Harnessing the Demographic Dividend to Accelerate

Socio-economic Transformation and Economic Development in Malawi

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Acronyms

AfDB	African Development Bank
AFIDEP	African Institute for Development Policy
AIDS	Acquired Immunodeficiency Syndrome
AUC	African Union Commission
ASFRs	Age Specific Fertility Rates
CPR	Contraceptive Prevalence Rate
CTT	Core Technical Team
DD	Demographic Dividend
DHS	Demographic and Health Survey
ECA	Economic Commission for Africa
ECE	Early Childhood Education
EHP	Essential Health Package
EHRP	Emergency Human Resources Programme
ESARO	East and Southern Africa Regional Office
EY	Ernst & Young
EMIS	Education Management Information System
FDI	Foreign Direct Investment
FP	Family Planning
FP2020	Family Planning 2020
GCI	Global Competitiveness Index
GDP	Gross Domestic Product
GPI	Gender Parity Index
HDI	Human Development Index
HIV	Human Immunodeficiency Virus
HSSP	Health Sector Strategic Plan
IHS	Integrated Household Survey
HPP	Health Policy Project
ICPD	International Conference on Population and Development
IMCI	Integrated Management of Childhood Illnesses
ILO	International Labor Organization

IMR	Infant Mortality Rate
ITN	Insecticide Treated Nets
LFS	Labour Force Survey
MCH	Maternal and Child Health
MGDS	Malawi Growth and Development Strategy
MDG	Millennium Development Goals
MES	Malawi End-line Survey
MIC	Middle Income Country
MK	Malawi Kwacha
MMR	Maternal Mortality Ratio
MOE	Ministry of Education
MoFEPD	Ministry of Finance, Economic Planning and Development
MOH	Ministry of Health
MPRS	Malawi Poverty Reduction Strategy
MTEF	Medium Term Expenditure Framework
NAR	Net Attendance Ratio
NCD	Non-Communicable Diseases
NEET	Not in Education or Training
NER	Net Enrolment Rate
NESP	National Education Sector Plan
NMR	Neonatal Mortality Rate
NSO	National Statistics Office
PCV	Pneumococcal Conjugate Vaccine
PMTCT	Prevention of Mother to Child Transmission
PPI	Post-partum Infecundability
PRB	Population Reference Bureau
SACMEQ	Southern and Eastern Africa Consortium for Monitoring Educational Quality
SMS	Shortage Message Service
SRH	Sexual and Reproductive Health
SSA	Sub-Saharan Africa
TB	Tuberculosis
TEVET	Technical Education, Vocational and Entrepreneurship Training
TFR	Total Fertility Rate

U5MR   Under-five Mortality rate

UN   United Nations

UNDP   United Nations Development Programme

UNECA   United Nations Economic Commission for Africa

UNESCO United Nations Educational, Scientific and Cultural Organization

UNFPA   United Nations Population Fund

USAID   United States Agency for International Development

USD   United States Dollars

VSHD   Venture Strategies for Health and Development

WEF   World Economic Forum

Acknowledgements

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The Ministry of Finance, Economic Planning and Development and the Ministry of Youth, Sports and Culture, co-chaired the National Steering Committee for the study. The Committee comprised representatives of the two ministries and UNFPA. The steering committee provided technical oversight of the project and validated and approved the inception report and the final technical report and advocacy materials.

The Ministry of Finance, Economic Planning and Development and Ministry of Youth, Sports and Culture also co-chaired the Core Technical Team (CTT), which was responsible for the analysis and report writing. The AFIDEP Team (comprising Dr Eliya Zulu, Dr Grace Kumchulesi, Dr Bernard Onyango, Prof Nyovani Madise, Ms Eunice Mueni and Ms Nissily Mushani) provided technical leadership of the study and work of the CTT, and was supported by three experts who were engaged by UNFPA (Dr Ellias Ngalande, Dr Henry Chingaipe, and Dr Richard Mussa). The UNFPA team was led by Ms Violet Kakyomya (UNFPA Country Representative), Dr Rogaia Abdelrahim (UNFPA Deputy Representative) and Mr Bill Chanza. Other members of the CTT included representatives from the Ministry of Education Science and Technology, Ministry of Health, Department of Population Studies (University of Malawi), UNICEF, and UNDP. Generation of the modelling results presented in the report benefitted from technical input from the USAID funded Health Policy Project (HPP) at the Futures Group, USA. The full list of members of the CTT is presented in Appendix I.

The study report incorporated feedback and advice provided at the multi-sector stakeholder workshop held in October 2015 involving representatives from government, development partners, University of Malawi, the private sector and youths.

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Foreword

The population of Malawi is youthful, with almost half (47 percent) aged 18 and below. This youthful population is Malawi's greatest resource. If properly nurtured and supported, the youth will positively contribute to Malawi's socio-economic development.

Malawi is a signatory to the 2013 Addis Ababa Declaration on Population and Development in Africa Beyond 2014, under the theme *Harnessing the Demographic Dividend: The Future We Want for Africa*. The declaration recognises the role of population dynamics in socio-economic transformation and seeks to unleash the full potential of the youth to boost socio-economic development.

In this regard, Malawi commissioned a study on Harnessing the Demographic Dividend to Accelerate Socio-economic Transformation and Economic Development in Malawi. Its main objective was to review demographic and economic opportunities and challenges and assess their implications for the attainment of the country's development aspirations. This report, therefore, outlines the key policy recommendations on how Malawi can harness the potential of her youthful population to achieve socio-economic development.

I sincerely thank UNFPA for the financial and technical support; African Institute for Development Policy (AFIDEP) and Ministry of Labour, Youth and Manpower Development for their technical input; and all other stakeholders who provided thoughts and input in the study. I urge all stakeholders to further provide their support in implementing the recommendations of the study.

Hon. Goodall E. Gondwe

MINISTER OF FINANCE, ECONOMIC PLANNING AND DEVELOPMENT

Executive Summary

Background

The Demographic Dividend is the economic benefit that arises from a significant increase in the ratio of working age adults relative to young dependents that results from a decline in birth rates and death rates. When these rates decrease substantially the age structure of the population shifts in such a way that for a time, there are more working age adults relative to young dependents in the population. This change can accelerate economic growth through the increased productivity of a relatively larger labour force if there are adequate decent jobs for them. Further impetus for economic growth is generated through increased household savings and investment, which result from reduced costs for basic needs since there are fewer children.

The magnitude of the demographic dividend that a country can earn can be enhanced if the change in the age structure is accompanied by sustained investments and improvements in education, skills development, public health, economic growth and job creation, and governance. Analyses of the phenomenal socio-economic development experienced by the East Asian countries like Malaysia, South Korea and Thailand show that a quarter to a third of the economic growth that these countries experienced between the 1960s and the 2000s is attributable to the demographic dividend.

It is critical to underscore that the demographic dividend is neither automatic nor guaranteed; countries must earn it by implementing policies and strategies that will not only accelerate rapid fertility decline, but also ensure that the resulting surplus labour force is well educated, skilled, healthy and economically engaged.

This report summarises results of a study carried out to assess Malawi's potential for harnessing the demographic dividend and the policy options that the country can consider in order to maximise its potential for earning a maximum demographic dividend.

Malawi's Economic Outlook and Opportunities

Malawi is one of the growing numbers of African countries that have achieved sustained economic growth over the past decade. The economy has grown at an average rate of 6.5 percent per year between 2003 and 2014 and Gross Domestic Product (GDP) increased from about USD 7.3 billion in 2003 to USD 13.1 billion in 2014 (constant 2011 International USD) (World Development Indicators, 2015). Malawi is currently categorised as a low-income country with an estimated GDP per capita of USD 397 in 2014. The Malawi economy is primarily dependent on the agriculture sector. Tobacco is the most important cash crop, contributing at least 80 percent to export earnings. The economic growth in the recent past has been driven by the agricultural sector.

Persistent poverty and income inequality are two of the many development challenges facing Malawi. In 2011, the national poverty rate was estimated at 50.7 percent, indicating that over half of the population is poor. Of these, 22 percent was estimated to be ultra-poor, meaning they are unable to meet basic needs including food. Moreover, income inequality is very high with the richest 10 percent of the population having an average per capita income that is nine times higher (MK 140,458 per person per annum) than income of the poorest 10 percent (MK 15,161 per person per annum).

Despite the country's steady economic growth over the past decade, the economy has not been able to generate sufficient decent jobs for the population.[1] The agricultural sector is the largest employer, providing jobs to 64 percent of those in employment. However, only 5 percent of agricultural workers have formal jobs. Underemployment (about 27 percent) is also a major problem in Malawi's labour market, especially among the youth and women. In addition, the productivity of Malawi's labour force is undermined by morbidity, premature mortality and poor economic skills, which stem from low levels of education and insufficient opportunities for skills development.

A key reason for not achieving inclusive, pro-poor and job-enhancing growth is the country's narrow economic base. The agricultural sector is under-developed and susceptible to natural disasters. Diversification, within and away from the agricultural sector, is the key to shifting the country towards sustainable economic growth that creates decent jobs. In addition, the country's unstable macroeconomic environment needs to improve in order to attract both local and international investments. Despite these shortfalls, Malawi's positive economic performance is expected to continue, with real GDP projected to grow by 5.4 percent in 2015.

High Child Dependency Burden and Youthful Population in Malawi

Demographic theories state that when child mortality declines, couples adjust their fertility downwards also. In Malawi, fertility has declined more slowly compared to the steady decline in child mortality over the past three decades. Under-five mortality rates have declined from 234 per 1000 live births in 1992 to 112 in 2010 to 85 in 2014. However, total fertility marginally declined from 6.7 births per woman in 1992 to 5.7 in 2010 to 5.0 in 2014. As a consequence, Malawi's population has grown rapidly and the country has a high child dependency burden of 0.91 dependents for every working age person and 46 percent of the population is under 15 years of age according to the 2008 census. Malawi's population increased from about 4 million in 1966 to about 13 million in 2008. The population is further projected to reach about 41.2 million by 2050, according to estimates from the United Nations Population Division.

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[1]According to the International Labour Organization (ILO), decent work involves opportunities for work that is productive and delivers a fair income, security in the workplace and social protection for families, better prospects for personal development and social integration, freedom for people to express their concerns, organise and participate in the decisions that affect their lives and equality of opportunity and treatment for all women and men.

The 2012 Malawi Population Policy notes that the high child dependency burden in the country is one of the main bottlenecks for attainment of sustainable socio-economic development. High fertility makes it difficult for parents and the government to take care of the needs of children, which leads to poor educational attainment and poor health outcomes and ultimately poor quality of human capital. High fertility also curtails economic productivity because it is associated with low levels of school attendance and low participation in formal economic activities by women. If Malawi's fertility declines rapidly, the country's youthful age structure will change to one dominated by working age adults, presenting a window of opportunity for Malawi to enhance its economic productivity through the demographic dividend.

The Demographic Dividend and Malawi's Long-term Development Aspirations

Malawi's population dynamics and economic opportunities can be turned into a valuable opportunity to boost its potential for attaining the development goals outlined in Vision 2020. Although attainment of Vision 2020 is elusive given that the deadline is less than five years away and the key development challenges that the Vision sought to address have hardly changed, the overall goal of transforming the country into a technology-driven middle-income nation provides a useful vision for benchmarking the country's sustainable development over the next few decades. Indeed, the demographic dividend framework could provide a critical impetus for the country to accelerate economic growth and achieve its long term development if it makes the necessary investments to facilitate rapid fertility decline, promoting good governance and accountability, enhancing human capital development and reforming the economy for high productivity and mass job creation.

Study Objectives and Methodology

The study was commissioned by the Government of Malawi and co-led by the Ministry of Finance, Economic Planning and Development and the Ministry of Labour, Youth and Manpower Development, with participation of other ministries including Gender, Children, Disability and Social Welfare; Education, Science and Technology; and Health. The study was commissioned in partnership with the UN Country Team, under the leadership of UNFPA in Malawi.

The primary objectives of the study are to assess the country's potential to harness the demographic dividend and to identify the policy options that the country can adopt to optimise its chances of harnessing a maximum demographic dividend. The specific objectives are as follows:

1. To review demographic, economic, and human capital trends, challenges and opportunities, and assess their implications for Malawi's development;

2. To quantify the magnitude of the demographic dividend that Malawi can harness under different policy scenarios; and

3. Based on review of current policies and their performance and experience from other countries, recommend policy options that Malawi can adopt in order to maximise the potential demographic dividend that it can earn

The study used a mixed-methodology approach involving a review of the general literature on the demographic dividend, and of population and economic dynamics in Malawi; collation of national demographic and socio-economic indicators from various national and international data sources; and modeling the potential demographic dividend that Malawi can earn under different policy and investment scenarios (using the DemDiv modelling tool developed by the Health Policy Project funded by USAID). The modelling is based on four policy scenarios as shown in the following table.

Scenario	Key characteristics
Status Quo	Slow progress in economic reforms and demographic transition to continue
Economic Emphasis	Maximise Malawi's global economic competitiveness, and productive efficiency, and governance, while maintaining slow progress in the demographic transition
Social Emphasis	Maximum increases in investments in interventions that reduce family size, including Family planning and education, while making modest investments in the economic sector
Combined Scenario	Simultaneous prioritisation of investments in economic reforms as well as prioritisation of Family Planning and education

Key Findings

The study shows that Malawi's demographic indicators and emerging economic opportunities can be turned into a sizable demographic dividend by 2054, which can propel the country to surpass the socio-economic transformation targets envisaged in Vision 2020.

Population and Age Structure Changes

The Status Quo and Economic Emphasis scenarios would lead to a reduction of the current average birth rate from about 5 births per woman to 3.94 children per woman and the total population of 43 million people by 2054. The dependency burden on the working age group will marginally decrease from 0.99 in 2014 to 0.69 in 2054, and the country will continue to harbour a high child-dependency burden.

Under the Social Emphasis and Combined scenarios, the total fertility rate would be 2.12 and the population size 33 million by 2054. These scenarios would result in a marked
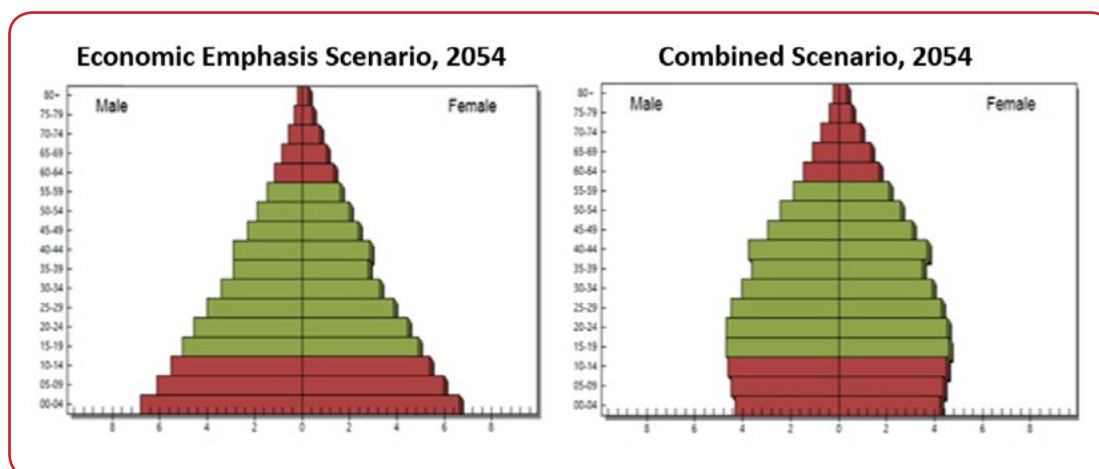
increase in the working age population and a relatively low dependency burden of 0.47. The percentage of the population under age 15 would be 26 percent and the country would have more working age population relative to dependent children.

The Working Age Population and Job-Creation Challenge

All the four policy scenarios will have a significant increase in the size of the working age population aged 15 years and above. Under the Status Quo and Economic Emphasis scenarios, this population will increase from 8 million in 2014 to 28 million in 2054. For the Social Emphasis and Combined scenario, the number will increase to 24 million by 2054. These numbers show that Malawi will face an enormous challenge in creating enough jobs for its rapidly growing labour force.

Currently, Malawi's unemployment rate, which includes people who want a job and are available for work but they are not seeking a job because they have given up hope of finding one (discouraged workers), is estimated at about 20 percent of the population aged between 15 and 64 years. The modelling results estimated that under the Status Quo scenario, the employment gap, defined as the difference between the number of people aged 15 years and above and the actual number of those in employment will rise from the 2014 level of 2.5 million to about 13.4 million by 2054. Under the Social Emphasis scenario the employment gap will be 7.7 million, while the Economic Emphasis scenario will result in a gap of 3.5 million and the Combined scenario will have a gap of 2.7 million. These results show that the government and private sector will need to put more effort in creating jobs for country's growing working age population, even under the Combined scenario.

Change in Economic Growth and Average Incomes

Under the Status Quo scenario, where the prevailing weak performance in both the economic and demographic environments is projected to continue, Malawi would achieve relatively limited economic growth and development. The per capita GDP would

increase from USD 397 in 2014, to USD 549 by 2040, and USD 645 by 2054. Under this scenario Malawi would still not reach middle-income status by 2054.

Under the Social Emphasis scenario GDP per capita would increase to USD 641 by 2030, USD 1,273 by 2040, and USD 2,148 by 2054. Malawi would only transition to middle income status under the Social Emphasis scenario around 2040.

Under the Economic Emphasis scenario GDP per capita would increase to USD 1,123 by 2030, USD 3,137 by 2040, and USD 6,376 by 2054. This would be a sizable improvement from the 2014 income level and the country would graduate to middle income status around 2030.

Under the Combined Scenario, where the country simultaneously prioritises economic, social and development investments to accelerate fertility decline and enhance the quality of human capital, per capita GDP would increase to USD 1,280 by 2030, USD 4,203 by 2040, and USD 9,351 by 2054. This scenario would propel Malawi to the level of per capita income currently enjoyed by upper middle-income countries.

Under this scenario, Malawi would earn a demographic dividend of USD 157 by 2030, USD 1,066 by 2040, and USD 2,957 per capita beyond the income it would earn under the Economic Emphasis scenario. Note that the increase in economic performance and additional economic gain emanating from the demographic dividend accelerates towards the end of the four decades. This underscores the fact that the demographic dividend is a long-term phenomenon and sustained integrated investments in health, education, inclusive job-oriented economic growth, and effective governance will generate multiplier effects that can propel achievement of the socio-economic transformation that Malawi articulated in Vision 2020 in two to four decades.
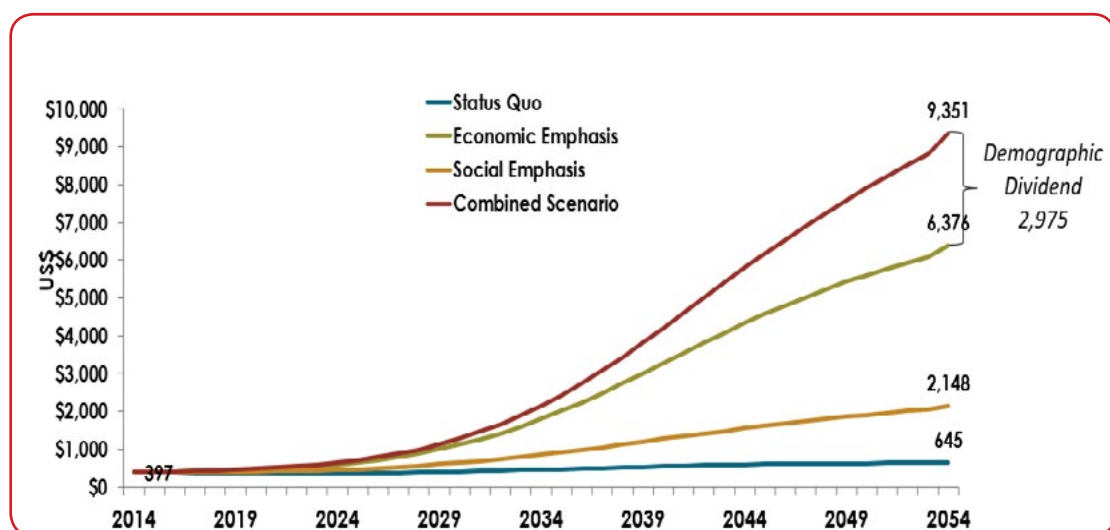
Recommendations for Harnessing the Demographic Dividend in Malawi

Malawi's aspirations to transform into a technologically driven upper middle-income country can massively benefit from the demographic dividend, which is not guaranteed and it is time bound. So the country must act quickly by concurrently prioritising policies and investments to accelerate fertility decline, improve human capital, accelerate economic growth and job creation for its rapidly growing working age population, and enhance good governance and accountability in service delivery and use of public resources. Throughout the consultations that we conducted to validate results and implications of the findings, various stakeholders highlighted the central importance of good governance accompanied by robust performance monitoring and accountability in all the other four pillars and within both the public and non-public sectors in order for the country is to harness a maximum demographic dividend.

The following are key policy options that the country should consider under each of the pillars of the demographic dividend:

1. Accelerating fertility decline to open the window of opportunity for harnessing the DD

To facilitate rapid voluntary decline in fertility, Malawi should ensure universal access to family planning, enhance ongoing efforts to keep girls in school, and reinforce its efforts in reducing child mortality. The country has already made significant progress in use of modern contraception but this has not translated into rapid fertility decline. Priority recommendations for accelerating fertility decline are:

a) Fully implement Malawi's FP2020 commitments and costed family planning strategy to ensure universal access to contraception for all sexually active people who need it, with a focus on reaching young people with contraceptive information and services to delay onset of childbearing.

b) Scale up mass educational campaigns and empower politicians, religious leaders, cultural leaders, the media, and civil society to champion the empowerment of women, the small family size norm and use of contraception. This could include incentives for limiting family size, such as cost-sharing in education (e.g. removal of school fees for the first two children) and health care.

c) Strengthen the coordination and governance of population issues to ensure that they are central to the development processes and is managed in an inter-sectoral manner. This could include the creation of a National Population Council or equivalent vibrant department within the National Planning Commission that the government is planning to institute.

d) Intensify interventions that are helping the country reduce child mortality in order to facilitate fertility decline, with particular emphasis on child nutrition, which is critical for development of cognitive capacity and productivity later in life

2. Enhancing education and skill development to nurture a productive labour force

a) Expand early childhood education facilities to ensure all children attend such schools to improve their aptitude for learning.

b) Increase the number of schools; provide high quality teaching materials and trained teachers to improve quality of education and progression from primary to secondary and tertiary institutions. This could include decentralising the education sector to enhance ownership and oversight by communities.

c) Reform the curriculum and teaching methods to incorporate technical, innovation, problem solving, and entrepreneurship skills in formal curriculum, including revitalisation and scale up of technical model primary schools.

d) Increase the number of facilities, outreach and quality of technical education, vocational and entrepreneurship training (TEVET) institutions to enhance entrepreneurship skills and the productivity of youth who are not in school.

e) Accelerate scale-up of the Community Technical Colleges' Programme by forging stronger ties with the private sector in its design and implementation and by extending it to develop skills of youth in agricultural production and value-addition activities.

3. Sustain a healthy working age population to improve economic productivity

To improve the health and quality of life of the labour force, Malawi should intensify investments in public health services, paying particular attention to the following recommendations:

a) Enhance interventions to address diseases that undermine the productivity of workers including HIV/AIDS, malaria, Tuberculosis, and accidents/injuries.

b) Strengthen key pillars of the health system including training, recruitment, and retention of health workers; supply chain management; health care financing; and use of evidence in decision-making.

c) Enhance health education to sensitise Malawians on prevention of emerging non-communicable diseases and strengthen the capacity of the health care system to manage these diseases.

4. Enhance economic growth and create mass quality jobs for the rapidly growing working age population

a) Create an enabling environment for the growth of the private sector as the engine for job creation, including the promotion of small and medium scale enterprises

(SMEs) by enhancing their management capacities and access to financial services; improving key economic infrastructure to ensure reliable energy, transportation, and communications services.

b) Provide incentives to attract direct foreign investment. This could include tax holidays for new and existing companies that pledge to generate defined levels of jobs for youth.

c) Reform the agricultural sector to enhance its productivity and profitabilit . Key reforms could include diversifying and modernising agricultural activities; promoting value addition and agro-industries; reforming produce marketing systems and pricing policies, and building resilient agricultural systems to minimise climate change effects.

d) Expand investments in other potential areas of comparative advantage such as tourism, fish production, mining, and ICT based service industry.

5. Enhance governance and accountability in use of public resources and efficiency in service delivery

a) Develop long-term national development and socio-economic transformation vision that succeeding governments will operationalise in their manifestos and implement them.

b) Build on the Public Service reform initiative to ensure effective accountability and performance management systems at all levels of government, and in non-public institutions.

c) Strengthen the capacities and coordination of ministries responsible for development planning, education, labour, youth, industry and trade (and how link with the private sector) to enhance sharing of labour market and information and maximise opportunities for job creation and development of skills necessary for the country's labour market.

d) Reinforce anti-corruption institutions and systems and empower citizens, civil society, the private sector, and the media to fight corruption.

e) Enhance decentralisation of decision-making and resource allocation to districts in order to captivate greater citizenly ownership and oversight of development initiatives, particularly social services such as education, health care, and general governance.

1.

Introduction

1.1 Defining the Demographic Dividend

The relationship between population change and economic growth has been studied and intensely debated for decades with a focus on population size and population growth. However, the debate has given insufficient attention to the critical issue of the age structure of the population, which can change dramatically as fertility and mortality rates change. Age structures can have significant effects on economic growth depending on the proportion of children and the elderly (dependents) in relation to the working age population that directly contributes to economic productivity.

The Demographic Dividend (DD) is a temporary opportunity for accelerated economic growth that is made possible by a sustained decline in birth and death rates, which leads to an increase in the ratio of working age population relative to young dependents. The size of the demographic dividend can be augmented if the resulting large working age population is well educated, skilled, healthy and economically engaged. This change in age structure can enhance economic productivity if the working age population and women, whose childrearing roles are reduced due to low fertility, have jobs. Further impetus for future economic growth is generated through increased savings and investments, which result from reduced costs of meeting the basic needs of dependent children.

The age structure of a population, which is principally determined by levels and trends in birth and death rates, has important ramifications for a country's current economic productivity and capacity to generate savings and propel future economic growth.[2] It is difficult for countries with high dependency ratios to develop because the productivity of relatively few workers has to support a large number of children, leaving no money for savings and investment. At the household level, parents find it hard to provide for the health, education and other needs of their children, leading to high child mortality, low quality human capital and less-productive adults. High fertility also curtails economic productivity because it is associated with low levels of female school attendance and low female participation in the formal labour market. Governments spend large amounts of resources on maintaining basic social services, thereby reducing the amount of resources available for investing in major infrastructure.[3]

> **The demographic dividend is a temporary opportunity for accelerated economic growth made possible by sustained decline in fertility and mortality that results in a change in the age structure from one dominated by child dependents to one dominated by economically productive working age adults.**

....

[2]Migration can also affect the age structure of the population since it tends to occur mostly among young adults. For instance, the age structures of most African cities have more working age adults partly because of relatively low fertility but also migration of young adults from rural to urban areas. At national level the effect of migration in shaping age structures is often minimal except in cases where countries with special economic features attract an unusual number of people from other countries.

[3]Similarly, having relatively more non-productive elderly people compared to workers can also have a negative impact on economic growth and development. However, this effect may not be as debilitating if most of the elderly people had good jobs and accumulated savings during their productive ages.

The change in age structure when fertility and mortality rapidly decline presents a one-time window of opportunity for a country to enhance its economic productivity but this can only happen if the labour force is well-educated, skilled, and gainfully employed. The importance of such a transformation in the age structures in propelling economic growth and socio-economic transformation has been well-illustrated by the experiences between the 1960s and 2000s of the emerging economies of East Asia, including Malaysia, South Korea, Singapore, Hong Kong and Thailand. It is estimated that between a quarter and a third of the unprecedented economic growth rates that these countries sustained during this period could be attributed to the demographic dividend (Bloom & Williamson, 1998; Mason, 2001).

The effects of the DD operate in two main phases. The first DD refers to the increase in economic output as a result of the increase in the number of workers, including greater participation of women in the labour force. The second DD refers to the increase in output that is created by the enhanced human capital investments per child and increased savings and investments that households and governments make as a result of reduced costs of caring for children. Having quality human capital and more financial resources can help enhance capital formation and the development of infrastructure, which are critical for attracting capital investment and igniting further economic growth.

1.2   Policy Framework for Harnessing the Demographic Dividend

1.2.1 Learning from the Experience of East Asia and Other Emerging Economies

The demographic dividend is neither automatic nor guaranteed; countries must earn it by implementing policies that will not only accelerate rapid fertility decline, but also ensure that the resulting surplus labour force is well educated, skilled, healthy and economically engaged. Therefore, achieving rapid fertility decline and creating an age structure with more working age adults than dependent children is necessary but not sufficient to harness a maximum DD. Having quality human capital is key to optimising productivity and the associated socio-economic benefits that a country can harness from the demographic transition. Even more crucial, the economy must have the capacity to generate enough decent jobs for the surplus labour force. There should be good governance, accountability and good infrastructure for energy, communications and transport that can support business efficien y and instil confidence in both local and foreign investors. Cultivating a visionary culture of national responsibility and accountability in the use of public resources and delivery of social services will increase the resources available for investment in the development of both human capital and the infrastructure needed to stimulate economic productivity.

> **The demographic dividend is neither automatic nor guaranteed; countries must earn it by implementing policies that will not only accelerate rapid fertility decline, but also ensure that the resulting surplus labour force is well educated, skilled, healthy and economically engaged.**

Economists and Demographers have summarised a number of key lessons that East Asian countries experienced between the 1960s and 2000s (Mason, 2003). Rapid demographic change was a necessary condition for rapid economic growth. Demographic changes created development opportunities that East Asian countries seized. Commitments to reducing rates of childbearing and slowing population growth rates were followed by unprecedented declines in fertility. Among other things, the demographic changes influenced the relative sizes of the dependent and working age populations, the economic roles of women, incentives for savings and investments, and spending on the health and education of children. Governments played an important role in East Asia by facilitating the availability of contraceptive technology, ensuring macroeconomic stability, and formulating policies that attached a high priority to education and health. In short, the developmental impact of the unusually rapid demographic transition in East Asia was substantial, in part, because of the region's effective and comprehensive public policies and programmes. For example, early efforts to tackle high population growth focused on education, persuasion and increased access to modern contraceptives. Singapore adopted a comprehensive set of incentives and disincentives (Yap, 2001), and similar efforts were pursued elsewhere in the region. In South Korea, couples' preference for sons was addressed (Kwon, 2001). The experience from the Asian Tigers shows that the comprehensive reforms that countries need to enact and implement in order to harness a maximum DD can be categorised into the five pillars or 'wheels' illustrated below.

Figure 1.1: Five Policy Wheels for Creating and Earning Demographic Dividend
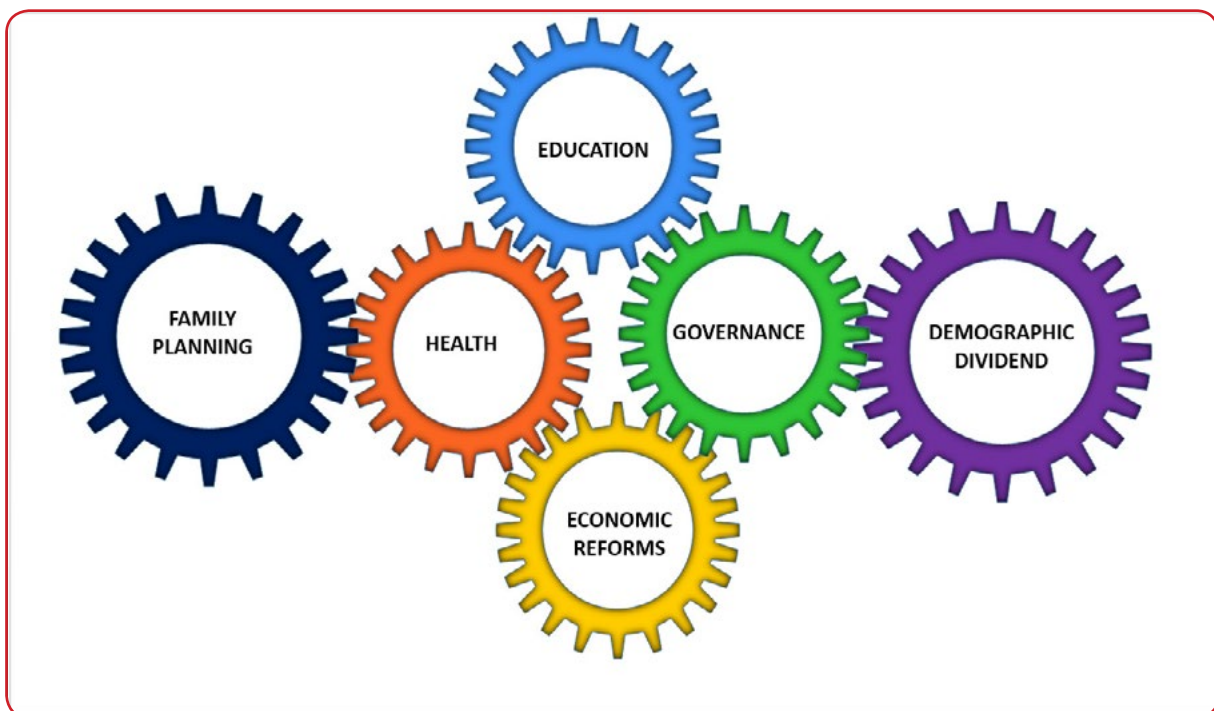
Source: Adapted from African Union Commission and Economic Commission for Africa (AUC & ECA), 2013

Five Policy Wheels for Harnessing the Demographic Dividend

1. Accelerating demographic transition through investments that facilitate rapid fertility decline, including the provision of family planning services and effective contraceptive methods, improved child survival, and female education and empowerment of women;

2. Investing in high-level education to develop a well-educated, skilled and innovative labour force;

3. Provision of high-quality health services to nurture a healthy and productive labour force;

4. Enabling Economic reforms to accelerate economic growth, increase productivity, incentives for household savings, and job creation for the rapidly expanding labour force; and

5. Good governance and accountability measures to ensure the rule of law, efficien y in delivery of services, accountability in the use of public resources, investment in infrastructure, and attract foreign direct investment (FDI).

