

Running Head: Ghana's Demographic Transition and Demographic Dividend



ASHESI UNIVERSITY

**The Demographic Transition and The Demographic Dividend: Does Ghana Stand A
Chance?**

By

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Science degree in Business Administration

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DECLARATION

I hereby declare that this thesis is my original work and that no part of it has been presented for another degree in this university or elsewhere.

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I hereby declare that the preparation and presentation of this thesis was supervised in accordance with the guidelines on supervision of theses established by Ashesi University

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Date:

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“I have observed something else under the sun. The fastest runner doesn't always win the race, and the strongest warrior doesn't always win the battle. The wise sometimes go hungry, and the skillful are not necessarily wealthy. And those who are educated don't always lead successful lives. It is all decided by chance, by being in the right place at the right time”. With much gratitude to the Lord for making this work complete.

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I am most grateful to my family, who inspire me daily. I am humbled and honored.

My final gratitude to all young people, you are doing great, keep on keeping on because I will too.

DEDICATION

I dedicate the work to the vibrant youth of Africa

ABSTRACT

There is a lot of talk on this new wind of economic benefit – the “demographic dividends.” Many regions of the world have had their share of the demographic transition and dividend. Still, most countries in Africa are yet to receive it or might even miss it if they do not put in place the necessary structures and systems to reap it. The study, therefore, seeks to find the state of Ghana concerning the dividend. It explores the preconditions of attaining the dividend, which might have delayed Ghana's chances of harnessing the DD and the roles stakeholders should play to enable Ghana capitalized on its demographic transition and dividend.

The study, through a qualitative research approach, made use of both primary and secondary data collection sources. Content analysis was used to analyze the data. The analyses revealed that to gain and maximize the DD, Ghana must invest in the areas of education, health, governance, and economy. Ghana can leverage on the DD if this is done. However, there are significant challenges, such as a high dependency ratio and a low level of education among the youth that needs great attention.

LIST OF ABBREVIATIONS/ACRONYMS

BECE – Basic Education Certificate Examination

DD – Demographic Dividend

DT – Demographic Transition

FDI – Foreign Direct Investment

GDP – Gross Domestic Product

IMF – International Monetary Fund

NABCO – Nation Builders Corps

NAS – National Academy of Sciences

NTA – National Transfer Accounts

PPP – Purchasing Power Parity

RIPS – Regional Institute for Population Studies

SDGs – Sustainable Development Goals

SSA – Sub-Saharan Africa

SHS – Senior High School

TFR – Total Fertility Rate

UN – United Nations

UNFPA – United Nations Fund for Population Activities/United Nations Population Fund

WICD – Wittgenstein Center for Demography and Global Human Capital

WPP – World Population Prospects

WW II – World War Two

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DEFINITION OF TERMS

- ✓ Demographic dividend – an accelerated economic growth resulting from declining fertility rates and mortality and a subsequent change in a population's age structure
- ✓ Demographic transition – a phenomenon and theory that describes a population change over time. It is characterized by a shift from high to low fertility and mortality rates
- ✓ Dependency ratio – the non-working age population to the working-age population
- ✓ Economic development – the improvement of the well-being and quality of life of a country
- ✓ Economic growth – the increase in goods and services produced by a population over some time
- ✓ Fertility rate – the number of births to a woman
- ✓ Human capital – the knowledge, skills, and skills endowed to a person or society
- ✓ Mortality rate – the number of deaths to a population
- ✓ Population – the number of humans inhabiting at the same place
- ✓ Population growth rate – the rate at which a population increases over some time
- ✓ Age Structure – population distribution across age groups
- ✓ Thomas Malthus - English economist and demographer, who observed that population growth would ultimately outrun food supply (“Malthus, Thomas Robert,” 2018)
- ✓ Working-age population – the proportion of a society actively employed plus those capable of working (mostly between the ages 15-64)

CHAPTER ONE - INTRODUCTION

1.1 Background

The demographic dividend (DD) has been a subject of research for many economists and demographers for some time now. Luoma (2016) defines the DD as “the economic growth that may result from the changes to a country's age structure, due to the shift from people living short lives and having large families to living long lives and having small families.” The DD became an exciting area of study because the development process in most economies for the last century has been accompanied by demographic transition - changes in population age structure (Abío, Patxot, Sánchez-Romero, & Souto, 2017).

The population age structure of some countries has been experiencing dramatic changes, and this, in effect, impacts economic conditions. Depending on how much the demographic change affects economic growth, the demographic dividend is generated or not (Abío, Patxot, Sánchez-Romero, & Souto, 2017).

1.1.1 The demographic transition and demographic dividend

The demographic transition is a modern population history process with three stages, which are characterized by (stage 1) a stable/slow- growing population resulting from a high birth rate accompanied by high death rates. Stage 2 (the point where the demographic transition begins). In stage 2. Improvement in the quality of factors like public health methods, diets, incomes, etc. would result in a reduction in death rate and gradually translate into an increase in life expectancy from 40 years to over 60 years. Finally, stage 3, emerges as a result of complex forces and influences of modern development, causing

fertility rate to fall, causing a convergence of the two rates (birth rate and death rate). It leaves little or no growth in population (see *Figure 1*) (Todaro & Smith, 2011).

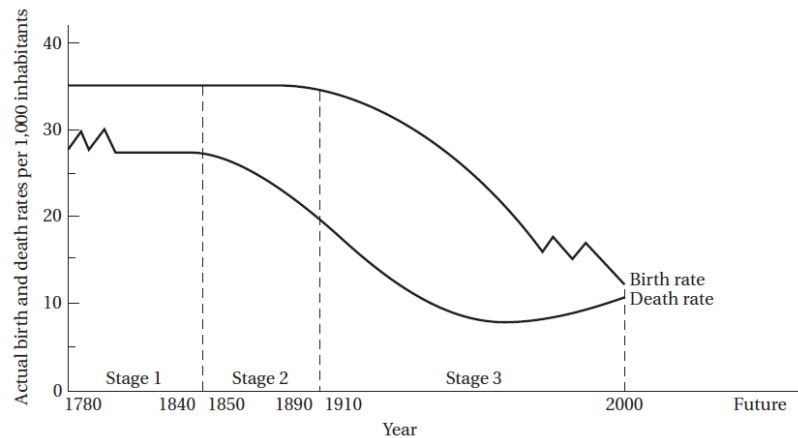


Figure 1: The demographic Transition in Western Europe

Source: Todaro, M. P., & Smith, S. C. (2011). *Economic development* (11th ed.). Harlow: Pearson Education Limited.

The third stage of the demographic transition gives rise to the demographic dividend, which is characterized by low fertility and mortality rates that are associated with an acceleration in economic growth. The demographic dividend is described as the accelerated economic growth related to a decline in an economy's fertility rate, mortality rate, and a later change in its population age structure (Gribble & Bremner, 2017).

Since the time of Thomas Malthus (English economist and demographer, who observed that population growth would ultimately outrun food supply), there has been a lot of debates surrounding population age changes and economic growth. Subsequently, the debate has turned to the question of whether changes in population structure create a demographic dividend or a potential window of opportunity for an economy.

Many social scientists, economists, and demographers after a series of analysis associate the “economic miracle” of the regions of Eastern and East Asia that happen between the 1960s and 1990s with the demographic dividend (Bloom & Williamson, 1998; Groth & May, 2017).

For instance, the rapid recovery of economies like Germany and Japan after WW II is said to be an economic miracle. Although several factors may have been responsible for this miracle, including the transfer of foreign aid from the USA as part of the Marshall Plan, some authors argued the DD played a role. These economists expected that economies in the least developed countries would experience a similar economic miracle since these economies got similar technical and financial assistance like Germany and Japan, but that did not happen (Nafziger, 2006).

On the other hand, some social scientists argued that the demographic dividend was an education dividend. In that, the age structure changes, which in turn increases the share of the working-age population does not translate into increased labor productivity since there is no evidence to prove it. But the investments (education and training) made in human capital translated into increased labor productivity (Cuaresma, Lutz, & Sanderson, 2014; Lutz et al., 2019).

Bloom and Canning (2004) mentioned that even though the DD provides a link between population growth in the productive age and economic growth, it is based on good labor laws, trade “openness,” sound institutions and good governance.

1.1.2 Demographic dividend in the SSA context

Any economy has the opportunity to experience a DD, but one has to put certain conditions in place to enjoy it because it is easy to miss it too. Unfortunately, from its inception, the demographic dividend was delayed in East Asian countries till around 1885 and that of sub-Saharan African countries, excluding Northern Africa was delayed up until 1995 (Mason, 2005).

All in all, if a country does not have a fall in fertility rate and a complete demographic transition coupled with the right social and economic policies, then the opportunity window of opportunity for enjoying the benefit the DD will be delayed (Gribble & Bremner, 2017).

The only region which has not yet experience the demographic transition and the demographic dividend is the SSA region, except for northern Africa (Groth & May, 2017).

Demographic change gives rise to the DD. The DD is characterized by reduced fertility and mortality rates. Contrary to what observers expected 20 to 30 years ago, there has been a rapid decline in infant, under-five, and maternal mortality rate, which translated into a reduced mortality rate/crude death rate. All thanks to massive public health interventions in sub-Saharan Africa (see *Figure 2*).

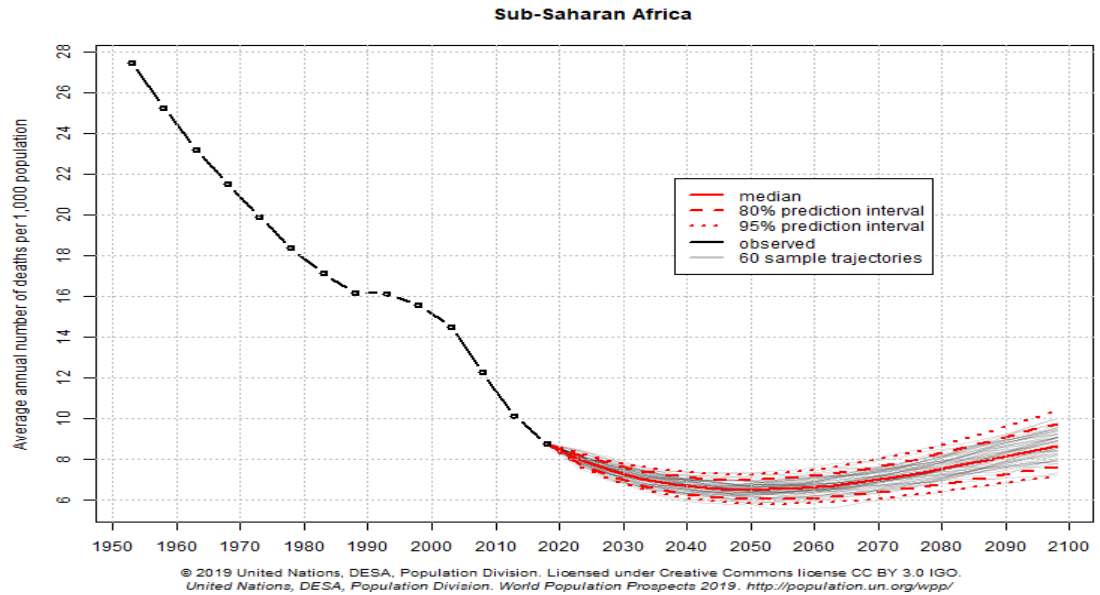


Figure 2: Sub-Saharan Africa, Probabilistic Projection of Mortality rate from 1950-2100

Source: The World Bank Data, 2019

Unfortunately, attempts (efficient family planning programs) to reduce fertility rates in countries in SSA failed to yield significant results because of low factors like a low level of education and low levels of income, culture, religious beliefs and superstition. The fertility rate in most of these countries have fallen, but 19 out of the 48 sub-Saharan African countries do have women giving birth to five or more children. In view of that, SSA population dynamics can be deemed as unique (Bongaarts & Casterline, 2013). But all in all, the fertility rate for SSA has fallen and will continue to fall as projected by the United Nations (see Figure 3).

