have to generate enough jobs to absorb the millions of young

people joining the labour market every year. While this poses a significant economic challenge, the age structure can be a potential opportunity for growth. To seize this opportunity however, Nigeria must adopt policies that will develop its workforce and ensure that it is productive.

3. Demography transition theory

The demography transition theory is a generalized description of the changing pattern of mortality, fertility and growth rates as societies move from one demographic regime to another. It is a commonly used phrase in the discussion of population growth, and it describes a progressive growth from high birth and death rates to low birth and death rates. The term was first coined by the America demographer, Frank W. Notestein, in the mid-twentieth century (precisely in 1945) (Notestein, 1945) but it has since been elaborated and expanded upon by many others. Demography transition theory simply states that societies that experience modernization progress from a pre-modern regime of high fertility and high mortality to a post-modern one in which birth will be low (Salvati et al., 2019).

The theory argues that population growth is inextricably linked to a society's level of technology. As a society's advance in the use of technology, its birth and death rates shift, directly impact the population numbers and growth rates (Singh and Kumar, 2021). Demographers refer to this process of transition as the tendency for birth rates to drop and population to stabilize once a society has achieved a certain level of economic development. According to the demography transition theory, people generally have as many children as they believe they can support and parents in urban industrialized societies, where children are the economic burden rather than a benefit, prefer small families (Dudley, 1996).

There are 5 stages in the demographic transition theory; stage 1 is the pre-transition stage associated with preindustrial society. Birth rate is high and death rate is high, producing a population with a relatively stable size and a slow growth closely tied to nature and the limitations of geographical resources. According to Dudley (1996), population growth was kept low by Malthusian preventives such as late age at marriage and famine, war, pestilences, etc. Cole (2019) pointed out that few people reach 65 years of age. The second stage is the early transition stage during which death rates begin to fall as birth rates remain high; the population starts to grow rapidly; although the birth rates remain high, death rate drops particularly as it applies to infant mortality. Children under 5 are no longer dying at such high rates, leading to a larger youth population in a given community. The fallen death rate is attributed to improvement in the quality of life through advances in sanitation, hygiene and public health initiatives and better education. As women and children gain access to education and opportunities off the farm, the new urban lifestyle leads to explosion in population. This produces a population pyramid structure with a large group of youths at the base. The third stage is the late transition stage where birth rates begin to decline, caused by preference for smaller families as large families are seen as a liability; there is a rise in materialism – people would prefer to spend money on expensive goods rather than pay for more kids; there are changes in social trends and fashions. The fourth stage is the posttransition stage characterized by low birth and low death rates where population growth is negligible. The population is small as fertility continues to fall due to changes in personal lifestyles; more women are in the workforce; fewer couples have kids (they would rather get their career sorted out first). The fifth and final stage is characterized by death rate slightly exceeding the birth rate causing population decline. The reason

for low birth rate is a rise in individualism, greater financial independence of women, lack of resources for future generation, an increase in non-traditional lifestyle, etc. (Cole, 2019, Chesnais, 1990, Igbal et al., 2015).

Demography transition theory explains changes in death rates and birth rates and helps us to understand the impact of population momentum. Although it was used to explain changes in the pattern of birth rate and death rate in European countries, it is still applicable to Nigeria. This theory gives us an insight into where we are coming from and what we should expect in the future, the possibility of reaping a demographic dividend now as Nigeria is in the second stage characterized by population explosion. With the right policies in place, the potential of this teeming youth population can be used to further economic. Many European countries are experiencing a shrink in their population as a result of death rate exceeding birth rate, we too should bear this in mind that the youth population we have today will age later, with unemployment rate on the increase and no means for these younger generation to plan for their future, what does the future hold for them? There is a need for an urgent plan of action in this regard.