The five policy pillars or wheels are interrelated; they reinforce each other and should be implemented concurrently in order to optimise the economic prosperity that can accrue from the DD (as illustrated in Figure 1.1). Like cogs in a wheel, each is integral to the success of the rest. If any of the wheels breaks down or is dysfunctional, all the other wheels will be slowed down, thereby limiting the extent to which a country can maximise the demographic dividend. The demographic dividend is not an event that happens or is achieved in a given year – it is an accumulation of economic gains over many years as the population age structure changes and the requisite investments are made in human capital development and job-oriented economic reforms over two to four decades.

Some African countries like Tunisia, South Africa, and Botswana have attained significant declines in fertility but have not harnessed the same level of the demographic dividend that Asian countries such as South Korea and Malaysia earned. This is because they did not make timely, strategic and comprehensive investments in the other sectors. For example, Tunisia's fertility declined rapidly to about 2 births per woman by 2010. However, its per capita Gross Domestic Product (GDP) only rose to USD 4 200 while that for South Korea has reached USD 26 000 (World Bank, 2015). Despite achieving a remarkable fertility decline of 2.7 births per woman in 2011 from 7.1 in 1981, Botswana continues to grapple with the challenge of high and persistent levels of unemployment. Since independence, Botswana has experienced the highest average economic growth rate in the world, averaging about 9 percent per year from 1966 to 1999 and attaining the upper-middle income status. Over this period, Botswana's economic growth was ahead of world's fastest growing economies, including those of the East Asian countries. This impressive economic growth, however, did not generate sufficient decent employment. Unemployment in Botswana is higher than most comparable upper-middle income countries. For example, Botswana's unemployment rate is 17.6 percent, while that of Ghana is 5.6 percent (UNDP, 2014).

1.2.2 Operationalising the Demographic Dividend through the Empower, Educate, and Employ (3E) Framework

Emerging work on how to position the key policies that governments can undertake to harness the demographic dividend groups the five wheels into a 3E policy framework - Empower, Educate, and Employ (World Economic Forum, 2015).

The Empowerment pillar underscores the need to ensure that "all people have the rights and freedoms to define their lives, pursue an education, join the productive workforce, and accrue wealth. These rights include ensuring that there is universal access to family planning to ensure that every pregnancy is planned and couples freely choose when they want to have children and the number of children to have. Furthermore, all young people, especially girls, need to be free from coercive and often premature marriage and childbearing, which undermines their health and potential to receive the education they need to contribute to development as economic actors and entrepreneurs.

The Education pillar ensures that the countries deliver transformative education and learning so that the relatively large working age population has the skills and expertise they need to propel and take advantage of new industries and innovations and meet the skill needs of a competitive private sector, which is critical to accelerate economic growth and job creation.

The Employment pillar highlights the need to create mass quality jobs for the youthful working age population. The economies of East Asia relied on employment opportunities from export-led industries in the manufacturing and service sectors. African countries need to explore economies of comparative advantage that take advantage of the increasing economic and global and regional economic integration and emerging opportunities in information technology and expansive extractive industries to accelerate its economic growth and job creation agenda.

The 3E policy framing was reinforced by the East and Southern Africa Regional Demographic Dividend Symposium that was convened by UNFPA, AFIDEP and the Government of Kenya in August 2015 in Kenya. The meeting brought together 16 African countries (including Malawi) to share experiences and explore ways to develop demographic dividend roadmaps. A follow-up Regional Leadership Summit on the African Demographic Dividend convened by UNFPA in Nigeria in March 2016, brought together technical experts working on the topic and resolved to encourage African countries to use the EEE framework but also include improvements to encompass the crosscutting governance and accountability pillar to ensure accountability in use of public resources and in service delivery. This would ensure that the investments, policies and programmes are Effective, Efficient and Equitable [3E][2].

1.2.3 The Demographic Dividend and Sustainable Development Goals

As the world's attention shifts from the Millennium Development Goals (MDGs) to operationalising and contextualising the Sustainble Development Goals (SDGs), it is pertinent to examine how the demographic dividend can be a vital tool for achieving the SDGs. The demographic dividend paradigm offers a practical integrated framework to help make the SDGs a game changer from

the retired MDGs. In order to achieve the SDGs, countries should ensure a strategic shift from seeking to merely reduce hunger, poverty, disease burden and illiteracy to investments that focus on sustainable wealth creation; ensuring that the vast majority of their people thrive as opposed to barely surviving. The demographic dividend will provide the needed stimulus for achieving these aspirations. In addition to these principles, the SDG framework emphasises preservation of the environment for current and future generations and addressing the impacts of climate change, which are also critical development issues for African countries.

The demographic dividend's special emphasis on turning the youthful population of high fertility countries into valuable human capital and a force for propelling socio-economic transformation and development through the 3Es described above places it at the centre of the SDG agenda. Indeed, given that 75% of Africa's 1.2 billion people are under age 35 (80% of Malawi's population falls in this category), efforts for achieving the SDGs should focus on the continent's youth. Youth can be critical agents for positive socio-economic change if appropriate investments are made to unleash their power to innovate and become productive citizens. However, a large army of unskilled, unemployed, and disillusioned youth can be agents of social unrest, crime, and the increasing emergence of violent extremism. Figure 1.2 shows how the DD wheels link to the 17 SDGs

To maximise the demographic dividend countries should embrace the 3E framework that prioritises policies and investments to Empower, Educate and Employ all citizens. Additionally, these efforts should be grounded on good governance and accountability in use of public resources and in service delivery so that there are ample financial resources and technical capacity to ensure that the investments, policies and programmes are Effective, Efficient and Equitable.

Figure 1.2: Direct and Indirect Links between Demographic Dividend Pillars and Sustainable Development Goals
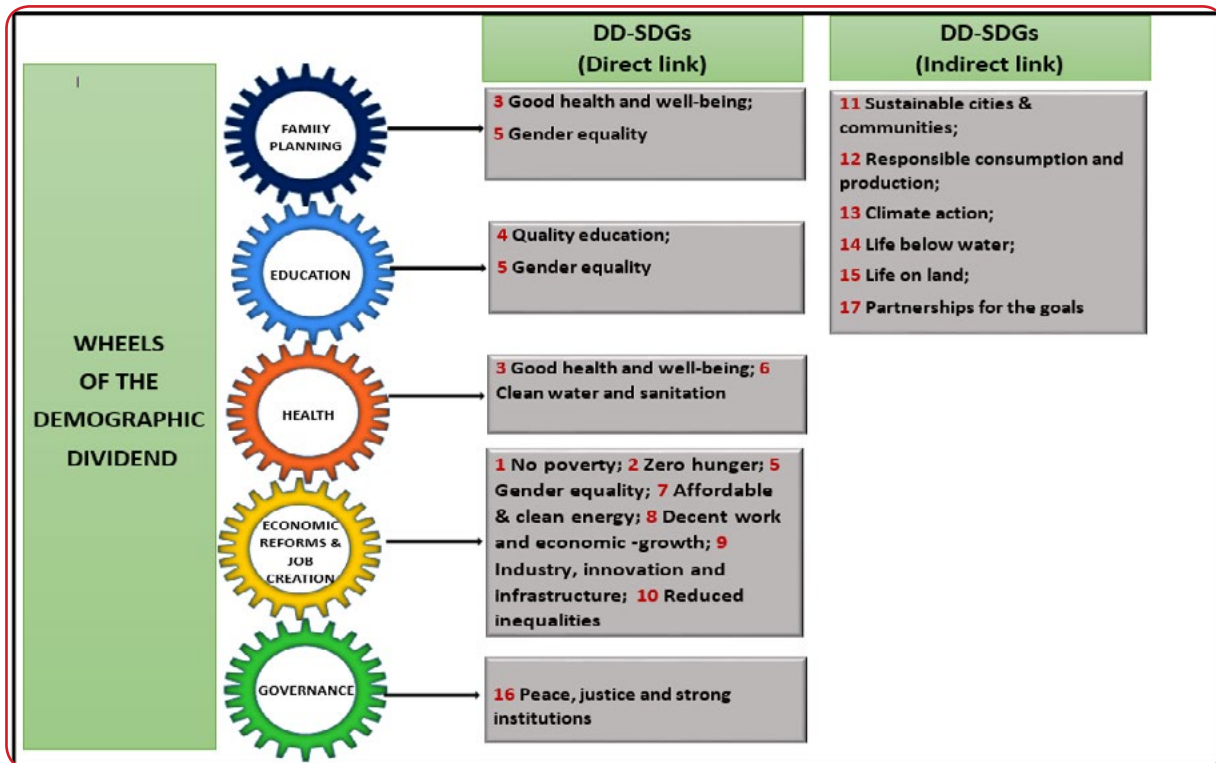
1.3 Objectives of the Malawi Demographic Dividend Study

The Malawi Demographic Dividend study seeks to undertake an in-depth analysis of the country's prospects of harnessing the demographic dividend and to identify policy and investment options that should be adopted in order to earn maximum dividend. The study seeks to help policy makers and other development actors to understand the potential for the demographic dividend in Malawi and come up with appropriate policies and actions to harness it. The analysis will inform the development of strategies and other policy and planning processes, as well as advocacy materials aimed at ensuring full integration of population dynamics and the demographic dividend framework into the development of Malawi's socio-economic transformation agenda.

The study is carried out in the broader framework of the African Union's endorsement of the demographic dividend as a key framework for achieving the continent's Agenda 2063 and national development aspirations. Under the leadership of the African Union Commission and with technical support from the United Nations Economic Commission for Africa (ECA), UNFPA, and other organisations, African countries have signed various protocols to translate the continent's youth bulge into a key demographic dividend for achieving the continent's Agenda 2063. Agenda 2063 seeks to transform Africa into an "integrated, prosperous and peaceful Africa, driven by its own citizens and representing a dynamic force in the global arena" (African Union Commission, 2015). The agenda recognises the role of population dynamics in this transformation

and specifically seeks to unleash the full potential of youth and women to boost socio-economic development. The 2013 Sixth Joint AUC and UNECA Conference of African Ministers of Finance, Planning and Economic Development in Abidjan called for a continent-wide demographic dividend initiative to enable accelerated economic development in Africa. Malawi is also a signatory to the 2013 Addis Ababa Declaration on Population and Development in Africa Beyond 2014, under the theme "Harnessing the Demographic Dividend: The future we want for Africa." In this declaration, countries were called upon to conduct in-depth analyses to understand the demographic dividend and provide roadmaps for what the countries should do to harness it.

The specific objectives of the Malawi Demographic Dividend study are to:

1. To review demographic, economic, and human capital trends, challenges and opportunities, and assess their implications for Malawi's development;

2. To quantify the magnitude of the demographic dividend that Malawi can harness under different policy scenarios; and

3. Based on review of current policies and their performance and experience from other countries, recommend policy options that Malawi can adopt in order to maximise the potential demographic dividend that it can earn.

1.4 Study Methodology and Approach

1.4.1 Project Management

The study was commissioned by the Government of Malawi and co-led by the Ministry of Finance, Economic Planning and Development (MoFEPD) and the Ministry of Youth, Sports and Culture (now Ministry of Labour, Youth and Manpower Development). The MoFEPD led the Steering Committee for the study, which provided strategic and technical guidance and oversight of the project and validated and approved the inception report and the final technical report and advocacy materials arising from the study. Other ministries that actively participated in the study are Gender, Children, Disability and Social Welfare; Education, Science and Technology; and Health. The study was commissioned in partnership with the UN Country Team, under the leadership of UNFPA in Malawi. The African Institute for Development Policy (AFIDEP) was engaged to provide technical leadership for the study.

In order to maximise the participation of a varied range of sectors and stakeholders the study was led by the Ministry of Finance, Economic Planning and Development in close partnership with the then Ministry of Youth, Sports and Culture and the Ministry of Labour, Youth and Manpower Development. The Ministry of Finance and Economic Planning and Development led the Steering Committee for the study, which provided strategic and technical guidance and oversight of the project and validated and approved the inception report and the final technical report and advocacy materials arising from the study.

The Core Technical Team (CTT), which was also led by the MoFEPD, was responsible for overall technical leadership for the study and conducted desk reviews, data collation, further data analysis, modelling, and writing of all study reports and advocacy materials. AFIDEP, in collaboration with UNFPA, led the technical aspects of the CTT's role, including study design, analysis and report writing. Other members of the CTT were the National Statistics Office, Ministry of Education Science and Technology, Ministry of Gender, Ministry of Health, Department of Population Studies (University of Malawi), other UN agencies (e.g. UNICEF, UN Women, and UNDP), Members of Parliament, and civil society organisations. The CTT also included local experts in Development Planning, Education, and Governance to help contextualise the study and champion its findings. The CTT members participated in the modelling workshop to identify national data sets for the study and agree on the model assumptions. Membership of the CTT was broad to help strengthen local technical capacity in undertaking DD analyses and promoting uptake of the generated evidence in decision-making.

1.4.2 Methodology

The study employed the following a combination of methodologies:

1. Review and analysis of policy documents and general literature on the demographic dividend on each of the DD pillars

2. Collation and analysis of secondary data and indicators for each DD pillar

3. Modelling the potential demographic dividend for Malawi under different policy scenarios

4. Stakeholder workshops and consultative meetings with key sectors working on the DD pillars

A combination of these methodologies has been used to provide an overall assessment of the country's chances of harnessing the DD and guide the recommendations made on the policy options the country could adopt to optimise the dividend.

Review of Literature and Policy Documents

The study involved a detailed review of general literature on the demographic dividend in order to identify policies and strategies that have helped some countries to harness the demographic dividend. This also involved reviewing and analysis of national development policy blueprints and sector-specific policy and strategy documents to understand the short-term, medium-term and long-term development goals, key development bottlenecks, recommended solutions, and key development targets. This review was done to understand the challenges, opportunities and the bearing that various factors have towards the country's chances of harnessing the demographic dividend. The study also explored international experiences with policy and programme options that would stimulate progress and possible transformations.

Collation and Analysis of Secondary Data and Indicators

Secondary data and indicators were collated and further analyses of existing data were carried out to fill particular evidence gaps and to establish past trends and the current status of different issues.

These data, along with the understanding of the policy framework, were used to project where Malawi is likely to be and where it should be on various indicators if it is to harness the demographic dividend. National data sets were used; these were supplemented with international data sets from institutions such as the UN, World Bank and ILO where national data were not available. The national data were derived from housing and population censuses, Malawi Demographic and Health Surveys, the Malawi MDG Endline Survey, Integrated Household Surveys, Labour Force Surveys, Economic Reports and other credible sources.

Modelling the Potential Demographic Dividend for Malawi

The DemDiv modelling tool created by the Health Policy Project (HPP) at Futures Group with support from USAID (Health Policy Project & United States Agency for International Development, DemDiv Model, 2014) was used to demonstrate the potential benefits of the demographic dividend and identify the multi-sectoral policies and investments required to achieve them. DemDiv is structured as a two-part model that projects demographic and economic changes with equations to estimate employment, investment and total factor productivity, which feed into the estimation of GDP and GDP per capita. The model is scenario and projection-based, comparing several different possibilities for future development against each other to show the varying benefits of different combinations of investments. It allows the design of multiple scenarios showing how the combined power of policy investments in family planning, health, education and the economy can generate a demographic dividend, which can play a key role in accelerating socio-economic development.

The modelling workshop was attended by about 30 members of the Core Technical Team, comprising of government officials, university scholars, UN staff, parliamentarians, youth representation and NGOs, who had hands-on training and experience in using the DemDiv modelling tool. The group agreed on the modelling period, policy scenarios to be used in the model, reviewed the trends of data and prevailing policy framework and agreed on the baseline and target indicators used in various policy scenarios. The participants also deliberated high-impact policy options crucial to harnessing the demographic dividend for the country. The list of participants in the workshop is provided in Appendix I.

Stakeholder Workshops and Consultative Meetings

The MoFEPD held several meetings to gather stakeholders' input to the conceptualisation and implementation of the study. Feedback on the concept note for the study was garnered through consultative meetings with the Minister of Finance. Economic Planning and Development as well as the Minister of Youth, Sports and Culture. The concept note was also discussed at a workshop attended by permanent secretaries (or their representatives) from Ministries of Finance, Economic Planning and Development; Health, Education Science and Technology; Gender, Children, Disability and Social Welfare; and Youth sports and Culture. The concept note was also discussed by heads of UN agencies in Malawi at a workshop with the United Nations Country Team.

The draft report of the study was reviewed by all members of the Core Technical Team and was deliberated at a multi-sector reference group validation workshop opened by the Minister of Labour, Youth and Manpower Development. The workshop was attended by close to 50 government officials, university scholars, development partners, parliamentarians, youth representatives, NGOs, and private sector representatives. Other consultative meetings with senior government officials from the Office of the Second Vice President, Treasury, Ministry of Education, Ministry of Health, Ministry of Labour, Youth and Manpower Development, Ministry of Health, Ministry of Gender, Children, Disability and Social Welfare, religious leaders, traditional chiefs, and the United Nations Country Team were done to validate the findings and enrich the policy recommendations from the study.

2.

Background: Population Dynamics in Malawi

Malawi's past, current and projected future population characteristics present potential challenges and opportunities for the country's development depending on how they are managed. Due to its high fertility in the context of steadily declining child mortality over the past three decades, Malawi's population increased rapidly from about 4 million in 1966 to about 13 million in 2008 (National Statistical Office, 2009). Malawi has a high child dependency burden (91 child dependents for every 100 working age persons) and 45 percent of the population is under 15 years of age (National Statistical Office, 2010). The total fertility rate marginally declined from 6.7 births per woman in 1992 to to 5.0 in 2014, while under-five mortality rates have declined from 234 deaths per 1000 live births to 85 deaths per 1000 live births over the same period (National Statistical Office & ICF Macro, 1994; National Statistical Office & ICF Macro, 2011; National Statistical Office, 2015).

Another critical demographic phenomenon, which can affect the development trajectory of a country is urbanisation. Although Malawi's population is largely rural – currently only 15.3 percent of the population lives in urban areas – it is one of the fastest urbanising countries in Africa at 5.3 percent per annum, as compared to the continent's urbanisation rate of 3.5 percent per annum (Urban, 2011; National Statistical Office, 2010). According to United Nations' projections, the proportion of the urban population in Malawi is expected to double by 2050 (UN Population Division, 2014).

These population characteristics pose serious challenges to the attainment of the country's long-term development aspirations, but they can also be turned into valuables asset for development if they are planned for effectively. As noted in the second Malawi Growth and Development Strategy (MGDS II) and the 2012 National Population Policy, the high fertility rate and rapid population growth are major constraints to achieving sustainable socio-economic development (Government of Malawi, 2012; Ministry of Economic Planning and Development, 2011). However, if Malawi's fertility declines rapidly, the country's youthful age structure will change to one dominated by working age adults, which could present a window of opportunity for accelerated economic growth and socio-economic transformation through the demographic dividend. Furthermore, given the potential advantages of urbanisation for socio-economic transformation, effective management of the urbanisation process can augment Malawi's potential to harness a maximum demographic dividend.

2.1   The Demographic Transition

A review of the history of population change and its linkages to economic development shows that countries typically pass through four stages of transition, from high birth and death rates to low birth and death rates, as they transform from agrarian economic systems to the industrialised-urbanised economic structures envisaged in Malawi's Vision 2020 (Figure 2.1).

The first stage is characterised by high birth and death rates and low population growth rates. The death rate is high because of high levels of disease, famine, inadequate clean water and sanitation and poor health care. In response to the high death rates, couples have many children to ensure

that some will survive to adulthood. This high fertility stage is characterised by dependence on subsistence farming, high demand for child labour, universal and early marriage, low levels of school enrolment, especially among girls and low demand for and use of contraception.

Figure 2.1: Phases of the Demographic Transition

Source: http://geographyfieldwork.com/ DemographicTransition.htm
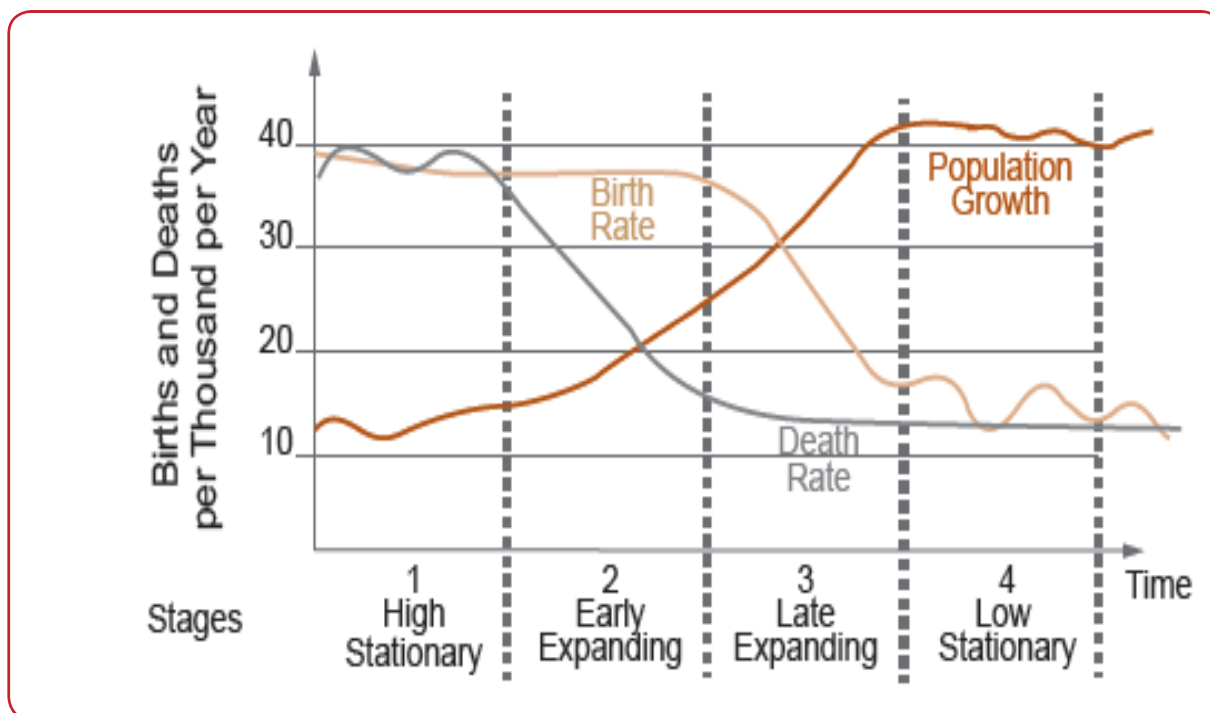
The second stage is characterised by a rapid increase in the rate of population growth. This occurs as a result of a sharp decrease in the death rate due to improvements in nutrition, sanitation and public health. During this stage, the fertility rate also starts to decrease, but less rapidly than the death rate, because high fertility is entrenched in cultural and economic values that take time to change.

In the third stage, the fertility rate also decreases rapidly due to a range of factors including increased access to birth control methods, higher levels of female education and employment, urbanisation, reduced child mortality and declining reliance on child labour. During this stage, the population growth rate remains high but begins to decline.

The fourth stage is characterised by stable population growth due to low birth and death rates, improved control of diseases and improved food security. For a stable population, the average number of births per woman is 2.1 (replacement level), a state where the population is neither growing naturally nor shrinking.

Malawi's transition is under way, with falling mortality rates but persistently high fertility rates, implying that the country is in the early stages of the demographic transition (Figure 2.2). Improving

child survival is a critical precondition for fertility decline because once parents are assured that there is decent chance that their children will not die prematurely, they are likely to want to have fewer children.

Figure 2.2: Past Trends and Current Levels of Crude Birth and Death Rates
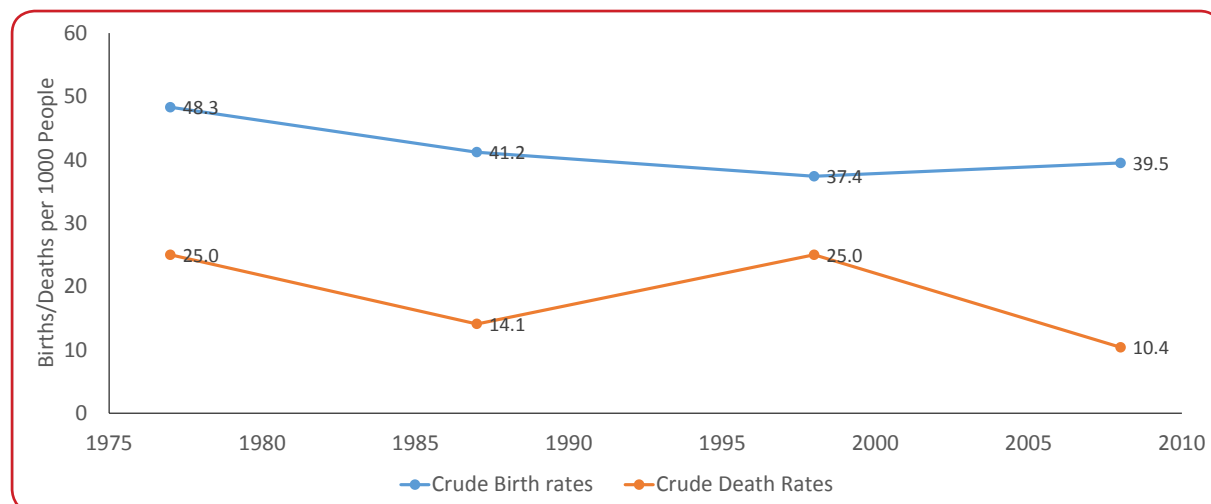
> **Improving child survival is a critical precondition for fertility decline because once parents are assured that there is a good chance that their children will not die prematurely, they are likely to want to have fewer children.**

2.2   Child Mortality Trends

Child survival in Malawi has improved tremendously in the past two decades. As Figure 2.3 shows, the under-five mortality rate (U5MR) declined from 234 deaths per 1000 live births in 1992 to 85 deaths per 1000 live births in 2014. Similarly, the infant mortality rate (IMR) declined from 134 to 53 deaths per 1000 live births over the same period (National Statistical Office & ICF Macro, 2011; National Statistical Office, 2015). These indicators are not far from the country's targets for the fourth Millennium Development Goal for 2015, which were 78 per 1000 live births for U5MR and 45 for IMR. The country projects that U5MR will decline to 66 deaths per 1000 live births by the end of 2015, amounting to a reduction of 70 percent from the 1992 level and an annual reduction rate of 6.7 percent (Ministry of Finance Economic Planning & Development, 2014). These data suggest that Malawi is on track to achieving the MDG 4 of reducing child mortality. Despite this impressive progress in reducing infant and under-five mortality, neonatal mortality rates (deaths occurring in the first month of life) are still high, and account for more than

one third (34 percent) of all deaths occurring in children below five years. In addition, the rate of decline for neonatal mortality rate has been slow compared to that for IMR and U5MR.

Figure 2.3: Trends in Childhood Mortality Rates
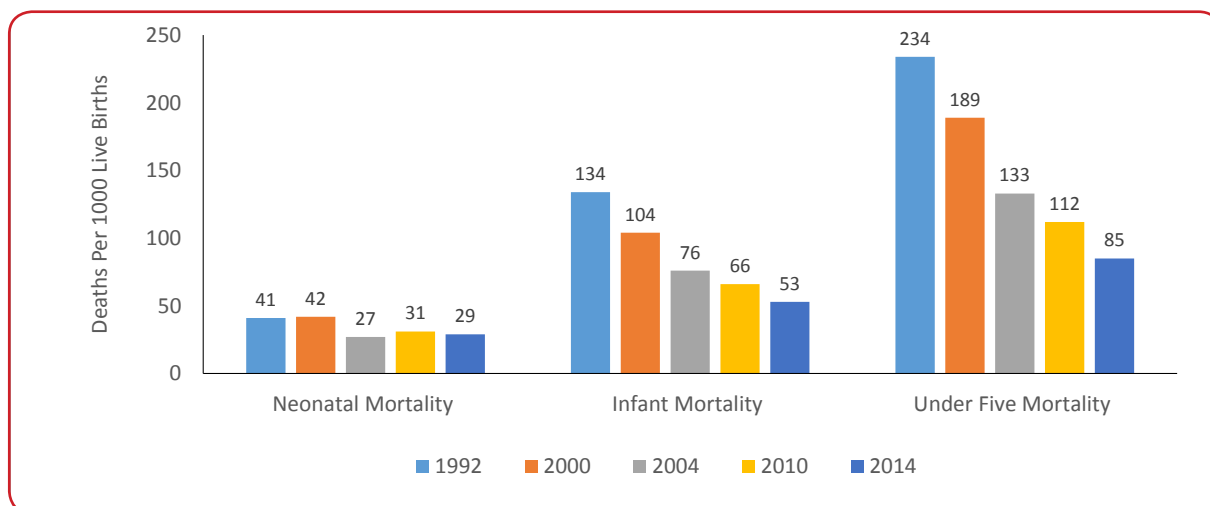
Source: NSO (2015)

At the sub-national level there are variations from the national average. According to the MES 2014, the regional figures show huge differences, with Northern region seemingly better than the Southern and Central regions. For example, U5MR was reported at 92 in Southern region, 81 in Central region and 67 in Northern region, while IMR was 59, 49 and 45, respectively. There was, however, no big difference between rural and urban levels of childhood mortality, except for IMR levels, where urban areas performed worse than rural areas, with 61 and 52 deaths per 1000 live births in urban and rural areas, respectively.

The relationship between childhood mortality rates and mother's education and household wealth is not strongly reflected in the MES 2014. Children born to mothers with higher education achievement are generally associated with lower mortality rates, but the results from MES 2014 appear not to correlate with education. There was no significant difference in U5MR and NMR between children born to mothers with no education and those born to mothers with secondary and higher education. Surprisingly, children born to mothers with secondary and higher education have high IMR (57) compared to those born to mothers without any formal education (48). The U5MR is lowest for children in households in the richest wealth quintile (70 deaths per 1,000 live births) and highest for children in the poorest wealth quintile (98 deaths per 1,000 live births). However, this pattern is not clear for neonatal and infant mortality rates.

The success in reducing child mortality in Malawi has been attributed to the implementation of key health interventions, such as child immunisation, the use of insecticide-treated bed nets to prevent malaria, Vitamin A supplementation, integrated management of childhood illnesses (IMCI), and prevention of mother-to-child transmission of HIV (Lawn & Kerber, 2006; United Nations Children's Fund, 2004; Countdown to 2015, 2015). Also, use of innovative ideas and

technologies to reach children in remote areas with activities that can save their lives has also been cited, including use of mobile phones for fast delivery of HIV test results, allowing for faster treatment for children and use of the rapid Short Messaging Service (SMS) system to record children's births and track patients. Malawi is also a signatory to the Committing to Child Survival: A Promise Renewed (United Nations Children's Fund, 2004), a global effort to stop children from dying of causes that are easily prevented. Attention to newborn health is needed as deaths occurring in the first month of life are not declining at the same pace as those of children older than a month. The Every New-born Action Plan that aims for universal coverage of high-quality care for mothers and new-borns should be fully implemented to address this challenge.

Among the East Asian Tigers and other African countries where fertility has declined, child mortality rates are low compared to Malawi (Figure 2.4). Of the five comparison countries, Malawi has the highest IMR and U5MR. While the IMR in 2015 was 7 and 11 per 1000 live births in Malaysia and Thailand respectively, Malawi had an IMR of 53. Further, Malawi's U5MR of 85 in 2014 compared unfavourably with that of Malaysia (8) and Thailand (13) (UN Population Division, 2015).

Figure 2.4: Comparison of Child Mortality Rates in Malawi and Selected Countries in Africa and East Asia
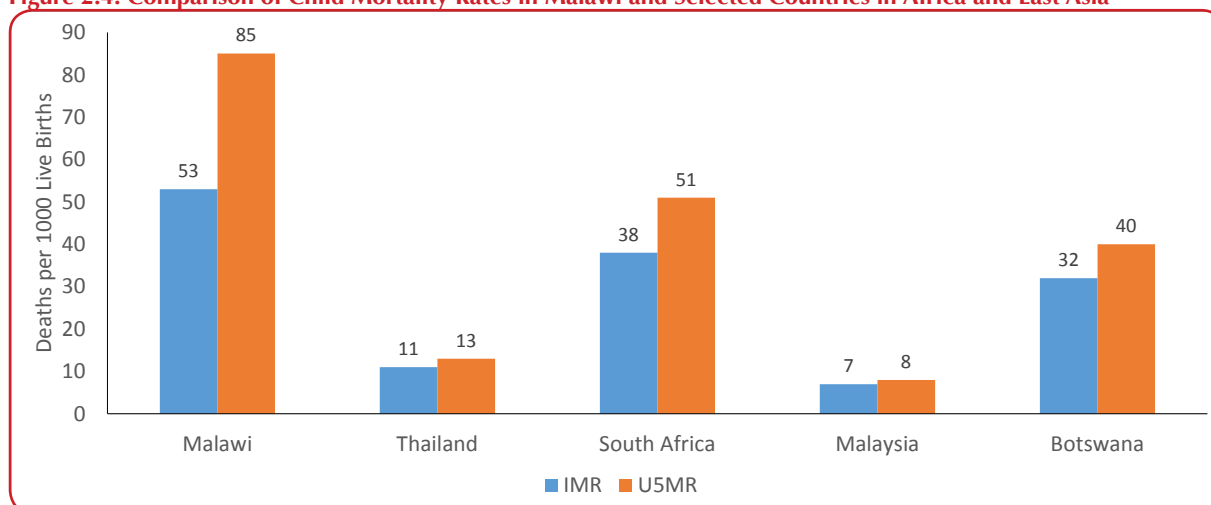
Source: UN Population Division, 2015; NSO, 2015

The high rate of child malnutrition is one of the factors contributing to high levels of childhood illness and mortality. Malnutrition affects children's long-term cognitive development and future productivity. It also is a risk factor for several adult-onset chronic diseases (Pelletier & Frongillo, 2003). The Cost of Hunger study in Malawi confirms the magnitude of the consequences that child malnutrition can have on health, education, and productivity, but most importantly, it emphasises the impact on the national economy. The study estimates that almost 60 percent of the current working age population in Malawi suffered from childhood stunting.[4] This population

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[4]'Stunting' describes low height for age and is often attributable to micronutrient deficiencies in childhood, while 'wasting' describes low weight for height, caused primarily by protein-energy malnutrition.

has achieved, on average, 1.5 fewer years of education than those who did not experience growth retardation.