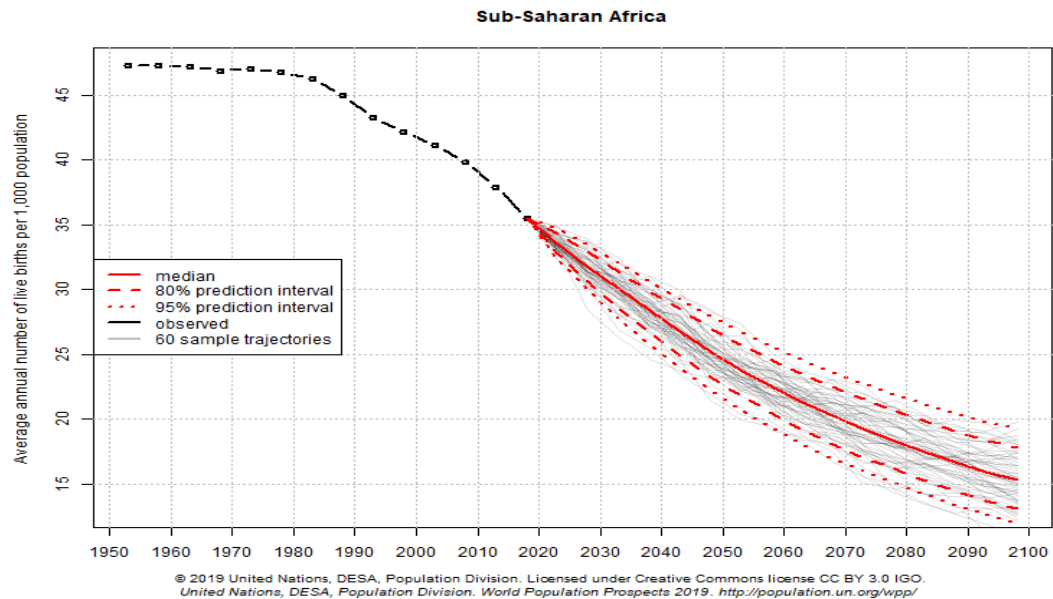


Figure 3: Sub-Saharan Africa, Probabilistic Projection of Fertility rate from 1950-2100

Source: The World Bank Data, 2019

Talreja (2014) mentioned that SSA economies had been exposed to various deadly diseases such as HIV/AIDS, which has led to a high mortality rate even among the young age (which makes up the working-age population) and in turn, could create demographic disaster. Therefore, SSA countries being prone to deadly diseases could serve as a hindrance to their DD. It is because “the public health and clinical infrastructure of developing countries are often inadequate to deal with a widespread health crisis” (Oshitani, Kamigaki, & Suzuki, 2008), which can translate into high mortality rates.

1.2 Problem Statement

Ghana, like every other nation in the SSA region, must take deliberate actions to enjoy a DD as its population changes (see *Figure 10-13*). Since the inception of DD, SSA economies have experience delays in attaining demographic dividend not because they

have vastly different cultures from economies who enjoy demographic dividend. But "...with undeveloped industrial complexes, low literacy, and few technical skills, but because they are simply not able to use the capital fully." (Nafziger, 2006, p. 81). Also, there is limited literature examining whether Ghana has gained the DD or not. The relevant problem is to understand the current situation and put appropriate strategies and measures in place to maximize DD if possible.

Discussions on the demographic transition and the dividend phenomenon have lasted for a century, but not much literature on it concerning Ghana exist. There was one media training in 2013, led by Professor John K. Anarfi, a social demographer with the Regional Institute for Population Studies (RIPS) of the University of Ghana, Legon and one research paper (a research study based on the national transfer accounts approach) presented at the Union of African Population Scientists (UAPS) meeting in 2015. It was said that the National Population Council of Ghana has completed a policy brief on the demographic dividend and organized a national workshop on the topic (Dogbevi, 2013). Prof. Stephen Kwakye (also of the RIPS) mentioned that the DD started opening up Ghana in the 1980s was not permanent and would end by 2030 (Abdul-Rahaman, 2019).

Therefore, Ghana and its government need to know and learn from other economies and make better policies and build healthy and sound institutions that gear towards the achievement and maximization of demographic dividend.

1.3 Research Question

The study seeks to answer the question

- I. What can Ghana do to gain, maximize, and enjoy the DD?

1.4 Research Objectives

- I. To explore the preconditions for Ghana to enjoy a DD.
- II. To explore the challenges that may hinder Ghana from gaining DD.
- III. To explore whether Ghana would earn a demographic dividend or suffer a demographic debacle.
- IV. To recommend strategies to improve Ghana's odds of enjoying the DD.

1.5 Relevance of the Study

The economic development aspirations of Ghana are aligned with the Sustainable Development Goals 2030 agenda, and it has a grounding in Ghana's 1992 constitution (National Development Planning Commission, 2019).

According to the World Population Review (2019), Ghana is estimated to gain one birth in every 36 seconds, lose one person to death in every 2 minutes, gain one net migrant in every 53 minutes, and gain one person in every 49 seconds. As noted by (Crookes & Ijjasz-Vasquez, 2015), Ghana's urban population has tripled in the last three decades and has outpaced rural population growth. These elements have significant chances of affecting Ghana's population changes and should not be taken lightly.

Therefore, there is a need to bring to the attention of policymakers and the government of Ghana, the possibility of Ghana missing the DD if its demographics are not monitored. Also, there is a need for Ghanaians to experience and live in an economy that offers opportunities and benefits.

Research on this topic will make way for a knowledge that would be readily available to people interested in the economy of Ghana and Ghana as an economy will come to a state of awareness and get the chance to grab on the benefits of demographic dividend.

1.6 Scope of the Study

The research will refer to literature on developing economies who have and are experiencing DD. It will make use of relevant information by the Regional Institute of Population Studies, Ghana's Ministry of Health, of Education, and Youth. The data period does not make much difference, and so it goes as far back depending on its relevance to the study. Hence, findings here cannot be used to create a generalized statement since data were selected based on their connection to the study. Results will be best limited to economies with similar demographic characters and changes.

1.7 Overview of Research Methodology

The study makes use of existing data from scholarly literature reviewed work through a qualitative research approach. It will make use of both primary and secondary data collection sources. A purposive sampling technique will be employed in sampling, and qualitative content analysis was used to analyze the data.

1.8 Outline of the Study

The outline of the study is as follows; Chapter One – which introduces the study, including the background, research question, objective, relevance, etc. Chapter Two – which entailed literature review of underling issues relating to demographic transition and dividend in the world, SSA, and in Ghana. Chapter Three – captures and discusses the

methodology used in the research process – a qualitative research approach. Chapter Four – reports result, entails analysis made using existing data from findings of the literature review and responses from the empirical data collected. And finally, Chapter Five – reports the key results from the study and provides the conclusion and recommendations of the study.

CHAPTER TWO – LITERATURE REVIEW

2.1 Overview of the Literature Review

The demographic dividend occurs when the age structure of a population changes from a triangle to a diamond (Armah, 2019). Significant changes in a population, for example, the level of literacy, the state of health, and skill level, as well as changes in the population age structure, are essential in analyzing literature on the demographic trends in the developing world and the likelihood of enjoying the DD. The chapter reviewed existing research on the theoretical and empirical perspectives underpinning the DD. It examined the demographic structure of SSA and that of Ghana in particular. It considered critical policy variables that influence a nation's ability to exploit its demographic dividend.

2.2 Theoretical Perspective of the Demographic Dividend

There is an intense debate between various economists, demographers, and researchers on the issue of whether population change restricts, promotes, or is independent of economic growth. Each party to the debate has come up with various theories through research to explain and back their stands. But the practicality of the debate has been hindered in that it focused on population size and growth while close to no attention given to age structure, an essential variable of a population (Bloom, Canning, & Sevilla, 2003, p.1). However, with a clear understanding of the link between economic development and the changing age structure, policymakers will make informed policies to enable economies to benefit from the demographic transition phenomenon. There are three (3) main types of relevant theories on the connection between population growth and economic growth: The Pessimistic theory (due to Thomas Malthus), The Optimistic theory, and Neutralist theory.

2.2.1 *The Pessimistic Theory*

The theory claims that population growth restricts economic growth. Thomas Malthus is the brain behind this theory. He observed that population, if unchecked, will bring crisis since it grows exponentially while food supply grows linearly (“Thomas Malthus’s essay on the principle of population (1798)”, 2017). Malthus missed the fact that the human brain or mind is complex, creative, and innovative. Even though humans have been able to come up with great technological inventions that are helping curb world problems, Malthus’s pessimism still lives on. As cited by Bloom et al. (2003, p.2-4), Ehrlich, in 1968, published his influential book titled *The Population Bomb*, saying that in the 1970s, hundreds of people were going to starve to death due to rapid population growth. They also cited that some measured researches that have been done by the National Academy of Sciences of the US in 1971 and the United Nations in 1973 predicted a negative net effect for population growth (p.3).

In the world now, where there is excellent technological advancement, rapid population growth is still standing as a threat to sustainable economic growth and development. It is threatening because it is the most impoverished countries that are experiencing fast growth in their populations. So, these economies face additional challenges in their efforts to manage fertility rates and improve health services (United Nations, 2019).

The world population is projected to increase for years to come (see *Figure 4*). In principle, high population figures demand more homes, social amenities, infrastructure, and shelter. In the long term, creating such capital might be possible, but a rapid population

will reduce the capital per worker and, in turn, temper with living standards (Bloom et al., 2003).

In effect, an economy with a rapidly increasing population invests more in meeting the needs of the growing community rather than devising ways to increase the level of investment per capita. These two points give solid grounds for pessimism. But as discussed earlier, technological advancement and more empirical studies undermined the pessimists’ and bolstered to the optimists’ theory (Bloom et al., 2003).