4. Nigeria's demographic transition

A country's population level depends on its fertility and mortality rates. Most developing countries experienced high population growth rates in the 1960s-1990s due to dramatic declines in mortality, especially among infants, as public health improved. Population growth began to stabilize when fertility rates also fell. The population age structure began to look less like a pyramid, with many young children and progressively fewer older cohorts. Instead, a "youth bulge" began to appear as the number of infants declined while the youth began to age – entering working age and eventually older ages.

In Nigeria, fertility rose through the first quarter century after independence, with each woman bearing an average of seven children in the mid-1980s, during this period, infant mortality, while still shockingly high, was falling (UN's Population Department of Economic and Social Affairs, 2008). The result was not surprising: growing numbers of large families faced a constant struggle to subsist. Nigeria's economy barely kept up with its surging population as throughout the post-independence period, Nigerians have devoted substantial resources to feeding, clothing, housing, educating and securing the health of their children, funds that could have been used to construct factories, invest in infrastructure or build the institutions needed to support a modern economy (World Bank, 2008).

A country can reap a demographic dividend if the size of its working age population increases while the number outside that range declines due to sustained lower fertility (average number of children per woman). A workforce with fewer dependents relative to the working age population has the potential to boost economic growth. The East Asian "economic tigers" such as Hong Kong, South Korea, Singapore and Taiwan may owe up to a quarter or a third of their economic growth to this phenomenon (Bloom et al., 2000). Similarly, a significant portion of Ireland's growth can be attributed to the legalization of contraception (Bloom & Canning, 2003). Is such a demographic dividend possible for Nigeria? Recent studies suggest that it is – and, with the right policies, that it can be substantial.

A fundamental factor that must be taken into consideration if Nigeria would exploit and reap the dividends of its demography is the vast diversity of the country. The 36 States of the country and the Federal Capital Territory (Abuja) are divided into six geopolitical zones – North-Central, North-East, North-West, South-East, South-West, and South-South. Population trends vary drastically across the six geopolitical zones. The three

southern regions have much lower fertility rates (4.2-4.4 children per woman over her lifetime) than the three northern regions (5.4-7.2 over a woman's lifetime). Life expectancy is almost 15 years more in the south-west than in the north-east. These conditions generate vastly different demographic projections and estimates regarding the dividend.

Assuming a base case rate of growth of 3%, fertility rates continue to decline smoothly by 1.5 through 2030 (TFR3) and mortality in the northern region is reduced compared to that of Nigeria as a whole (MR2), the economies in the three northern zones would be 100-115% greater in 2030 than they are today. If, however, fertility rates do not change from what they are at present, the economies would only be 69-76% greater in 2030 than today. The importance of sustained and faster lowering of fertility is also evident for the south, which is already benefiting from the demographic "window of opportunity", which means its dividend will be lower than that of the north. With a faster decline in fertility, the economies would be 75-82% larger in 2030 than they are at present, assuming there is no further change. However, if fertility does not decline, the economies would only be 45-48% greater in 2030 than today because of the ageing of the population (World Economic Forum, 2014). In either case, the demographic dividend for the southern zones would be much smaller than for the northern zones. The increase in the economies is significantly higher if fertility continues to decline by 1.0 from 2030 to 2050 in both the north and the south, but also much higher in the north.

The timing of Nigeria's demographic dividend also varies by geographical zones. The Southern geopolitical zones (south-south, south-east and south-west) are already undergoing a demographic transition, with slower population growth and favourable age structures, and thus less dependency and consequent higher per capita incomes. The Northern geopolitical zones (north-west, north-east, and north-central) have more rapid growth and youthful age structures, with higher dependency and lower per capita income (World Economic Forum, 2014). The import of youth bulge is that it provides a pathway to economic redistribution. As more people in a population can generate incomes, poverty and inequality levels may reduce, especially in country like Nigeria where familial ties are strong. Youth bulge may however be a burden in an environment with little or no opportunity for the youth population, thus aggravating the existing inequality and putting pressure on the household income.