> **The high rate of child malnutrition is one of the factors contributing to high levels of childhood illness and mortality. Malnutrition also affects children's long-term cognitive development and future productivity. It also is a risk factor for several adult-onset chronic diseases.**

Overall, the study estimates that the total loss in productivity for 2012 represents 9.3 percent of Malawi's GDP, largely due to reduced productivity associated with under-nutrition and nutrition-related mortality (Government of Malawi, 2015). Malawi has continued to grapple with high stunting levels among under-five children. In 2014, 42 percent of children under the age of five years were stunted, compared to 47 percent in 2010. The proportion of children suffering from wasting remained at about 4 percent, whereas the proportion of children underweight increased to 17 percent from 13 percent over the same period (Figure 2.5). The prevalence of stunting was higher in rural areas than urban areas (43 percent compared to 36 percent), with pronounced differences between the richest and poorest households at 48.7 percent and 33.6 percent respectively (National Statistical Office & ICF Macro, 2011; National Statistical Office, 2015).

Figure 2.5: Trends in Nutritional Status of Children below Five Years
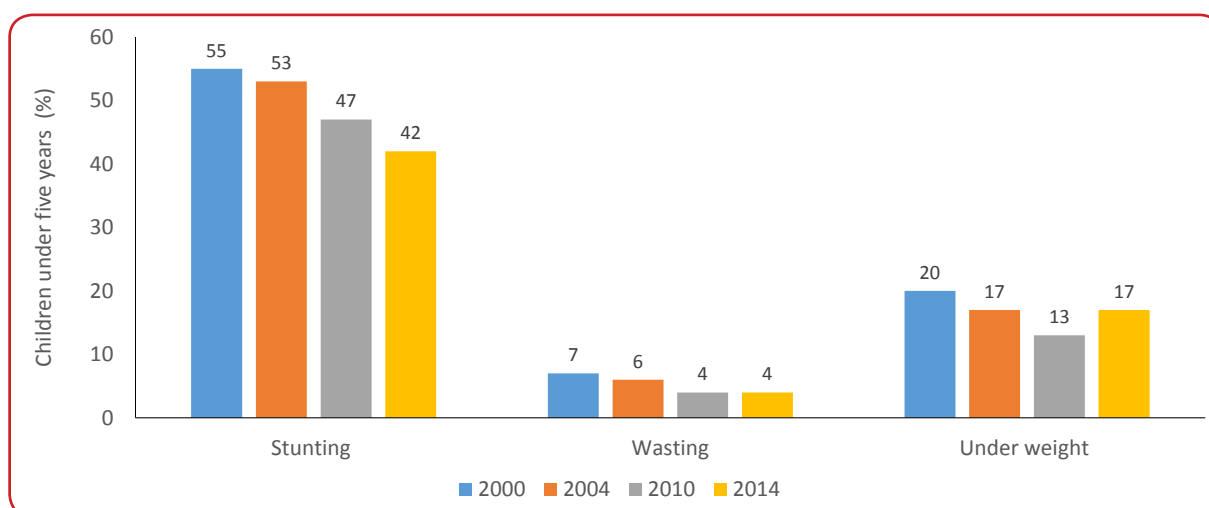
Source: NSO, 2011; 2015

2.3 Fertility Trends

In Malawi, total fertility rate (TFR) declined minimally from 7.6 children per woman in 1977 to 5.0 children per woman in 2014, a decline of 2.6 children per woman over 37 years (Figure 2.6). This may suggest that the impact of family planning (FP) programmes on fertility reduction in Malawi has been minimal. Paradoxically, the contraceptive prevalence rate (CPR) for modern

contraceptive methods among married women increased from 7.4 percent in 1992 to a remarkable 42.2 percent in 2010 and 57.4 in 2014 (National Statistical Office, 2015). The fertility level is thus relatively high when compared to the use of modern contraceptives among married women. In addition, women in rural areas have 2 children more than their urban counterparts, a trend that is observed in all survey years.

Figure 2.6: Trends in Total Fertility Rates
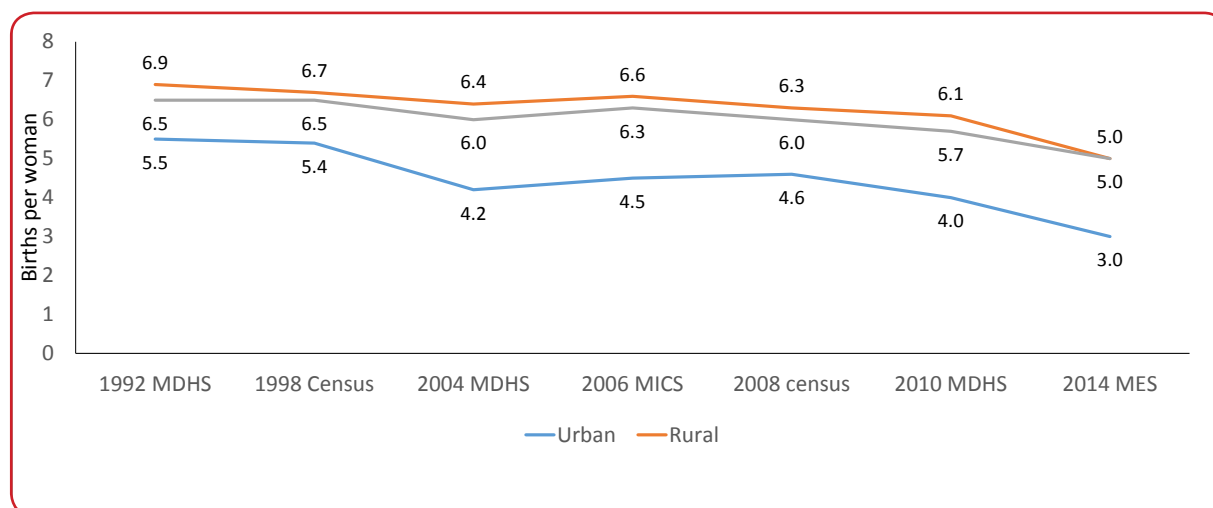
Source: NSO (2009; 2015)

The age-specific fertility rates demonstrate that urban-rural differences are most pronounced for women in the 20-24 age group, with 176 births per 1,000 women in urban areas versus 263 births per 1,000 women in rural areas. Childbearing begins early and peaks at ages 20-24 years (National Statistical Office, 2015). Sub-nationally, the data does not show much variation, but the Northern region has the lowest TFR at 4.5, while the Southern region has the highest at 5.2 births per woman. At the district level, Machinga and Mangochi districts in the Southern region register the highest TFR, at 6.8 and 6.4 respectively, while Rumphi in the Northern Region has the lowest (4 births per woman). Adolescent fertility is also higher in the Southern Region (162 births per 1,000 women) than in the Northern and Central Regions (124 and 126 births per 1,000 women, respectively). As expected, women in the richest households and with highest education attainments have the fewest children, with a huge gap of about three children between women from the wealthiest and poorest households.

Drivers of High Fertility in Malawi

Social norms and culture

The slow decline in fertility has been attributed to the persistence of social norms and cultural practices, which are very pronatalist. Children, especially boys, are important for maintaining the family name, and having many children is perceived to be economically beneficial especially in

later life when children support ageing parents. Early marriages and high school dropout rates among girls, mostly due to teenage pregnancy, also contribute to high fertility. Most fertility surveys have shown that the number of children that men and women want in their lifetime (ideal number of children) is always lower than the number of children they actually have. The gap between the ideal and actual number of children indicates the extent by which fertility level could be reduced if the barriers to family planning were addressed. The 2010 DHS results showed that women in Malawi were having 1.2 children more than they would like to have, namely 4.5 wanted compared to 5.7 observed (National Statistical Office & ICF Macro, 2011). This implies that fertility would decline by about one child if all unwanted births were avoided through effective means of contraception. This gap is more pronounced among the poor and the rural residents, where women from poor households have 2.5 children more than they desired compared to 0.3 of a child among women from wealthiest households (Figure 2.7).

Figure 2.7: Gap between Wanted and Actual Fertility, 2011
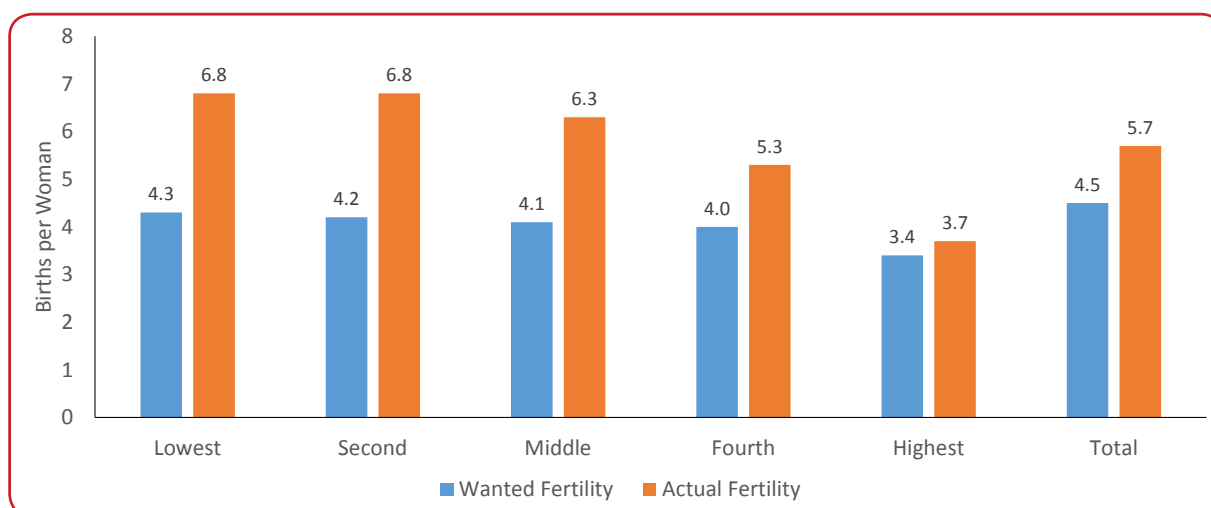
Source: National Statistical & ICF Macro, 2011

Despite the difference between wanted and observed fertility, a wanted fertility rate of 4.5 shows that couples demand large family sizes, and for fertility to further decline, there will be a need for investments in public education on advantages of smaller families, in addition to expanding family planning services.

Use of Contraception

Research evidence shows that family planning is one of the most successful development interventions, with wide-ranging benefits to maternal and child health outcomes, educational advances, economic development and women's empowerment. According to a 2014 analysis by the Guttmacher Institute (2014), if all the women with an unmet need for modern contraception were to receive services, maternal mortality would decline by more than two-fifths, unintended

births and unsafe abortions would drop by 87 percent and the country would save USD 11 million (4.1 billion Malawi Kwacha) annually.

> **Research evidence shows that family planning is one of the most successful development interventions, with wide-ranging benefits to maternal and child health outcomes, educational advances, economic development and women's empowerment.**

Malawi has made considerable progress in improving access and use of family planning. More than half (57.4 percent) of married women were using modern methods of contraception in 2014, with urban and rural contraceptive use being almost at parity (National Statistical Office & ICF Macro, 2011). Use of contraceptives among all women of reproductive age was lower at 33%. Having come from a background of banning provision of family planning in public health facilities in 1969 to the initiative of the child spacing programme in the mid-1980s, the Government of Malawi has received several global awards for achieving impeccable progress in increasing use of modern contraception among married women from about 7.4% in 1992 to 57.4% in 2014.

Effective contraceptive use is a key driver of fertility decline. However, in Malawi's case, the impressive increase in contraceptive use has not resulted in a commensurate decline in fertility as the average number of births per woman has remained high and declined marginally from 6.7 to 5.0 births per woman over the period (NSO, 2011, NSO, 2014). The discordance between the level of contraceptive use and fertility may be indicative of the need to improve quality of family planning services, with particular attention to targeting younger, and unmarried women. A recent study examining contraceptive use dynamics in Malawi suggested that the anomaly may be due to overreporting of contraceptive use during times when women experience use-gaps or temporary discontinuation of injectable contraceptives, which are the most commonly used method (Dasgupta, Zaba, & Crampin, 2015). So, current efforts aimed at promoting long acting reversible and permanent methods of contraception may help address the challenge. Furthermore, the discordance underscores the need to reinforce other socio-economic determinants of fertility, including keeping girls in school. Other reasons that have been posited for this anomaly are that many Malawian women start using contraception after having many children and that the high levels of premarital sex and associated sporadic contraceptive use leads to over-reporting of contraceptive use in the context of the country's relatively high levels of teenage childbearing. More research is needed to unpack the policy and programme oriented factors behind this anomaly and ways of addressing them.

The majority of women use injectable contraceptives (32.2 percent), followed by female sterilisation (10.2 percent) and then implants (9 percent). Among women with 4 or more children, more than one-third were not using any form of contraception (Figure 2.8), while only 30 percent of those using contraceptives were using Long Acting Reversible Contraception. Despite the good progress made in enabling women to access and use contraception, there are marked inequalities

in contraceptive use across regions and socio-economic groups. In the Northern region, 51 percent of married women use modern contraceptives, compared to 63 percent in the central region (National Statistical Office & ICF Macro, 2011).

Figure 2.8: Percentages of Women Currently Married or in Union Using Contraception by Number of Living Children
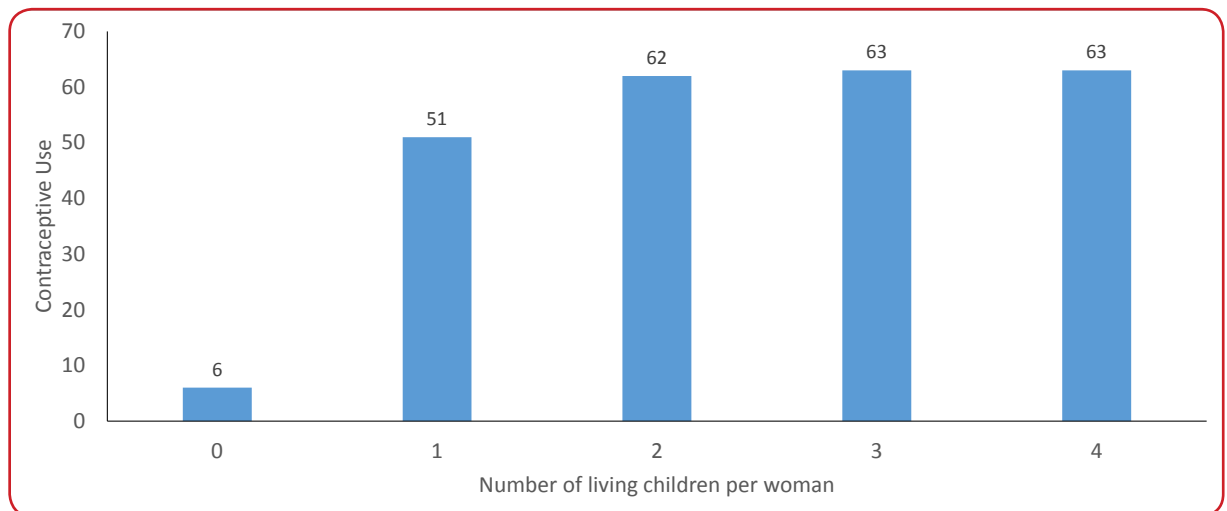
Source: NSO, 2015

Although modern contraceptive use among married women in Malawi is relatively high, about one fifth (19.4 percent) of married women who want to delay or avoid pregnancy are not using an effective family planning method, and are categorised as having an unmet need for effective contraception (National Statistical Office & ICF Macro, 2011). Unmet need is slightly higher among adolescent married women (23 percent) than married women in older age groups. Noticeably, a sizeable proportion of unmet need up to age 34 is for spacing rather than limiting, while the opposite applies among those above 35 years. These unmet need figures show that there is great potential to increase contraceptive use and reduce fertility levels if barriers of access to use of family planning can be addressed. Such barriers include insufficient training of healthcare providers, frequent stock outs of contraceptive commodities and limited choice of methods (Save the Children, 2012).

Gender power relations also influence fertility preferences and contraceptive uptake. Numerous studies have shown that men in developing countries are often the primary decision-makers, yet most family planning programmes focus on women. The challenge of increasing men's involvement in family planning is to identify ways and messages that will most effectively engage them. In Malawi, male-motivator intervention in couples' contraceptive uptake was tried in Mangochi district and findings indicated that men facilitated contraceptive use for their partners as a result (Shattuck et al., 2011).

Female education attainment

Another driver of high fertility in Malawi is the low level of education, particularly among women. When girls stay in school longer, they get married and start childbearing later and ultimately have fewer children. More educated women are also more likely to use contraception and other child survival services than their less educated counterparts. Malawi is facing serious challenges related to school dropout, teenage pregnancies and child marriages. Although national adjusted primary net attendance ratios (NAR)[5] for both boys and girls are comparable and almost universal at 94 percent, only 37 percent of these transition to secondary school (Ministry of Education Science and Technology, 2014). Girls enjoy a slight advantage over the boys in adjusted secondary school NAR, at 18 percent compared to 14 percent among boys (National Statistical Office, 2015). Increasing school attendance and progression for girls is considered to be one of the most effective means to reduce fertility (Basu, 2002), while delaying marriage and child bearing by 5 years can slow population growth by as much as 15 to 20 percent (Bongaarts J., 2009; Bruce J. & E. Chong, 2005). In addition, keeping girls in primary school for one extra year increases their wages by 10-20 percent (Levine et al, 2008)[1]. The 2014 Education Management Information System (EMIS) reports that only 28 percent of the cohort that started class 1 in 2007 survived to class 8 in 2014 (Ministry of Education Science and Technology, 2014). This was a drop from a survival rate of 50 percent in 2008. Marriage and pregnancy were the most common reasons for dropping out among class 7 and 8 girls during the 2013/2014 school year.

> **When girls stay in school longer, they get married and start childbearing later and ultimately have fewer children. More educated women are also more likely to use contraception and other child survival services than their less educated counterparts.**

The northern region, with the lowest adolescent fertility rate had the lowest numbers of school dropouts, while the southern region had the highest numbers. At secondary school level, marriage and pregnancy are also the most common reasons for dropping out of school with form two girls exhibiting the highest rates of pregnancy and marriage. Of the girls that dropped out due to teenage pregnancies, less than 10 percent of young mothers were re-admitted into school. About 30.4 percent of women aged 15-19 years had begun child bearing during the 2014 survey (Figure 2.9), while the number of births per 1,000 women aged 15-19 years was 143. In addition, 28.4 percent of those aged 15-19 were married and half of Malawian women aged 20-49 were married before they reached 18 years. Consequently, Malawian women are exposed to long periods of child bearing, which partly explains the high fertility rate.

....

[5]Adjusted primary net attendance ratio (NAR) is the percentage of children of primary school age attending primary or secondary school.

Figure 2.9: Proportion of Women Aged 15-19 who have Begun Child Bearing
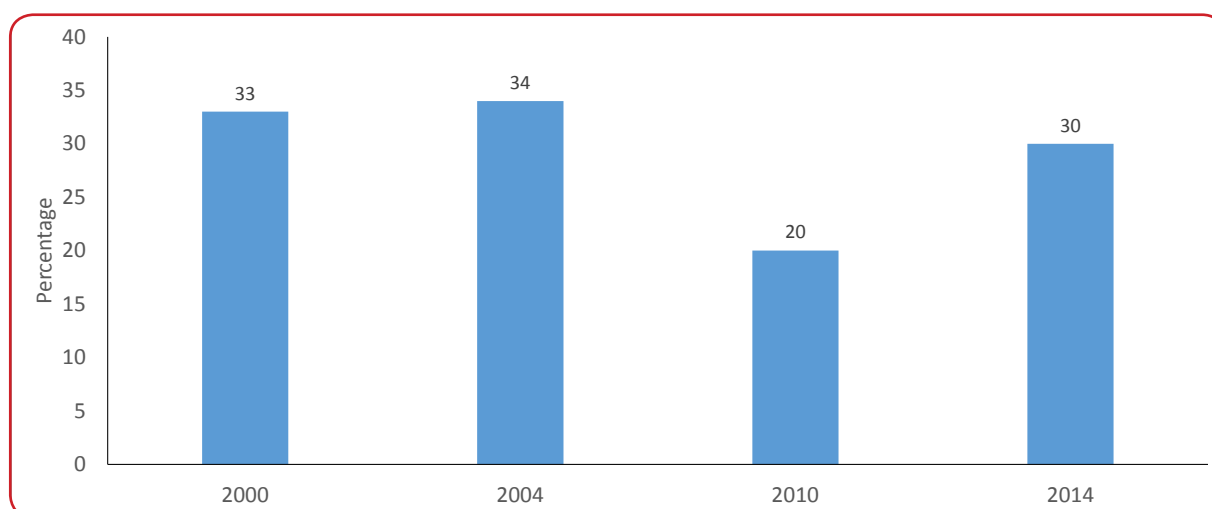
Source: NSO (2011; 2015)

Government's commitment to addressing high fertility and uptake of contraception

The Government of Malawi considers the country's fertility level and the rate of population growth is that they are too high. In its commitment to increase uptake of modern contraception, the government approved the administration of injectable contraceptives by trained health surveillance assistants in 2008 (Government of Malawi, 2008). The Ministry of Health is providing training of health workers to improve the quality of services and expanding contraceptive choice by making sure that there is effective supply chain management and overall family planning commodity security.

In 2012, the government made pledges at the London Summit for Family Planning which include:

• Increase all women modern CPR to 60 percent by 2020 with focus on 15–24 age group

• Develop a comprehensive sexual and reproductive health programme for young people starting FY 2013–14

• Increase coverage of services through the expansion of public/private partnerships, starting FY2013–14

• Increase community participation in family planning services through initiatives like the Traditional Chiefs Committee

• Strengthen forecasting and data management for effective supply chain operation

• Create a family planning budget line in the main drugs budget by 2013–2014

• Demonstrate accountability in utilisation of available resources

• Increase financial allocation for health systems supporting family planning

- Raise the legal age for marriage to 18 by 2014

- Strengthen policy leadership by elevating the Reproductive Health Unit to a full Directorate

- Approve the National Population Policy by December 31, 2012.

The country is committed to fulfilling these pledges, with a number of the pledges already implemented including raising the legal age at marriage, approving the National Population Policy, and creating a family planning budget line. Malawi Parliamentarians approved the first national funding for family planning commodities in 2013. The government allocated 26 million Malawi Kwacha (USD 80,000) for family planning commodities as part of its 2013/14 national budget, the first time that such an allocation has been made from domestic funds instead of donor aid. This decision represents an important government commitment to women's health. Further funding is still required in order to meet the country's family planning needs (Health Policy Project, 2013). In addition, the government should implement fully the costed implementation plan for family planning, which was published in 2015.

2.4 Past and Projected Population Growth

Malawi's annual population growth rate increased from 2.0 percent in 1998 to 2.8 percent in 2008 (National Statistical Office, 2009) and is projected rise above 3 percent up to 2032, thereafter declining to 2.4 by 2050 (National Statistical Office & ICF Macro, 2011). As a result of a persistently high fertility rate, the total population increased from 4 million in 1966 to 13.1 million in 2008 and is projected to have grown to 16.3 million in 2015 (Figure 2.10). The 2010 NSO population projections show that Malawi's population will almost double from 13.1 million in 2008 to 26.9 million in 2030 and more than triple to 45.2 in 2050. This is despite an assumed fertility decline to 4.7 by 2030 and 3.6 by 2050.

Figure 2.10: Population Growth Trends in Malawi 1966-2015 (2015 value is projected)
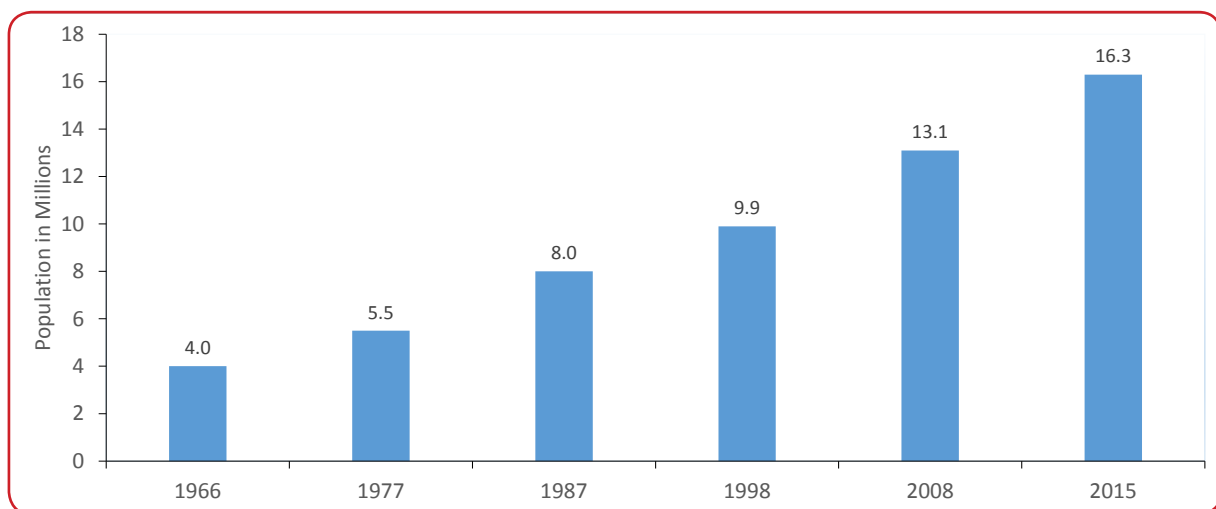
Source: NSO (2009; 2010)

Projected Population Growth

The NSO population projections indicate that population is currently increasing by half a million people per year but will be expanding at one million per year by 2050. Minor differences between NSO and UN predictions are based on slightly different assumptions of how much fertility will change. The UN population projections, using the medium variant assumptions, show that the population will increase to 45.2 million by 2050 and 62 million by 2070 as shown in Figure 2.11 (UN Population Division, 2015). The UN medium fertility variant assumptions predict that Malawi's fertility will decline to 4.2 by 2030, 3.3 by 2050 and 2.76 by 2070. The UN high variant assumptions are that TFR will be about 0.5 higher than the medium variant. Thus, the worst-case scenario is that the population will grow to 74 million in 2050 and to 120 million in 2070 if the country follows the UN high variant assumptions.

Figure 2.11: UN Population Projections for Malawi, 2015-2070
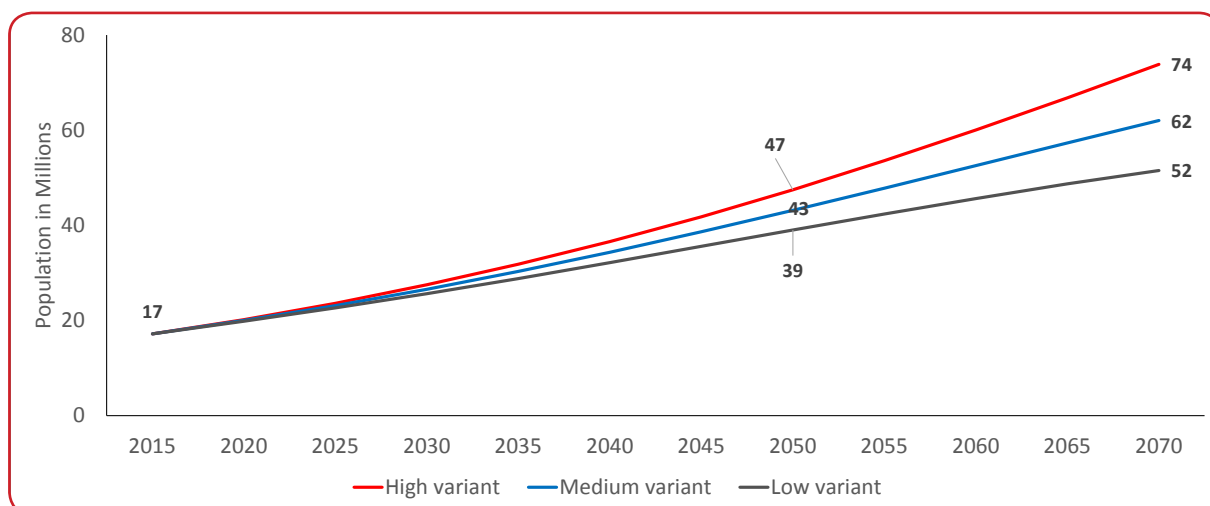
Source: UN Population Division, 2015

Population Momentum

Although the pace of population growth is likely to decline during the next four decades because of anticipated reductions in fertility, Malawi's population size will continue to grow for many decades to come. This is true even if fertility was to decline very rapidly by 2020. This is because of the population momentum, which is a phenomenon of populations continuing to grow for several generations after reaching replacement fertility level (approximately 2.1 births per woman). As existing people start to reproduce, albeit at lower rates of fertility, the population will still continue to grow because of the large population base.

Figure 2.12 shows predictions made by AFIDEP and Venture Strategies in 2011, of the Malawi population size depending on when Malawi attained replacement level TFR. If Malawi attained its replacement fertility level by 2020, its population would continue to grow from 15 million in 2011 and stabilise at around 34 million in 2100 (African Institute for Development Policy &

Venture Strategies for Health and Development, 2012). If the replacement level were achieved by 2040, Malawi's population would continue to grow and would stabilise at about 48 million people in 2115. However, if the replacement fertility level were attained in 2060, the population would stabilise at 68 million around 2130 and at 95 million around 2145 if the replacement fertility level were achieved by 2080. As such, the year when Malawi reaches replacement level fertility will affect both the timing of and level at which the population size will peak. These data show that Malawi is guaranteed to have a large population even if birth rates decline rapidly; the country can turn this big population into a resource for development if proper investments are enacted to make the working age population well educated, skilled, and economically engaged.

Figure 2.12: Projected Effect of Population Momentum on Malawi's Population Size Depending on Year when Replacement Level TFR is Reached
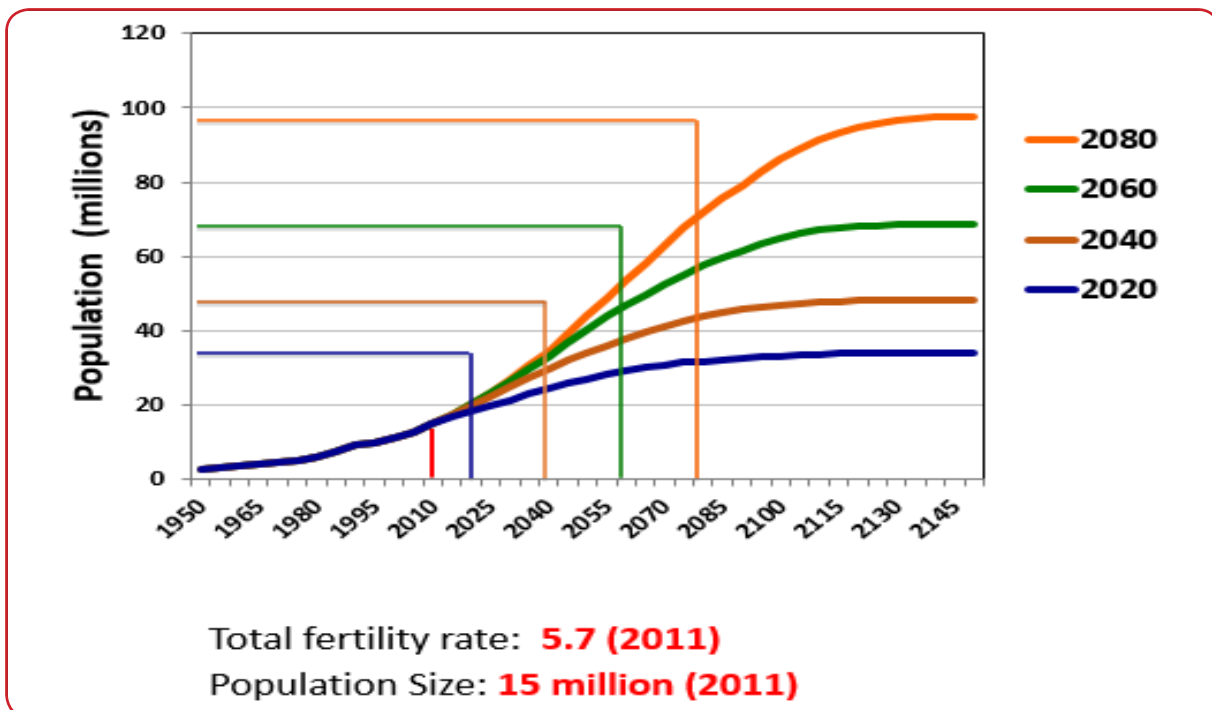
Source: AFIDEP and VSHD, 2012

> **Due to inbuilt population momentum, Malawi is guaranteed to have a large population even if birth rates decline rapidly; the country can turn this big population into a resource for development if proper investments are enacted to make the working age population well educated, skilled, and economically engaged.**

2.5 Population Structure

Figure 2.13 shows the age-sex distribution of Malawi's population, based on the 2008 housing and population census. In 2008 the population was largely youthful, with a median age of about 17 years. The age structure is expected to remain relatively unchanged for the next 25 years, according to the NSO 2010 population projections. A young age structure of a population usually results into high child dependency burden. In 2008, the child dependency ratio was at 90.6, meaning that for every 100 working persons there were 91 dependent children (0-14 years). According to the World Bank, the overall age-dependency ratio[6] in 2014 was 95 per 100 economically active people. In contrast, for the same period, Malaysia's age-dependency ratio was 41, while Botswana's was 56.

The economic burden of youthful population is identified as one of the development challenges in the 2012 National Population Policy (Government of Malawi, 2012). The policy notes that the dependency burden will reduce if mortality and fertility rates decline, shifting the age structure from youthful to one dominated by working age people. The NSO projections assume that fertility will decline to 3.6 births per woman by 2050. Consequently, the median age will increase to 21 years in 2050, while the proportion below 15 years will decrease to 38 percent. The child dependency burden will also decline to 64.5 in 2050. If the fertility declines rapidly than assumed in the NSO projections, the population structure will shift to one dominated by productive, working age people.

Overall, the Malawi National Population Policy clearly articulates what needs to be done to turn from a dependent population to a highly productive one; what remains is to implement the policy alongside other development strategies in order to achieve the socio-economic transformation envisioned in the long-term development framework.

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[6]Child dependency burden is defined in terms of child dependency ratio (the number of children 0-14 years for 100 economically productive people 15-64 years). Age dependency burden includes the older-age dependency ratio (number of people 65+ per 100 economically active people 15-64 years).