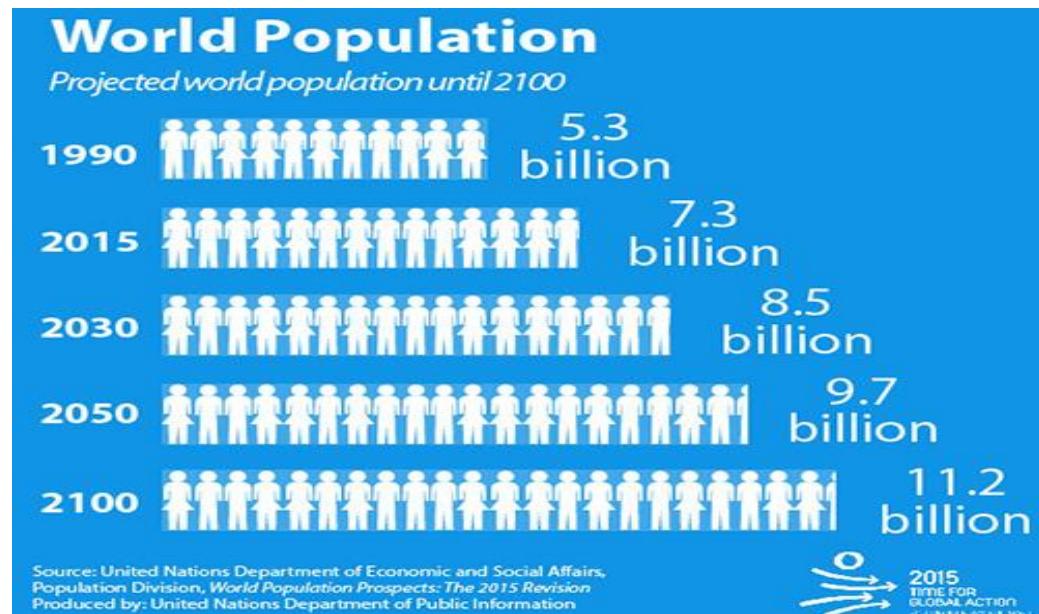


Figure 4: Projected World Population Until 2100

Source: United Nations, Department of Economic and Social Affairs, Population Division (2019).
 World Population Prospects: The 2019 Revision, custom data acquired via website

2.2.2 The Optimist Theory

The theory claims that population growth can fuel economic growth. In the last almost 60 years, the world population has doubled (see Figure 5), and income per capita has increased substantially over the years. With all these happenings, Enrich, 1968’s

prediction of hundreds of thousands of people starving to death failed. Thus, famines primarily were caused by poverty and the inability of the section of the population facing the hunger to get funds to buy food and not entirely due to a shortage of food (Bloom et al., 2003, p.15).

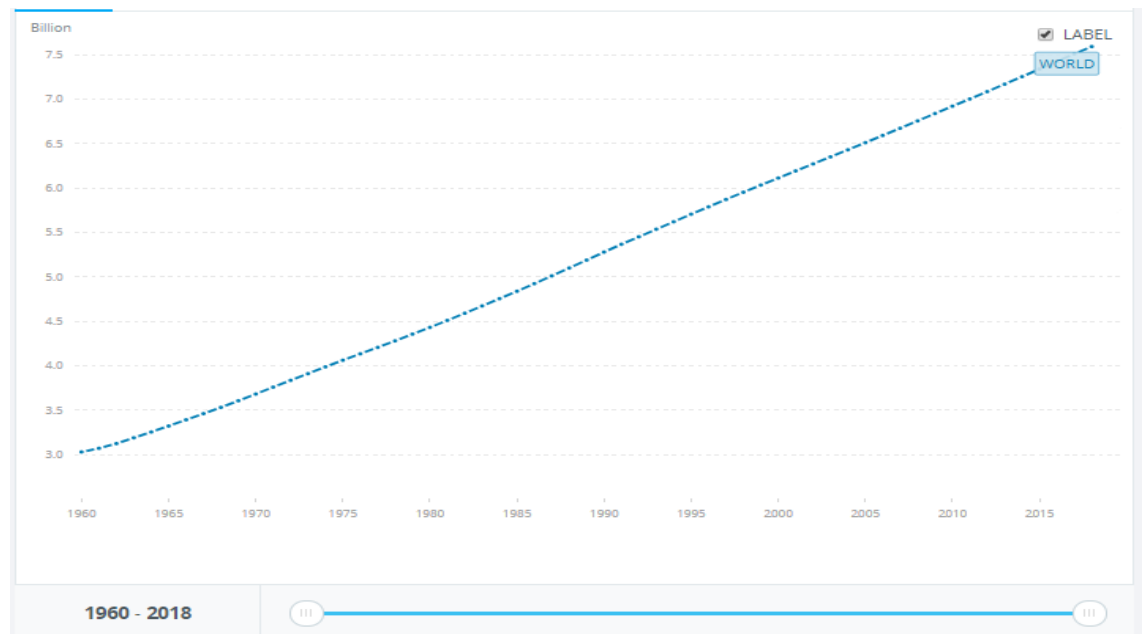


Figure 5: World Population from 1960 – 2018

Source: The World Bank, 2019

Despite being against the pessimist theory, the optimists took a broader stand and view on the consequences of population growth. They argued that multiple external factors like policies and institutions account for implications of population growth for development than rapid population growth (Bloom et al., 2003; Srinivasan,1988). The broadening of the optimists’ view brought about a robust neutralist perspective on the demographic debate.

2.2.3 The Neutralist Theory

The Neutralist theory claims that population growth has no significant effect on economic growth. Since the mid-1980s, the neutralists had the dominant view (Boom & Freeman, 1986). Kellen (2001) cited areas that accounted for the dominance neutralists' view saying that, the depletion of natural resources has no strong correlation with population growth as estimated by the pessimists. Also, studies overlooked the negative impact of population growth on savings and forgotten that population growth did not lead to resource diversification, as the pessimists predicted.

Even though the Neutralists had a dominant view, there were still little variations. Bodies of knowledge like the National Academy of Sciences (NAS) deduced that a slow-growing population could fuel the economic development of developing countries (Committee on Population & National Research Council, 1986). Many World Bank researchers suggest that a large population can aid the economic growth of other countries (Bloom et al., 2003). In essence, population issues were given little attention in the policymaking environment.

These theories in their formation overlooked a vital element of a population, which is the population age structure and changes that can occur in the population structure (Bloom et al., 2003; Olaniyan, Soyibo, & Lawanson, 2012). The different age groups in a population which make up the age structure react differently to economic elements and give off different economic consequences. When there are changes in the relative sizes of these groups, there are corresponding changes in their economic behaviors.

2.3 Empirical Perspective of the Demographic Dividend

Though many economists and demographers have made arguments while overlooking the age structure, which is a critical variable in explaining the relationship between population growth and economic growth. Now studies on economic growth and development concerning population growth focus more on the changes in the age structure of the population (Cutler, Poterba, Sheiner, Summers, & Akerlof, 1990; Bloom & Williamson, 1998; Mason, 2005; Lutz et al., 2019). A study by Bloom and Canning (2004) shows that changes in population age structure do affect economic growth. Also, many other studies done by researchers like Lee and Mason (2006), Bloom, Canning, Fink, and Finlay (2010), Kinugasa (2004) shows that the age structure changes open an economic, demographic window of opportunity (DD) which has significant effects on economic growth.

As countries experience a continuous change in their population age structure (Mason, 2005; Olaniyan et al., 2012), constant change aids their demographic transition. These countries move from a state of high to low fertility rate and mortality rate (Lee & Mason, 2006). Cutler et al. (1990) mentioned two reasons associated with the benefits of a changing age structure are lower dependency ratio, which means more resources available for economic investments, and increase life expectancy, which improves the savings behavior and income levels. Relatively, sizeable working-age population place economies that are in the middle of demographic transition at an advantage position of enjoying DD (Olaniyan et al., 2012). Further studies by Mason (2005) show that DD has a significant

role to play in economic growth and is responsible for about one to two percent of the increase in per capita income in various nations (including both developed and developing).

According to Queiroz and Turra (2010), DD has two phases; the first is associated with a temporary increase in the working-age population. It increases the number of producers over the number of consumers (Mason, 2005; Wang & Mason, 2007). The second phase of dividends emerges in succession to the first. In the period, policymakers and consumers are anticipatory of demographic changes and respond effectively and so, create wealth for themselves (Queiroz, Turra, & Perez, 2006). The first dividend is definite, but the second dividend is indefinite but can happen if the country grabs the opportunity window it opens.

That said, the extent to which nations can benefit from it depends on how much wealth was created in the first phase of the dividend (Mason, 2005). The second dividend, which has to do with sustainable development is dependent on capital or wealth accumulation. During the first dividend, the working-age population (that will grow into the elderly population) should have been saving and investing in the capital on behalf of the consumers, and that will set economic development in motion (Olaniyan et al., 2012).

2.4 The Demographic Structure of SSA

As cited by Olaniyan et al. (2012), Soyiba (2011) found that the pace to which the different regions in SSA experience the DD is different. Wongboonsin and Guest (2004) noted that DD only occurs and lasts as long as the demographic transition process (which happens in a few decades - the case for the first dividend). It implies that the opportunity window for reaping DD will last as long as the population age structure continues to

change. Thus, until there is a reduced fraction of the working population and an increased fraction of the elderly population, which means nations must take advantage of it while it lasts (Bloom et al., 2003).

Bongaarts and Bulatao (1999) deduced that countries in SSA are likely not to enjoy the DD, but Bloom, Canning, and Fink (2007) found otherwise. They showed that most SSA countries had the potential of reaping DD, but there need to be strong institutions to realize it. There must be international planning and policy formation to secure the health of the young population and train and endow it with skills, especially technical through education. Bloom et al. (2007) name such institutions to include infrastructure in health care, schools, roads, & transportation and a formal labor market that have clear laws to protect the rights and enforcing the responsibilities of both employees and employers.

In view of that, many researchers have argued that a lack of stable institutions makes it ineffective for the demographic transition to result in the DD (Bloom et al., 2003; Lee & Mason, 2006). For instance, Wong and Carvalho (2005) projected that Brazil's demographic transition would last until 2045, then the first dividend will set in implying a long wait. Also, Turra and Queiroz (2005) pointed out that the lack of proper policies reduces Brazil's temporal benefits from its population age change.

Lee and Mason (2006) further emphasized that variables such as physical and human capital, the strength of both economic and political institutions do influence the realization of the DD. They also mentioned that income per worker might also be an influencer in an open economy. Olaniyan et al. (2012) further said that there had been

projections that several African countries have strong growth in their working-age population but have institutional deficiencies, so they might just miss the DD.

Notwithstanding all these arguments, Basu (2015) is very positive about SSA realizing the DD. He mentioned that with reduced dependency ratios (see *Figure 6*) and when women are relief of childbearing and can effectively join the working-age population, DD will be realized sharply in Africa than other parts of the world.