This decoupling of the timing of Nigeria's demographic dividend is worth noting for its policy implications to ensure more equitable development into the future. This view is corroborated by Bloom et al. (2009) in their study that showed that the youth dependency ratio is lowest in the richest countries, next lowest is the next richest countries, and so on to the poorest countries, which has the highest dependency ratio. Similarly, NBS (2006) shows that there is an obvious relationship between fertility rate and development. Families with a large number of children tend to be poorer and vice versa.

Magnitude of the demographic dividend also varies by geopolitical zone. It appears from the analysis that the northern geopolitical zones have the most to gain from the upcoming demographic dividend in terms of percentage increase in per capita income, even though all regions of the country stand to gain from the demographic dividend. The northern geopolitical zones, which have seen the highest dependency ratios and low per capita income growth, are likely to gain the most from any future demographic dividend. Higher investment in formal and vocational education could help to ameliorate the situation in Northern Nigeria and increase the capacity of the youths to be at the vanguard of the efforts aimed at achieving socio-economic development. Government – both State and federal – could also provide enterprise credit schemes for the youths.

5. Demographic transition and its causes

Nigeria has experienced population explosion for at least the last 50 years due to a very high fertility rate, quadrupling its population during this time, growth was fastest in the 1980s. According to the 2012 revision of the world population prospects, the total population in Nigeria was 159,708,000 in 2010, compared to 7,860,000 in 1950. The proportion of children below the age of 15 in 2010 was 44.0%, 53.2% were between 15 and 65 years of age, while 2.7% were 65 years or older (World Population Prospects, 2012).

According to the United Nations, the population of Nigeria will reach 440 million by 2050. Nigeria will then become the third most populous country in the world. In 2100 the population of Nigeria will reach 914 million (World population prospect, 2012). According to the CIA World Factbook (2022), the age structure of Nigeria is such that the population of the youth is extremely larger, as shown in the Table 1.

AGE STRUCTURE	PERCENTAGE	MALE	FEMALE
0-14	41.7%	45,571.738	43,674,769
15-24	20.27%	22,022,660	21,358,753
25-54	30.6%	32,808,913	32,686,474
55-64	4.13%	4,327,847	4,514,264
65 and over	3.3	3,329,083	3,733,801

Table 1. Demographic distribution of Nigeria by age and gender

CIA World Fact Book, 2022

Table 1 showed that Nigeria records a population rate of 213,978,302 million. It is evident that the active population 15-64 when compared to the other age group 0-14 and 65 and above, takes the larger share of the society (117,668,911) signifying 55% of the overall population and a youth bulge; when this population is taken into consideration in education, employment and indices of development, significant economic growth and development will be recorded in the country.

Economists have foreseen that Nigeria is expected to experience a youth bulge – an increase in the population of the youth relative to other age groups (Bloom and Humair, 2010; Reed and Mberu, 2011) which is evident in the statistics presented above. This phenomenon is expected to be an advantageous situation that the government can use to propel economic growth and development. The term "youth bulge" was coined by a German social scientist, Gunnar Heinsohn, in the mid-1990s (Omoju and Abraham, 2014). It is a common phenomenon in many developing countries, which is used to describe a situation where there is an increase in the proportion of the youth population relative to other age groups.

A country is said to incur a youth bulge when the population of the youth group is larger than all other age groups, which is attributed to an increased birth rate, declining infant mortality and overall improvement in health (Omoju and Abraham, 2014). There is evidence that the youth bulge is valid in sub-Saharan Africa, as the region's youth population has been increasing far more than it is experienced in other regions of the world. This is supported by the World Bank, which claimed that over 200 million people, representing about 20% of

the population, 40% of the work force, and 60% of the unemployed in Africa, falls within the youthful population (Agbor et al., 2012). This means that more and more youths are not absorbed into the economy.