Figure 2.13: Malawi's Population Age Structure, 2008
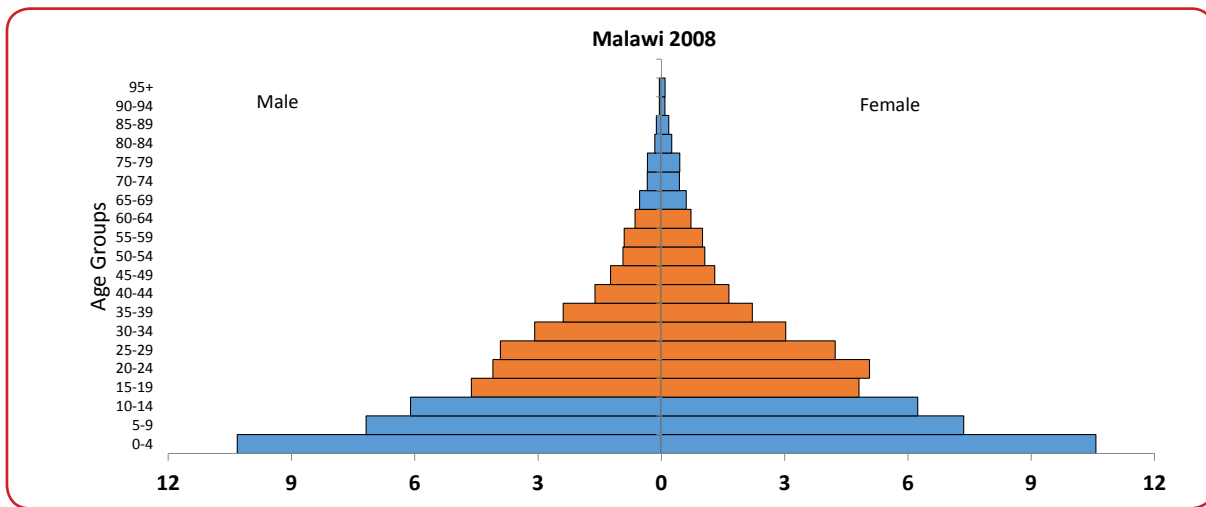
Source: NSO, 2009

2.6 Urbanisation

Another critical demographic phenomenon, which can affect the development trajectory of a country is urbanisation. Malawi's population is largely rural and the country is among the least urbanised sub-Saharan African countries, with only 15.3 percent of the population living in urban areas. However the country is one of the fastest urbanising countries in Africa at 5.3 percent per annum, as compared to the continent's urbanisation rate of 3.5 percent per annum (Urban, 2011; National Statistical Office, 2010). The rate of urban population growth accelerated from 4.7 percent per annum in the period 1987-1998 to 5.3 percent in 1998-2008 period. In 2014, about 2 million people were living in urban areas, and this number is projected to rise to about 12.5 million by 2050 (UN Population Division, 2014).

The rapid increase in the urban population can be explained by several push factors including diminishing rural land holdings, lack of rural off-farm economic opportunities, environmental degradation and natural disasters, all of which contribute to rural poverty. Another increasingly significant factor in urban growth is natural population growth in cities. The UN Urbanisation Prospects in Figure 2.14 show that the urban population will increase to 20 percent in 2030 and to 30 percent in 2050 (UN Population Division, 2014). Even then, Malawi will still be among the least urbanised countries compared to its neighbours.

Figure 2.14: Actual and Projected Growth of Urban Population in Malawi, 1950-2050
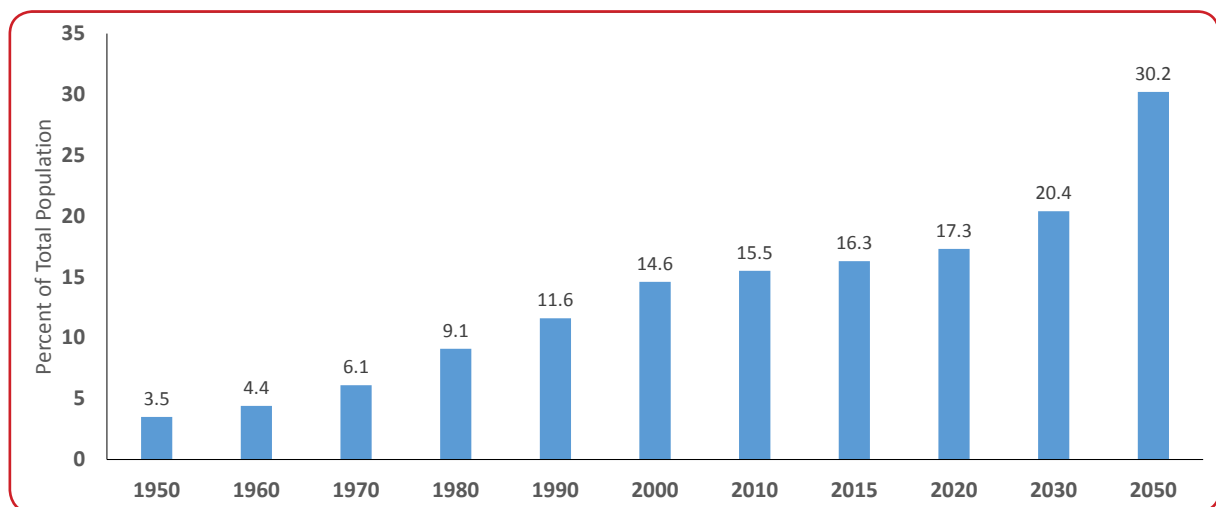
Source: UN Population Division, 2014

The government recognises the challenge of rapid urbanisation and it is part of the key focus under the MGDS II Social Development sub-theme. Increased urbanisation puts pressure on urban infrastructure and services leading to poor living conditions for low-income populations such as those living in urban slums. Indeed, a major concern of the urbanisation process in Malawi is that at least two-thirds of urban residents live in unplanned settlements commonly called slum settlements according to UN-Habitat estimates (UN Habitat (2012)[7]. The urban poor have poor livelihood opportunities, live in overcrowded and poor housing conditions, have poor basic amentieis and social services including drinking water, sanitation, health care, and education (UNICEF, 2008). Furthermore, the 2010/11 Malawi Integrated Household Survey (IHS 3) estimates that 17 percent of the urban population are poor based on the national poverty line (Republic of Malawi, 2012). Figure 2.15 shows that the proportion of the urban population living in slum conditions remained constant from 1990 to 2005, which was followed by a significan upsurge in numbers from 2007 to 2009.

> **A major concern of the urbanisation process in Malawi is that at least two-thirds of urban residents live in unplanned settlements commonly called slum settlements characterised by poor livelihood opportunities, poor housing conditions, overcrowding, inadequate amenities and social services including drinking water, sanitation, health care, and education.**

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[7]Slums differ in size and other characteristics from country to country. However, most lack reliable sanitation services, supply of clean water, reliable electricity, timely law enforcement and other basic services.

Figure 2.15: Proportion of Urban Population Living in Slum Conditions in Malawi
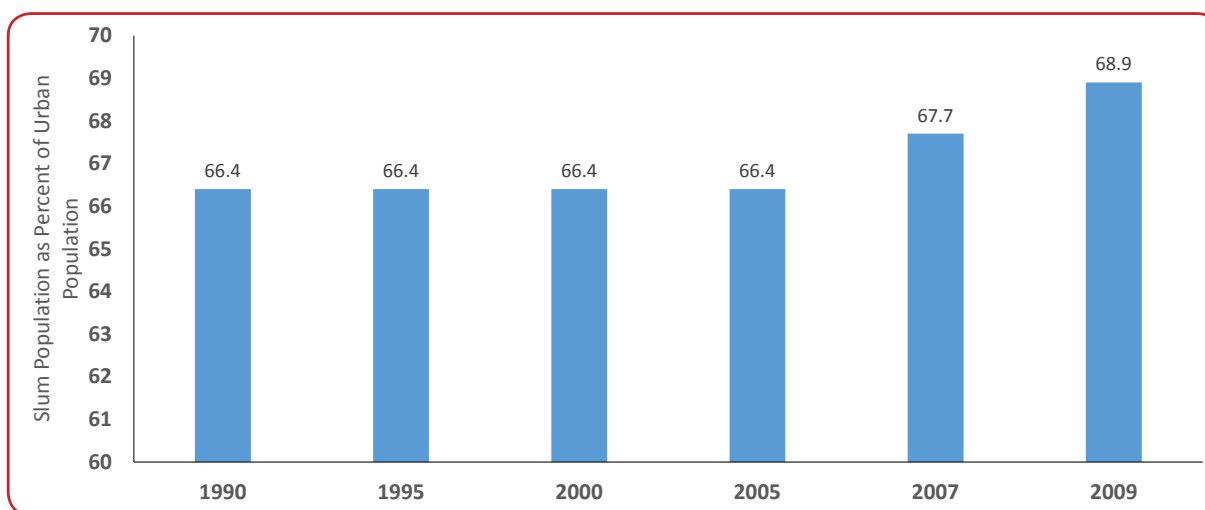
Source: UN-Habitat, 2012

There are economic advantages to urbanisation including an increase in the labour force for the manufacturing and service sectors, increased consumer spending, demand for luxury goods, and household savings. Malawi's population policy also recognises the positive role of urbanisation in the development process and it includes enhanced urban planning as one of its policy outcomes. The MDGS II have the goal of creating a sustainable, economically and socially integrated urbanisation system, with a view to reducing slums. Furthermore, given the potential advantages of urbanisation for socio-economic transformation, effective management of the urbanisation process with recognition of the symbiotic relationship between rural and urban development can augment Malawi's potential to harness a maximum demographic dividend and the attainment of the country's long-term goals.[8]

....
[8]An urban policy is currently in draft.

3.

Background – Human Capital Development in Malawi

3.1   Education and Skills Development in Malawi

Education, training and skills development are the cornerstones of developing a globally competitive and productive workforce that is required to harness the demographic dividend. Studies show that to maximise the economic productive potential of citizens, countries must invest in education at all levels – from basic to tertiary. As argued by ILO (Brewer, 2013), effective skills development requires a holistic approach, with the features described below.

a) Continuous and seamless pathways of learning starting with pre-school and primary education that adequately prepares young people for secondary and higher education and vocational training; that provides career guidance, labour market information, and counselling as young women and men move into the labour market; offers workers and entrepreneurs opportunities for continuous learning to upgrade their competencies and learn new skills.

b) Development of core skills including literacy, numeracy, communication skills, teamwork and problem-solving, entrepreneurial and other relevant skills.

c) Development of professional, technical and human resource skills to capitalise on or create opportunities for high-quality or high-wage jobs.

d) Portability of skills, based firstly on core skills to enable workers to apply knowledge and experience to new occupations or industries and secondly, on systems that codify, standardise, assess and certify skills so that levels of competence can be easily recognised by social partners in different labour sectors across national, regional or international labour markets.

e) Employability (for wage work or self-employment), based on a foundation of core and technical skills, motivation, availability and uptake of training opportunities that are critical for enabling workers to attain decent work, manage change and adopt new technologies.

> **Education, training and skills development are the cornerstones of developing a globally competitive and productive workforce that is required to harness the demographic dividend.**

Though all levels of education are interdependent and should be addressed holistically, evidence shows that tertiary education provides a greater impact on economic growth than lower levels of education attainment (Barro & Lee, 2013; Oketch, McCowan, & Schendel, 2014). For a country to harness the demographic dividend, it not only has to experience a change in age structure that results in more people in the working ages; this potential labour force has to be well-educated and highly skilled.

Malawi has made significant strides in educational attainment since independence, but the current state of education and skills development in the country has room for improvement. The education sector is faced with three critical challenges:

- Low enrolment rates, especially at secondary and tertiary levels and low quality of education: Although participation has steadily increased at all levels, the quality of education received is not at the expected levels. Participation rates are only comparable to the global and regional best performers at the primary school level where the free primary school programme has been in place for the last two decades. School transition rates to secondary school and enrolment rates at secondary and higher levels are low. Enrolment rates for early childhood education are also low, despite its importance to the foundational learning that has a critical bearing on future learning outcomes.

- Equity: School participation and education attainment in Malawi is also marked by disparities on key dimensions such as gender, place of residence and household wealth. In particular, females, rural residents and individuals from poor households find themselves at a disadvantage and this hampers their ability to be productive members of the society.

- Mobility: Related to equity is education mobility. Despite the well-acknowledged role of education as a driver of socio-economic mobility in society, disadvantages in education attainment related to socio-economic status in Malawi have kept education mobility low, with just over one quarter of children likely to exceed their parents' education attainment.

The government of Malawi recognises the importance of education and skills development and hence both Vision 2020 (National Economic Council, 1998) and the MGDS II (Ministry of Economic Planning and Development, 2011) have dedicated sections on the need to improve the quality of basic, technical and vocational education. Vision 2020, published more than a decade ago, stated:

"The challenges are obvious. The school system, from primary through secondary and on to tertiary level needs fundamental change that should start with better access. More pupils should be taught science and commercial subjects; teachers skilled in technical and vocational education and training are needed along with better special education and greater access to quality tertiary education." (National Economic Council, 1998)

More recently, the MGDS II recognises both recent positive developments and persistent challenges and outlines strategies to achieve the goal to improve access to quality and relevant education. Three medium-term expected outcomes are spelled out as: (i) expanded equitable access to education; (ii) improved quality and relevance of education; and (iii) improved management and governance of the education system. These aspirations to improve education in Malawi are further buttressed by several policy documents including the National Education Sector Plan (NESP), 2008-2017.

Malawi needs to faithfully implement the policy actions identified in these critical policy documents to move from the vicious cycle of low skills, low productivity and a low-wage economy, which is incompatible with harnessing the DD, to a virtuous cycle of improved quality and availability of education and training necessary to harness the DD.

School Participation Status in Malawi

Early Childhood Education

Early childhood education between the third and fifth years of life is a critical foundational platform for cognitive development, future learning and skills building (Grantham-McGregor et al, 2007). Like many countries in sub-Saharan Africa, Malawi has in the past invested heavily in primary school education while pre-primary schooling was neglected. The early childhood education sector for a long time lacked a strong policy framework and there was little investment in the pre-primary school infrastructure and personnel. This resulted in low enrolment in pre-primary school with only 39 percent of children between the ages of 3 and 5 years attending any form of organised childhood education programme in 2014. In 2006, the government revised the National Policy on Early Childhood Development, which was supported by an implementation plan (2009-2014) that was developed in conjunction with UNICEF (Government of Malawi & UNICEF, 2009). A review of this policy in 2015 found that the necessary legal and enabling environments for some of the policies (for example universal pre-primary education) do not exist and that monitoring of the policy for non-health outcomes remains poor (World Bank, Malawi early childhood development, 2015).

> **Early childhood education between the third and fifth years of life is a critical foundational platform for cognitive development, future learning and skills building.**

Primary School, Secondary School, and Tertiary Education Participation

In contrast, primary school participation rates in Malawi are quite high. This has mainly been a result of the free primary education policy that was instituted in 1994, which abolished tuition fees in all public primary schools. In addition, wearing school uniforms, which was previously an economic barrier for some children, was no longer compulsory. This saw an unprecedented rise in primary school enrolment rates. For instance, enrolment rates among children in the designated ages for attending primary school, also known as primary school NER, increased from 51 percent in 1990/91 to 77 percent by 1997/98 (Al-Samarrai & Zaman, 2007). The rising trend has continued over the past decade and in a recent survey, the adjusted primary NER[9] for Malawi in 2014 stood at a laudable 94 percent (National Statistical Office, 2015).

Thus, among children of primary school age, Malawi's school participation rates are comparable to those of middle income and advanced economies in East Asia (Figure 3.1). For instance, primary school participation in comparable age groups in Malaysia, Thailand and South Korea stand at 97 percent, 96 percent and 98 percent, respectively (UNESCO, 2015).

....
[9]Adjusted primary NER is the percentage of children of primary school age attending primary or secondary school.

The comparison ends there, since school participation falls off rapidly at the secondary school level, where, among other factors, adequate investments have not been made to support the burgeoning numbers of students who complete primary school. Figure 3.1 clearly illustrates this situation. Whereas enrolment rates of children of secondary school age at this level range from just over two-thirds to near-universal in the three East Asian countries (Malaysia - 69 percent; Thailand - 79 percent; South Korea - 97 percent), less than one-fifth (16 percent) of their compatriots in Malawi are attending secondary school (National Statistical Office, 2015; UNESCO, 2015). The situation gets even worse with only about 8 percent of eligible Malawians attending tertiary institutions.[10]   This gulf in school participation demonstrates the serious challenges that Malawi faces in achieving the socio-economic transformation of the Asian Tigers and other fast-developing nations that are driven by highly developed human capital.

Figure 3.1: School Net Enrolment Rates in Malawi Compared to Select East Asian Countries
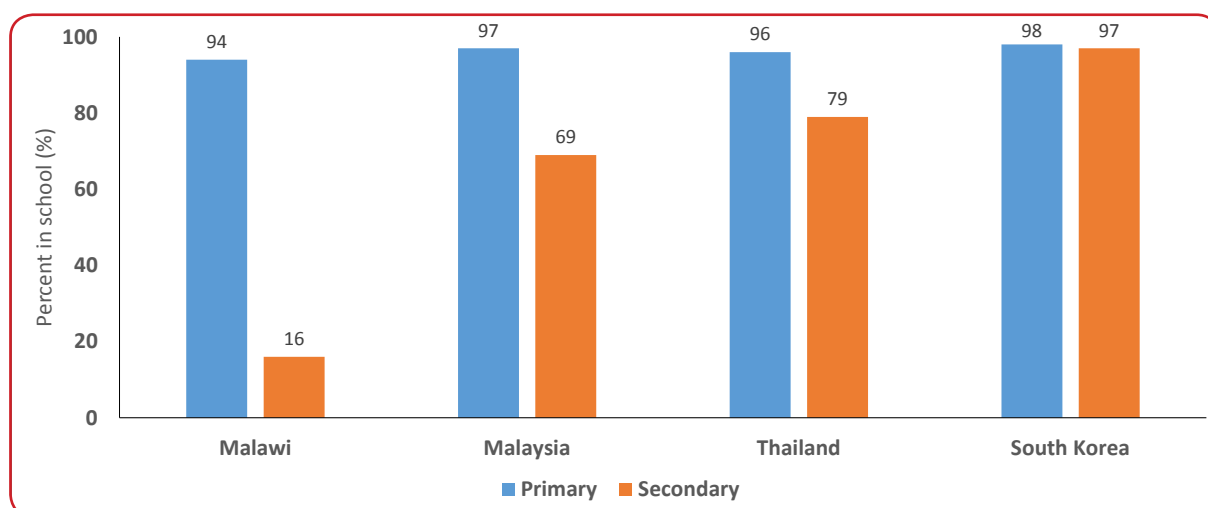
Source: Malawi MDG End line Survey 2014[11]; UNESCO Institute of Statistics, 2015

Education Attainment among Adults

Due to the improvements in access to education over time, adult education attainment in Malawi is improving, albeit slowly. This is reflected in Figure 3.2 (below), which captures aspects of educational attainment among adults in Malawi. These statistics, computed from the second and third Integrated Household Surveys, conducted in 2004/5 and 2010/11, respectively, show that educational attainment levels in Malawi are low. By 2011, more than 30 percent of adults in Malawi were illiterate while the average years of education completed were a paltry 3.9 years.

....

[10]Calculations from the Malawi IHS 3
[11]Malawi school participation rates here are net attendance ratios (adjusted). Adjusted primary NER is the percentage of children of primary school age attending primary or secondary school. Adjusted secondary NER is the percentage of children of secondary school age attending secondary school or higher.

Figure 3.2: Literacy Rate and Years of Completed Education among Adults in Malawi
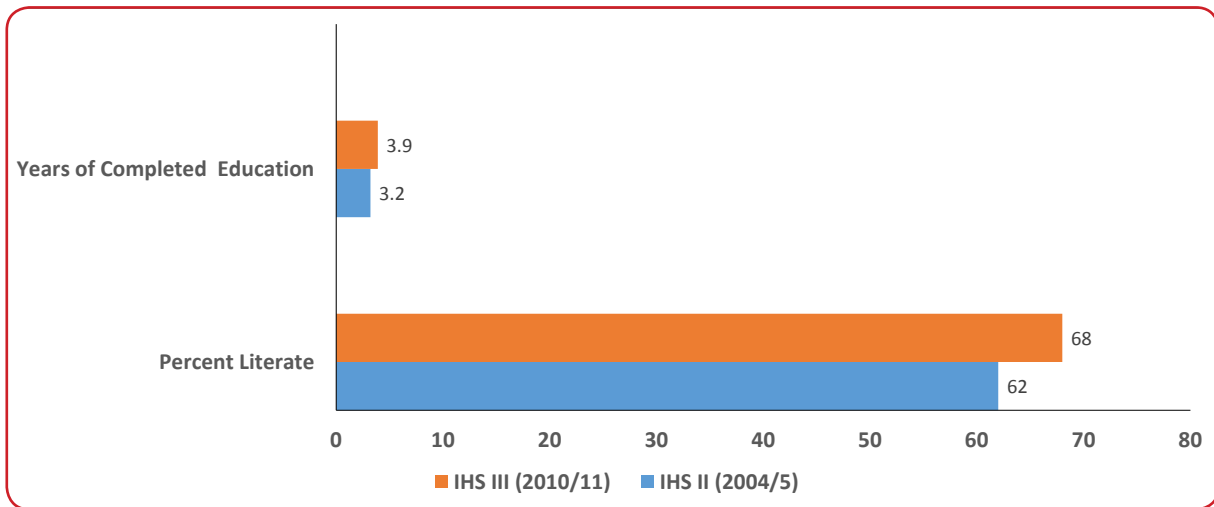
Source: GoM (2006; 2012

Education Quality

The 2014 National Education Policy identifies some of the persistent challenges facing school enrolment in Malawi. At primary school level, the introduction of the free primary education program has, to date, not been matched by requisite investments to accommodate immense pressures brought about by the high levels of enrolment. This has put strain on the distribution of teaching and learning materials, the availability of adequately qualified teachers and classroom space. For instance, while countries such as Malaysia and South Korea had pupil-teacher ratios in 2014 of 12 and 19 respectively (World Bank, 2015), the pupil-teacher ratio in Malawi in 2014 at primary school level was 74; when adjusted for trained teachers, 78 (Department of Education Planning, 2014).

The participation rates at secondary level are seriously undermined by the lack of commensurate expansion of secondary school facilities to cater for expected higher demand borne out of increased primary school enrolment under the free primary education program. Education statistics show that in 2014 there were an overwhelming 896,110 repeaters and 186,285 dropouts at primary school level, while there were 16,744 repeaters and 17,608 dropouts at secondary school level. Furthermore, primary school completion rate was only 52 percent and the transition rate from primary to secondary school was only 36 percent (Ministry of Education Science and Technology, 2014).

The poor quality of education in Malawi is also reflected in its poor performance in regional education quality tests, where it ranked in bottom position (alongside Zambia) among 15 regional countries in the 2007 SACMEQ III 6th grade assessment study on math and reading test scores, revealing that most children in Malawi in standard 6 lacked basic skills in math and reading.

Another quality issue affecting the education system is the mismatch of skills and qualifications. A majority of young workers are undereducated for the work they do, implying that the level

of qualification and/or education is lower than is required to perform the job adequately. For instance, 81.8 percent are undereducated (Mussa, 2013). The under-education of workers can have a negative impact on their productivity and the output of the enterprise, but also more personally on the young worker's sense of security.

A key quality issue affecting the education system is the mismatch of skills required by the job market and the skills that students acquire from the education system. In 2013, 82 percent of young workers were undereducated for the work they did.

Inequities in Education

Educational attainment in Malawi is characterised by marked inequities based on gender, income and place of residence. In general women in Malawi have attained lower educational levels than men, with computations from IHS 3 showing that adult women have completed 3.6 years of education on average compared to 4.3 years for their male counterparts. The computations also reveal far fewer adult women who are literate (60 percent) compared to adult men (77 percent). However it is interesting to note that for the past decade, the female disadvantage has been in reversal among the younger generation with near parity in current primary school-adjusted NER[12] in 2014 (female 94 percent; male 93 percent) and girls having a slight advantage over boys in adjusted secondary school NER (female 18 percent; male 14 percent). Figure 3.3 summarises school enrolment by various characteristics (National Statistical Office, 2015).

Place of residence is also a marker of inequality in education attainment. Children of secondary school age residing in urban places in Malawi are four times as likely to be enrolled in secondary

Figure 3.3: Inequities in Net Attendance Ratios (Adjusted) in Malawi by Various Characteristics, 2014
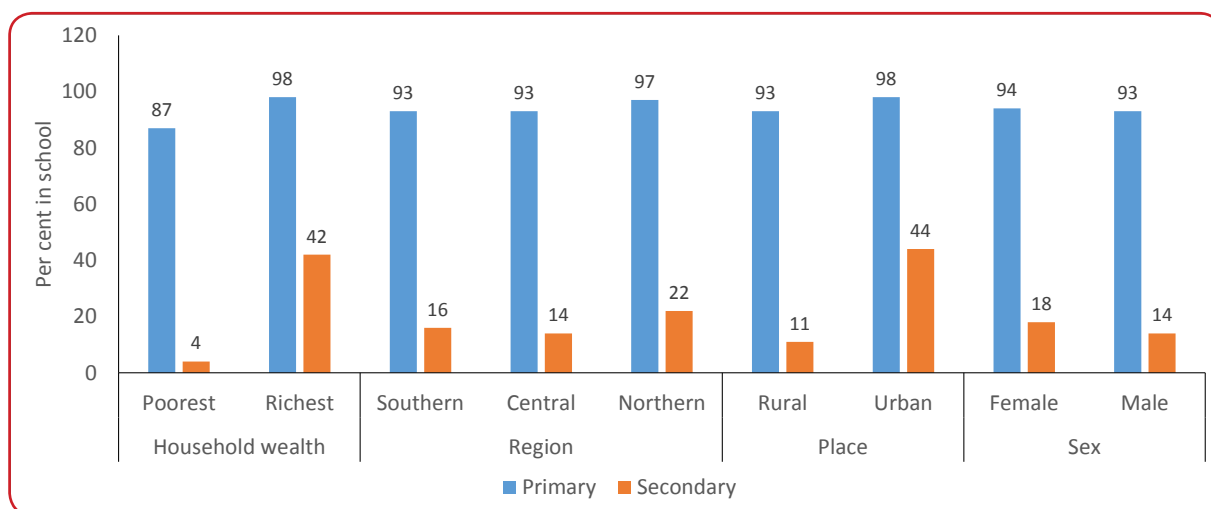
Source: Malawi MDG End line Survey, 2014

....

[12]The primary adjusted net enrolment rate is the percentage of children of primary school age who are enrolled in primary or secondary education.

school or higher compared to their rural counterparts (44 percent to 11 percent) but there is only a slight difference in the adjusted NER at primary school (urban 98 percent; rural 93 percent).

In general, there is relatively high enrolment at primary level in all three of Malawi's regions but for secondary school-age children attending secondary school or higher, the Northern region holds an advantage with an adjusted NER of 22 percent compared to the Central region's 14 percent and Southern region's 16 percent.

One of the most critical markers of education inequity in Malawi is income. The MES 2014 indicates that among children of primary school age, 98 percent from the richest households attended primary school or higher compared to 87 percent from the poorest households. The gap between the two widens dramatically among secondary school age children. About 42 percent of those from the richest households attended secondary school or higher, compared to just 4 percent from the poorest households. This trend means that social mobility based on education attainment is in favour of those children who come from already relatively well-off households.

Malawi needs to work hard to close these gaps in education attainment. Evidence from the IHS 3 suggests that education mobility in Malawi is low (Figure 3.4). Just over a quarter of Malawians are more educated than their parents. Most have attained the same level of education as their parents, with 61 percent attaining the same level as their father and 63 percent attaining the same level as their mother. About 13 percent are less-educated than their fathers and 3 percent are less educated than their mothers.

Figure 3.4: Education Mobility among Children Compared to Their Parents in Malawi, 2011
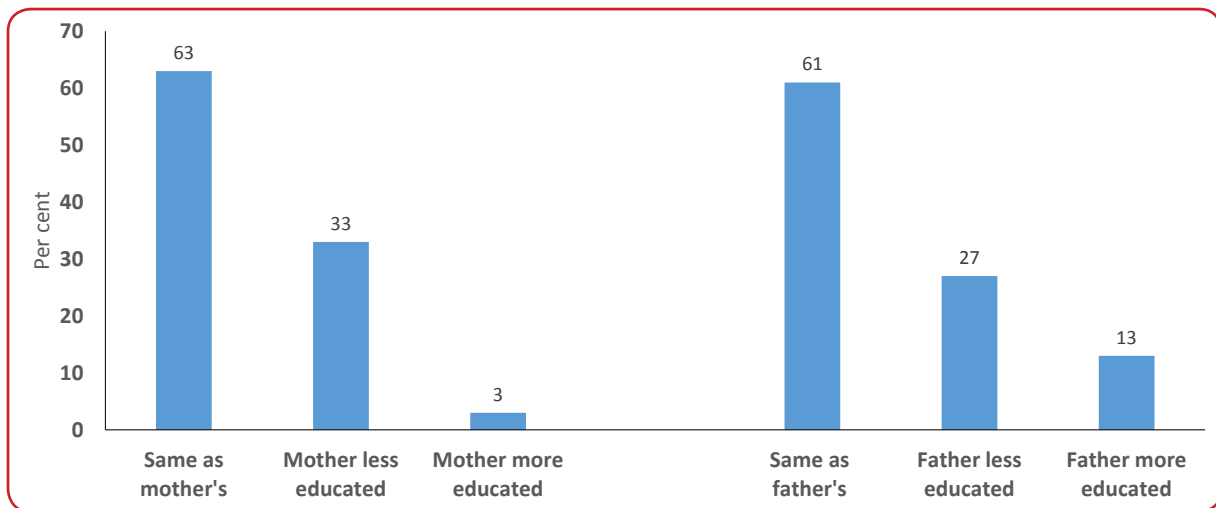
Source: Computations from IHS 3, 2010/11

For Malawi to produce a competitive workforce that can propel the country to harness the DD, it should aim for children to attain at least secondary education and for a significant proportion to move on to attain tertiary education. A minimum of 12 years of completed education from grade 1 is expected of those who complete secondary education. IHS 3 estimates indicate that adult Malawians had completed only 4 years of schooling on average. However, significant

improvements in education access assure that the younger generation should expect to surpass the older generation. Those beginning their formal education now can expect to complete 8 years of education on average. This nevertheless falls far short of the goal of having a majority of Malawians complete at least secondary school education and proceed to tertiary level.

> **For Malawi to produce a competitive workforce that can propel the country to harness the DD, it should aim for children to attain at least secondary education and for a significant proportion to move on to attain tertiary education.**

The current education status in Malawi is a major obstacle to harnessing the demographic dividend and needs to be tackled decisively. Young people must be equipped with quality education and skills if they are to maximise their potential productive capacities and spur Malawi's Socio-economic development. Although skills development is necessary for improved productivity, it is not sufficient unless there is a conducive economic and social environment to translate productivity improvement into employment, growth and development. These are discussed in later chapters.

3.2   Health Status of Malawi's Population

A healthy workforce is critical for the successful attainment of Malawi's long-term development goal of becoming a middle-income nation. A healthy workforce is more productive, bringing greater income to families and higher levels of economic growth for nations, and enabling the country to enhance its economic productivity and earn a substantial demographic dividend.

Communicable and Non-Communicable Diseases in Malawi

Malawi's labour force is currently faced with the double burden of diseases, including HIV/ AIDS, Tuberculosis (TB), Malaria and emerging non-communicable diseases (NCDs), such as hypertension, heart diseases, stroke, cancer, diabetes and chronic respiratory conditions like asthma. Table 3.1 shows that HIV/AIDS, lower respiratory infections, diarrheal diseases and malaria were the highest- ranking causes of death and disease burden in 2011.

HIV/AIDS remains the leading cause of death to both males and females. The 2010 Malawi Demographic and Health Survey (DHS) reports that 10.6 percent of adults aged 15-49 years in Malawi are infected with HIV. HIV prevalence is higher among women (13 percent) than among men (8 percent). Among youth aged 15-24, prevalence is also higher among women (5 percent) than men (2 percent) (National Statistical Of ce & ICF Macro, 2011).

Awareness of HIV/AIDS, intensi cation of behaviour-change interventions such as abstinence, safer sex and sexual reproductive health (SRH), and anti-retroviral drugs (ART) for the prevention of mother-to-child HIV transmission are some of the factors that have led to progress in the fight against HIV/AIDS. The country has seen a dramatic decline of 67 percent in the number of new infections among children 0-14 years, and a modest 34 percent decline in incidence of HIV

among women of reproductive age (UNAIDS, 2014). By the end of 2014, more than 65 percent of those eligible for ART had access to this, according to National AIDS Commission (Government of Malawi, 2015). This is below the universal access target set globally. The National HIV and AIDS Strategic Plan, 2015-2020 is a new framework to help the county to implement HIV and AIDS prevention and treatment interventions, in line with UNAIDS 90-90-90 targets.[13]

Malaria is another major cause of mortality in Malawi. Endemic in nature, it is estimated that 6 million cases occur every year. The disease is a leading cause of mortality in children under five years of age and pregnant women. The 2010 DHS reports that 35 percent of children under age five had fever in the two weeks preceding the survey. Among these, less than half (43 percent) took antimalarial drugs. The percentage of under-five children with access to malaria treatment within 24 hours of onset of symptoms has increased from 21.9 percent in 2010 to about 24 percent in 2012. This increase has been due to the government's commitment to increase access to malaria treatment among its population. In addition, intensive sensitisation campaigns on the dangers of malaria are some of the initiatives the government is implementing to ensure that communities are knowledgeable on the dangers of malaria. In 2012, it was projected that the proportion of the under-five population accessing malaria treatment is going to continue rising and that by 2015 it will reach 27 percent (UNDP, 2014). The provision of insecticide treated bed nets for under-five children is another intervention that has reduced childhood morbidity and mortality.

Table 3.1: Leading Causes of Deaths and Disease Burden in Malawi in 2011

Condition	% of total deaths	% of disability-adjusted life years (DALYS)				
	Total	Males	Females	Total	Males	Females
HIV-AIDS	24.6	21.7	27.1	34.9	31.2	38.1
Lower respiratory infections	11.7	12.8	10.7	9.1	10.4	8.0
Diarrheal diseases	8.4	8.5	8.4	6.4	6.8	6.1
Malaria	8.2	8.4	8.1	7.7	8.1	7.4
Cerebrovascular disease	3.9	3.2	4.6	0.6	0.6	0.6
Ischemic heart disease	3.5	3.5	3.6	0.5	0.6	
Conditions arising during perinatal period	3.3	4.6	2.1	3.3	4.7	2.2
Tuberculosis	2.6	3.8	1.6	1.9	2.7	1.3
Road traffic accidents	1.5	2.3	0.7	1.5	2.2	0.8
Chronic obstructive pulmonary disease	1.3	1.7	0.9			
Maternal haemorrhage	1.0	NA	1.9	0.8	NA	1.5
Abortion	0.8	NA	1.5	1.4	NA	2.6
Maternal sepsis	0.7	NA	1.4	1.0	NA	2.0

Source: (Bowie & Mwase, 2011)

....