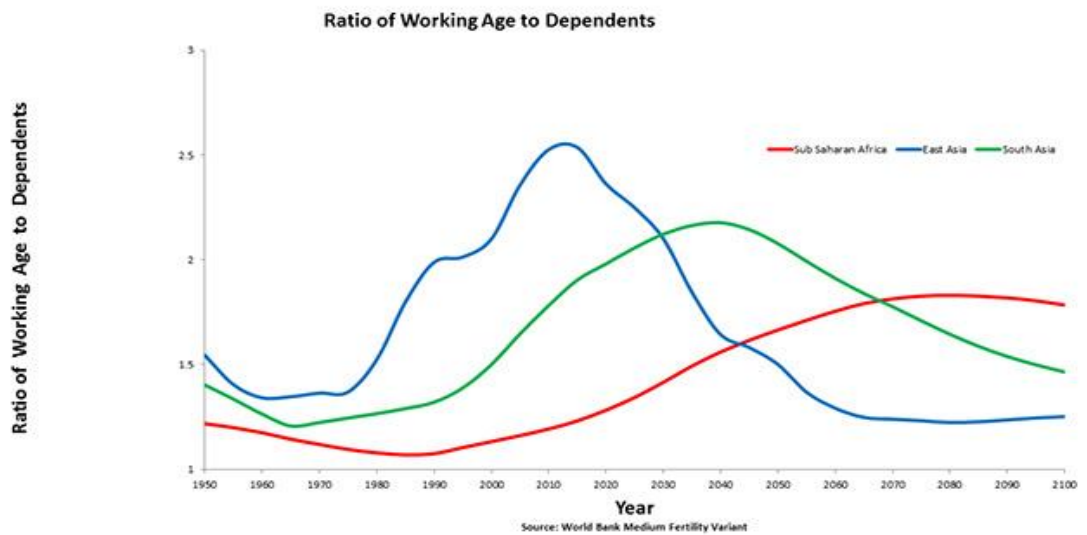


Figure 6: Graph of dependency Ratios for SSA, East Asia, & South Asia from 1950-2100

Source: World Bank Medium Fertility Variant

2.5 The Economic and Demographic Structure of Ghana

Ghana was formed from the British colony of the Gold Coast. It was the first country to gain independence in SSA in 1957 and has since had a stable democracy. Ghana is endowed with many natural resources. It is the second-largest gold producer and second-biggest cocoa producer in Africa. Also, it is rich in diamond and oil (The Heritage Foundation, 2020).

2.5.1 The Economic Structure of Ghana

Ghana, now a middle-income country as of 2018, had a GDP per capita (current US\$) of 2,202.31, a GDP (current US\$) of 65.556 billion, and GDP (PPP \$) of 141.295 billion. (World Bank, 2019). GDP in PPP accounts for factors like relative costs and inflation and serves as a base for comparison between countries. Ghana's GDP was estimated to grow at 6.7% in the first quarter of 2019, which was much higher than the growth rate of 5.4% in the same period for 2018. The 7.2% growth in Ghana's service sector accounts for the relatively higher growth in its GDP for the first quarter of 2019 (World Bank, 2019). Unfortunately, in the first quarter, due to the pressure caused by importers as they try to restock supplies, there was a lot of pressure on the cedi. Still, it was much calmer in the second quarter and cumulatively Ghana's cedi depreciated by 8.2% (from the beginning of the year until July 18, 2019). In 2019, Ghana's economic growth was estimated to increase to 7.2% (World Bank, 2019).

2.5.2 The Demographic Structure of Ghana

Ghana's share of the world population is 0.39% (Worldometers, 2019). As of 2018, Ghana had a population of about 29.6 million and an average (1950-2010) population growth rate of 2.66. It declined to 2.34 as of 2015 and is estimated to fall to 0.42 in 2100

(United Nations,2019). In 2019, Ghana’s estimated population was 30.42 million, is 46th in the world concerning population rankings, and has an annual growth rate of 2.15%. Also, the percentage of Ghana’s working-age population (Aged 15-64 years) has been growing and is projected to grow to over 70% of its population by 2100 (see *Figure 7*).

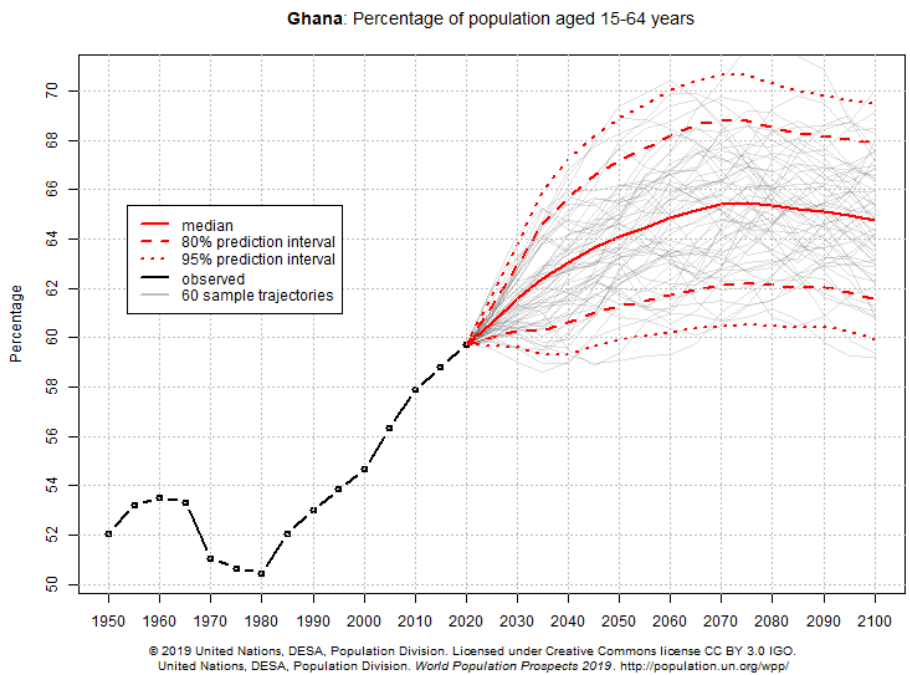


Figure 7: Percentage of Ghana’s Working Age Population (Aged 15-16 years) Projections from 1950-2100

Source: The World Bank Data, 2019

The trends from 1950 to 2018 show a decline in both fertility and mortality in Ghana (United Nations, 2019). The total fertility rate in 1950 was around 6.4 children per woman but declined to about four children per woman in 2018 and projected it to

experience a continuous fall until 2100 (see *Figure 8*). The mortality rate (crude death rate) also decline from about 22 % in 1950 to about 8 % in 2018 (see *Figure 7*). But United Nations (2019) projected an increase in mortality rate from 2020 to 2100 (see *Figure 7*).

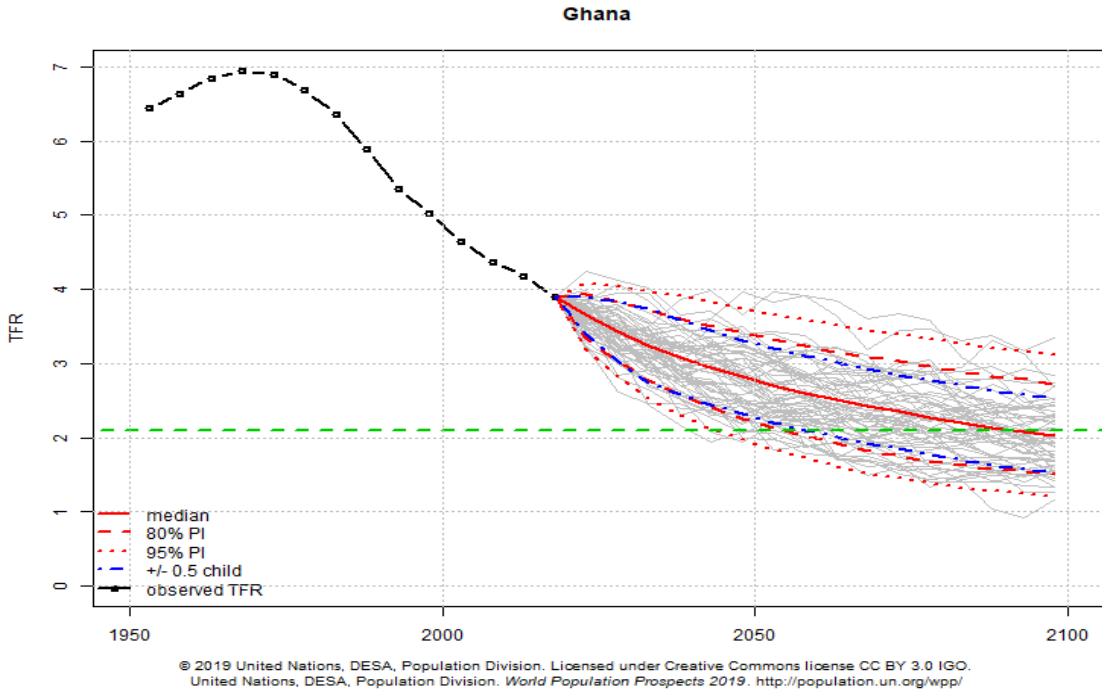


Figure 8: Probabilistic Projections of Ghana’s Total Fertility Rate Until 2100

Source: The World Bank Data, 2019

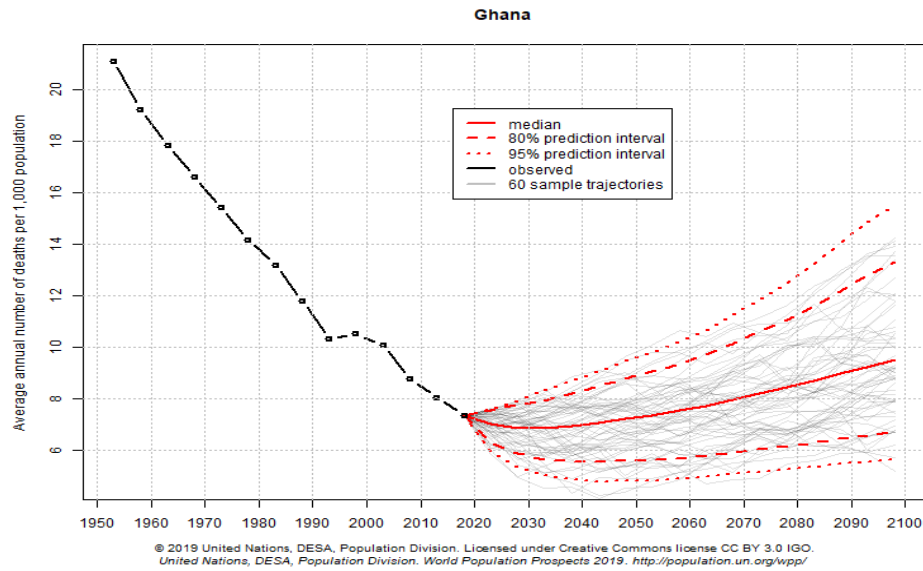


Figure 9: Probabilistic Projections of Ghana's Mortality rates (crude death) Until 2100

Source: The World Bank Data, 2019

Life expectancy at birth in Ghana as in 2018 was 62 years (Geiger, Tanaka, & Nuamah, 2018). It has dramatically improved from 41.7 years in 1955 due to the improvement in health indicators (Amporfu, Sakyi, & Frimpong, 2014). Amporfu, Sakyi, and Frimpong (2014) further argued that advancement in health indicators increases female school enrollment.