6. Youth bulge and transition to economic dividend

The phenomenon of youth bulge should lead to demographic dividend which is the socio-economic opportunity that emerges in a country as fertility rates and infant mortality rate declines which in turn leads to economic growth and development when supported with appropriate and effective public policies. It occurs when a failing birth rate changes the age distribution, so that fewer resources are required to meet the needs of the dependent population of children and old people and resources are mobilized for investment in economic growth and human development.

According to Omoju and Abraham (2014) the concept of demographic dividend is borne out of the notion that as mortality rates reduces, people would desire to have fewer children, and there would be an increase in the population of working adults relative to other population groups, which would result in economic growth. The increase in the number of working-age adults lays the foundation for demographic dividends. The reduction in the number of children allows families to invest more in their children's education and health, increasing skills and human capital. This in turn increases per capita income, other things being equal. Besides, working adults have the opportunity to save more for retirement as dependency ratio reduces. Women could work as the time used for child rearing is reduced, thereby boosting the labour force. These developments are expected to have positive effects on the economy.

The dividend period is a window of opportunity rather than a guarantee to an improved standard of living and it is sequential: the first dividend begins and then comes to an end, and the second dividend begins somewhat later and continues indefinitely. According to Ito and Rose (2010), the first dividend occurs with the decline of birth rates and increase in labour supply while the second dividend occurs when a significant number of workers are motivated to save and invest for financial security in retirement. The first yields a transitory bonus, and the second transforms that bonus into greater assets and sustainable development. In the same vein for Mason and Lee (2006), how much of the first divided is realized hinges on key features of the economic life cycle. The productivity of young adults depends on schooling decisions, employment practices, the timing and level of childbearing, and policies that make it easier for young parents to work. How much of the second dividend is realized depends on how a society supports its elderly, productivity at older age which depends on health and disability, tax incentives and incentives and, particularly, the structure of pension programs and retirement policies. Aiwone (2016) gives four mechanisms through which demographic dividend benefits are delivered: The first is the increased labour supply. The magnitude of this benefit appears to be dependent on the ability of the economy to absorb and productively employ the extra workers. The second is increase in savings. As the number of dependents decreases, individuals can save more, this increase in national savings rates increases the stock of capital in developing countries already fighting shortage of capital ad leads to higher productivity as the accumulated capital is invested. The third is human capital. Decreases in fertility rates result in healthier women ad fewer economic pressures at home which also allow parents to invest more resource per child, leading to better health and educational outcomes. The fourth is the increasing domestic demand brought about by the increasing GDP per capita and the decreasing dependency ratio.

Demographic dividend has been argued to account for between 25 and 40% of the economic transformation experienced by the East Asian Tigers (Bloom et al., 2000, Bloom and Williamson, 1998) and Nigeria should take a cue from this. Also, for a generation now, Nigerian women have been choosing to have fewer children, following a pattern in countries across the world as they develop (though current level of fertility in Nigeria is still relatively high).

As health standards improve, babies have much greater chances of surviving to adulthood. At the same time, a large 'baby boom' generation is now entering the workforce, the net result being that there are now more adults available to support each child in the population, depending on how fast fertility rates drop. By midcentury, there could be as many as one extra adult Nigerian for every child. This change has the potential to provide a substantial economic boost. The effect of demographic dividend on economic growth is transmitted through increases in labour supply, saving rates, human capital, and domestic demand. This is because there will be a reduction in dependency ratio as families spend less on children's education, health, and other needs, thereby creating opportunity for saving and investment.

From generation to generation, youth has remained the treasure and strength of any society. They consist of the crucial human capital required by the modernizing economy. This is because they are usually vibrant and dynamic young men and women with visionary minds. Their strength can be utilized for good or bad activities. For human development, Nigeria has a very young population of which majority are youths. To reap the full demographic dividend of the youth bulge, there is need to optimally harness the potential of the youths. As positive instruments of change in society, youths can use their vibrancy and creative minds to enhance productivity.