[13]90 percent of people living with AIDS will know their status; 90 percent of people diagnosed will be on ART; 90 percent of people on ART will be virally suppressed.

Health Policy Priorities

Addressing the health challenges of the population is recognised as key in achieving sustainable socio-economic growth and development of the country, and is well highlighted in the Vision 2020 and the MGDS II. According to Vision 2020's social sector development pillar, access to health services is low, management of the health sector is weak, and the childhood and maternal deaths are unacceptably high. The goal is to ensure that health services are available, accessible and of good quality. The MGDS II echoes Vision 2020, noting that there is a strong correlation between health status and level of development. To adequately address health challenges and to raise the health status of all Malawians, public health, sanitation, malaria and HIV and AIDS management have been identified as key priority areas in the MGDS II. The objective is to focus on prevention of diseases to prolong life and promote good health practices and life styles through information, education and communication; controlling and preventing diseases; tackling hygiene and the broader determinants of health; and screening for diseases. The Health Sector Strategic Plan (HSSP) (2011-2016) is aligned with the MGDS II and guides the implementation of the health interventions. The HSSP emphasises increasing coverage of high quality Essential Health Package (EHP) services and strengthening performance of the health systems to improve equity, efficien y and quality of EHP services in Malawi (Government of Malawi, 2011).

> **Addressing the health challenges of the population is recognised as key in achieving sustainable socio-economic growth and development in Vision 2020 and the MGDS II. Key challenges include low access to health services, weak management of the health sector, and unacceptably high childhood and maternal deaths. The goal is to ensure that health services are available, accessible and of good quality.**

The health care delivery system mainly consists of government facilities (63 percent), Christian Health Association of Malawi (26 percent) and some private for-profit providers. The health sector has registered a number of successes, as highlighted in the MGDS II, including reduced incidence and prevalence of major diseases; improved maternal and child health; increased and sustained coverage of high quality EHP services; reduced health risk factors among the population; improved equity and efficien y in the delivery of EHP; and strengthened performance of health support systems (Government of Malawi, 2011). Challenges in the public health sector are still evident, exemplified by shortages of drugs and qualified healthcare workers. Unless Malawi makes deliberate efforts to invest in the health of its people, the country will not accumulate a sufficiently healthy workforce that it needs to maximise productivity required to achieve its development objectives.

Life Expectancy

As shown in Figure 3.5, life expectancy in Malawi is lower than the average for countries with low Human Development Index (HDI), including Zimbabwe and Tanzania (60 and 62 years, respectively) as well as the average for sub-Saharan Africa countries (at 57 years). In East Asia, life expectancy in Malaysia, Thailand and South Korea are 75, 74 and 81 years, respectively, attributable to better access to health care and consequent lower chid mortality rates (UNDP, 2014). The implication is that workers in East Asian countries will live a healthier, longer and therefore more economically productive life than workers in Malawi. The high prevalence of HIV/AIDS in Malawi partly accounts for the country's low life expectancy compared to other developing countries in the low-income category and the more advanced East Asian countries (Colbourn et al., 2013).

Figure 3.5: Life Expectancy in Malawi is Lower than the Average for Countries with Low HDI
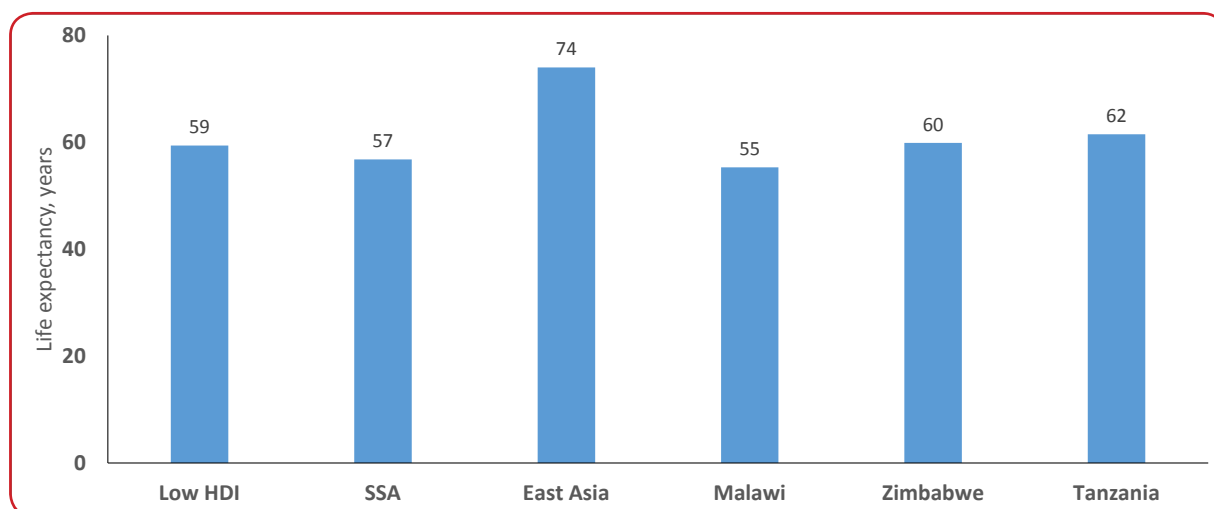
Source: UNDP (2014)

Public Health Concerns

Malnutrition among children under the age five years is very high in Malawi, with dire consequences for child survival and cognitive development and learning for children. The country ranks third highest for the rate of under-five children who are stunted (too short for their age) in the sub-Saharan Africa region, and has shown little to no improvement over the past two decades. The 1992 DHS reported that the prevalence of stunting (an indicator of chronic under-nutrition) among children under the age of five was 50 percent. This proportion is almost 25 times the level expected in a healthy, well-nourished population. For the subsequent 2000, 2004 and 2010 Malawi DHSs, the prevalence for stunting were 48 percent, 48 percent and 47 percent, respectively (National Statistical Office & ICF Macro, 1994; National Statistical Office & ICF Macro, 2011). The MES 2014 showed that the proportion of children under five who are stunted had declined slightly to 42 percent.

Malnutrition among children under the age five years is very high in Malawi, with dire consequences for child survival and cognitive development and learning for children.

Research commissioned by the African Union and the Malawian government highlights the social and economic impact of inadequate nourishment in early life. According to the Cost of Hunger study, Malawi's development is being thwarted by child undernutrition, the effects of which continue to blight the lives of 60 percent of the impoverished country's adults and cost the economy millions of dollars a year. The study found that an estimated 11 percent of those who would now be aged between 15 and 64 died as children because of undernourishment. The findings also showed that 23 percent of the estimated 82,000 child deaths that occurred between 2008 and 2012 were attributable to undernutrition and that 60 percent of working age Malawians had suffered from growth retardation before reaching the age of five. With two-thirds of the country's population working in manual activities, Malawi is estimated to have lost USD 66.7 million in 2012 alone because of the reduced productivity of those who were stunted as children. In the same year, Malawi lost 800,566 working hours due to absenteeism resulting from incremental under-nutrition related child mortalities. Overall, Malawi is estimated to have lost USD 597 million in 2012 – equivalent to 10.3 percent of its GDP (Government of Malawi, 2015).

Another major public health concern, where progress has been modest, is maternal mortality. Maternal deaths, apart from the loss of productive lives, have serious implications for surviving babies and their older siblings who are left without maternal care. The major causes of maternal mortality in Malawi are sepsis (blood infection), haemorrhage during pregnancy and birth, obstructed labour/ruptured uterus and unsafe abortion (Colbourn et al., 2013). Furthermore, while hundreds of women die during childbirth or due to pregnancy complications, many more experience morbidity that can drastically affect their quality of life and productivity. A study in West Africa for instance, estimated that severe maternal morbidity from direct obstetric causes was nearly 30 times more frequent than maternal mortality (Prual et al., 2000). The absence of women from the labour force due to death or debilitating conditions has a negative impact on the country's economy. It also has serious implications for the wellbeing of households as studies have revealed that women's income goes towards food, education, medicine, and other family needs—a direct investment in the family's wellbeing (Jowett, 2000).

Malawi has made some progress in reducing maternal mortality; between 2004 and 2010, the maternal mortality rate (MMR) decreased from 984 deaths per 100,000 live births to 675 (National Statistical Office & ICF Macro, 2011). Currently, the MMR rate stands at 475 deaths per 100,000 live births (National Statistical Office, 2015). This trend is encouraging and a reversal of the earlier trend in the 1990s. Even though these figures are comparable with those of neighbouring countries in 2010 (for example, 570 and 460 deaths per 100,000 live births in Zimbabwe and Tanzania, respectively)[14], they are not adequate for the country to achieve the MDG 5 target of

155 deaths per 100,000 live births by 2015. Further investments and better quality of care during childbirth are needed to improve maternal health.

While infectious diseases still rank as priority areas for intervention in the public health sector in Malawi, the country needs to also pay close attention to the emergence of NCDs as a major challenge to the health status of its citizens and by extension to that of the productivity of the nation. NCDs are on the rise and are increasingly becoming a significant cause of mortality. Among the adult population aged 25-64 years, about 33 percent are estimated to be hypertensive. Furthermore, 75 percent of these are unaware of their condition. Prevalence of diabetes is estimated at 5.6 percent and about 9 percent have raised cholesterol (Government of Malawi, 2010). Some of these conditions are associated with lifestyle changes that include unhealthy nutrition habits and physical inactivity. Structural factors such as the built environment in urban areas can exacerbate NCDs It is important to stay a step ahead of the challenge by investing in better diagnoses, case management, and health promotion interventions that emphasise healthier diets and more physical activity.

Access to clean and safe water and sanitation are among the major barriers to good health. Poor water and sanitation conditions are major contributors to the burden of disease and expose people to water-borne diseases and related ailments. The 2010 DHS reports that 79.3 percent of the population has access to safe water source. However, It should be noted that urban areas have higher access (about 92 percent), compared to the rural areas (77 percent). In terms of sanitation, only 8.8 percent of the population has access to improved sanitation facilities. Although the urban population has higher access (about 22 percent) than the rural population (about 7 percent), the figures are still lower than desired (National Statistical Office & ICF Macro, 2011).

Challenges in the Health System

Malawi's health challenges are worsened by a shortage of qualified healthcare workers. According to the 2011-12 District Implementation Plan in Lilongwe, the capital city, the doctor-to-patient ratio was 1:110,195, with staff retention remaining a serious challenge (Global Fund Observer, 2013). Due to the shortage of fully qualified doctors and specialists in Malawi, most of the district health services are provided by a middle-level cadre such as clinical health officers and enrolled nurses, who have shorter training times and provide services that were originally provided by specialists. Low pay and poor working conditions, particularly in remote areas, are some of the factors inhibiting Malawi's ability to reach the recommended ratios. To address the staff shortage, the Government and development partners have allocated resources, for example, the Emergency Human Resources Programme (EHRP) in 2005 to provide salary increases for all health workers, expand pre-service training and recruit expatriate volunteer doctors and nurses. Programmes have

....
[14]In 2010, MMR for sub-Saharan Africa was 474 deaths per 100,000 (UNDP, 2014).

also been developed to provide incentives that attract health care workers to under-served regions of the country. Despite some successes, such as the 50 percent increase in the health workforce that was achieved through the implementation of the 6 year Emergency Human Resources Plan between 2005-2010, Malawi is still far from achieving the recommended ratio of health care professionals to patients to effectively confront HIV with a full slate of prevention, treatment and care activities.

The government is the main source of health financing in Malawi. Between 2004 and 2005, the total health expenditure was 12.5 percent of the GDP, but by 2008-2009, the percentage had reduced to 9.7 percent, well below the Abuja Declaration target of 15 percent (WHO Afro Region). Although public health facilities do not charge at the point of care, drugs are often in short supply so that ill people buy medicines from private pharmacies. There is no national health insurance scheme, but private health insurance exists for some formal sector employees. Thus, poorest people often face catastrophic out-of-pocket payments when confronted with major illness.

There are multiple and complex population health challenges that bear directly on Malawi's potential to harness a substantial demographic dividend, and investing in health is one of the significant investments in human capital that must be made. Better health outcomes will increase GDP over the long run, generating a dividend that could be reinvested to further advance workforce skills and public health. To ensure that the next generation of the labour force will be healthier and to ensure an economically productive labour force, Malawi should reinforce its on-going efforts to invest in improving public health, through improving health promotion and uptake of services, as well as strengthening the health system.

4.

Background – Economic Growth and Job Creation in Malawi

4.1   Recent Economic Performance and Future prospects

Malawi has experienced positive economic growth in the past decade, averaging about 6.5 percent per annum. The primary source of economic growth has been agriculture. Although real GDP growth has mostly been positive over the years, economic performance in Malawi slowed down in 2011, with growth registered at 4.3 percent (see Figure 4.1). An economic crisis in 2012 plummeted growth down to 1.8 percent. The 2011 and 2012 slowdown was mainly due to contractions in the agricultural and manufacturing sectors. In the agricultural sector this was attributed to a 67 percent decline in tobacco output, while the manufacturing sector was negatively affected by high input prices resulting from general inflation as well as fuel and foreign exchange shortages at the beginning of the year. Agro and tobacco processing also contracted in line with the lower agricultural output (Ministry of Finance, 2014). Despite the average positive economic growth achieved in the past decade, about half of Malawians live in poverty, income inequality is high, and unemployment and underemployment are still big challenges especially for the youth and women.

Figure 4.1: Trends in Annual Real GDP Growth Rates in Malawi
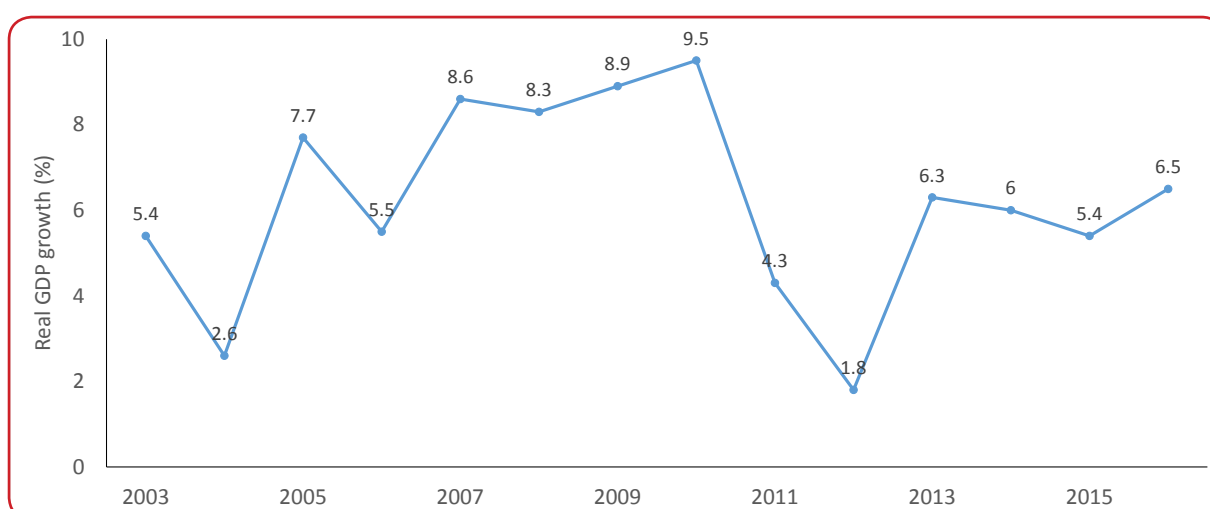
Source: Ministry of Finance and African Development Bank estimates

> **Despite the average positive economic growth achieved in the past decade, about half of Malawians live in poverty, income inequality is high, and unemployment and underemployment are still big challenges especially for the youth and women.**

In 2013, the country's economic performance started to improve, registering GDP growth of 6.3 percent. All sectors of the economy registered positive growth rates in that year (Figure 4.2). In particular, there was a significant improvement in the growth rates of the agricultural and manufacturing sectors, following a significant increase in tobacco production from 79.8 million

kilograms in 2012 to 168.7 million kilograms in 2013 (Ministry of Finance, 2014). In 2014, Malawi registered GDP growth of 6 percent, mainly driven by the agricultural, manufacturing, wholesale and retail trade and information and communication sectors (Figure 4.2). The agricultural sector grew by 6.3 percent, attributed to higher crop production due to good rains in that year. The manufacturing sector grew by 6.2 percent, also attributed to increased agro-processing activities. Tobacco processing has been the largest driver of growth in the sector, with an increase in output of 22.9 percent between 2013 and 2014. The wholesale and retail sector grew by 5.7 percent, largely benefitting from the steady decline in inflation rates. The information and communication sector recorded growth of 11.2 percent, benefitting mainly from the national elections as sales from publications escalated due to increased readership. The mining and quarrying sector registered a negative growth rate, contracting by 4.6 percent due to the suspension of production of uranium at Kayelekera as the company continued to incur losses due to low prices on the international market (Ministry of Finance, 2014).

Figure 4.2: Sector Growth Rates in 2014
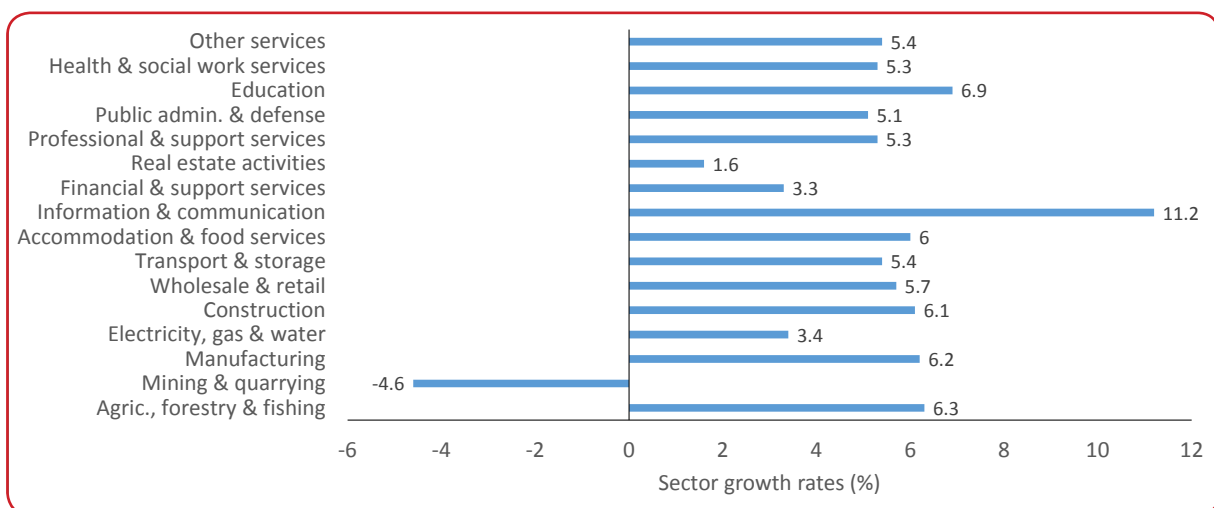
Source: Ministry of Finance, 2014

It is projected that real GDP will grow by 5.4 percent in 2015. The marginal slowdown in growth is mainly attributable to expected contraction of the agricultural sector, which remains the mainstay of the economy. Adverse weather conditions experienced in 2015, including the late onset of rains, the floods, the uneven distribution of rainfall and subsequent dry spells are expected to substantially slow growth in 2015. In 2016, the sector is expected to grow at 6.5 percent, on the assumption that weather conditions will be favourable and that production will resume its expected trajectory (Ministry of Finance, 2014). Overall, the economy is expected to continue growing as macroeconomic fundamentals are expected to continue to improve beyond 2015. Among other things, in the short term, the economy will benefit from lower fuel prices due to a significant decrease in global oil prices in 2015.

Nevertheless, higher growth potential is still constrained by several challenges such as exorbitant interest rates, fluctuations of the local currency, insufficient energy generation and supply, water shortages, inadequate skilled human resources, a narrow economic base, high illiteracy levels, lack of decent jobs, the HIV and AIDS pandemic and over-dependence on rain-fed agriculture. On top of these challenges, it is also important to note that the average growth rate for the last five years has failed to reach the World Bank determined threshold of 7 percent required to reduce poverty in Malawi. The implication of such erratic and relatively low economic growth is that the economy does not have a solid base for enhancing its capacity to generate ample decent jobs and the country is not able to generate enough surplus resources to invest in the demographic dividend pillars of education and health, which are key to quality human capital and hence increased productivity.

The 2014 estimate of GDP per capita in Malawi was USD 397 (Ministry of Finance, 2014) placing it in the category of low-income economies. The World Bank (2015) defines middle-income countries as those economies with a GDP per capita of more than USD 1,045 but less than USD 12,736. Lower-middle-income and upper-middle-income economies are separated at a GDP per capita of USD 4,125 Malawi aspires to transition to middle income status by the year 2020.

The MPRS and the MGDS were designed as primary operational medium-term strategies for the country to attain the country's Vision 2020, by reducing poverty through economic growth and infrastructure development. Reports from the reviews of the national development plans indicate some positive outcomes (Lundgren & Wirth-Bauer, 2014). During the implementation period of the first MGDS from 2006 to 2011, the economy grew at an average of 7 percent per annum against the projected target of 6 percent. This satisfactory economic performance was the result of debt cancellation, which led to an improvement in the balance of payments and investment. Debt cancellation also released foreign exchange resources for importing inputs. During this period, the country also benefited from price and interest rate stability and there were several new infrastructure development projects across the country.

Malawi has also faced a number of problems during the implementation of MGDS II between 2011 and 2016. These have included scarcity of foreign exchange resulting from the decrease in export receipts from tobacco in 2011 and 2012, which undermined the country's balance of payments position. At the beginning of the implementation period in 2011, the economy achieved the rate of economic growth of only 4.3 percent, compared to the projected 6.9 percent, after which the rate of economic growth plummeted further to 1.8 percent. As a recovery plan, the Government introduced measures for stimulating production in the sectors of energy, tourism, mining, agriculture and transport infrastructure and information and communications technology.

Malawi is open to foreign investment and the government encourages both domestic and foreign investment in most sectors of the economy without major restrictions on ownership, size of

investment, source of funds, or the destination of the final product. In 2012, Malawi attracted foreign direct investment (FDI) worth USD 1.2 billion up from USD 987,458,231 in 2011, representing an 18 percent increase (Technology and Action for Rural Advancement, 2014). The upward trend commencing from 2011 was a diversion from the collapsing investment figures traced from 2008 to 2010. This is a reflection of the improved business environment, which attracted more investors from within and outside Africa. Infrastructure and the energy sectors shared 62 percent and 33 percent of the 2012 total investment respectively with tourism, services and agro-processing having minimal contributions. Malawi's FDI in 2012 represented 22 percent of the FDI fl ws to Southern Africa. China and the United Kingdom shared 46 percent equally while the rest of the investors, which include South Africa, India, Pakistan and local investors, were less than 4 percent of the total.

The Economic Recovery Plan from the 2012 economic crisis has put Malawi's economy back on track which should make Malawi an attractive investment destination and subsequently increase the prospects of FDI and economic growth in the country. [15]

4.2   Government Expenditure as a Share of GDP

According to World Bank, Malawi's government expenditure as a percentage of GDP over the period 1991 and 2001 has averaged 15-20 percent, which is consistent with other countries in Africa and elsewhere, including Botswana and Zambia. An exception occurred during the multiparty transition period in the years 1993-4 when government expenditure as a share of GDP exceeded 30 percent. [16]

While Malawi's government expenditure is comparable to a number of countries, differences may arise in terms of the quality and composition of government expenditure when measured in terms of expenditure on consumption and on long-term investment or infrastructure. Figure 4.3 shows a steady increase in public expenditures during the period of high growth (2005/06-2009/10), a trend that could not be reversed during the subsequent economic contraction (2010/11-2011/12). During the high growth phase, Malawi benefited from an increase in revenue. Domestic tax and non-tax revenues rose by almost 5.6 percentage points of GDP, and grants increased by about 0.9 percent of GDP. The government allocated a higher proportion of these resources to increasing current expenditure (for example wages, generic goods and services, fertilizer and seed subsidy, part of the Farm Input Subsidy Program (FISP)). More recent revelations suggest wastage through corruption, dubbed as "cashgate". [17]

Figure 4.3: Trends in Government Revenue and Expenditure, 2005 - 2013
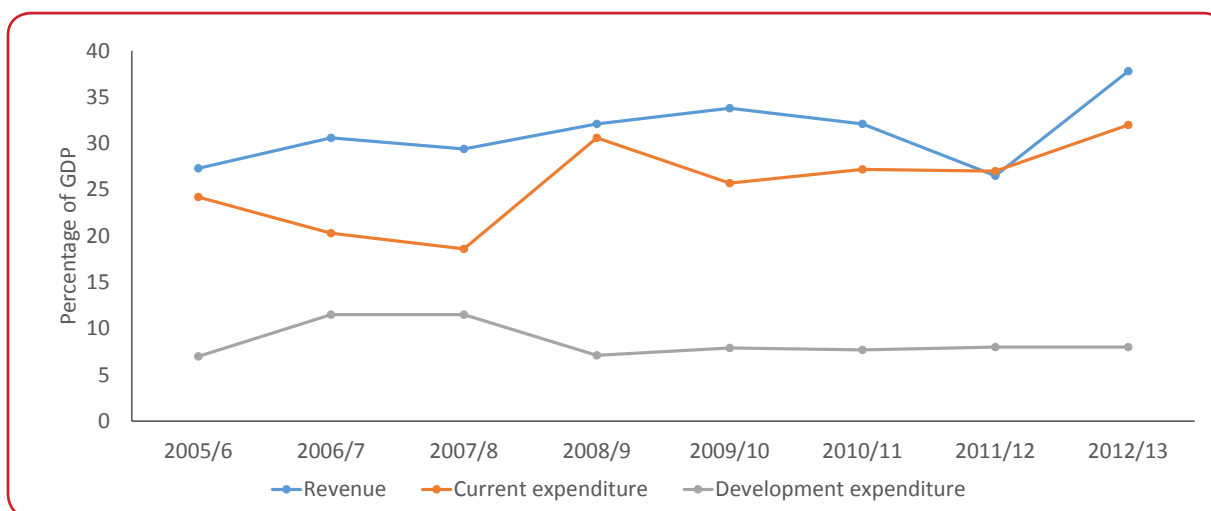
4.3 Poverty and Income Inequality in Malawi

Positive economic growth achieved in the past decade has not been inclusive and equitable, and the majority of Malawians continue to live in abject poverty. According to IHS 3, the national poverty rate in 2011 was 50.7 percent, a slight decrease in the poverty rate by 2 percentage points from 52.4 percent reported in IHS 2 in 2004. About 25 percent of the population is ultra-poor (up from 22.4 percent), such that they cannot even afford to meet daily recommended food requirements (Figure 4.4). This is worrying in that it would appear that while the overall poverty rate is falling, the percentage of ultra-poor population is increasing. The poor may simply be moving to the ultra-poor category, an indication that poverty is either, deepening and not necessarily reducing, or its composition is simply changing for the worse. This should not be surprising given the fact that economic growth has been neither inclusive nor pro-poor.

Figure 4.4: Proportion of Poor and Ultra-Poor Persons, Malawi (2004 and 2011)

Source: NSO, 2012

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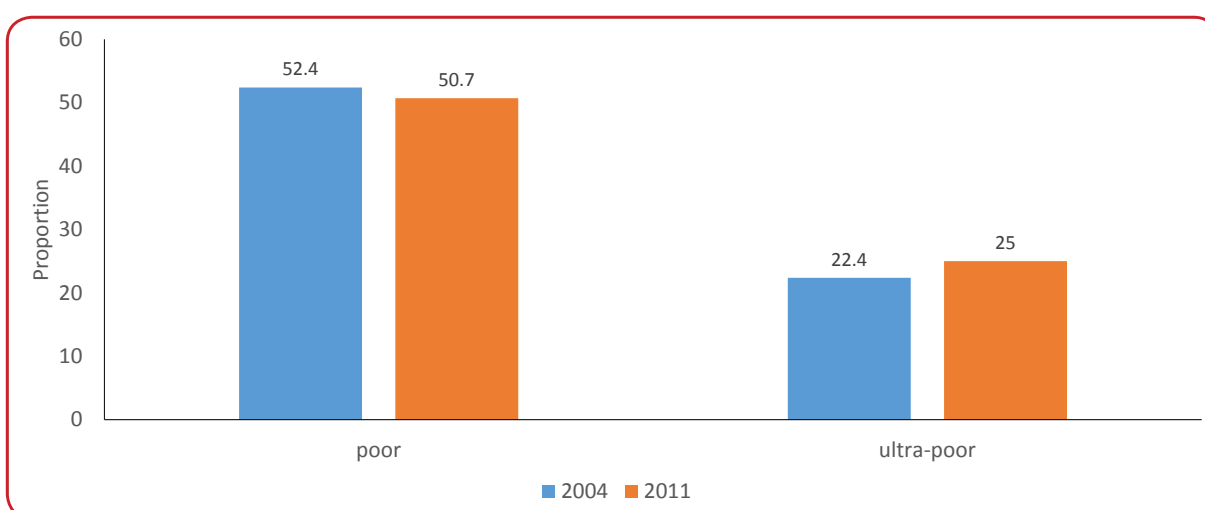
Poverty in Malawi is primarily a rural phenomenon. About 57 percent of the population in rural areas live in poverty compared to 17 percent of the urban population. By region, the Southern region has the highest proportion of poor people, while the Central region has the lowest.

> **About 57 percent of the rural population compared to 17 percent of the urban population in Malawi live in poverty, while the ultra poverty rate in rural areas is seven times higher than in urban areas (28 percent compared to 4 percent).**

About 47 percent of the poor population in the country lives in the rural areas of the Southern region, 33 percent in the rural areas of the Central region while 10 percent lives in the Northern region rural areas. Only 6 percent of the poor population in Malawi lives in urban areas. Similarly, the ultra-poverty rate is higher in rural areas (28 percent) than in urban areas (4 percent). Again, the Southern region rural areas have the highest ultra-poverty rate (34 percent) among rural areas. The North rural has the second highest ultra-poverty rate (29 percent) and the Central rural has the lowest (22 percent). Chikwawa and Nsanje districts have the highest poverty rates (81.6 percent and 81.2 percent, respectively), while Blantyre City has the least number of poor people (7.5 percent) (Republic of Malawi, 2012).

Although poverty rates indicate the share of the population below a minimum income level, they do not reveal any information about the distribution of income above the poverty line threshold. Inequality measures, instead, consider the entire distribution in the population. The richest 20 percent of the population has an average per capita income that is nine times higher (MK 140,458 per person per annum) than an average per capita income of the poorest 20 percent (MK 15,161 per person per annum) (Republic of Malawi, 2012).

Income inequality as measured by the Gini Coefficien [18] appears to have grown in the last decade in Malawi and suggests that the country needs deliberate strategies to make economic growth inclusive and pro-poor. Figure 4.5 shows the Gini coefficients in Malawi in 2004 and in 2011. The Gini coefficient for 2011 is 0.452 as compared to 0.389 for 2004, a pointer that consumption inequality has been worsening.

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[18]The Gini Coefficient (a standard measure used to establish how income is distributed in countries) ranges from zero to one where zero means perfect equality (all households have the same income) and one is complete inequality (all income held by one household). More generally, higher values of the Coefficient indicate a more unequal distribution of income and therefore, highly undesirable.

Figure 4.5: Gini Coefficient, Malawi
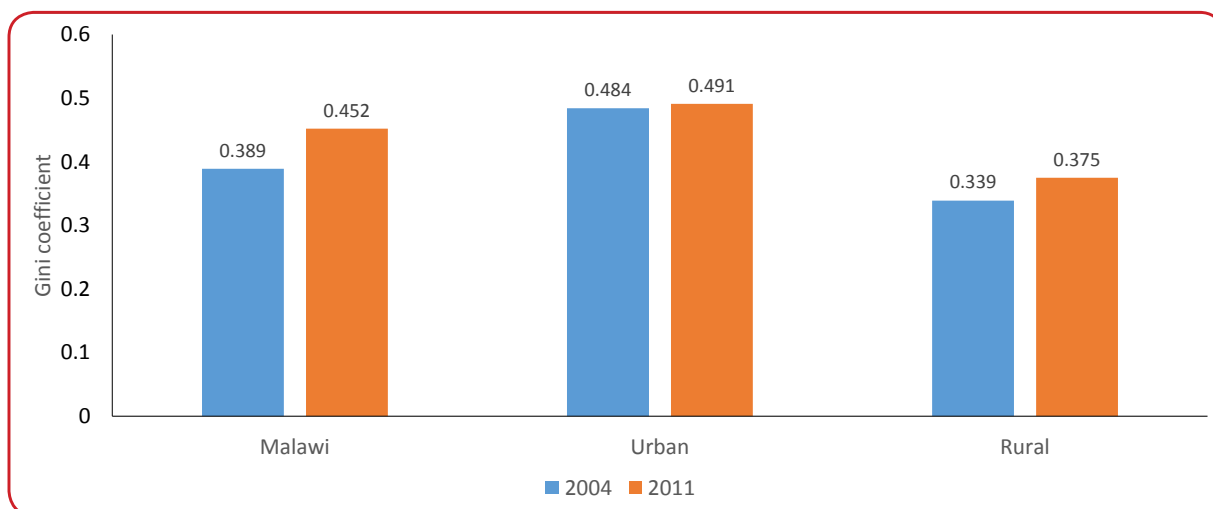
Source: NSO, 2012

In terms of HDI[19], Malawi ranks at position 174 out of 187 countries (UNDP, 2014). Figure 4.6 shows trends in HDI for the 1980 – 2013 period. During this period, Malawi's HDI value increased from 0.270 to 0.414, an increase of 53.3 percent, annually increasing at an average of about 1.3 percent. The HDI is improving because all of its components are changing upwards, as noted in Figure 4.6. The 2013 HDI value for Malawi positions the country below the average of 0.493 for countries in the low human development group and below the average of 0.502 for countries in Sub-Saharan Africa. The value is comparable with Mali (0.407), which is similar to Malawi in terms of the size of the population (Republic of Malawi, 2012).