Studies show that female education and fertility rate are negatively correlated because the opportunity cost of having many children is just too high for an educated woman (Basu, 2002). For instance, Ghanaian women who have an SHS education tend to have low TFR; thus, between 2 to 3 children per woman but those without schooling tend to have TFR of about six children per woman (Pradhan, 2015). Bloom and Canning (2000)

also mentioned that empirical studies show that improvement in health helped boost economic growth in developing economies.

The population pyramids (see *Figures 10-13*) shows how Ghana's population age structure would change over the period from 1950 to 2100. Referring to this above information, does Ghana stand a chance of having DD? How can Ghana maximize and enjoy its DD to the fullest?

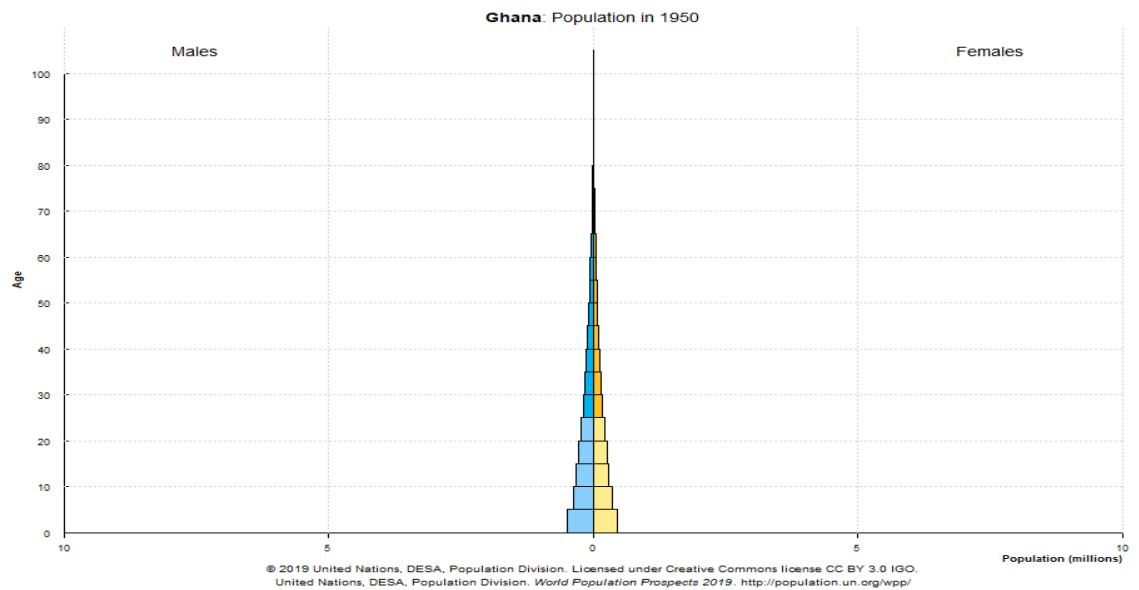


Figure 10: Ghana's Population Age Structure 1950

Source: United Nations, Department of Economic and Social Affairs, Population Division (2019).
World Population Prospects: The 2019 Revision, custom data acquired via website

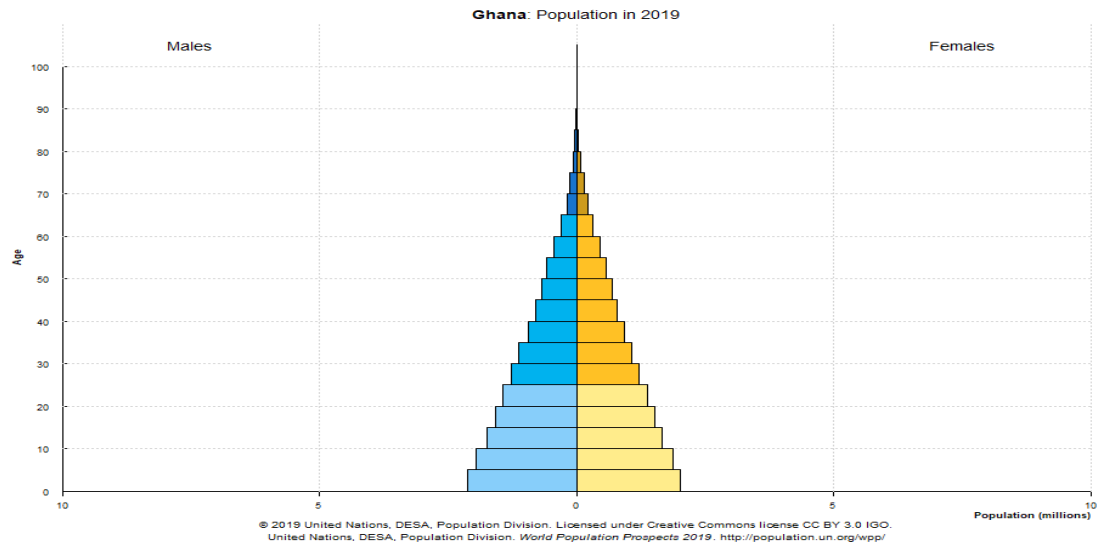


Figure 11: Ghana's Population Age Structure 2019

Source: United Nations, Department of Economic and Social Affairs, Population Division (2019).
 World Population Prospects: The 2019 Revision, custom data acquired via website

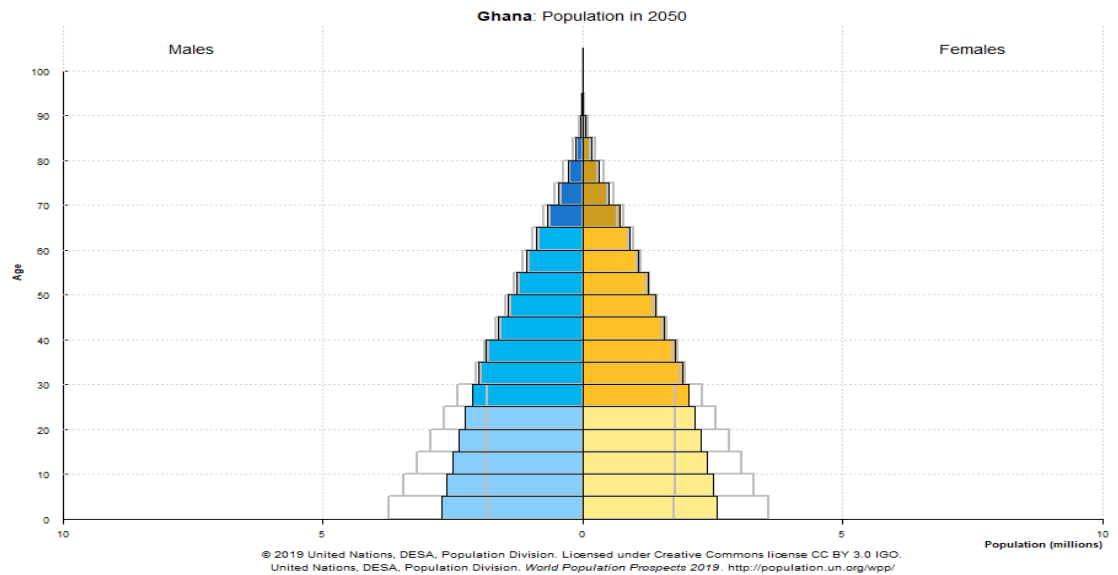


Figure 12: Ghana's Population Age Structure 2050

Source: United Nations, Department of Economic and Social Affairs, Population Division (2019).
World Population Prospects: The 2019 Revision, custom data acquired via website

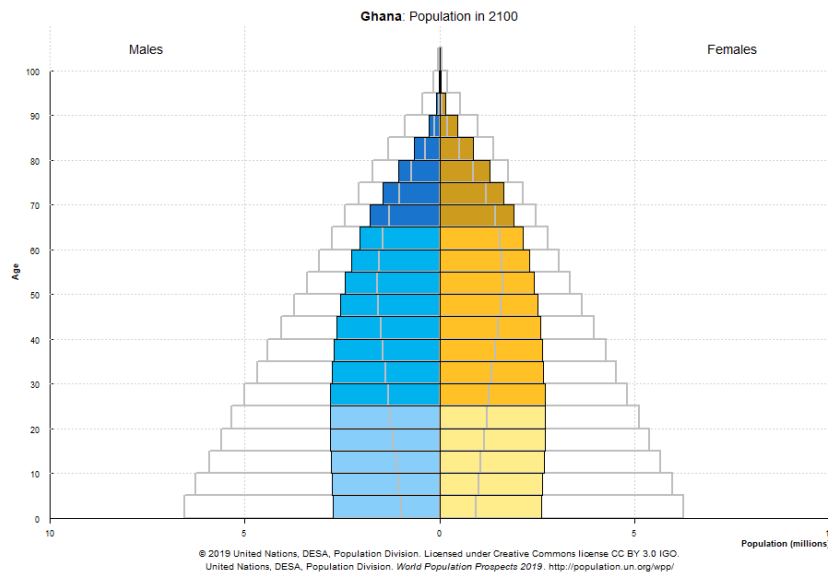


Figure 13: Ghana's Population Age Structure 2100

Source: United Nations, Department of Economic and Social Affairs, Population Division (2019).
World Population Prospects: The 2019 Revision, custom data acquired via website

2.6 Key Demographic Transition Policy Variables

During the demographic transition, a lot of factors and variables must be considered for the DD to be realized. A decline in fertility rate is a must (Gribble & Bremner, 2017). Therefore, to accelerate fertility decline policies should be put in place to target the reduction of child mortality, child marriage, malnutrition, morbidity, address social norms on fertility, expend comprehensive family planning programs, increase female education and gender equality (Canning, Raja, & Yazbeck, 2015).

To reap the first DD, the policies must be geared towards the improvement in education and human capital (Montgomery & Lloyd, 1996; Jensen & Ahlburg, 2001;

Mason, 2005; Canning et al., 2015), business environment; encourage the employment of the female outside the home; and the reduction of trade barriers and attraction of FDI (Canning et al., 2015).

Finally, to reap the second DD, the policies put in place must ensure the improvement of institutions for domestic savings and investment (Canning et al., 2015). Such systems will enable the growing working-age population to save wisely and make an investment that brings the best returns with the lowest risk as possible. It will ensure sustainable economic growth and development of a country.

CHAPTER THREE – RESEARCH METHODOLOGY

3.1 Introduction

The chapter describes the constituents of the research process. It provides information concerning the research strategy adopted by the research and the procedures used to collect data. The chapter takes note of the role of the researcher in qualitative research concerning reflexivity.

3.2 Research Strategy

The research strategy employed was a qualitative case study approach. It allows for an in-depth investigative study (Cohen & Manion, 1995), making it possible for researchers to do study complex phenomena within their contexts with various sources of data. (Baxter & Jack, 2008).