7. Problems militating against demographic dividend in Nigeria

Unfortunately, either for lack of opportunity or positive encouragement, the youth misuse their potential. Ironically, most countries with youth bulge instead of enjoying demographic dividend must contend with youth restiveness and radicalism. Nigeria is a classic example of this sorry situation. Studies have revealed that countries with young age structure are prone to conflicts (Cincotta and Leahy, 2006), unfortunately in Nigeria, the youths fail to develop a sense of responsibility necessary for effective participation. Many factors have been identified for this among which are: general apathy, wrong perception of the role of youth, youth unemployment, and abuse of technology, among others.

Despite the evidence in literature about the effect of decline in fertility rate and infant-mortality rate which had led to the economic growth in countries in Europe and Asia, the socio-economic and political environment in Nigeria, poses a great challenge to the youth. The Nigerian youth is faced with the frailty of the Nigerian economy and poor wellbeing of people.

After 60 years of independence, the country is still dependent on the primary sector; there is high level of indebtedness, unemployment which leads to poverty, increase in crime rate, drug trafficking, hostage taking and youth restiveness, terrorism and other social vices, infant and maternal mortality, illiteracy and an entrenched culture of corruption. There is the absence of basic infrastructure which has left majority of Nigerians with no access to basic service – potable water, electricity, sanitation, housing, among other basic means of survival – all of which have implication for the meaningful participation of the youth population in

the economic and governance arrangements of the country (Omoju and Abraham 2014; James and Jason, 2015). This could be a cog in Nigeria's wheel to actualizing the objectives of the transformation agenda.

In a work published by Kayode et al. (2014), it is argued that Nigeria's federal government over the years have claimed strong real GDP growth rate measuring at 6.5 percent since 2005 till date, but this claim is apparently paradoxical as in the same period, unemployment rate continued to rise annually from 11.9 percent in 2005 to 19.7 percent in 2009, and over 37 percent in 2013 and 37 percent presently. Njoku and Okezie (2011) also corroborate this in stating that unemployment rate increased to 23.9 percent in 2011 compared with 21.1 percent in 2010. The Nigerian unemployment report 2011 shows that the rate is higher in the rural areas (25.6 percent) than in the urban areas (17.1 percent). The rise in unemployment is largely attributed to the increased number of school graduates with no matching job opportunities, a freeze on employment in many public and private sector institutions as well as the slow disbursement of capital budget by the government (Kemi and Dayo, 2014).

Nigeria's fate rests upon the shoulders of two opposing narratives. The first is that in recent times Nigeria has experienced economic growth which has propelled it into a position of global economic significance, the second is a fate of violence, rising conflict, and instability. Economic reforms, especially at the federal level, have brought forth many benefits including the accumulation of foreign reserves and clearing of crippling foreign debt. However, these gains from economic progress have been unequally distributed and have manifested most visibly in regional militancy and episodic communal violence in the Niger Delta. Also, in the Northern parts of Nigeria, terrorist activities of Boko Haram prevail as the youths feel marginalized in the face of teeming unemployment and poverty. The implication of this for Nigeria reaping a demographic dividend is that in the face of instability, where violence continues to fuel instability, economic growth cannot advance unabated as investment in creating employment opportunities will be relegated to the background, and the government will rather spend available resources it has on combating insecurity in the nation thereby further plunging the youth into unemployment (The Legatum Index, 2013).

Blattner et al. (2008) opines that Nigerian health indicators lag far behind other countries due to HIV/AIDS epidemic as well as other infectious diseases and poor healthcare infrastructure particularly in the rural areas. Nigerian health sector is faced with myriad of problems such as inadequate supply of trained health workers, dearth of resources including drug supply, decaying infrastructure, obsolete technology, brain drain, poor working conditions of health workers and so on which cut short the life of youths, results in high and infant mortality rates. All these have implications for Nigeria realizing its demographic dividend.