Figure 4.6: Trends in Human Development Index and its Components, Malawi 1980 - 2013
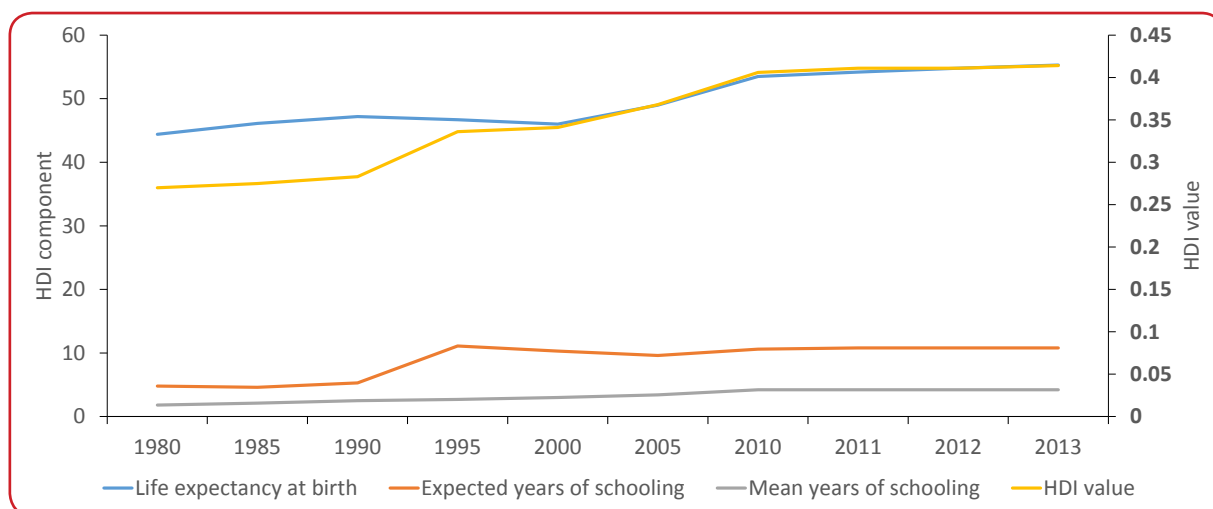
Source: UNDP, 2014

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[19]The HDI is a summary measure for assessing long-term progress in three basic dimensions of human development, namely life expectancy at birth, mean years of schooling and GDP per capita.

4.4 Restructuring Malawi's Economic Growth to Create Decent Jobs

The agriculture sector is not only the most significant source of the country's GDP growth; it is also the major employer in the country. According to the 2013 Labour Force Survey (LFS), of the 80 percent of the 7 million people in the labour force who are in employment, 64 percent are employed in the agricultural sector and about 45 percent are in skilled agricultural employment (see Figure 4.7). Over half of the employed females (51 percent) were engaged in skilled agricultural employment, compared to 39 percent for males. It is clear from these statistics that in order for agriculture to make the requisite contribution to employment generation, the contribution of women should continue to be recognised and harnessed.

> **Malawi needs to urgently restructure its economic base in order for the country to provide decent economic opportunities for its citizens and enhance its chances of earning the demographic dividend.**

Of the people employed in agriculture, 3.6 million (95 percent) are in the informal sector, which is characterised by low earnings, low capital investments and low levels of technology and limited prospects of improving the living standards of the population (National Statistical Office, 2014). Transforming agriculture will involve reducing dependence on rain-fed agricultural production, graduating employees from the informal to the formal activities in agriculture, improving agricultural earnings and investing in agricultural capital and appropriate technology. The challenge is to make agriculture attractive as an industry through modernisation, value addition and enhanced earnings. The wholesale and retail sector is the second largest employer, accounting for 16 percent. The rest of the sectors employ less than percent of people in the labour force.

Figure 4.7: Employment by Industry
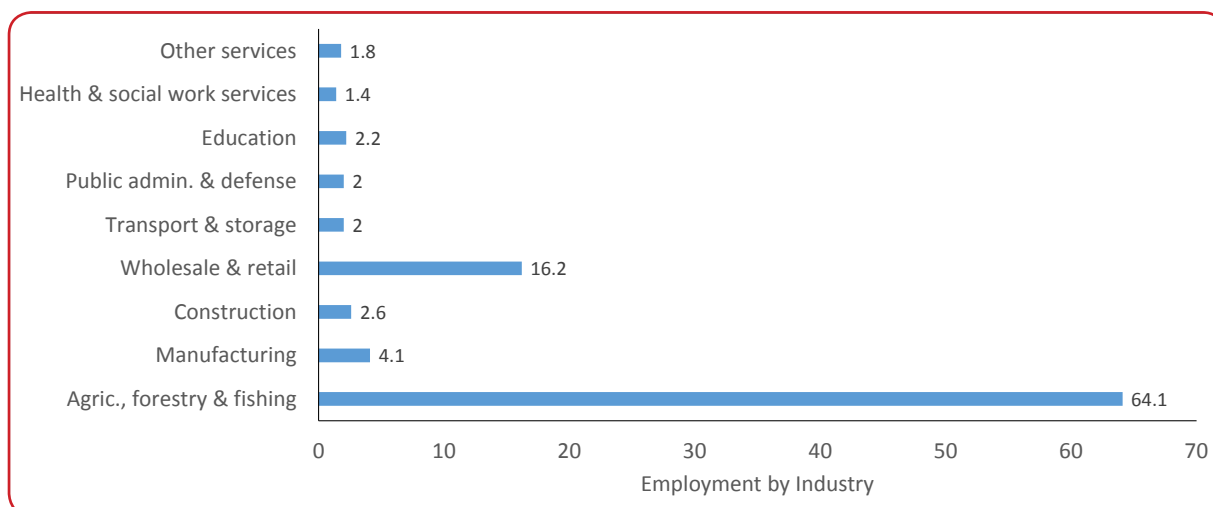
Source: NSO, 2014

Diversification of the economy from its dependence on rain-fed, small-scale and low technology agriculture is critical for Malawi's economy and overall job creation agenda to be more viable, resilient, and sustainable. Diversification needs to focus on agriculture as well as areas with strong links to agriculture. Within agriculture, focus needs to shift to improve productivity and the management of the environment on which sustainable agricultural methods depend. With irrigation, there is the potential to increase agricultural production, turning it into a source of all-year employment as well as alleviating the chronic food shortages. Currently, only 27 percent of potential land is irrigated (Deraniyagala & Kaluwa, 2011), implying that output performance of this sector is highly volatile and that jobs are unsustainable. The Green Belt Initiative launched by the government in 2009, if linked to proper management of the environment, holds the potential to grow employment and address food security challenges.

Very little value addition occurs in Malawi as Malawians continue to export primary commodities which, when processed, are imported back into the country at significantly higher prices. Promoting the manufacturing / agro-processing sector holds the key to generating thousands of jobs.

Another potential strategy for job creation is to pay attention to the service industry. As noted in Figure 4.2, growth in Malawi has not occurred in all the potential sectors of the economy. The tourism sector is not presently a significant contributor to growth, and despite recognition of its strategic importance, has suffered from underinvestment. Being a service industry, it has great potential to create jobs and bring in foreign exchange earnings. One of the ways the East Asian tigers managed to transform their economies from agricultural bases to services was by investing in tourism.

Prioritising manpower development to meet the skills gap in the labour market can also enhance the potential of job creation in the other sectors. In Figure 4.8, the 2013 LFS reports that technical and associated professional occupations constitute only 0.3 percent of those who are employed; craft and related trade workers constitute as low as 4.2 percent while plant and machine operators and assemblers constitute only 5.2 percent. Among women, these figures are even lower, at 0.1 percent, 1 percent, and 4.1 percent, respectively. These low contributions to employment by technical occupations show that there are huge deficits in skills among both men and women.

Figure 4.8: Employment by Occupation

Source: NSO, 2014

Based on the International Labour Organisation (ILO) broad definition of the unemployed,[20] about 20 percent of the country's total labour force is unemployed. Overall, 27 percent of the employed population in Malawi is underemployed (National Statistical Office, 2014). The number of young people entering the labour market is increasing but they continue to face employment challenges. Using the broad definition, the youth unemployment rate in the 15-24 age group is 28 percent (National Statistical Office, Malawi Labour Force Survey 2013, 2014). This is an indication of the extent to which the economy is unable to provide employment for young people.

The level of unemployment among youth is also measured by the percentage of the youths not in employment and not in education or training (NEET). In addition to the extent of accessibility of youth to employment, NEET also measures youth access to education. For example, a declining trend in NEET may either reflect an improvement in youth access to education or a situation where young people simply accept whatever job comes their way in order to survive. It is reported that 21.7 percent of Malawian youths in the 15 – 24 age group are NEET. The corresponding figure for the 15 – 34 age group is 16.5 percent, indicating the possibility of a disadvantaged position of younger, inexperienced people in the labour market (National Statistical Office, 2014).

4.5 Macroeconomic Policies for Job Creation

Monetary Policy

The central thrust of monetary policy in Malawi is the attainment of low and stable inflation. After independence, Malawi experienced long periods of double-digit inflation. Inflation worsened

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[20]The ILO provides two definitions of the unemployed, broad and narrow. Under the broad definition, the unemployed is a person without work during the reference period and currently available for work. Under the strict definition, the unemployed is a person without work during the reference period; currently available for work; and seeking work..

after the financial reforms of the late 1980s, then averaged around 25 percent during 1995 – 2004. After the interest rates were deregulated in 1990 and the exchange rate was floated in 1994, there was severe upward pressure on prices. This was largely attributable to the high cost of borrowing (the bank rate increased to 50 percent by 1995 with lending rates far above that) and to the sharp rise in import costs following the depreciation of the Kwacha in 1994. Annual inflation exceeded 80 percent in 1995. Since 2004, however, there has been a drastic fall in inflation. After rising in late 2008, in response to food and fuel price shocks, consumer price inflation decreased steadily to 7.5 percent in 2009 (Figure 4.9). In recent years inflation has remained high. The annual average inflation rate for 2014 was at 23.8 percent, down from 27.3 percent in 2013. Inflationary pressures are, however, expected to ease in 2015 with the fall in global oil prices. Average inflation rates for 2015 and 2016 are estimated at 16.4 percent and 12.0 percent, respectively (National Statistical Office, 2014).

Figure 4.9: Rate of Inflation
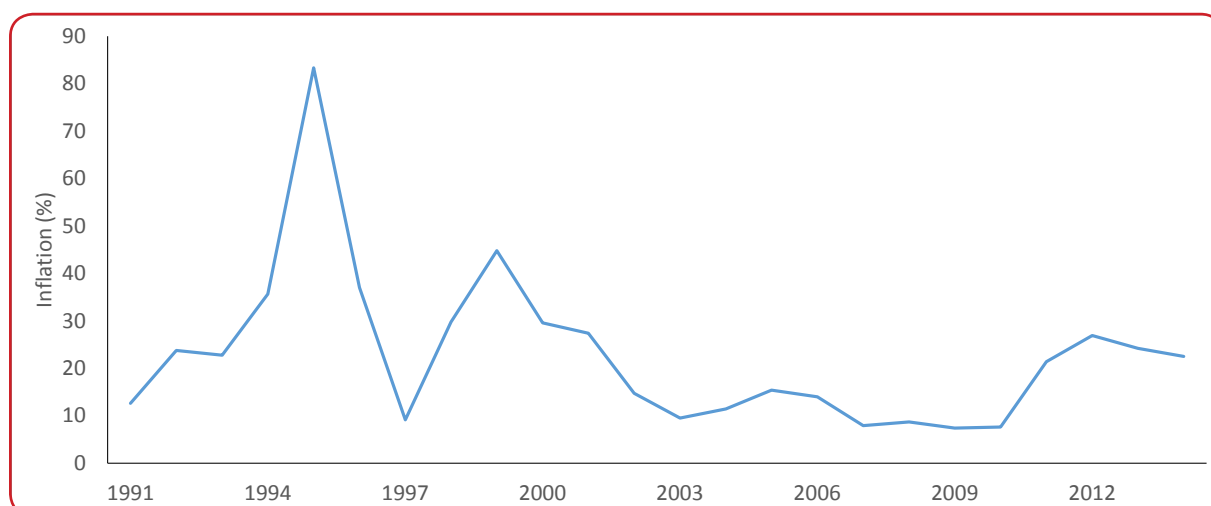
Source: Deraniyagala and Kaluwa (2011)

The Reserve Bank of Malawi uses a combination of instruments to achieve its monetary policy objectives, including the bank rate, liquidity reserve requirements, open market operations and sales and purchases of foreign exchange. Monetary policy instruments can be used to encourage Malawi onto a path of employment-generating growth (Deraniyagala & Kaluwa, 2011). For example, high levels of commercial bank liquidity have important implications for stimulating employment-rich growth, as it indicates the scope for channelling credit to productive sectors, which need to expand in order for the economy to undergo structural change.

Malawian commercial banks have been characterised by high levels of liquidity. The liquidity ratio of banks in 2009 was around 35 percent, which is well above the required reserve ratio of between 15 and 20 percent (Deraniyagala & Kaluwa, 2011). This level of excess liquidity indicates that commercial banks have had limited opportunities to offload the excess liquidity, due in part to the high interest rates. The high profitability levels emanating from the wide spread

between borrowing and lending rates means that there is less pressure on commercial banks to mobilise savings and develop new markets for their financial services.

In the sectoral composition of commercial bank lending, loans to the agricultural sector as a proportion of total loans have fallen over time (Deraniyagala & Kaluwa, 2011). This reflects banks intentionally reducing exposure to agricultural lending due to weak loan repayment. More generally, commercial bank lending rates have been consistently high, particularly for the agricultural sector, thereby limiting private sector borrowing and subsequent investments. The high rates have resulted in making the agricultural sector unattractive, as it is difficult to secure funding and to repay the loans when the season has not been favourable.

Lending rates by commercial banks in Malawi have been consistently high thereby limiting private sector borrowing for investment.

Fiscal Policy

In terms of fiscal policy, Malawi aspires to achieve modest overall budget deficits. Fiscal deficits ranged between 6 percent and 11 percent of GDP in the period 1995 – 2004 and declined thereafter. The deficit was 5.8 percent of GDP in 2008/2009 and 4.2 percent in 2009/2010. The loosening of fiscal policy in early 2009 was the result of sizeable budget overruns on fertilizer and general expenditures in goods and services. In recent years, the government has pursued a prudent fiscal policy, anchored on the principle of zero domestic borrowing. On the revenue side, fiscal policy has focused on strengthening revenue mobilisation and improving efficiency in tax administration through tax reform and the introduction of electronic fiscal devices. Fiscal conditions, however, deteriorated markedly in 2013/14 following the withdrawal of donor budgetary support to Malawi in the wake of the "cashgate" fiasco. The fiscal deficit widened to 4.3 percent in 2013/14 from 0.2 percent in 2012/13, resulting in higher than programmed domestic financing, and thereby exerting pressure on interest rates (AfDB, OECD, & UNDP, 2015).

The structure of the fiscal deficit can also have a significant impact on employment-generating growth, for example, to minimise negative effects on employment (Deraniyagala & Kaluwa, 2011). In Malawi, fiscal deficits can be designed in tandem with measures that strengthen public services in education and health care through hiring qualified personnel in these areas and improved targeting of the social safety net.

The taxation regime also plays a crucial role in stimulating growth, which in turn generates employment. In Malawi, the tax base has not expanded and instead, revenue mobilisation has depended on taxation of the same narrow base through improvements in efficiency in taxation. Although the private sector has been presented as the engine of growth, in actual fact, tax incentives have not been equitably applied to achieve the objective of generating further investment in the sector.

4.6 Promoting the SME Sector

One sector to which government needs to pay attention in order to generate jobs is the small and medium enterprise (SME) sector. Studies by the World Bank (Ayyagari et al., 2011) point to the fact that small enterprises tend to create more jobs than big corporations. However, these need to be supported by access to credit, product markets, availability of technology and a market for second hand equipment. Malawi has not harnessed the potential of this sector; the informal and SME sectors have been left to develop without coherent policies that promote access to credit, markets and technology.

Since the liberalisation of the economy following the advent of multi-party politics in 1994, many initiatives have been created purporting to promote the growth of the SME sector but none have borne fruit. The demise of the Development of Malawian Traders Trust (DEMATT), Small Enterprises Development of Malawi (SEDOM) and the Small and Medium Enterprise Fund (SMEF) all attest to the failure to recognise the role that access to credit and political non-interference can play in the growth of the SME Sector.

> **Financial and non-financial support from both the government and private sector are essential for maximising the SMEs' potential for creating jobs.**

In addition to lack of access to credit, entrepreneurship skills are rather limited, thus stifling the growth of the SME sector. While initiatives such as the Small and Medium Enterprise Development Institute (SMEDI) offer some training, funding constraints limit their impact.

A good example of support to this sector can be found in South Africa where the government has supported entrepreneurship from the grass roots level and up. This commitment by government has led to a number of initiatives including:

- Policies to assist, support and develop small, micro and medium enterprises;

- The Department of Trade and Industry's Competitiveness Fund, providing financial assistance to entrepreneurs which could cover up to 50 percent of running cost;

- Junior Achievement South Africa, an organisation which runs a number of programmes to encourage youth entrepreneurship; and

- The National Youth Development Agency, which offers support to youth in finding resources for business and business development.[21]

Malawi could learn from these initiatives and create supporting institutions that can promote and support entrepreneurship and skills development beyond the efforts that are currently in place.

....
[21]Sub-Saharan Consulting Group (SSCG) Research, Feb 2013

With only a few years remaining until the year 2020, the implementation of the vision to transform the economy into a middle-income country is not on track. Diversifying the economy from its dependence on agriculture in order to create jobs is of critical importance, as is the modernisation of the sector and development of associated manufacturing industries. Investments to promote the tourism industry and small enterprise development are needed.

5.

Background – Governance and Accountability in Malawi

5.1　Governance and Socio-economic Development in Malawi

Governance[22] is widely understood to be a critical determinant of development outcomes, with economic growth shaped definit vely by government practices and the quality of public institutions (Adam & Mengistu, 2008; Ndulu & O'Connell, 1999; Pradhan & Sanyal, 2011) politics in shaping the content of economic decisions, social policy as well as their enforcement mechanisms (Woo-Cummings, 1999). Governance is a vital crosscutting ingredient for the success of all the pillars of the demographic dividend. Firstly, governance must yield a diligent allocation of resources to productive investments in economic growth and human capital. Comparative country experiences show that in countries experiencing modest growth, rising consumer aspirations such as allocation of resources requires substantial discipline and high levels of integrity among political and bureaucratic elites. Secondly, governance entails accountability and efficien y in service delivery, which would ensure ef cient transformation of resources into development outcomes and, more broadly, the careful monitoring of efforts to address development bottlenecks. Transformative governance requires targeted investments in inclusive mechanisms, along with policy and operational research that supports well-resourced, visionary, developmental leadership as well as technical capacity of planners and service providers, and accountability frameworks to implement programmes efficiently.

> **Good governance is a critical determinant of development outcomes, with economic growth shaped definitively by government practices and the quality of public institutions. Governance is a critical cross-cutting factor for the success of all the pillars of the demographic dividend.**

Recognising the magnitude and complexity of the development challenges that Malawi faces, there is widespread consensus among development practitioners, financiers and scholars that the Government of Malawi needs to adopt and operationalise sound public administration institutions and practices. The MGDS II "recognises that the successful implementation of the development strategy depends on the prevalence of good governance". It prioritises governance as one of the pillars for transformational socio-economic development, with focus on four themes: economic governance, corporate governance, democratic governance and public sector management. Corruption is identified as crosscutting in nature and affecting all the elements of good governance. It is asserted that if citizens are empowered, if political power-holders and bureaucratic/technocratic authorities are effective, accountable and responsive, if spaces for negotiation are expanded, effective and inclusive, then sustainable and equitable development has better chances of being achieved.

....

[22]The World Bank defines governance as "the exercise of economic, political and administrative authority to manage a country's affairs at all levels. It comprises mechanisms, processes and institutions, through which [the state], citizens and groups articulate their interests, exercise their legal rights, meet their obligations and mediate their differences in furtherance of their welfare and the values of a good and progressive society."

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The theme of good governance in Malawi's development efforts dates back to the 1990s when Malawi's Vision 2020 was formulated. The Vision highlights the following governance objectives and indicators:

- Making Malawians aware of their civil and human rights and responsibilities;

- Improving and sustaining the rule of law and respect for human rights;

- Enhancing the role and performance of the public sector;

- Creating an enabling environment for private enterprise,

- Enhancing the separation of powers, checks and balances of the three branches of government;

- Encouraging political participation by the general populace;

- Nurturing and appointing foresighted leaders;

- Improving internal security; and

- Creating capacity in political and strategic studies.

Malawi has enjoyed a long period of political stability since independence and was one of the pioneer countries in sub-Saharan Africa to manage a successful transition from a one-party political system to multi-party democracy in the 1990s. Five general elections at intervals of five years have since been held with the most recent held in May 2014. Electoral democracy has taken root and important strides made in improving human rights. However, these political gains have not translated into sustainable development and economic gains that improve standards of living for the majority of the people. After the optimism and euphoria of the political transition in the 1990s, there is now a sense of palpable disappointment and frustration across the country as poverty remains widespread while corruption and poor accountability in the use of public resources holds back economic progress.

5.2. Malawi's Rating on Various Governance Indicators

There are multiple sets of indicators of good governance that are tracked by different organisations, (Arndt & Oman, 2006), including the World Bank's Worldwide Governance Indicators (WGI) and Country Policy Institutional Assessments (CPIAs). Freedom House, a private non-profit advocacy organisation founded in the United States, also produces governance indicators that are widely used by journalists, analysts and academics. International investors mostly use International Country Risk Guide (ICRG) rating system, done by a privately owned firm, which was formed in 1980. The Ibrahim Index of African Governance (IIAG) also provides annual assessments of governance performance specifically for African countries. In this report, we use WGI, which enable comparisons of Malawi to countries outside Africa, including the East Asian countries that provide benchmarks in the demographic dividend discourse. The key indicators relevant to the concerns of a demographic dividend study are given and defined in the table below:

Table 5.1: Description of Selected Worldwide Governance Indicators

Indicator	Descriptive definition
Regulatory quality (RQ) –	Capturing perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development.
Political stability and absence of violence (PV)	Capturing perceptions of the likelihood that the government will be destabilised or overthrown by unconstitutional or violent means, including politically-motivated violence and terrorism.
Government effectiveness (GE)	Capturing perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies.
Voice and accountability (VA)	Capturing perceptions of the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association and a free media.
Rule of law (RL)	Capturing perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence.
Control of corruption (CC) –	Capturing perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests.

Country scores of these variables are used to assign a percentile rank to individual countries relative to all others included in the measure. A percentile rank simply shows the percentage of total scores that fall below a given score. For example, a percentile rank of 38.7 percent for regulatory quality for Malawi in 1996 indicates that in that year, of the total number of countries that were assessed on this variable there were 38.7 percent whose scores were equal to or below that of Malawi. Figure 5.1 reports the estimates for various WGIs, ranging from -2.5 (weak) to 2.5 (strong). The corresponding percentile ranks are presented in Figure 5.2.

Figure 5.1: Estimates for selected Worldwide Governance Indicators
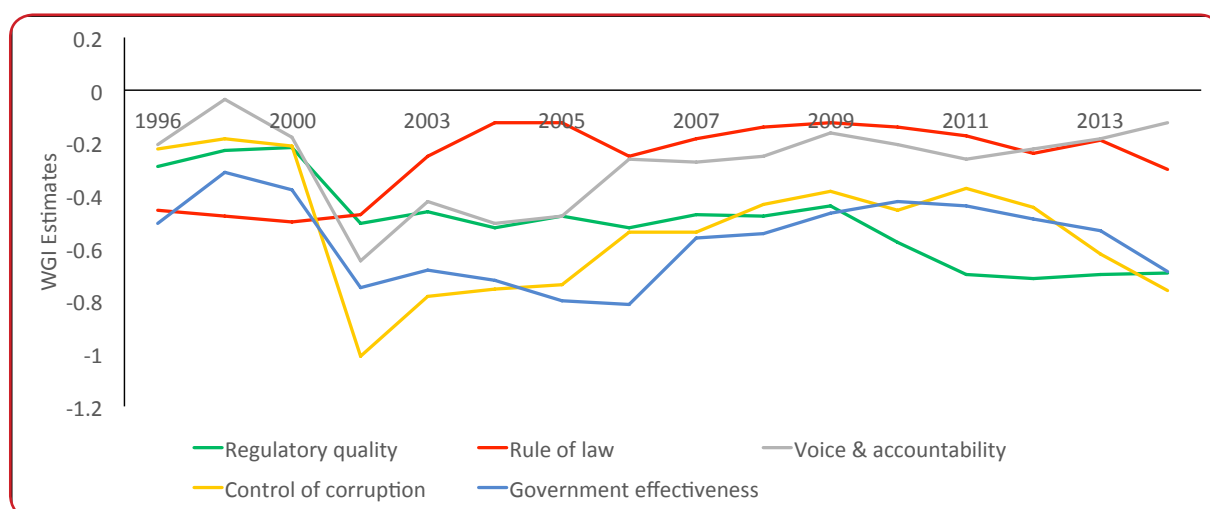
Source: Worldwide Governance Indicators, 2015

Figure 5.2: Percentile Ranks for Selected Worldwide Governance Indicators, 1996-2014
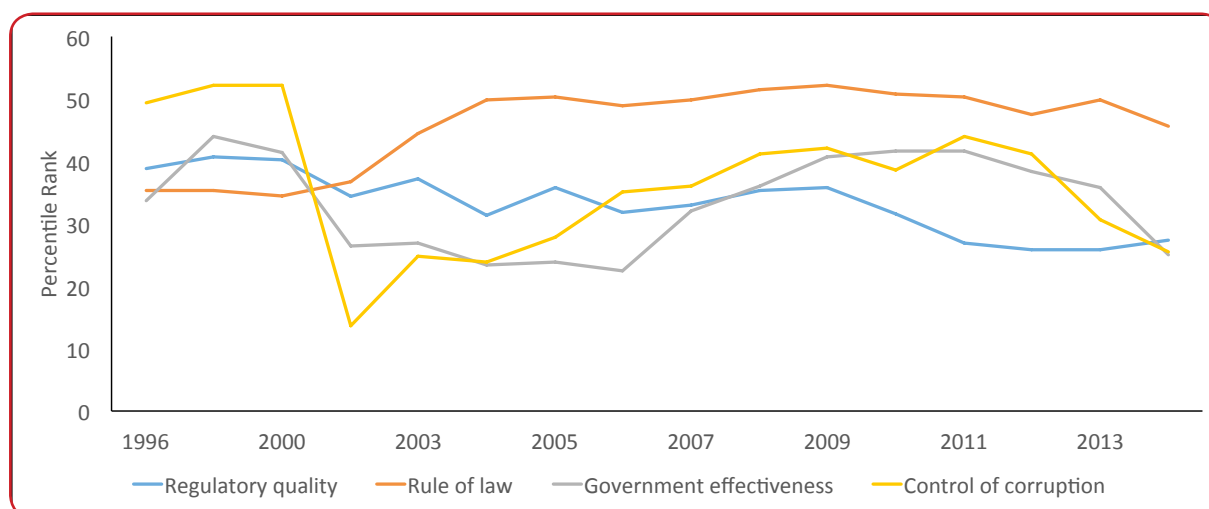
Source: Worldwide Governance Indicators, 2015

Regulatory Quality of the Government of Malawi

The main areas of focus in this regard are economic governance and corporate governance, which are central to investment decisions by the wide range of actors that would contribute to moving the five policy wheels for the demographic dividend. In the past decade, Malawi experienced a stable macroeconomic environment characterised by a relatively sustained GDP growth rate and sustainable levels of both domestic and foreign debt. This is partly attributed to the Public Finance and Economic Management (PFEM) reforms that were undertaken to ensure financial prudence. The economy is still facing a number of challenges including high interest rates, high inflation rate, unstable currency fluctuations, limited coverage of banking services and low access to credit. "Although the growth outlook remains broadly positive, Malawi is at risk of becoming stuck in a low level equilibrium characterised by a large fiscal deficit, persistently high inflation, and high lending rates which continue to threaten growth performance."

In terms of corporate governance, the 2007 World Bank Report on the Observance of Standards and Codes indicated that Malawi's legal framework and traditions are contributing to the protection of shareholder rights and boards of listed companies generally play the role assigned to them by international good practice. However it was noted that, "Existing laws and regulations (including the Code of Corporate Governance) require harmonisation and updating. The regime governing the review and approval of related party transactions is relatively underdeveloped in the law" (World Bank, 2007). Strengthening good corporate governance and implementation of the code of best practices is expected to enhance private sector performance through reduced corruption and fraud within the public and private sectors and improve investors' positive perception of the country, leading to increased levels of domestic and foreign direct investment and thus economic growth. In short, good corporate governance lays down a foundation for non-collusive state-

business relations that would be growth-enhancing and reform oriented (Chingaipe & Leftwich, 2007).

> **Strengthening good corporate governance and implementation of the code of best practices is expected to enhance private sector performance through reduced corruption and fraud within the public and private sectors and improve investors' perception of the country, leading to increased levels of domestic and foreign direct investments.**

Generally, the perception of the ability of the Government of Malawi to formulate and implement sound policies and regulations that permit and promote private sector development has been getting stronger over the years, as shown by a downward rank index in Figure 5.2.

Rule of Law

Despite the existence of a progressive constitution and a robust human rights regime that provides a framework for rule of law, other factors constrain good performance. In particular, there is low capacity in institutions that must enforce and uphold rule of law; there is still inadequate protection of vulnerable groups like women and children reflected in rising incidents of domestic violence, rape, child defilement and early and forced marriages for young girls; the costs of legal services are high and there is a shortage of legal experts to help address human rights violations involving ordinary citizens. In addition, the vulnerable and marginalised are not fully empowered to seek and demand their rights especially prisoners whose living conditions are far below the minimum standards acknowledged in the human rights regime and the Prison Act.

Figure 5.2 shows that of the five governance indicators, Malawi's score and rating is highest on "rule of law" and relatively low on control of corruption, government effectiveness, and regulatory quality. Despite being the highest, the country's scores on rule of law show that there are still significant weakness as the scores have persisted in the descriptive range of 'weak' on the WGI scale. Rule of law is evidently a challenge for many countries in the developing world as Malawi's percentile rank has hovered around 50 percent from 2004 to 2013 dropping slightly in 2014 either because a few countries improved on rule of law or Malawi's score deteriorated.

Democratic Governance

Malawi has made a number of improvements in democratic governance. For example, successful presidential and parliamentary elections have been held as scheduled, there has been growth of civil society and non-governmental organisations and a deepening of the culture of constitutionalism. First and foremost, the Civil Society Organisations' role in a democratic arena is to provide checks and balances to government and voice out when things are not right. The government and its development partners have formulated the Democratic Governance Sector Working Group in order to consolidate the gains made so far and to deepen and broaden the reach of democratic governance.

In 1996, the Cabinet approved the National Decentralisation policy as part of the process of consolidating democracy and as a strategy to enhance poverty reduction efforts by bringing decision-making and resource allocation responsibilities closer to the people . In 1998, this was consolidated through the enactment of the Local Government, which has clear and progressive provisions for the devolution of political and administrative authority to the district level. Similarly, an Independent Election Management Body was created to run the electoral process in a multiparty environment; the traditional court system that operated parallel to and often as an alternative to the judiciary during the one-party period was abolished to improve and uphold the discharge of justice in accordance with democratic ethos, and a number of oversight and accountability institutions were created with strong mandates in law. These include the Office of the Ombudsman to check and address cases of public sector mal-administration; the Anti-Corruption Bureau to lead the fight against corruption, and the Malawi Human Rights Commission to deepen the respect for human rights. Furthermore, a consequential change that has proved to have significantly shaped the discourses and the practices in the governance sector was the shift from parliamentary supremacy that characterised the one party state, to constitutional supremacy that effectively puts ruling politicians and the government as a whole under the law.

Figure 5.3 shows Malawi's performance on "political stability" and "voice and accountability". On political stability Malawi's performance in terms of scores has been weak. However, the country has been peaceful and stable without civil strife or armed conflict. The scores on political stability and the corresponding percentile ranking show that more can be done to consolidate these gains and ensure that the political process has no potential conflicts and is protective of human rights, property and investment.

Figure 5.3: Political Stability and Voice and Accountability
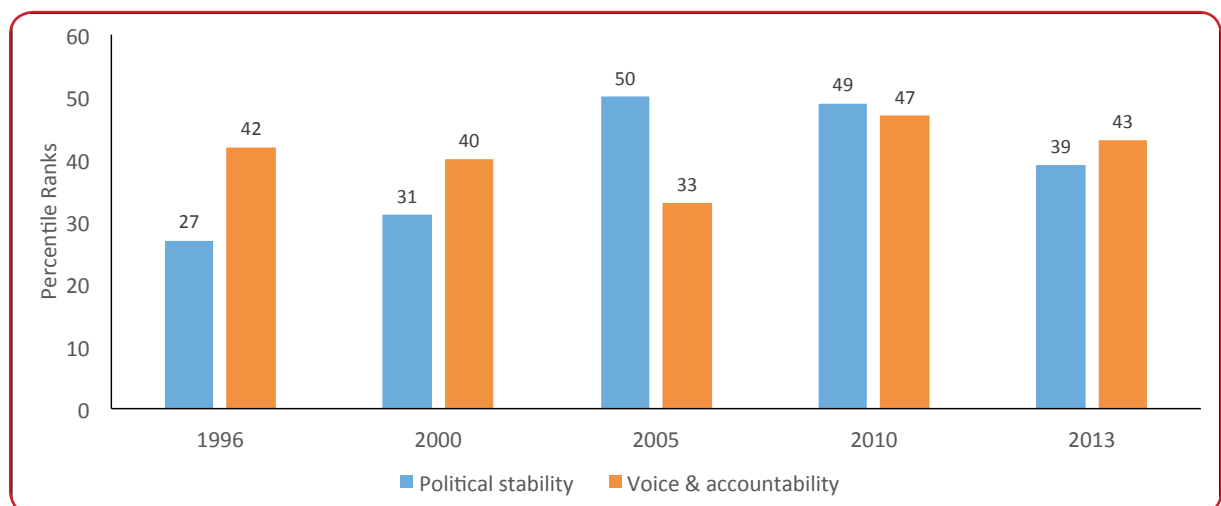
Source: Worldwide Governance Indicators, 2015

Public Sector Management

Malawi has undertaken a number of public sector management reforms since the 1980s, including Civil Service Pay and Employment Reform, the Medium Term Expenditure Framework, Public Sector Investment Programme, the Integrated Financial Management Information System, the MPRS and Pro-Poor Expenditures. Watchdog institutions include the Office of the Director of Procurement, the National Audit Office, the Ombudsman, the Auditor General and the Anti-Corruption Bureau. These did not result in substantial improvements in improving public sector effectiveness and efficien y, as the problems they were expected to address persist. The WGI measures for government effectiveness demonstrates Malawi's uneven performance in this area while overall it has been in a protracted low equilibrium. The pronounced low points in the governance indicators like government effectiveness and the overall economic performance of the country align with general elections and second presidential terms. To address this challenge, the country should embrace a governance culture that will ensure maintenance of long-term strategic development goals that are insulated from the politics of short-term horizons. Effective public sector management is especially critical in the social sectors, that is, health and education, which support the development of human capital necessary for harnessing the demographic dividend. In particular, the education sector is known for pervasive teacher absenteeism, lack of accountability of teachers to employers or parents, budget leakages, weak information systems that thwart the ability to track funds, and the absence of mechanisms to hold officials to account. In order for Malawi to harness the demographic dividend, it is vital that the country develops robust performance management systems that will instill professionalism and accountability in both the public and non-public sectors.