The case study approach is one of the real-world traditional research strategies for research (survey and experiments). As cited by Yobo (2013), it was employed because of its ability to allow researchers “probe deeply and to analyze intensely” (Cohen & Manion, p.106) the research phenomenon under investigation – demographic transition and DD. Critics like Yin (2003), Osuala (2007), among others, argued with the case study approach makes generalization impossible. However, Bassey (1981) counter-argued that case study is essential because of its relatability, which is better than generalization. Also, Osuala (2007) further encourages researchers to spend more time in research to examine and make a meaningful interpretation of their study and findings.

3.3 Research Scope

The research scope explains the specific parameters within the study and the extent to which the study area would be explored. It covers the study population and area of research.

3.3.1 Study Population

The context of the study is the Ghanaian population. International bodies like the World Bank, United Nations, and The Heritage Foundation have reported positive potential growth for the Ghanaian economy. The researcher seeks to find the opportunities Ghana has and can create for its youth through the Demographic Transition phenomenon since the benefit (the DD) that results from the transition has to do with how well the economy can capitalize on its increasing working-age population (which encapsulate the youth).

The focus is on Ghana because even though the research is primarily qualitative, the researcher will refer to data of variables like fertility rates, mortality rates, and maybe employment and literacy rates, which will reflect the entire Ghanaian population.

3.3.2 Area of Study

The study area would be in the southern part of Ghana but limited to the Greater Accra region. Accra is the most urbanized city, which is the capital and has the most significant number of citizens (Ghana Statistical Service, 2012).

It is much easier for the researcher to get easy access to the necessary information and data in Accra. For instance, the Regional Institute for Population Studies (which provides knowledge on population, demography, and related sub-fields) is in the city of Accra. Also, due to budgetary and time constraints as the research is done with one

academic year, it would be much more efficient to research Accra and other cities close to Ashesi University, where the researcher resides.

3.4 Sampling Strategy

The purposive sampling strategy was employed in the sampling since qualitative research seeks to find answers to what, how, why, and when questions (Dey, 1993). As cited by Yobo (2013), Merriam (1988, p.48) further added that “purposive sampling is based on the assumption that one wants to discover, understand, gain insight; therefore, one needs to select a sample from which one can learn the most.” Therefore, with purposive sampling, the researcher has a predetermined plan in mind while pursuing the sampling problem.

The population would be subdivided into two groups. The first would be Economists/Demographer. The group will include individuals who lecture, research or have a general interest in the field. The second group would be youth. This group will consist of especially students since they are learned and would be in a better position to share relevant and useful information.

3.5 Data Collection

As the study is about capturing qualitative data, it will be adopting both primary and secondary data collection techniques. Field interviews will be used to collect primary data.

The researcher, with the aid of semi-structured open-ended interviews, administered open questions to Nine (9) economist/demographers/researchers and twenty-

one (21). Dey (1993) recommends that open-ended questions be employed in semi-structured questions for qualitative interviews.

The secondary data collection sources will include journal articles, books, working papers on demographic transition, and DD. These resources will be made available kind cutesy Ashesi University's Warren Library and online databases – EBSCO, Jstor, Emerald, CREDO reference, Oxford journals online, etc. and Google Scholar. The secondary data collection sources, coupled with the primary data collection sources, will adequately assist the researcher in providing a good picture of Ghana's demographic transition and DD.

3.6 Framework for Data Analysis

The method in which the empirical data collected will be analyzed and interpreted is a meticulous search for meaning from a pile of data and information (Hatch, 2002). Researches can make meaning out of their data collected and enabled to communicate it to their readers (Hatch, 2002).

The researcher will employ a qualitative content analysis. It is a term used by Patton (2002) as a "sense-making effort," and it done through three intellectual approaches; data description, analysis, and interpretation (Dey, 1993).

The researcher will further compare responses from empirical data collected with chapter two's (literature review) findings.

3.7 Validity and Reliability

The truthfulness of research justifies its validity, and its consistency justifies its reliability (VanderStoep & Johnston, 2009). Generally, a valid measurement is always

reliable, but a reliable measure is not always valid. For instance, for reliability, under the same circumstances by using the same methods, can produce the same results. But results are not necessarily the same. For validity, they correspond to the real properties in the physical world.

A standard semi-structured questionnaire guide was administered to gear interviews with all participants based on the groups they belong to ensure reliability. Also, to ensure validity, a pilot test was conducted [with one (1) researcher and three (3) students] to ensure that the answers given are relevant to the research question and objectives.

3.8 Ethical Considerations

Since humans are the subject of study, with all respect due to them, the researcher sought the consent of respondents and without any application of force, but in consensus, made them sign a consent form before any form of interaction started. Also, the confidentiality of the respondents' identities was assured.

There was no falsification or manipulation of data to suit the researcher's preference or for the sake of conformance to data employed in the study. Also, results, interpretations, and conclusions were presented as obtained and revealed by analysis.

The researcher obtained permission from the Human Subject Review Committee (the committee has the directive to ensure ethical research conduct) of Ashesi University to carry out the research.

3.9 Limitations and Challenges

Every research has its limitations and potential problems. According to Osuala (2007), that aspect of the research process that hinders the researcher from making generalized comments is limitations.

The researcher had difficulty in accessing the research respondents because of the busy schedules they had to keep up. Also, the researcher expects that the interviewees might not be open to give the necessary information or might even withdraw from the research process.

Since the primary data collection source is based on personal opinions, it might have been subjected to inaccuracies and biases (Biggam, 2008).

Finally, due to time and financial constraints, the researcher could not reach as many people as expected (over 50 responses).

CHAPTER FOUR – RESULTS

4.1 Introduction

The chapter presents results from the fieldwork undertaken to investigate what Ghana can do to gain, maximize, and enjoy the DD. It layout the demographics of the study and reports the preconditions to gain a DD as opined by respondents. It is followed by the case study findings and complimented by a description of results and an analysis of the results against the literature review findings. The potential factors that might have delayed Ghana's chances of harnessing the DD.

4.2 Demographics of the Study

Thirty-one (31) respondents participated in the study. Nine (9) out of the respondents were demographers/economists/researchers, and 21 were students. 14 (7 researchers and seven students) of the respondents were from RIPS, and the 12 (2 researchers and 15 students) of other respondents were from Ashesi University.

4.3 Preconditions for Harnessing the DD

Researchers have unanimously and emphatically pointed out that the benefits of the DD are not automatic and that intentional, proactive, and strategic policies must be implemented for it to be possible. They notice that multisectoral investment policies in areas of education, health, economy, and the government should be implemented.

4.3.1 Investment Policies in the Area of Education

Presently, Ghana's government has implemented the Free Senior High School policy, which aimed at providing all students equal access to senior high school education while relieving parents of the burden of school fees. Income that families used for their

wards SHS education will now be used for other investments they can reap benefits that could help their wards further their tertiary education. Emphasizing on how the free SHS policy would help harness the DD, one economist/researcher opined that;

“It is sad that there are many people still speak against the Free SHS policy implementation. The government has given a great opportunity to many Ghanaian students to attain senior high school education for free, which would not have been possible for most. Education is key because it helps equip the young generation with knowledge, skill, and experience necessary for their growth and economic growth. With the demographic transition, if young people, especially the female child, have access to education, it delays childbearing among them because they spend most of their youthful days in school. In turn, this will help reduce FTR in Ghana. Even though the quality of the free SHS is of worry to many Ghanaians, it has been doing well, thus far”.

Even though respondents were in supports of the Free SHS policy, many raised concerns about the quality of education that is offered in schools as schools are congested with lots of students and its double-track accompaniment. One student respondent at Ashesi University opined that;

“This Free SHS thing is good, but it's really depressing and sad. Do you know what happened to my junior brother after he wrote his BECE? He had a grade of 13 but was denied his first and second choice of school, but his colleague who had grade 16 was given got his first choice of school. Already I know the school selection system was not fair, but with the implementation of the Free SHS policy,

things have become worse. If smart and needy students like my brother are just offered to enter schools that lack the necessary infrastructure and equipment to aid learning, then, I wouldn't call it an education. I don't think Ghana can build and equip its human capital effectively and efficiently through this policy. It might be difficult”.

The respondents do hope that education in Ghana can be improved through the policy. Most respondents encouraged the government of Ghana to equip schools with the necessary materials, tools, and equipment and not just build school buildings. So, that human capital in Ghana is a better fit for the working world. Concerning this s demographer/researcher at the RIPS opined that;

“if you invest in education, then the young adults that are now emerging, hmm.. The boom, that bulge, if you draw a graph, you see a bulge in the graph. It is a symptom of the infusion of large number of young adults into the population if they have education, relevant education. If there have been given skills, employable skills, then they become useful to the economy, we can use them, and they can work. But they can work if there are enough job openings. So, the economy must be up and doing. There must be investment in some key areas, jobs must be created. So that, you know, there would be jobs for these young people. If that is not there, then the boom that you're expecting can turn into a bomb. So, the young ones would not have jobs to do, and so they become idle. And so, any politician can give them fifty cedis, and they can even go and kill because the jobs are not there. And so that is where the problem lies. If you have not given them the requisite training and if the

economy is not expanding enough to absorb all of them, then they become idle hands that could be used to do any dirty work. Then they cause a problem, so the boom becomes a bomb. ...let me add that when it comes to education, more emphasis should be placed on the girl child”.

4.3.2 Investment Policies in the Area of health

As Nduka once said, “a healthy nation is a wealthy nation.” As observed in the literature, most researchers like Todaro and Smith (2011) (see section 1.1.1), Leathers (2017), etc. mentioned that good health in an economy is necessary for efforts to reap the DD because it helps reduce the mortality rate. Most respondents opined that Ghana needs more investments in their health sector. One student at RIPS had an interesting view of Ghana's health sector and the novel Corona Virus Disease 2019 (COVID-19) pandemic that has brought hard times to many countries since November 2019. The student opined that;

“Ghana government increasing investment in the health sector is very necessary. I'm not saying this, not just because of the demographic transition phenomenon. But if the government really wants to help preserve the lives of Ghanaians, then, it must improve health services in Ghana. You just imagine if this coronavirus had broken out in Africa first, we would have all been dead even before we could ask for help. Did you hear from the ministry of information brief that many of us would be put at risk if more people are to be put under ventilators? We don't even have ventilators to accommodate the increasing numbers of affected people.

This is just alarming. We do need healthy people and long lives if we must take advantage of this phenomenon that is happening across countries”.

All the respondents agreed that government expenditure on health is key because not only would the population be healthy, but it would expand their earnings from their productive works. The respondents' opinions coincide with the literature (see section 2.5.2). In terms of the achievability of targets set in policies implemented by the government, a researcher at RIPS opined that;

“but as I said, I haven't really looked in detail all the policies on health but for those concerning adolescent reproductive and sexual health.... from the old one (policies) we have certain targets that we have to meet when it comes to young people, education, employment, health, sexual health and so on. That we, we set those targets but ermm...some are not achievable.... so, let me swerve to health. I think it was in 2016, ermm.. the Ghana Health Service came out with an adolescent reproductive health strategy. I forgot the full name, but they came up with a document to guide how young people would be treated when it comes to their reproductive health.... things set.... the usual providing access to reproductive services and information.... see all these adverts about and from Ghana life about using contraception and this and that. So, Ghana Health Service has been working hard to ensure that reproductive health improves, especially among young people. And so, they do this by providing friendly services and education”.