Loss of highly qualified Nigerians to emigration preceded by lack of economic opportunities in Nigeria for highly skilled workers inhibits the raising of wholesome and creative Nigeria for the next generation. This leads to attendant loss of experts who could have improved the quality of life of the Nigerian population in many sectors, particularly in health and education, resulting in low quality of life and low level of public human capital spending in Nigeria (Bloom et al., 2010). A combination of such factors as political crisis, official corruption, and dearth of enabling environment – for youth creativity – is another factor that may militate against the realization of the benefits inherent in a favourable population structure such as Nigeria's.

For Nigeria, this demographic trend has implications on Nigeria's economic development because the youth populations which are in abundance in Nigeria and should be used to propel economic growth, have become dependents who need access to education, jobs, healthcare, and other social services. It would mean that rapid population growth will put substantial pressure on the country's capacity to provide quality social services

such as new schools, more clinics, adequate sanitation, as well as food and provisions to meet basic needs. It is pertinent to note that reaping demographic dividends is not automatic, as the youths are faced with all these challenges. It becomes difficult to reap a demographic dividend as the potential of the youth cannot be harnessed in the face of unemployment and other positive activities that are needed to boost economic growth. Rather, it seems like we are having a demographic bomb. If Nigeria fails to reap the dividend of demography, it leads to growing number of restless young people frustrated by lack of opportunity, increased competition for jobs, land, natural resources and political patronage, cities that are increasingly unable to cope with the pressure placed on them, increase in crime rate and other such undesirable gravitations.

8. How Nigeria can reap a demographic dividend

Most writers of the concept of demographic dividend have envisaged that by 2030, Nigeria will start reaping demographic dividend which is close to the year Nigeria plans to be in the league of the top 20 industrial economies (Bloom et al., 2010). To ensure that this preferred alternative materializes, a lot of complementary policy initiatives will need to be in place well before this time. Demographic dividends are realized with distinguishable changes in population age structures, labour productivity and economic growth over time. Initially with declining birth rates and increased labour force supply, per capita income rise, other things being equal. The smaller share of children in the population enables greater investments per child, particularly for health care, nutrition, and schooling. If appropriate policies are in place to support productive employment, the larger working-age cohorts can produce more on a per-worker basis and on a per-person basis than in the past, thus boosting per capita income. Since workers are typically active savers, national savings can increase and extra savings can be directed into new investments that yield additional returns (United Nations, 2011) The potential can be enormous, provided supportive economic policies are in place and investments in human capital, particularly in young people, is ensured.

Recent studies also show that demographic dividends can be substantial, but the dividend will not come automatically. To seize the opportunity, James and Jason (2015) is of the opinion that government must engender efforts to harness the opportunities in the youth bulge and minimize the risks by developing strategies to upgrade the skills and competencies of the youth in line with the country's comparative advantage and sectorial prospect.

According to Obadan and Odusola (2001), efforts should be made by the government to improve the welfare of the people and to stem the tide of unemployment as education and human capital are not transmitted into productivity in the face of unemployment leaving demographic dividend to be of no effect. Therefore, there is need to begin to develop strategies to upgrade the skills and competencies of the youth in line with the country's comparative advantage. Employers have alleged that graduates of Nigerian universities lack employable skills, including life and leadership skills. Related to this is the weak link between the universities, other tertiary institutions and society represented by the private sector. Although efforts are being made to promote university-private sector collaboration to introduce university students to concepts of entrepreneurship and innovation with the twin objective of making all students imbibe entrepreneurial and enterprising attitudes and making some of them who have characteristics of entrepreneurs become one (Bloom et al., 2010), more efforts should be made in this regard.

As education is of key importance, there must be access to quality primary, secondary and post-secondary education for boys and girls and Nigeria must adopt policies that will develop its workforce and ensure that it is productive. Equally important, the policies must be consistent with the various realities of Nigerian regions (World Economic Forum, 2014). In the same vein, Agbor et al. (2012) is of the view that for Nigeria to leverage on the youth bulges productively and effectively, the youth must participate actively in the labour market; they can engender innovation and support governance and political reform.