In the health sector, the GoM has put in place Technical Working Groups in all departments for better coordination of aid and alignment to government systems to enhance efficien y, reduce duplication and ultimately improve health outcomes (Government of Malawi, 2010). Harnessing the demographic dividend through health interventions will require extending the reach and quality of health care services with a focus on prevention as well as curative services. Health systems and planning require more transparency and accountability in supply chain management and more responsiveness to the general health needs of Malawians.

In 2015, the Government of Malawi launched the Public Service Reforms Programme, as part of the Government's commitment to make the public sector efficient and effective; and also to restore trust through increased transparency in the Public Service. The formulation of the programme is ongoing and its reform agenda is focused on enhancing four key features of public service and service delivery:

1. Professionalism – improve professionalism in how the Public Service operates

2. Responsiveness – improve how the Public Service is geared up to respond to demand for quality services from the public;

3. Openness and accountability – ensure the Public Service openly engages and accounts for what it does

4. Unity – ensure that the Public Service works in a better cohesive and collective way.

Some of the key reforms the government is pursuing under the new reform initiative include establishing new accountability structures to ensure greater focus on performance in delivery of public services; improving management of civil servants and monitoring their performance to ensure efficien y; building capacity for civil servants to maximise their potential; and conducting periodic perception surveys on how civil servants are performing.

While the Government of Malawi has been implementing Public Service reforms since independence in 1964, these reforms yielded varying results. Some of the reforms failed because of a lack of political will, shared vision, clear strategic direction, ownership of the reform process and capacity to implement the reforms. In this regard, the Public Service Reform Commission was established to provide strategic leadership in the implementation of Public Service Reforms, with the hope that this time around, the reforms would result in a professional and dynamics civil service delivering high quality services to the public.

If successfully implemented, the reforms would go a long way in placing Malawi on the path towards harnessing the demographic dividend. The Public Service is the centre of government operations and plays a key role in the socio-economic well-being of the country. While the private sector is considered the engine of economic growth, wealth creation, and job creation for the citizenry, the Public Service is a catalyst which creates the enabling environment to attract investors and make the private sector flourish.

Corruption Prevention and Control

Over the years, Corruption Perception Indices of Transparency International have shown that corruption in Malawi is a key concern. One recent governance and corruption survey is instructive in this regard:

> *"[…] the findings generally paint a rather gloomy picture about the country's capacity and commitment to successfully fight corruption and create an enabling environment that ensures that those entrusted with the task of providing quality public resources and assets do so in a safe way, in a fair, honest and professional manner. The apparent gains that appeared to have been made in the fight against corruption as demonstrated by the 2010 survey results have not been sustained. The 2013 survey results actually show that the country has experienced regression almost on every other index that is tracked. The results generally point to corruption becoming more or less systematic and deeply entrenched in public life".*[23]

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[23]GoM and Chancellor College, 2013.

Although efforts to address corruption have been sub-optimal, control of corruption has been on the political agenda since the transition to multiparty democracy and in the last few general elections, fighting corruption has also become an electoral campaign issue. Fighting corruption is beset by many factors including limited capacity of the Anti-corruption Bureau to investigate and prosecute corruption and poor commitment of the private sector to conduct "clean" business with the government. These bottlenecks need to be urgently addressed. Furthermore, efforts to address corruption will require reviews of recruitment, promotion, and remuneration structures and incentives in the Public Service. It will also require enforceable regulatory frameworks that will promote public-private dialogues and public-private partnerships that promote collaboration and collective action towards the attainment of national goals, while reducing the risk of collusive relations that undermine state capacity to deliver public goods and services.

5.3   Focal Governance Elements for Harnessing the Demographic Dividend

The governance indicators above show that Malawi needs to urgently strengthen its governance and accountability principles, frameworks and practices for the country to address its pervasive development bottlenecks and harness the demographic dividend. Harnessing the demographic dividend will require better governance in the key sectors of health, education and the economy. Overall governance should seek to achieve the outcomes described below.

- A developmental political settlement i.e. a system of rules and practices for governance that enables political, technocratic and business elites to shape, pursue and encourage achievement of explicit developmental objectives.[24]

- Social inclusion, i.e. participatory development processes whose positive outcomes are enjoyed by, or reach out to, all social groups.

- Transparency and accountability for decisions, indecisions, actions and inactions and for prudent use of resources in the delivery of policy objectives.

- Performance based work culture and improved levels of public integrity achieved through spirited measures to control and stamp out corrupt practices that stand in the way of delivery of public goods and services.

- Promoting the spirit of collective action across the political divide and involving government, private sector, civil society and non-governmental organisation in a pursuit of clearly define development goals.

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[24]Chingaipe, Henry (2014) The Impact of the Cash gate Scandal on the National Budget: A Focus on health and Education Sectors; power point presentation delivered during the commemoration of the Human Rights Day, 10th December 2014, BICC, Lilongwe.
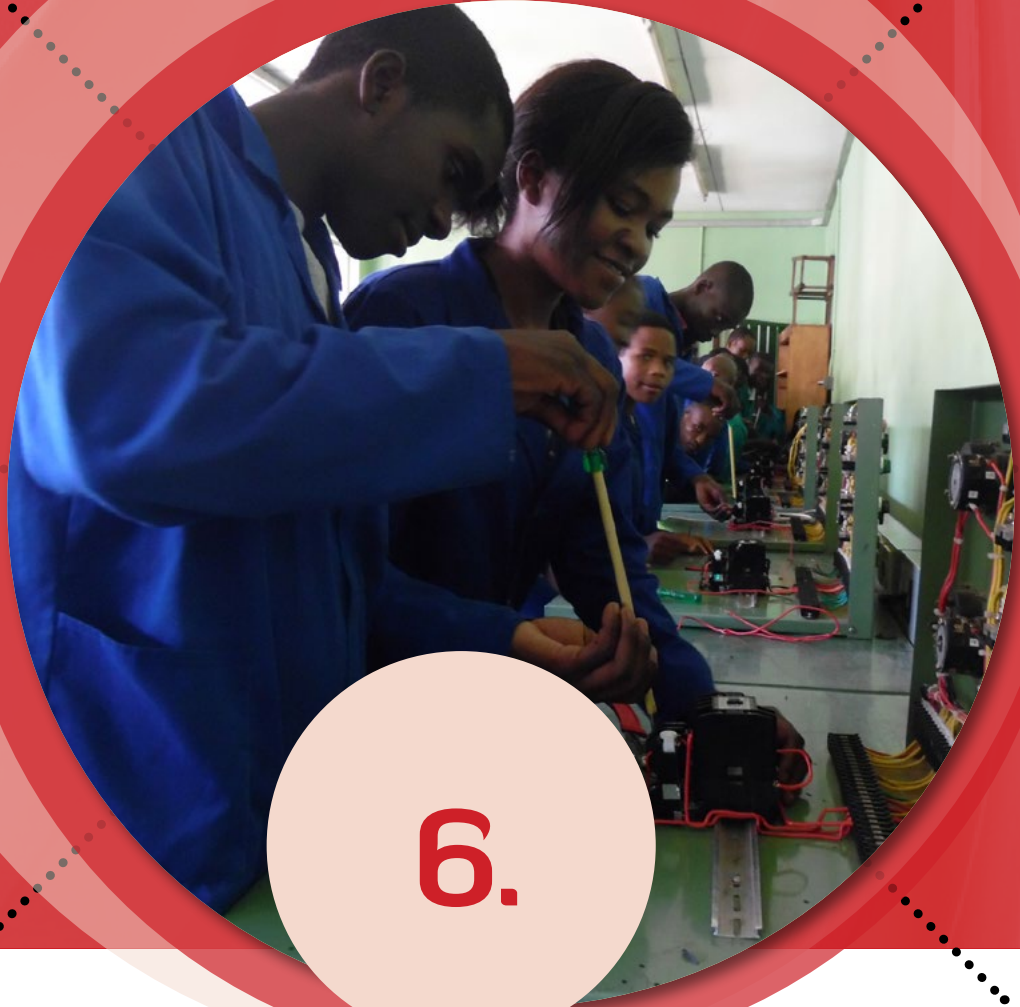
6.

Estimating the Potential Demographic Dividend for Malawi

6.1   Potential for Harnessing the Demographic Dividend in Malawi

Over the last decade, Malawi has experienced positive economic growth but nonetheless, about half of the population lives in poverty and much more needs to be done to meet the 2016 MGDS II target of reducing the proportion to 27 percent. Although there is some evidence of decline in inequality in the country (Gini coefficient declined from 0.40 to 0.39 between 2010 and 2013), the change is varied across geographical space with an increase experienced in urban areas and in the Central region. A faithful adherence to medium term implementation plans such as MGDS II and a recalibration of strategies that are not working are required for Malawi to accomplish its long-term development goals. These goals include becoming a technologically driven middle-income country, and with inclusive, sustainable economic growth.

Enhanced investments in education are critical for Malawi to develop quality human capital and harness the DD. Currently, participation rates at secondary school and tertiary level are too low and need massive improvements. At the same time, the quality of education has to be improved at all levels, and systemic inef ciencies leading to high repetition and dropout rates addressed. A prompt review of the curriculum at all levels to address the education and job-market skills mismatch is vital for Malawi's education system to produce a competitive labour force that will make the country's economy globally competitive. As identi ed in Vision 2020, the priority of promoting science and technology, commercial subjects and technical and vocational training will put the country on a much-needed transformational pathway to learning and skills development. Development of skills such as entrepreneurship and leadership can assist the country to emulate the socio-economic development trajectory of the Asian Tigers and other fast developing countries - including those on the continent like Mauritius and Botswana.

Malawi has demonstrated over the last two decades that its democratic space is deepening and maturing, with several peaceful democratic elections behind it. Such stability fosters a good environment for investors, both local and foreign. Thus if the country strives to enhance governance, performance management and accountability, in both the public and private sectors, many of its development goals can be met. The array of good policies in place to achieve this end requires strict implementation, monitoring, and evaluation mechanisms to ensure that proposed policy actions translate into expected positive outcomes.

Malawi can achieve its development goals and harness the demographic dividend, but the demographic transition must be accelerated. This can be accomplished by implementing policy options that will result in rapid fertility decline and creation of an economic environment that will attract investments and help create jobs for the rapidly growing labour force.

Figure 6.1 and Table 6.1 show changes in population age structures and socio-economic and demographic indicators for Malawi and Malaysia between 1960s and in the more recent period. The population structures for the two countries were relatively similar in the 1960s when the average number of births per woman was 6.0 in Malaysia and 7.0 in Malawi. While the 2015 age structure for Malawi is similar to the one in 1960, Malaysia's 2015 age structure is radically

different due to the rapid decline in fertility and mortality rates the country has experienced since the 1960s. Malaysia also achieved significant improvements in education: two-thirds of Malaysian children of secondary school age are enrolled at that level and gross tertiary education enrolment is at 37 percent. Malawi on its part has only 16 percent of its population of secondary school ages enrolled at that level and gross tertiary enrolment is at less than 1 percent. Finally, while Malawi has made considerable progress in reducing child mortality and is on target to achieve MDG 4, the 2014 level of under-five mortality of 85 deaths per 1,000 live births is much higher than the recent level of 5 deaths per 1,000 live births for Malaysia.

Malawi needs to intensify the on-going efforts to reduce child mortality, to improve quality of life of its population and lay the foundation for the decline in fertility rates. Decisions to have few children are often predicated on the understanding that the few children will survive to adulthood. These transformations contributed to Malaysia's accelerated economic growth, which had a GDP per capita of USD 10,538 in 2014 (World Bank, 2015) compared to Malawi's USD 397 (Ministry of Finance, 2014).

Table 6.1: Comparison of Trends in Various Economic and Demographic Indicators, Malawi and Malaysia

Indicator	1960		2013/4	
	Malaysia	**Malawi**	**Malaysia**	**Malawi**
GDP per capita (USD)	299	46	10,538	397
Total fertility rate (births per woman)	6.0	7.0	1.98	5.0
Under-five mortality (deaths per 1,000 live births)	85	186	5	85
Net secondary school enrolment rate (%)	35	2.2 (in 1990)	69	16
Gross tertiary institution enrolment rate (%)	4	0.4 (in 1973)	37	0.82

Sources: World Bank World Development Indicators 2014; UN World Population Prospects, the 2012 Revision; Malawi MDG End line Survey, 2014; UNESCO UIS; NABOP Technical Committee 2014; Malawi Education Statistics, 2014

Figure 6.1: Comparison of Population Pyramids for Malawi and Malaysia, 1960 and 2015
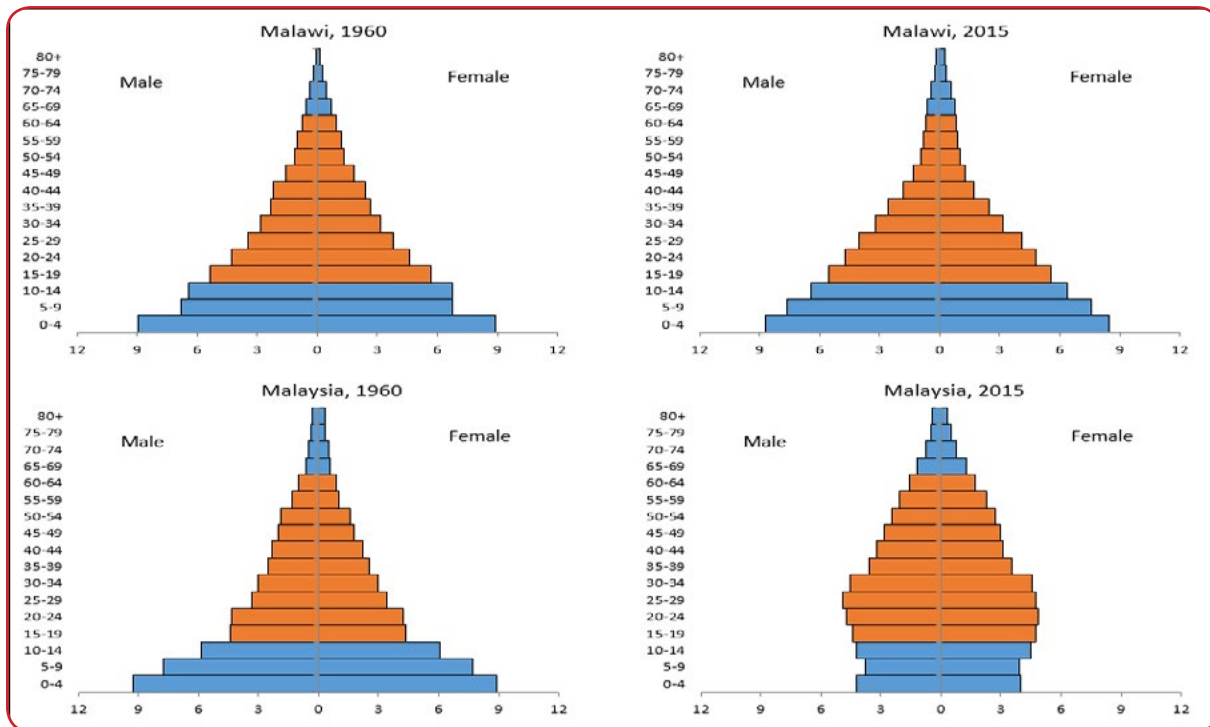
Source: World Population Prospects, The 2012 Revision. Volume II: Demographic Profiles

6.2 Policy Scenarios for Modelling the Potential Impact of the Demographic Dividend for Malawi

The study used the DemDiv modelling tool (Health Policy Project & United States Agency for International Development, DemDiv Model, 2014) to measure the potential impact of the Demographic Dividend on economic growth and other socio-economic outcomes in Malawi. The modelling was based on four policy scenarios selected to demonstrate the net and combined effects on economic growth and other development outcomes when focusing on investments in economic and social development. The model gives results for a 40-year projection period and given the availability of data, particularly from the 2014 Malawi MDG End line Survey, 2014 was chosen by the CTT as the base year for the projections. Targets for these policy scenarios were mainly derived from the averages of various upper middle-income countries that are at the level where Malawi aspires to be by 2054 for various indicators. A summary of the policy scenarios is presented in Table 6.2.

Status Quo Scenario

This scenario represents a case where the status quo, characterised by the persistence of high child-dependency ratios and relatively modest economic performance, persists over time. The country would continue to perform well below its full potential and there would be no decisive action to address the widely acknowledged development bottlenecks in order to break away from the business-as-usual culture. Malawi would continue to make only modest improvements

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but fail to attain middle-income status given its current low-income status. Targets for economic, education and family planning indicators would improve only minimally, hence the country would not achieve the target indicators of socio-economic transformation.

Economic Emphasis Scenario

This scenario represents a case where the country is aggressive in addressing the economic challenges to socio-economic development. It would put in place policies, systems, and resources to fully implement the economic programmes necessary to attain the ideals envisioned for its long-term development goals and operationalised through medium term plans such as the MGDS II. In this scenario, we benchmark Malawi's progress against the averages of fast-developing and economically advanced nations whose incomes are in the middle to the high-income bracket. This scenario represents the best economic case for Malawi in terms of reforming the economy to enhance productive efficiency and accelerate economic growth, job creation, and poverty reduction. The current average values for the benchmark countries were used for most of the global competitiveness indicators. On the other hand, there is little emphasis in this scenario on social investments and therefore education and family planning indicators are held constant at the Status Quo scenario level.

Social Emphasis Scenario

This scenario is designed to assess the net impact of maximum increases in investments in interventions that reduce family size, including family planning and education, while making modest investments in the economic sector. Investments and performance in the economic sector are at a similar level as the Status Quo scenario. In this case, we increase modern contraceptive use from the current level of 57.4 percent to 80 percent by 2054. As the CPR increases, the population not using contraception decreases, and therefore it is assumed that Malawi will experience a much slower rate of increase of CPR in the projection period, compared to previous rates of increase. We also make the assumption that if Malawi is to achieve the desired status of a technologically-driven, middle-income economy, then by 2054, young people on average should receive at least two years of post-secondary school training and certification. Thus the expected years of education would increase from the baseline values to 14 years by 2054 under this scenario.

Combined Emphasis Scenario

This scenario provides the best policy option for attaining the country's desired socio-economic transformation to become a middle-income country. The scenario adopts the best target indicators for economic competitiveness, education and family planning, enabling assessment of the net impact of maximum prioritisation of family planning and education beyond the effects of prioritisation of economic reforms (i.e. the demographic dividend). This scenario entails determined commitment and action to develop high-quality human capital in Malawi, comparable to upper middle-income countries. There is prioritisation of empowerment of women and their partners to avoid unintended pregnancies through universal access to effective methods of contraception. Furthermore, there

are comprehensive reforms of the educational system resulting in increased years of schooling completed and better quality of education. Increasing completed years of schooling helps to keep girls in school, prevent early childbearing, and reduce fertility. For the education indicators, we assumed that for Malawi to be economically competitive, the country should achieve universal secondary education and a large proportion of the school-going population attain at least two years of post-secondary training. The contraceptive prevalence rate was set at 80 percent, which would be among the highest levels in the world based on 2014 levels. The Combined Emphasis scenario targets for education and family planning indicators are the same as those of the Social Emphasis scenario, while the economic targets are the same level as those of the Economic Emphasis scenario. Thus the Combined emphasis should provide the best possible outcome.

Table 6.2: Summary of Characteristics of Policy Scenarios for Demographic Dividend Modelling for Malawi

Policy Scenario	Key Characteristics
Status Quo	■ **Family planning** Use of modern contraceptive methods increases by half of the improvement needed to achieve the 2054 combined emphasis target of 80 percent.[27] This represents growth averaging 0.28 percentage points per year, which is much lower than the 2.3 percentage points per year achieved over the last two decades (1992-2014). The assumption is that as CPR levels increase, the rate of increase reduces, tapering off at between 75-85 percent, as seen in countries with the highest CPR levels globally. ■ **Economic reforms, job creation and governance** ■ Targets for economic indicators are higher than baseline indicators by 20 percent of the improvement needed to achieve 2054 combined scenario targets. ■ **Education** Targets for education indicators are higher than baseline indicators by 20 percent of the improvement needed to achieve 2054 combined scenario targets. ■ **Health** Slow progress in human capital development
Economic Emphasis	■ Represents optimisation of Malawi's global competitiveness and governance. ■ Target economic indicators for 2054 are the average economic indicators for high-income countries except for Imports as a percentage of GDP. ■ Imports are pegged to the current level of imports for South Africa, which has a vibrant and diversified economy not dominated by imports. ■ Education and family planning indicators were held at the same level as the Status Quo.
Social Emphasis	■ Economic indicators held to the same level as the Status Quo scenario where little investments are made in the economic sectors. ■ Target indicators for education are set at the same level as Combined Emphasis scenario with the goal of achieving at least 14 years of completed education for Malawian children i.e. at least 2 years of post-secondary school qualification. ■ Modern contraceptive prevalence rate to increase to 80 percent

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[27]Targets were arrived through a participatory discussion during the workshop that agreed the Status Quo targets would reflect the slow improvements on the indicators due to a business-as-usual attitude to investments in socio-economic development. The scenario is a pessimistic outlook.

Combined Emphasis	■ Emphasises an integrated development model that concurrently maximises investments and reforms in the economic sector, family planning and education to prevent unplanned births, builds high-quality human capital and increase productive population.
	■ Economic indicators are held to the same level as the Economic Emphasis scenario.
	■ Target indicators for education were set at the highest level equal to the social emphasis scenario.
	■ As in the social emphasis scenario, modern contraceptive prevalence rate to increase to 80 percent by 2054, which would be among the highest in the world.

6.3   Baseline and Projected Economic and Demographic Indicators

The specific indicators that the DemDiv model uses are presented in Table 6.3. For each variable, we indicate the baseline value and the values used in the four policy scenarios. The meanings of the variables are defined in Appendix II. The rationale and assumptions behind the choice of the target indicators are explained below.

Economic Indicators

The DemDiv economic model captures a number of indicators to reflect the general economic situation and the extent to which the country has an enabling environment and infrastructure to promote job creation, economic productivity and investments. These indicators were used as inputs to project the performance of the economy on a set of outputs, particularly GDP, GDP per capita, per capita investment, capital formation and employment. Baseline estimates of output variables were obtained from official national statistics, except for the capital stock and capital stock depreciation rate, which were derived from the model dataset by Berlemann and Wesselhoft (2014). The share of imports to GDP was obtained from the Malawi National Accounts and Balance of Payments (NABOP) office.

Other economic indicators were sourced from the Global Competitiveness Index (GCI), a cross-country database compiled by the World Economic Forum (WEF). Competitiveness is defined as the set of institutions, policies, and factors that determine the level of productivity of a country, and hence the level of prosperity that can be reached by the economy. The database assesses the strengths and weaknesses of national economies by analysing the efficien y of various sectors and their contributions to productivity of the economy over time. The GCI database has a number of indicators and components that are grouped into 12 pillars of competitiveness. Each indicator is presented on a scale of 1 - 7, with 7 as the best performance. For this report and in line with the DemDiv model, we selected indicators from four pillars: labour market flexibilit , financial market efficiency, ICT use and public institutions.

The 2013-2014 figures for Malawi were used as the baseline for GCI variables. Under the Status Quo scenario, the country will continue to perform below its full potential and attain about 20 percent of the improvement it requires to catch up with the average economic GCI indicators for high income countries. The high-income countries represent the kind of technologically-driven

and prosperous economy that Malawi aspires to have. In addition to being technologically-driven, such economies are diversified and therefore not as susceptible to the kind of economic shocks that a country like Malawi, heavily reliant on a single dominant cash crop economy, can suffer in the face of difficulties in the sector. The Economic Emphasis Scenario thus pegs Malawi's target to the average of the GCI indicators for high-income countries with the exception of "imports as a percentage of GDP". An additional note is that on three out of the four GCI variables, Malawi scores higher than the average for upper middle income countries, hence the choice of pegging the 2054 targets to the contemporary average values of high income countries. It is only for ICT use where Malawi scored below the average of upper middle-income countries.

Labour Market Flexibility

Labour market flexibility creates a positive effect on worker performance and on the attractiveness of the country for talent and high quality skills. This pillar is critical for ensuring that workers are allocated to their most effective use in the economy (based on their skills) and provided with incentives to give their best effort in their jobs. Labour market flexibility enables shifting of workers from one economic activity to another rapidly and at low cost and allows for wage fluctuations without much social disruption. It provides for equity in the business environment between women and men. The components that make up this pillar include: cooperation in labour-employer relations; flexibility of wage determination; hiring and firing practises; redundancy costs, and effects of taxation incentives on work.

Malawi's labour market flexibility baseline index is 4.59. We assume that under the Status Quo and Social Emphasis scenarios, the index will increase to 4.60, representing between 20 percent to 40 percent of the increase the country needs to make to reach 5.52 (the baseline year value for high income countries) that is set as the Economic emphasis and Combined emphasis scenario values projected for 2054.

Financial Market Efficiency

This pillar deals with allocation of national resources and foreign direct investments in the different sectors. An efficient financial sector should channel resources to those entrepreneurial or investment projects with the highest expected rates of return rather than only to those who are politically well-connected. To ensure financial efficien y, economies require sophisticated financial markets that can make capital available for private-sector investment from a sound banking sector, well-regulated securities exchanges, venture capital, etc. The banking sector therefore needs to be trustworthy and transparent and appropriately regulated to protect investors and other actors in the economy at large. The constituent components of this sub-pillar include: availability and affordability of financial services; local equity market financing; ease of access to loans; and venture capital availability.

As in many countries in SSA, financial market efficien y in Malawi financial markets are at early stages of development yet it is a fast growing sector. With the right policy measures in place, the country can expect rapid growth in the sector and the concomitant enhancement of economic

growth that these developments can foster. Under the ideal conditions, we therefore modelled the financial market efficien y index to increase from the baseline value of 3.96 to 4.08 under the Status Quo scenario, and 4.2 under the Social emphasis scenario. These represent 20 percent and 40 percent improvement respectively, compared to the desired value of 4.55 (pegged to the baseline year value for high income countries) for the Economic and Combined emphasis scenarios.

ICT Use

ICT use, under the technological readiness pillar, measures the agility with which an economy adopts existing technologies to enhance the productivity of its industries, with specific emphasis on its capacity to fully leverage information and communication technologies (ICTs) in daily activities and production processes for increased efficien y and enabling innovation for competitiveness. ICT use constitutes: proportion of the population using internet; the number of fixed broadband internet subscriptions per 100 people; internet bandwidth (kb/s per user); and the active mobile broadband subscriptions per 100 persons.

While Malawi's baseline score for this measure is quite low at 1.02 out of 7, it is acknowledged that the ICT sector is a fast developing area and uptake over the next 40 years should increase significantly in Malawi as it becomes more integrated in the global economy and ICT becomes central to doing business and everyday life. We therefore projected that progress in this area by 2054 under the Economic emphasis and Combined scenarios would likely mirror the 5.52 contemporary average score for high-income countries. To attain a fifth of this progress under the Status Quo scenario, the target was placed at 1.92, while the target under the Social emphasis scenario was pegged at 2.82 to represent 40 percent of the improvement needed to attain the score of the high-income countries (5.52).

Public Institutions

This pillar represents the accountability mechanisms and strategies that have been laid to promote and protect both local and foreign investments. The institutional environment is determined by the legal and administrative framework in which individuals, firms and governments interact to generate wealth. The effective functioning of public institutions influences investment decisions and the organisation of production. Government attitudes toward markets and freedoms and the efficien y of its operations are key. Excessive bureaucracy and red tape, overregulation, corruption, dishonesty in dealing with public contracts, lack of transparency and trustworthiness, inability to provide appropriate services for the business sector, and political dependence of the judicial system can impose significant economic costs to businesses. These would significantly slow the process of economic development.

Proper management of public finances also falls under this pillar and is critical for ensuring trust in the national business environment. The components of this sub-pillar are: property rights and intellectual property protection; ethics and corruption that includes diversion of public funds; public trust in politicians; irregular payments and bribes (awarding of contracts, taxation

payments, favourable judicial decisions, etc.); undue influence that affects judicial independence and favouritism in decisions involving government officials; government efficien y that includes wastefulness of government spending, burdens of government regulation, efficien y in legal frameworks (settling disputes and challenging regulations) and transparency in government policymaking; and security (business cost of terrorism, crime and violence and reliability of police services).

Governance is among the ve themes of the MGDS II and the strategy stresses that successful implementation of the development plan hinges on good governance. It outlines key governance areas that require continuous attention in the country as economic governance, corporate governance, democratic governance and public sector management. In order for Malawi to attract foreign investment and reduce the cost of doing business, the country will need to operationalise the MGDS II commitment to total adherence to principles of good governance including efficien y and effectiveness, transparency and accountability in the delivery of public services. The model projects that the capacity of Malawi's public institutions to enforce accountability in service delivery and the use of public resources and to ensure the protection of lives, investments, and property would improve modestly under the Status Quo scenario (from 3.82 to 4.04), and slightly better under the Social emphasis scenario (from 3.82 to 4.25). The 2054 target for the Economic emphasis and Combined scenarios, on the other hand, is xed at the current average of high-income countries (4.90) to emulate the best practices in governance achieved by these countries.

Share of Imports as a Percentage of GDP

High levels of imports (as a percentage of GDP) can undermine socio-economic development, capital formation and prospects for mass creation of jobs in the local economy. Imports as a percentage share of GDP in Malawi between the year 2000 and 2012 averaged 41 percent. In the baseline year (2014), imports as a percentage of GDP had risen to 48 percent. To ensure a positive balance of trade, Malawi should strive to import less while at the same time export more. An increase in imports of consumer goods, coupled with the devaluation of the Malawi Kwacha, are likely to keep Malawi's share of imports as a percentage of GDP high in the short-term. However, fundamental economic reforms that promote local manufacturing, tightening of the fiscal policy and an increase in exports in potentially lucrative sectors such as uranium mining can reverse the situation. In modelling, we set Malawi's best option (Combined and Economic Emphasis scenario) for this variable at 36 percent.

Family Planning Indicators

In this category, we focus on three indicators: the CPR, the period of postpartum infecundability (PPI) and sterility.[28] Family planning is a very important intervention for fertility decline since it enables women and their partners to prevent unplanned births.

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[28]While the analysis does not include abortion as one of the family planning indicators, high levels would have an impact on fertility. Nevertheless, abortion is illegal in Malawi.

Contraceptive Prevalence Rate

This analysis used the proportion of married women using both modern and traditional contraception.[29] We assume contraceptive effectiveness of 95 percent for modern methods and 50 percent for traditional methods. The baseline contraceptive use levels for 2014 were 57.4 percent and 1.2 percent for modern and traditional methods, respectively.

The proportion of married women using modern contraceptives increased from 7 percent in 1992 to 57.4 percent in 2014, representing an annual increase of 2.3 percentage points. Malawi thus has one of the highest modern contraceptive use rates in the region. This is likely to lead to a ceiling effect that will constrain similar rapid CPR growth in the future. Reviews suggest that increases in contraceptive use slow down at higher levels of contraceptive prevalence when non-users of family planning are mostly those not predisposed to use contraception due to self-assessment of fecundity, concern about side effects, and religious or cultural beliefs (Ross, Abel, & Abel, 2004). In 2014, some of the countries with high modern CPR were United Kingdom with 84 percent, Brazil with 77 percent and Thailand with 77 percent (Bureau, 2015).

Thus in setting 2054 projections for modern CPR, we set the Combined Emphasis and Social Emphasis modern CPR at 80 percent, which is in the historical range of the highest use of modern contraceptives globally. For the Status Quo and Economic emphasis scenarios that pay little attention to social sector investments, we projected a halfway point improvement between the baseline and the best possible value, setting the modern CPR at 68.7 percent.

Traditional methods at 1.2 percent at baseline are already quite low. However, we assume that use of traditional methods will not altogether disappear over time and therefore made a marginal decrease to 1 percent by 2054, which we hold constant for all four scenarios.

Postpartum Infecundability and Sterility

The PPI is the duration (in months) after giving birth when a woman is not susceptible to pregnancy due to lactational amenorrhea and / or postpartum sexual abstinence. The 2010 DHS value in Malawi for PPI was 12.4 months. Being the latest available data on PPI, this is the value used for the baseline in the model. We project a 30 percent reduction of PPI over the next 40 years, in line with values found in middle- and high-income countries where rates of breastfeeding are low and female formal employment high, and there being no strong rationale for why it should vary for the scenarios, we held the value constant for all four scenarios at 8.68.

Sterility

Sterility is measured by the percentage of women in union who remain childless at the end of their reproductive years (ages 45–49). The percentage of Malawian women who were childless in the 45–49 age group was 1.3 in 2014. Already at quite a low level, the decision is made to hold this indicator at the same baseline level for all the four scenarios.

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[29]While it would be appropriate to focus on CPR among all women of reproductive age in Malawi due to the fact that the high fertility is driven by the younger women who do not define themselves as married, CPR statistics for 2014 for this age category are not available.

Education Indicators

In this model, we use expected years of schooling and the observed mean years of schooling for males and females as indicators of the impact of education on development. The expected years of education refers to the total number of years of schooling a six-year-old child today can expect to receive, assuming that the probability of her / him being enrolled in school at future ages is equal to the current enrolment rate at those ages. We adopted the expected years of schooling computed from the Malawi IHS III as the baseline figures for 2014. These were 9.19 years for females and 8.71 years for males.

The Mean Number of Years of Schooling is the average number of years of schooling for the adult population ages 25 and above. We adopted the figures computed from Malawi IHS III: 4.19 years for females and 6.42 years for males.

The big difference between expected years of schooling and actual years of schooling shows that school attendance rates are much better for the younger generations in Malawi than the older ones. It also indicates that the school attendance of females in Malawi has seen a dramatic shift with the younger generation bridging the gap in attainment that existed compared to males in the older generation.