In the opinion of Kyiamah (2020), as a policy guardian, the Ministry of Health ensures the quality and equity access to health services in Ghana. It is transitioning into a

more diversified and decentralized system since it has become challenging to sustain it on only the limited public (government) funds. The creation of the National Health Insurance Authority (which serves as a central financing channel for the health sector) has assured free health services to young people below age 18, elderly above 60 years, and the poor.

Also, Nana (2020), reported on November 13, 2019, that, the Finance Minister, Mr. Ken Ofori-Atta, highlighted several positive developments in the budget on government programs and policies for the health sector. Nana mentioned that government intends to extend the use of Electronic Medical Records to all Teaching, Regional, District, and Psychiatric Hospitals as well as Polyclinics. And that, in the coming financial year, the Ministry of Health will pursue the health sector decentralization plan and review the Ghana Health Service Act 1996, (Act 525). These new developments would enhance patients' security and experience and give significant autonomy to district hospitals to better serve their communities, respectively.

4.3.3 Investment Policies in the Area of Economy

Most of the respondents commented that having well-skilled, educated, and healthy young people is not enough to help Ghana harness the DD. They believe the economy should create job opportunities and expand to make use of its improved human capital to make profits out of them.

One demographer/Researcher at RIPS opined;

“...If you have not given them the requisite training and if the economy is not expanding enough to absorb all of them, then they become idle hands that could

be used to do any dirty work. Then they cause a problem, so the boom becomes a bomb”.

According to the World Bank (2019), Ghana's economy is expanding and has a promising future (see section 2.5.1).

4.3.4 Investment Policies in the Area of Governance

As cited by Asem, Busse, Osei, and Silberberger (2013), the late and former UN Secretary-General, Kofi Anan, once said, “Good governance is perhaps the single most important factor in eradicating poverty and promoting development.” With regards to governance, an economist/researcher at RIPS opined;

“...governance is where democracy is deepened, and people can have a say in the economy, in their own governance. They would be able to point out the ills in society without fear or favor, and nobody would arrest them or harass them. That kind of thing, you know.”

Unlike researchers like Sachs (2005), who believe the quality of governance is dependent on a large amount of aid, most of the respondents agreed with researchers like Easterly (2006), Acemoglu and Robinson (2012), who opined that the quality of governance is driven from history, social norms or political factors like democracy or leadership.

4.4 Factors that might have delayed Ghana's Chances of Harnessing the DD

Many of the respondents pointed out a few factors they believed might have delayed Ghana Chances of harnessing the DD.

4.4.1 The Decreasing rate at Which Fertility Rate Declines

Almost all the respondents pointed out that fertility rate is one thing that Ghana has not been able to reduce drastically irrespective of the many campaigns on the use of contraceptives, education of the girl child, abolishing early marriages, among others. One student at Ashesi University opined;

“...during my service-learning, I worked with the Antenatal and Family Planning Unit of the Tease Presbyterian Health Center in the Afram Plains. I was involved in activities like registering babies upon arrival, weighing babies, and counseling nursing mothers on personal hygiene. I also had a rare opportunity to witness the removal of a 5-year contraceptive implant (Jadelle/a family planning method) Through questions and answers during the personal hygiene session with nursing mothers, I came to notice that mothers, especially wives, have a low representation. These mothers and wives, through other sessions, have come to know their sexual rights, the importance of family planning among others, and yet cannot stand up to their husbands, whom they see as their leaders. They cannot say no to their husbands when they are not ready for sex, and they also do not practice family planning, which could help them as parents to adequately cater to the needs of their children, among others. Wherever I passed, I saw either a pregnant woman or a nursing mother, and just a few people practice family planning”.

Figures in empirical studies reflect the respondents' concerns relating to the fertility rate in Ghana (see section 2.5.2).

4.4.2 Failure of Institutions to Implement Useful Policies Created

Many of the respondents, especially demographers/economists/researchers, mentioned that Ghana, just like all countries, always come up with reasonable policies and always try to align them to goals such as the SDGs set by international bodies. But the problem is the failure to implement them. A demographer/researcher at the RIPS opined;

“...the governments of Ghana, both the past and present came up with wonderful policies to enable Ghana harness the demographic dividend but failed to implement most of them.... the priority is placed on the policies to implement. For instance, in this crisis of the coronavirus, the government will take measures and implement policies targeted to curb the virus and might ignore other policies equally important, like policies targeted at agriculture, which provides food necessary for healthy living. And even within the health sector, in this time of coronavirus might ignore patients other than the coronavirus affected patients... it's all because of our institutions such as the government, health ministry, among others. lack the capacity to function effectively fully.”

Another opined;

“...from the old one (policies) we have a certain target that we have to meet when it comes to young people, education, employment, health, sexual health and so on. That we, we set those targets but ...some are not achievable... Ghana Health Service has been working hard to ensure that reproductive health improves, especially among young people”.

But it does look like the relevant Ghanaian institutions in charge of ensuring quality healthcare, education, and skill improvement and job creation are not working hard enough or well enough. The respondents' view on weak institutions delaying Ghana's chances of harnessing the DD coincides with the opinions of Bloom et al. (2003) and Lee and Mason (2006) (see section 2.4).

4.4.3. Inadequate Awareness Raising

One of the significant reasons the researcher undertook this study was because there was little to no literature on the demographic transition and dividend phenomenon in Ghana. Through data collection, most respondents confirm that people outside the field of work and study did not know much about the phenomenon. A little over 40% (11) of the respondents had no idea about the phenomenon. One demographer/researcher at RIPS opined;

“... a colleague and I, we did some work with the UNFPA. We did a number of workshops, dissemination workshops trying to let people know what the demographic dividend is all about and the role that they can play to ensure that we as a nation benefits from the dividend...we did all that by way, we were trying to whip people's sentiments and let people become aware. But the most important thing is to let the government become aware. So, that they would put policies in place, which will all work towards making the best out of the demographic dividend. ...it's not easy, it takes planning, long term planning, it's not something you can do just one year or two years, and all these things must be put into place. So that as the years roll by, gradually as a nation, we may reap the dividend”.

Another respondent, a student at RIPS opined that;

“awareness-raising should be made to the policymakers, which is the government. I know that in the demographic transition, the changes in the population age structure make the youthful population more because they make up the working-age population. Yes, the youth should know about the transition. But first and foremost, government attention must be drawn to the benefits that come with the demographic transition. Even if the youth become aware of the transition and dividend, but the government does not implement the necessary policies, the youth can do nothing. So, the demographic transition and dividend must be made known to all aspects of government”.

4.5 The Empirical Case Study Findings

A study done by Utah-Adjibola (2018) explored the DD in SSA using Ethiopia, Ghana, Kenya, Mozambique, Nigeria, Senegal, South Africa. These countries are among those that had a mid/late transition, and Utah-Adjibola (2018) used these countries because they were the only countries with their NTA (National Transfer Account) available. The result and analysis of the case study findings are discussed in this section.

4.5.1 The Data Sources

Data on GDP and fertility were obtained from the UN WPP (World Population Prospects). Data on population growth, life expectancy, and education were obtained from the most recent version (as of 2018 at the time) of Population and Human Capital Stock data provided by the WICD. Data on investment found in the IMF Macroeconomic and

Financial database and data on urbanization and natural resources were from the World Bank databank (Utah-Adjibola, 2018).

4.5.2 Fertility Transition Across Sample SSA Countries

Country	Highest TFR prior to onset of fertility decline			Length of time between highest TFR and 10% decline			Pace of decline - Highest TFR change between 5-yr periods		
	2010-2015			Years to			TFR		
	TFR	Period	TFR	Period	TFR	decline	Period	TFR	Change
Eastern Africa									
Ethiopia	4.59	1980-1985	7.42	2000-2005	6.13	20	2005-2010	5.26	-0.87
Kenya	4.44	1965-1970	8.11	1980-1985	7.22	15	1990-1995	5.57	-0.97
Mozambique	5.45	1965-1970	6.60	1995-2000	5.85	30	1995-2000	5.85	-0.27
Southern Africa									
South Africa	2.40	1960-1965	6.10	1970-1975	5.47	10	1990-1995	3.34	-0.66
Western Africa									
Ghana	4.25	1965-1970	6.95	1985-1990	5.88	20	1990-1995	5.34	-0.54
Nigeria	5.74	1975-1980	6.76	2000-2005	6.05	25	1990-1995	6.37	-0.23
Senegal	5.18	1975-1980	7.45	1990-1995	6.35	15	1995-2000	5.78	-0.57

Table 1: A Snapshot of Fertility Transition Across Sample SSA Countries

Source: Essays on Fertility and The Demographic Dividend in Sub-Saharan Africa: Exploring the Puzzles and Possibilities

From the *Table 1*, there is a significant variation in time on how the sample countries achieved mid-transitional status; thus, a 10% decline from the highest TFR before the start of the fertility transition. It took Kenya and Senegal 15 years, Ethiopia and Ghana 20 years, Nigeria 25 years, and Mozambique 30 years. Interestingly, between 2010 and 2015, compared to other sample countries other than South Africa, TFR in Ghana was much lower.

4.5.3 Sample Means and Percentages

Variable	(1) Ethiopia	(2) Ghana	(3) Kenya	(4) Mozambique	(5) Nigeria	(6) Senegal	(7) S. Africa
GDP per capita growth (%)	4.0	2.7	1.1	4.3	2.6	1.0	0.5
Base year GDP per capita	272.4	707.9	667.3	322.2	1120.3	744.1	4804.2
FDI inflow (% of GDP)	2.1	4.6	0.9	11.7	3.0	1.9	1.2
Natl resource rents (% of GDP)	19.5	12.4	4.1	11.5	25.6	3.9	5.1
Urban pop. growth (%)	4.7	4.0	4.4	4.0	4.5	3.3	2.6
Conflict (1=YES)	0.8	0.0	0.0	0.2	0.5	0.5	0.0
Male (20-39)-Primary Ed (%)	45.3	15.2	31.5	25.8	24.3	25.8	25.3
Male (20-39)-Sec Ed (%)	9.8	47.2	56.0	19.7	37.7	13.7	65.5
Male (40-64)-Primary Ed (%)	24.7	12.7	41.0	21.5	28.3	15.7	38.8
Male (40-64)-Sec Ed (%)	3.2	36.3	32.7	8.5	15.3	10.2	39.8
Fem (20-39)-Primary Ed (%)	25.2	15.7	34.0	15.7	25.0	22.7	23.3
Fem (20-39)-Sec Ed (%)	5.8	36.5	48.8	10.0	24.5	8.8	67.2
Fem (40-64)-Primary Ed (%)	6.3	11.2	35.3	6.8	21.5	11.2	39.8
Fem (40-64)-Sec Ed (%)	0.8	20.7	16.8	2.3	6.8	4.3	36.2
Support ratio	0.7	0.5	1.0	0.7	0.6	0.9	0.7
Growth-effective producers (%)	16.0	16.9	20.2	12.6	13.2	16.2	12.8
Growth-effective consumers (%)	15.5	14.5	16.4	12.4	13.5	15.3	9.8
Life expectancy	55.1	61.4	56.0	48.5	49.2	57.2	55.3
Stall level (0-8)	1.0	1.8	1.8	2.3	2.7	1.8	2.5
Observations	6	6	6	6	6	6	6

Table 2: Sample Means and Percentages

Source: Essays on Fertility and The Demographic Dividend in Sub-Saharan Africa: Exploring the Puzzles and Possibilities

Table 2 provides descriptive means for each of the sampled countries for the variable considerations by Utah-Adjibola (2018). South Africa, with the highest mean GDP per capita (\$4,804.2), is the most developed economy in the sample and Nigeria, the most resource endowed among the sample with mean GDP per capita of \$1,120.3. Unfortunately, Ghana has no outstanding numbers. But in terms of the female educational level categories, Ghana and Kenya follow closely behind South Africa, which dominates in most of the categories.