In the bid to create employment, Nigeria must diversify away from oil, with an emphasis on sectors that will improve the employment prospects for young people. This is necessary for both urban and rural areas. For rural areas, agriculture is vitally important. However, Nigeria's agriculture is still far behind international benchmarks with low research and training for farmers, low level of mechanization and irrigation, weak communications and markets and inadequate access to credit (Federal Ministry of Finance, 2008). Soil degradation is also a growing threat, especially in the north, where climate change is expected to exacerbate desertification. With growing demand for agricultural products from the cities, significant improvements are needed. There should be greater investment in support for farmers, and rural areas are well positioned for a long agricultural boom that will improve living standards in Nigeria's poorest regions while moderating migration from the countryside's to the cities.

Also, Zille and Benjamin (2011) states that if the increase in the number of the working population can be fully absorbed into productive activities, all things being equal, average per capita income will increase. Increased number of employed youths also results in skill transfer, which directly impacts human capital, contributing to reduction in inequality, thereby enhancing the prospects for social coherence and stability which is of key importance to development and growth. On the contrary, if the larger number of youths is not gainfully employed, the youth bulge would lead to demographic bomb as a larger number of unemployed youths could become a potential source of social and political instability, violence, and conflict.

Policies aimed at reducing the level of poverty and youth empowerment are essential to the attainment of demographic dividends. According to Olaleye (2010), youth empowerment helps to reduce the level of poverty and the tendencies for young people to engage in criminal activities. Culture of entrepreneur should be encouraged among the youth and government should provide credit facilities for them, and an enabling environment should be created for the private sector to invest in infrastructure and initiation of good macroeconomic policies. Furthermore, the problem of shortage of infrastructural facilities, particularly power supply that could aid small and medium-scale enterprises, should be appropriately and adequately addressed (Zille and Benjamin, 2011).

Sexual reproductive health plays an important role in taking full advantage of the demographic dividend. Women should be empowered to plan the number and spacing of their children, which can result in a fall in fertility level, and there must be an accelerated effort to improve maternal and child health. Sexual and reproductive health care also reduces disease and injuries, ensuring that people are better able to contribute to the economy as women with access to these services are better able to continue working, strengthening the financial well-being of their families and communities. Furthermore, Nigeria must focus on providing women with voluntary family planning information and services (Jacqueline et al., 2011).

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contraceptives should be encouraged. Sexual and reproductive health care also reduces disease and injuries, ensuring that people are better able to contribute to the economy as women with access to these services are better able to continue working, strengthening the financial well-being of their families and communities. Furthermore, Nigeria must focus on providing women with voluntary family planning information and services (Jacqueline et al., 2011).

The age transition will lead to an increased demand for assets as Nigerians would live longer and the expected duration of their retirement increases, another complementary approach is to encourage savings and investment among the current working age population so that they can have assets to rely on during the dependency period of old age. Although labour income is relatively high at older ages at the current time, this may well decrease as the standard of living improves and the demand for leisure increases and as more people are employed in the formal sector. Also, the Nigerian financial markets should be deepened and widened to allow for more creative instruments for investment, providing adequate legal institutional framework for dispute resolution among others. Also, the Nigerian Public Pension system launched in 2005 with the passage of the National Pension Commission (PENCOM) Act of 2004 needs to be all inclusive. It needs to be deepened and enhanced to involve more participants. Presently, only a few employed government workers and some private sector workers are involved; most Nigerian workers are yet to be covered (Bloom et al., 2010).

9. Conclusion

Nigeria has a substantial demographic opportunity that may be harnessed for greater economic prosperity. The conversion of the favourable demographic structure to socio-economic development will however require refocusing and reframing the policies that are critical to the country's socio-economic development. This may be supplemented with the drafting of the active population into productive activities and strengthening the education system and increasing access. The result will be improved human capital index, which is a measure of social and economic development.

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