Concerning the support ratio, taking all the demographic variables is an estimate as to the active producers to consumers. Ghana, with a support ratio of 0.5, is way behind the

other sampled countries. But life expectancy in Ghana (61.4 years) is higher than the other sampled countries.

4.6 The Duty of Stakeholders in Efforts to Harness the DD

It might sound cliché, but it is always true that united, we stand and divided we fall. The respondents pointed out that many stakeholders needed to work together to implement country-driven and result-oriented policies that will drive Ghana towards harnessing the DD. Stakeholders like the government, Ministers, civil society organizations, UN, African Regional Institutions, young people, experts (demographers, economists, researchers, among others), African Diplomats, among others. But the three that were most discussed are the government, experts, and the youth.

4.6.1 The role of government

A good number of the respondents commended both past and present government for their efforts in keeping the youth engage in terms of providing jobs in the from programs like the National Youth Employment program, NABCO, among others. A demographer at RIPS had a new view on government programs targeted to provide jobs for the youth of Ghana. The respondent opined;

“you see what is happening now? This whole idea of NABCO. The government policy which gave jobs to about one hundred thousand Ghanaians. You see, if people are put in the areas, they're trained for, that would be useful. Otherwise, they're just occupying spaces, you know, being given something to take care of themselves and it's not being useful. So, if you're trained as a nurse, and you've put in the classroom to teach, it won't benefit you in any way. But if you're

trained as a nurse, and you've put in a place where you're able to gain more experience, by the time you get your own job, you're ready to work, and work hard to increase productivity."

In essence, the respondents hoped that the government would not just implement sound policies and programs. But government policies and programs targeted at the youth (which make up the working-age population in the demographic transition) should not only help provide them their basic needs. But it should enable them to unleash their potentials, which can help increase productivity sufficiently.

4.6.2 The Role of Experts

Respondents, especially demographers, economists, researchers, among others, mentioned that they had a lot to do in terms of dissemination information on the phenomenon. A good number of them said that all their efforts would go waste if the government does not support them by implementing effective and strategic policies with the phenomenon in mind. A researcher opined;

"... a colleague and I, we did some work with the UNFPA. We did a number of workshops, dissemination workshops trying to let people what the dividend is all about and the role that they can play to ensure that we, as a nation, benefit from the dividend. We did all that by the way; we were trying to whip people's sentiments and let people become aware. But the most important thing is to let the government become aware of it. So, that they would put policies in place, which will all work towards making the best out of the demographic dividend...."

So, respondents elaborated that demographers, economists, researchers, among others, are the mouthpiece for this phenomenon. And need all the support they can get from the government and all other stakeholders, be it in information dissemination or further research on the phenomenon.

4.6.3 The Role of the Youth

In the demographic transition, the youth make up a large portion of the working-age population. And it is the productive activities of the working-age population that gears a country towards attaining the DD. One student respondent made an interesting comment on the state of the youth.

“I really don't know, the youth, I don't know if we have been programmed. Let me say “we” because I'm also part. We have been programmed that it is education that opens certain avenues. So, everybody wants to be in school, and we're not learning skills. I think what we need in Ghana now is skills. In our early days, you draw, then your parents are angry, you sew, then they think is all about studying books or studying law or medicine or studying to become a bank manager, “bla bla bla.” But we need skills. We need people that have the skills and are talented. And that is what is fetching money. Fashion is fetching so much money now, so is art...”

Most of the respondents mentioned that the youth of Ghana strive to build on their talents and skills and not only depend on having a formal education. Most of the respondents pointed out that the youth would be more productive if they enjoy and are confident in the work they do.

CHAPTER FIVE – CONCLUSION

5.1 Introduction

The chapter summarizes the entire research study. It lays out the conclusions drawn from the research and make recommendations on policy strategies the government of Ghana can leverage on and suggestions for further studies.

5.2 Conclusion

Empirical studies show that the demographic transition started in Ghana in the 1980s (see section 1.2). The views of the respondents regarding Ghana's delay in harnessing the DD are due to weaknesses in Ghana's institutions, decreasing rate at which TFR declines, and inadequate awareness on the demographic transition phenomenon.

The institutions are termed "weak" because they are incapacitated and lack the resources that will enable them to implement the right policies they formulate. Even though TFR in Ghana is declining, it is declining at a decreasing rate. Most of the respondents view that it is as a result of low representation of the female in most areas of leadership. Respondents pointed out that inadequate knowledge on the phenomenon on the part of crucial stakeholders made it impossible for them to work together to drive Ghana towards harnessing the DD.

The study revealed that Ghana has put in place measures to meet the preconditions of harnessing the DD. For instance, policies such as the Free SHS is target at improving education, programs such as the Health Insurance targeted at

making health care easily accessible to all, programs such as NABCO aimed at building the economy by creating jobs for unemployed graduates. And Ghana is known to be a democratic society. Its citizens have successfully elected four governments into power since independence signifying its democracy in governance.

Fundamentally, Ghana does stand a chance of benefiting from the demographic transition. However, there are significant challenges, such as a high dependency ratio and a low level of education among the youth compared to other African countries.

5.3 Policy Recommendations

The recommendations were made based on the views of the respondents

5.3.1 A Review of Ghana's Educational System

For mainstream universities (which are also known as government or public universities), leadership courses should be introduced into every academic program so that attributes like volunteerism, entrepreneurship, innovation, among others is instilled into young people even before they leave school.

5.3.2 A Review of the Ghanaian Tax System

Regularize informal sector activities. The government of Ghana should only deal with the heads of groups/associations of workers in the informal sector. For instance, all market traders have leaders, so do dressmakers, hairdressers, shoemakers, among others. Dealing with such workers individually will cost the government more than it will gain because they are many. It more cost-effective if they pay as a group. It will help increase government revenue so that the government can increase its investment in education, health, agriculture, among others.

5.3.3 Implement A law that Mandate Succeeding Governments to Complete Projects Started by Preceding Governments.

Ghana should implement a law that mandates succeeded governments not to ignore developmental projects of preceded governments. Developmental projects like school infrastructure, hospitals, roads, skill development should not be stopped because there is a change in government. The citizens of Ghana cannot make use of uncompleted schools, hospitals, and offices. In the end, it is Ghana that would be losing because the money spent to start the project would go waste, and the citizens of Ghana would be denied the benefits of these projects.

5.4 Limitations of the Study

The researcher's limitations were primarily time and financial constraints. And due to the coronavirus pandemic, the researcher could not reach out to as many respondents as needed.

5.5 Recommendations for further studies

Further research should be;

- Conducted to find out the income implications on the government of Ghana programs and policy responses targeted at reducing fertility and mortality rates.
- Conducted to find out Ghana's chances of experiencing a demographic curse and identify ways to come out of it.

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APPENDICES

A. Consent Form

CONSENT FORM

With your permission, I would be very grateful if you could help by volunteering information for this study. It is purely for academic purposes, and your response will be treated with the strictest confidentiality and anonymity. You are at free will to stop at any moment during the interview. There is no risk in participating, and you will be contributed enormously to the existing body of literature. Thank you for your anticipated cooperation.

For further information, contact;

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Participant's Signature:

Date:

B. Interview Guide

Interview Guide (for economists/demographers in Ghana)

Introduction

This interview guide is designed to solicit views on the state of Ghana in the demographic transition and demographic dividend. The researcher is an undergraduate student at Ashesi University. This research is implemented in partial fulfillment of the requirement for the award of a bachelor's degree in Business Administration.

I would be very grateful if you could help by volunteering information for this study. It is purely for academic purposes, and your response will be treated with the strictest confidentiality and anonymity. You are at free will to stop at any moment during the interview. There is no risk in participating, and you will be contributed enormously to the existing body of literature. Thank you for your anticipated cooperation.

Researcher: Constance Awontayami Azong

Tel: 0549934619

Email: constance.azong@ashesi.edu.gh

Interview Questions

1. What are your thoughts on the government's policies on the demographic transition and dividend phenomenon in Ghana?
2. How does the government regulate the policies regarding demographic transition and dividends?
3. Do you think economists/demographers are playing their role in raising awareness of this phenomenon in Ghana? How?
4. What is your opinion on this phenomenon? Do you think the policies are workable in the Ghanaian economy?
5. What will you consider as some advantages of this phenomenon?
6. Can the Ghana government be blamed for the delay in reaping benefits associated with the phenomenon in Ghana?
7. Which bodies (be it private or public) involvement do you think will help Ghana maximize the benefits of this phenomenon?
8. What challenges do you anticipate Ghana to face in efforts to maximize the benefits of this phenomenon? Could you suggest ways to deal with these challenges?
9. Is there any policy you think could work better in Ghana in maximizing the benefits of the phenomenon which is not in the policy brief?

Interview Guide (for Students)

Introduction

This interview guide is designed to solicit views on the state of Ghana in the demographic transition and demographic dividend. The researcher is an undergraduate student at Ashesi University. This research is implemented in partial fulfillment of the requirement for the award of a bachelor's degree in Business Administration.

I would be very grateful if you could help by volunteering information for this study. It is purely for academic purposes, and your response will be treated with the strictest confidentiality and anonymity. You are at free will to stop at any moment during the interview. There is no risk in participating, and you will be contributed enormously to the existing body of literature. Thank you for your anticipated cooperation.

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Interview Questions

1. Have you heard about the demographic transition and dividend phenomenon?
2. With the state of affairs in Ghana, do you think Ghana is benefiting or will benefit from this phenomenon?
3. As a youth, do you consider this phenomenon worthwhile for the Government of Ghana to invest?
4. What are your thoughts on the policies on this phenomenon?
5. What other policies do you think will work better in the Ghanaian context concerning this phenomenon?
6. Do you think raising awareness of this phenomenon will help increase Ghana's chance of maximizing the benefits of this phenomenon? How?
7. How will you speak for this phenomenon if given the opportunity?