However, Malawi is still quite far from attaining the education levels it needs to become a globally competitive economy. Furthermore, developing high-quality human capital requires more than just an increase in years of schooling. Improvements must also be made in the quality of education and the capacity of the educational system to produce graduates who are equipped with the skills in innovation, technological sciences and entrepreneurship that the country will need to have a globally competitive labour force.

To address this, the modelling envisions a Malawi where most young people will attain at least two years of tertiary education in the future. In addition, gender parity in education attainment is desirable. Thus in 2054, under the Combined Emphasis and Social Emphasis scenarios, where optimum investments are made in education, training and skills development, the expected years of schooling for both females and males is set at 14 years. Under the Status Quo and Economic Emphasis scenarios where minimal investments are made in the sector, the variable is set at 10.15 years for females and 9.77 years for males. These reflect a 20 percent improvement on the baseline figures relative to 14 expected years of schooling.

In 2054, under the Combined Emphasis and Social emphasis scenarios, where optimum investments are made in education, training and skills development, the mean years of schooling for both females and males is set to 9 years - the current level derived from the female average range of benchmark countries, South Africa, Seychelles, Mauritius and Botswana, countries with high levels of adult education attainment in SSA. Under the Status Quo and Economic emphasis scenarios where minimal investments are made in the sector, the variable is set at 5.15 years for females and 6.94 years for males. These reflect a 20 percent improvement on the baseline figures relative to 9 years of completed schooling.

Table 6.3: Baseline and Target Indicators for Policy Scenarios Used for Demographic Dividend Modelling for Malawi

POLICY SCENARIO	REF YEAR	Education					Family Planning				Economic				
		Expected Years Female	Expected Years Male	Mean Years Female	Mean Years Male	Mean Years (Male & Female)	CPR Modern Methods	CPR Traditional methods	PPI	Sterility	Labour Market Flexibility	ICT Use	Financial Market Efficiency	Public Institutions	Imports as % of GDP
Baseline	2014	9.19	8.71	4.19	6.42	5.31	57.4	1.2	12.4	1.3	4.59	1.02	3.96	3.82	48.90
Status Quo	2054	10.15	9.77	5.15	6.94	6.04	68.7	1.0	8.68	1.3	4.60	1.92	4.08	4.04	48.90
Economic Emphasis	2054	10.15	9.77	5.15	6.94	6.04	68.7	1.0	8.68	1.3	4.62	5.52	4.55	4.90	36.00
Social Emphasis	2054	14.00	14.00	9.00	9.00	9.00	80.0	1.0	8.68	1.3	4.60	2.82	4.20	4.25	48.90
Combined	2054	14.00	14.00	9.00	9.00	9.00	80.0	1.0	8.68	1.3	4.62	5.52	4.55	4.90	36.00
Data Source		*Computed from IHS III, 2010/11*					*MES 2014; MDHS 2010*				*World Economic Forum, Global Competitiveness Report 2013–2014*				*NABOP technical Committee*

INTERVENTION POLICY AREA

Other Baseline Indicators

Table 6.4 shows the other DemDiv model inputs that are used as baseline indicators for various outputs of the model. All data were drawn from national data sources and official reports, except the capital stock depreciation rate, a constant drawn from the Berlemann and Wesselhöft (2012).

Table 6.4: Baseline values for Model output indicators

| Category	Indicator	Base Year Value (2014)	Data Source
Health	Percentage married (women aged 15-49 years	66.8	MES 2014 &MDHS 2010
	Total fertility rate (TFR)	5.0	
	Percentage of high-risk births	38.1%	
	Infant mortality rate (IMR) per 1000 live births	53	
	Under-five mortality rate (U5MR) per 1000	85	
	Maternal mortality rate (MMR) per 100,000 live births	574	
	Female life expectancy	52.7	Malawi Population Projections 2014, NSO
	Female-male life expectancy difference	2.59	Malawi Population Projections 2014, NSO
	Contraceptive Effectiveness Modern Methods	0.95	Assumptions
	Contraceptive Effectiveness Traditional Methods	0.5	
Economic	Capital formation per capita	82	Calculated from Malawi Economic Review Report 2013/14
	Initial employment	5,500,000	Labour Force Survey, 2013
	Initial employment growth rate	3.1%	ILO (average for 2005-2015)
	GDP per capita (USD)	397	NABOP estimates, 2014
	Ratio of capital stock to pop 15+	6,331	https://research.stlouisfed.org/fred2/series/RKNANPMWA666NRUG/, July 8, 2015; NSO population projections
	Initial GDP growth rate	5.8%	Average from 2003-2013. (Ministry of Finance, Annual Economic Report, 2014)
	Capital stock growth rate	15.6%	Computed
	Labour Force Participation Rate	0.89	Labour Force Survey, 2013
	Capital stock depreciation rate	4%	Berlemann and Wesselhöft 2012
	Primary education costs as % of GDP per capita	10.60%	Computed from Ministry of Finance and Ministry of Education

6.4   Modelling Results

6.4.1   Growth in Per Capita GDP

The key result from the DemDiv model that illustrates the effect of change in age structure on economic growth under the different policy scenarios is the projected GDP. The modelling results show that GDP will grow modestly from the baseline level of USD 5.9 billion to USD 28 billion under the Status Quo scenario by 2054. Under the Social Emphasis scenario GDP will rise to USD 70.9 billion. The performance will be much better under the Economic Emphasis and Combined Emphasis scenarios where GDP is expected to rise to USD 277 billion and USD 309 billion, respectively, by 2054.

To illustrate the effect of population size we examine GDP per capita. The difference in GDP per capita between the Economic Emphasis scenario and the Combined Emphasis scenario represents the potential DD that the country can earn over the next four decades. We are defining the demographic dividend as the additional income that the country will earn for adopting an integrated development model that simultaneously prioritises investments in the economic sector to accelerate economic growth and job creation and the social sectors to empower women and facilitate reduction in fertility, education, skill development, and public health, as well as governance.

Figure 6.2 shows growth in GDP per capita between 2014 and 2054 for each of the four policy scenarios and Table 6.5 summarises these data and the consequent levels of the potential demographic dividend that Malawi can earn by 2030, 2040, and 2054.

Figure 6.2: Projected GDP Per Capita by Policy Scenarios in 2030 and 2054 (USD)
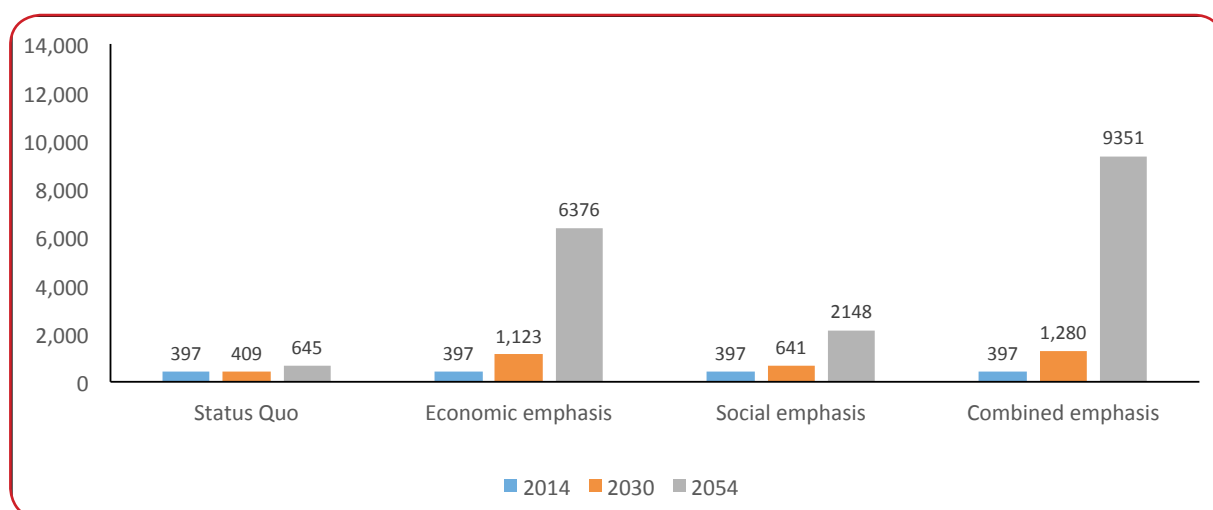
Table 6.5 Projected GDP Per Capita (Us$) and Estimated Demographic Dividend in 2030, 2040 and 2054 by Policy Scenario, Malawi

Policy Scenario	2014	2030	2040	2054
Status Quo	397	409	549	645
Social Emphasis	397	641	1,273	2,148
Economic Emphasis	397	1,123	3,137	6,376
Combined Emphasis	397	1,280	4,203	9,351
Estimated DD		157	1,066	2,975

Under the Status Quo scenario, per capita GDP will increase modestly from the 2014 baseline level of USD 397 to USD 409 in 2030, in 2030, UDS 549 in 2040, and to USD 645 in 2054. Under the Social Emphasis scenario, GDP per capita will increase to USD 641 USD by 2030, USD 1,273 in 2040 and USD 2,148 by 2054. Under the Economic Emphasis scenario, the average income amount will increase to USD 1,123 and USD 6,376 in 2030 and 2054, respectively. Under the Combined Emphasis scenario, Malawi will maximise the increase in per capita income to a GDP per capita of USD 1,280 in 2030, USD 4,203 in 2040, and USD 9,351 in 2054. The 2054 GDP per capita income level would be almost 24 times bigger than the current level of USD 397.

The potential demographic dividend that the country can earn by 2030 is $157, which is almost 40 percent of the current GDP level. By 2040, Malawi would earn a demographic dividend worth USD 1,066 while by 2054 it would be USD 2,975. Thus, the additional average income that the country would earn for adopting an integrated development model would be 7.5 times bigger than the current level of per capita GDP.

Note that the increase in economic performance and additional economic gain emanating from the demographic dividend accelerates towards the end of the four decades. This underscores the fact that the demographic dividend is a long-term phenomenon and sustained integrated investments in health, education, inclusive job-oriented economic growth, and effective governance will generate multiplier effects that can propel achievement of the socio-economic transformation that Malawi articulated in Vision 2020 in two to four decades.

6.4.2   Population Size and Structure

Figure 6.3 illustrates the 2014 baseline age-sex distribution and the projected age-sex distribution of Malawi's population and key population and human capital features for the Economic Emphasis and Combined policy scenarios in 2054.

The Status Quo scenario would lead to a total fertility rate of 3.49 children per woman and a total population of 43 million people. The dependency ratio will decrease from 0.99 in 2014 to 0.69 in 2054. As a result of decrease in the mortality rate, female life expectancy will increase to 68 years in 2054 from the 2014 figure of 53 years. The HDI, which is a composite measure of countries' levels of social and economic development based on life expectancy at birth, years of schooling, and per capita gross national income, would increase from the baseline level of 0.315

to 0.401. At this level, Malawi would be ranked at position 148 based on the 2011 global rankings compared to position 160 at baseline. Undermined by a high child-dependency burden where more than a third (36 percent) of the population is below 15 years, Malawi would be performing far below its potential and firmly stuck in the low-income nation status.

With the Economic Emphasis scenario, total fertility rate, female life expectancy at birth, dependency burden and population size would be the same as in the Status Quo scenario as a result of a similar lack of investment in education and family planning programmes. However, due to the better economic performance, HDI would increase to 0.56, representing a ranking equal to 117 based on 2011 rankings.

Adoption of the Social Emphasis strategy would lead to a fertility decline to 2.12 children per woman, a dependency ratio of 0.47, with 26 percent of the population under age 15. This is a much more manageable child dependency burden compared to 46 percent of the population below 15 years at baseline. Female life expectancy at birth will increase to 64 years and the HDI to 0.59, where Malawi would be ranked 111 based on the 2011 rankings. Malawi's population size would increase to 33 million.

The Combined Emphasis scenario, which provides the best combination of policies and investments for transforming Malawi into a middle-income economy by 2054, would result in a total fertility rate of 2.12, and a population of 33 million by 2054 as in the Social Emphasis scenario. Both scenarios would have the same age structure with a marked increase in the working age population and a dependency ratio of 0.47. The percentage of the population under age 15 would likewise be 26 percent and female life expectancy at birth would increase to 64. However, because of the much better economic performance under the Combined scenario relative to the Social Emphasis scenario, the HDI would be more improved, at 0.69 and Malawi would rank 80th, globally, as per 2011 rankings.

Figure 6.3: Current and Projected Population Pyramids and Key Features, Malawi
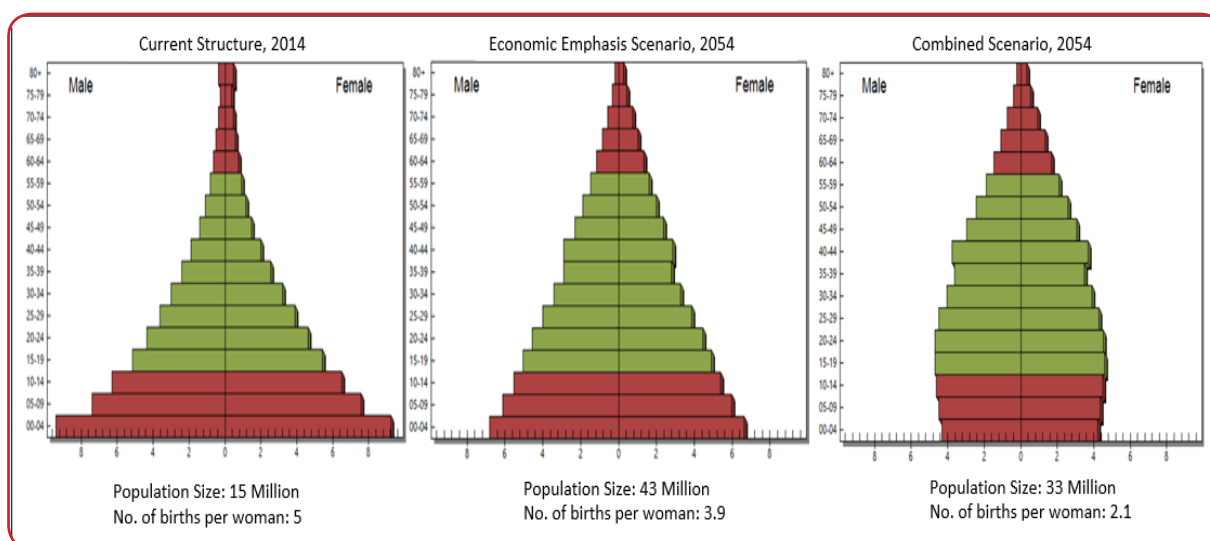
Source: Ministry of Finance, Economic Planning and Development, UNFPA & AFIDEP, 2016

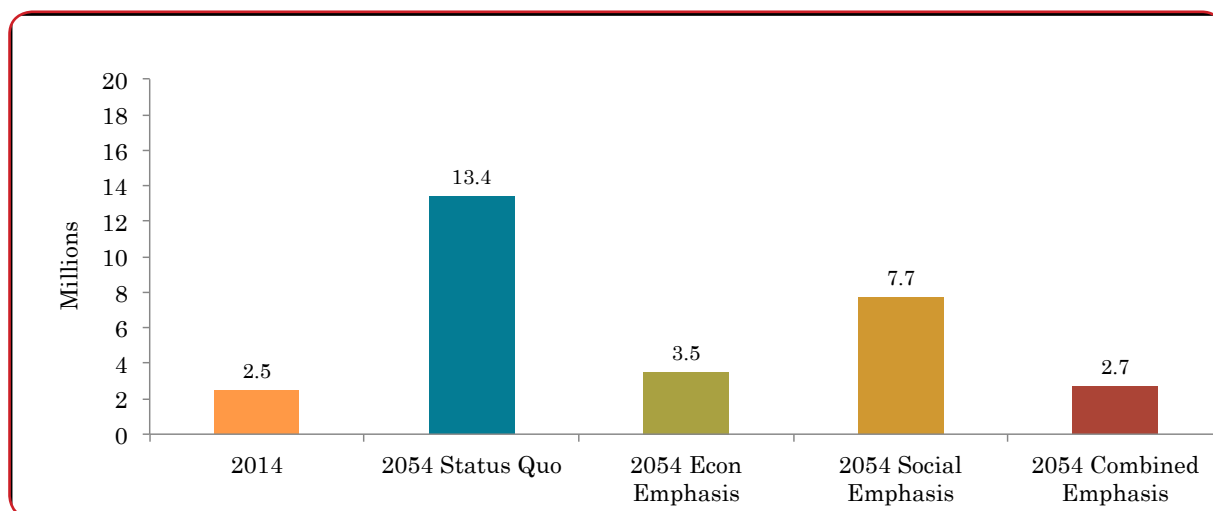### 6.4.3 The Working Age Population and Job Creation Challenge

One of the most critical policy concerns around the "Africa rising" narrative is the high rate of unemployment and underemployment across the continent, despite widespread rejuvenated economic growth. As fertility declines, there will be a rapid growth of people in the youthful ages as countries experience the youth bulge. The DemDiv model attempts to model the gap between available jobs and population in the working ages over the projection period, taking into account the changing age structure and employment growth rate.

Applying the initial employment growth rate of 3.1 percent (an average of Malawi's employment growth rate between 2005 and 2015 according ILO estimates) at baseline, the results indicate that Malawi will have to grapple with a significant demand for job-creation under all four policy scenarios. Figure 6.4 summarises these results.

At baseline, the gap between the potentially employable and the employed stood at 2.5 million. This number will increase significantly by 2054 to an overwhelming 13.4 million if business continues as usual under the Status Quo scenario. A Social Emphasis strategy will reduce this number to 7.7 million by 2054. The crisis will be more manageable under the Economic Emphasis scenario that will have an employment gap of 3.5 million. The number will be 800,000 less (2.7 million) under the best-case scenario in which the Combined strategy of integrated and simultaneous investments in the five pillars of the DD is followed.

The model is not able to measure a critical component of employment – whether the jobs constitute decent work. Although the 2013 Malawi Labour Force Survey from, which the employment data for the model are extracted, shows that 80 percent of those in the labour force are in employment, 64 percent are employed in the agriculture sector, which largely consists of low-earning subsistence farming in rural areas. In urban areas, much of the employment is characterised by informal itinerant trade activities. Neither can be described as decent work in that that it does not improve the general living standards of the population or support real socio-economic transformation.

While the effects of the demographic dividend are realised through the increase in the working age population relative to dependent children, the sheer increase in the size of the working age population will place enormous pressure on the economy to create enough jobs. The government will therefore need to keep unemployment rates at low levels and simultaneously address the high rates of underemployment by mainstreaming the informal sector.

Figure 6.4: Projected Gap between Total Population Aged 15+ and Employed Population, Malawi

Source: Modeling Results

6.4.4   Capital Formation and the Second Demographic Dividend

An increase in the working age population relative to dependents is not in itself sufficient for a country to harness the demographic dividend; investments in human capital development and job-oriented economic reforms are also necessary. Having a productive and skilled labour force is critical to attract investments for capital formation and boost economic productivity. Figure 6.5 shows projections in per capita capital formation for the four policy scenarios. Fixed capital formation measures how much of the new value added in the economy is invested in fixed assets (less disposals of fixed assets) by the business sector and governments, rather than consumed. The results show that the per capita capital formation would rise from USD 82 at baseline, to USD 143 under the Status Quo scenario, USD 464 under the Social Emphasis scenario, USD 1,106 under the Economic Emphasis scenario, and USD 1,730 under the Combined Emphasis scenario in 2054.

Figure 6.5: Projected Per Capita Capital Formation by Policy Scenario (USD), Malawi
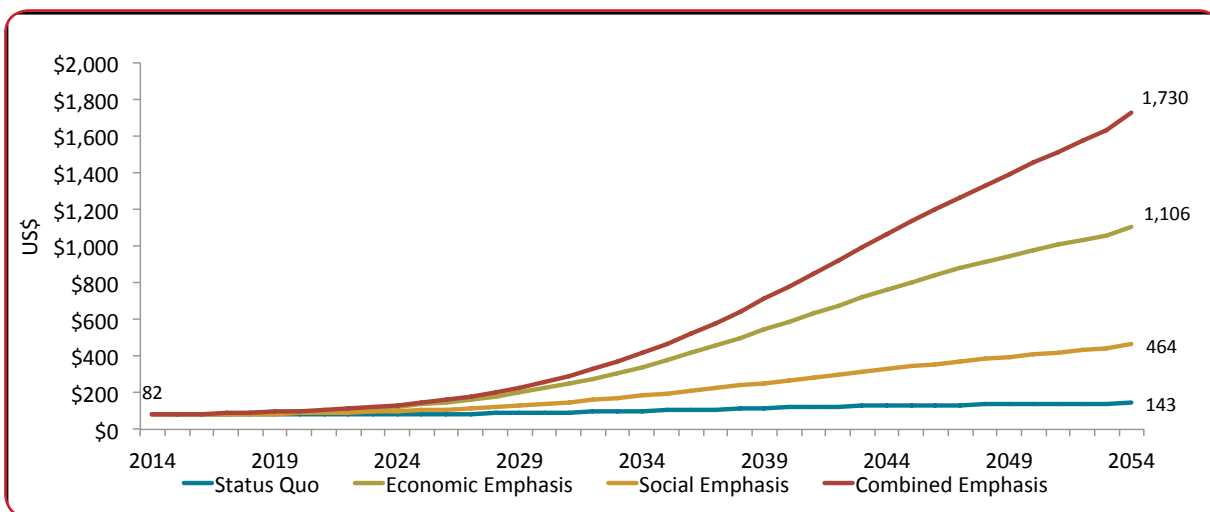
Source: Modelling Results

Summary of Results

The Malawi DemDiv modelling results are summarised in Table 6.6. Overall, the strategies modelled under the Combined scenario best capture the aspirations of Vision 2020 and the goals of MGDS II and other key policies already in place in the country.

Under the Combined scenario, Malawi can raise its GDP per capita from the USD 397 at baseline to USD 9,351 by 2054. This will push it into the contemporary rank of upper middle income nations, and it will be almost USD 3,000 more than if the country takes on the Economic Emphasis strategy (USD 6,376 per capita GDP in 2054). Having a Social Emphasis strategy in combination with Economic Emphasis, leads to a smaller population size (33 million compared to 43 million) and a smaller child dependency burden (26 percent below the age of 15 compared to 36 percent) that increases savings that can be invested elsewhere, while reducing the costs of social services. Among others, these changes can enhance socio-economic development leading to the harnessing of the DD.

Table 6.6: Summary of Modelling Results per Policy Scenario (2014 – 2054 Projections)

Indicator	Baseline (2014)	Status Quo	Economic Emphasis	Social Emphasis	Combined Emphasis
Total Population (millions)	15	43	43	33	33
Population <15 (%)	46	36	36	26	26
Total fertility rate (number of children per woman)	5	3.94	3.94	2.12	2.12
Per capita GDP (USD)	397	645	6,376	2,148	9,351
Life expectancy at birth (female)	53	58	58	64	64
Dependency ratio (population ages 15–64 divided by population <15 and 65+	0.99	0.69	0.69	0.47	0.47
Gap between population ages 15+ and employment (i.e., unemployed population) (millions)	2.5	13.4	3.5	7.7	2.7
Investment per capita (USD)	82	143	1,105	464	1,730

Source: Modelling Results

7.

Policy Options for Harnessing the Demographic Dividend in Malawi

7.1   Malawi's Policy Framework and the Demographic Dividend

Malawi is at a defining moment, where the policy and investment decisions of the next few decades will determine whether the country takes advantage of the time-bound demographic dividend opportunity to accelerate its economic transformation and aspiration to become a technologically driven upper middle-income country. However, this opportunity is not guaranteed or automatic; the country must act fast by concurrently prioritising investments to a) accelerate rapid fertility decline; b) provide high-quality education and skills development; c) create employment opportunities for the resulting large working age population; d) sustain good health of the population; and e) ensure that there is accountability in use of public resources and delivery of public services. The results of this study show that pursuing such a strategic integrated development approach would potentially increase the current GDP per capita level of $397 in 2014 to $9,351 in 2054, resulting in a massive demographic dividend worth GDP per capita USD 2,975 in 2054.

Malawi's socio-economic development blueprint, Vision 2020, seeks to transform the country into "a God-fearing nation that is secure, democratically mature, environmentally sustainable, self-reliant with equal opportunities for and active participation by all, having social services, vibrant cultural and religious values and being a technologically driven middle-income economy" (National Economic Council, 1998). The Malawi Poverty Reduction Strategy (MPRS), the first Malawi Growth Development Strategy (MGDS I) and MGDS II were developed to operationalise Vision 2020. The thrust of these Medium Term Development Frameworks was poverty reduction through economic growth and infrastructure development. The implementation of MGDS I (2006-2011) has seen Malawi through a period of robust economic growth, averaging at 7 percent per annum. The implementation of the MGDS II (2011-2016) has not been smooth, however, with some deceleration experienced in the economy. Generally, progress towards Vision 2020 has been mixed and all indications are that the targets will not be achieved fully and the goal of graduating into a middle-income country may not be achieved by the year 2020. The country has remained among the least developed, with an estimated GDP per capita of USD 397 in 2014 (Ministry of Finance, 2014).

Although attainment of Vision 2020 is elusive given that the deadline is less than five years away and the key development challenges that the Vision sought to address have hardly changed, the overall goal of transforming the country into a technologically driven middle-income nation provides a useful vision for benchmarking the country's sustainable development over the next few decades. Indeed, the demographic dividend framework could provide a critical impetus for the country to accelerate economic growth and achieve its long term development if it makes the necessary investments to facilitate rapid fertility decline, promoting good governance and accountability, enhancing human capital development and reforming the economy for high productivity and mass job creation.

The MGDS II identifies the high fertility rate and rapid population growth as major constraints to achieving its goal of sustainable socio-economic development. The 2012 Malawi Population and

Development Policy specifically highlights the importance of facilitating rapid fertility decline for the country to harness the demographic dividend. The MGDS II recognises that the high child-dependency ratio places a heavy economic burden on the working population, creating a great burden of covering the costs of basic needs and putting pressure on social services. MGDS II is based on 5 thematic areas and one cross-cutting thematic area. These are:

1. Sustainable economic growth

2. Social development

3. Social support and disaster risk management

4. Infrastructure development

5. Governance

6. Gender and capacity development - cross-cutting

This study sought to assess the prospects aimed to demonstrate the magnitude of the demographic dividend that Malawi can earn with well-targeted investments and policies for social and economic development. The country requires an integrated policy and investment approach to education, health, economic reforms and governance over the next 40 years. Malawi aspires to graduate from a low-income to a middle-income country, and could do so by harnessing the demographic dividend. The critical challenges, key policy objectives and strategies in the areas of demographic transition, health, education, economic growth, job creation and governance are summarised below.

7.2   Accelerating the Demographic Transition

A key first step for Malawi to enter the pathway to harnessing the demographic dividend is to facilitate rapid voluntary fertility decline by ensuring universal access to family planning, enhancing female education, and reinforcing efforts in reducing child mortality. Experience from the Asian Tigers and other African countries such as South Africa and Botswana shows that it is possible for Malawi to reduce fertility considerably over the next two decades. Malawi's commitment to the FP2020 Programme is a major positive step, but the country now needs to move forward towards implementing population and family planning policies and strategies.

The persistent challenges that the country faces in its efforts to reduce fertility include:

a) Early initiation of childbearing and early marriage;

b) High levels of unmet need for family planning;

c) High child mortality; and

d) High school dropout rates, especially for teenage girls.

Key recommendations for accelerating fertility decline include:

1. Fully implement Malawi's FP2020 commitments and costed family planning strategy to ensure universal access to contraception for all sexually active people who need it, with a focus on reaching young people with contraceptive information and services to delay onset of childbearing.

2. Strengthen the coordination and governance of reproductive health programmes and broad population issues to ensure that they are central to the development processes and managed in an inter-sectoral manner. This could include the creation of a National Population Council or equivalent vibrant department within the National Planning Commission that the government is planning to institute.

3. Increase the budgetary allocation for family planning, including public-private partnerships to widen access to modern contraception to all who need it.

4. Scale up mass education campaigns and empower politicians, religious leaders, cultural leaders, the media, and civil society to champion the empowerment of women, the small family size norm and use of contraception. This could include incentives for limiting family size, such as cost-sharing in education (e.g. removal of school fees for the first two children) and health care.

5. Improve the quality of family planning services and strengthen training of health workers in contraceptive method counselling, and expand method choice to reduce discontinuation rates. Intensify interventions that are helping the country to reduce child mortality in order to facilitate fertility decline, with particular emphasis on child malnutrition, which is critical for the development of cognitive capacity and productivity later in life.

7.3   Creating a Healthy Workforce

Malawi's labor force bears a double burden of mortality and morbidity from both communicable and non-communicable diseases, worsened by insufficient and unequal distribution of health workers, health facilities and water and sanitation services. The key health challenges for workers' health include:

a) A high burden of disease and high levels of mortality from HIV/AIDS, TB, malaria, respiratory infections and malnutrition;

b) High levels of maternal and reproductive morbidity and mortality;

c) Emerging lifestyle and non-communicable diseases including various forms of cancer and diabetes;

d) Inadequate numbers of well-trained, practicing health workers and health facilities to meet the demand; and

e) High and persistent rates of child malnutrition, affecting cognitive development, learning and long-term educational achievement.

Key recommendations for developing and maintaining a healthy workforce are listed below.

1. Enhance interventions to address diseases that undermine the productivity of workers including HIV/AIDS, malaria, tuberculosis and accidents/injuries.

2. Enhance health education to sensitise Malawians on prevention of emerging non-communicable diseases and strengthen the capacity of the health care system to manage these diseases.

3. Improve nutritional and health status of children, adolescents and women to reduce child and maternal mortality as well as improve the cognitive capacity of children and health status of women.

4. Strengthen key pillars of the health system including training, recruitment, and retention of health workers; supply chain management; health care financing; and use of evidence in decision-making.

5. Encourage and reinforce public-private partnerships in health care delivery and financing and develop accountability mechanisms that leverages synergies and eliminates inefficiencies.

7.4 Enhance Access and Quality of Education and Skill Development

The key challenges to improving the education attainment and skills development in Malawi and to produce a high-quality and competitive labour force, can be summarised as follows:

a) Poor quality of education due to inadequate school facilities, learning materials and teachers;

b) High dropouts and repetitions;

c) High education disparities between men and women;

d) Spatial, gender and income inequalities in literacy, enrolment and attainment;

e) Low mean years of education, and low participation in pre-primary education;

f) Limited and unequal distribution of access to secondary and higher education due to lack of facilities and other resources;

g) A mismatch between skills imparted by the education system and the labor market needs.

h) Conflict between cultural factors and education; and

i) Inadequate secondary schools to absorb learners transitioning from primary school.

Key recommendations for improving education, including access, quality and skills development are as follows:

1. Expand early childhood education facilities to ensure all children attend such schools to improve the aptitude for learning.

2. Increase the number of schools, provide high quality teaching materials and trained teachers to improve quality of education and progression from primary to secondary and tertiary institutions. This could include decentralising the education sector to enhance ownership and oversight by communities.

3. Improve equitable access to secondary, tertiary and vocational training , by addressing social, economic, and cultural factors impacting on enrollment and completion, possibly through universal school policy and public-private partnerships. Improve essential infrastructure of schools including sanitation facilities, water, electricity as well as ICT technology.

4. Reform the curriculum and teaching methods to incorporate technical, innovation, problem solving, and entrepreneurship skills in formal curriculum, including revitalisation and scale up of technical model primary schools.

5. Provide better teacher training and equitable deployment of high-quality teachers to rural areas.

6. Encourage community participation in school management and co-financing especially at early childhood development levels.

7. Improve supervision and school inspection and empower community to demand high quality education

8. Increase the number of facilities, outreach and quality of technical education, vocational and entrepreneurship training (TEVET) institutions to enhance entrepreneurship skills and the productivity of youth who are not in school.

9. Accelerate scale-up of Community Technical Colleges Programme by forging stronger ties with the private sector in its design and implementation and by extending it to develop skills of youth in agricultural production and value-addition activities.

7.5   Accelerating Economic Growth and Job Creation

Malawi's economic growth has to be accompanied by job creation for the job-rich and sustainable economic growth and development goal of the MGDS II and Vision 2020 to be achieved. The current challenges to creating enough decent jobs for Malawi's labor force are:

a) Dependency on the agricultural sector (especially tobacco) for economic growth, employment and forex, which is susceptible to natural disasters such as floods and droughts;

b) Growing imports that are skewed to consumption, challenging the competitiveness of local businesses;

c) Politically and economically unattractive environment for local and foreign investment;

d) Poor infrastructure and services that obstruct productivity and sales;

e) High levels of income inequality;

f) High levels of youth and women unemployment and inadequate formal and skilled employment, especially for women; and

g) A significant skills mismatch, characterised by a gap between market needs and what the education system produces.

Key reccomendations for accelerating economic growth and job creation include:

1. Creating an enabling environment for the growth of the private sector as the engine for job creation, including the promotion of small and medium scale enterprises by enhancing their management capacities and access to financial services; improving key economic infrastructure to ensure reliable energy, transportation, and communication services.

2. Providing incentives to attract foreign investment. This could include tax holidays for new and existing companies that pledge to generate defined levels of jobs for youth.

3. Reforming the agricultural sector to enhance its productivity and profitabilit . Key reforms could include diversifying and modernising agricultural activities; promoting value addition and agro-industries; reforming produce marketing systems and pricing policies; and building resilient agricultural systems to minimise climate change effects.

4. Expanding investments in other potential areas of comparative advantage such as tourism, fis production, mining and ICT based service industry.

7.6 Governance and Accountability

Challenges in the governance structures of the country include:

a) Lack of long-term commitments to the national development plans due to alignment of development plans with general elections and second presidential terms;

b) High levels of inefficiencies in the delivery of public services;

c) Low capacity in institutions that must enforce and uphold the rule of law;

d) Wide-spread corruption and lack of transparency in operations, at all levels of public service; and

e) Inadequate protection and empowerment of vulnerable groups in seeking and demanding their rights.

Key recommendations for enhancing governance and accountability for harnessing a demographic dividend include the following:

1. Develop long-term national development and socio-economic transformation vision that succeeding governments will operationalise in their manifestos and implement.

2. Build on the public service reform initiative to ensure effective accountability and performance management systems at all levels of government, and in public institutions.

3. Strengthen the capacities and coordination of ministries responsible for development planning, education, labour, youth, industry and trade (and how to link with the private sector) to enhance sharing of labour market and information and maximise opportunities for job creation and development of skills necessary for the country's labour market.

4. Reinforce anti-corruption institutions and systems and empower citizens, civil society, the private sector, and the media to fight corruption.

5. Enhance decentralisation of decision-making and resource allocation to districts in order to captivate greater citizen ownership and oversight of development initiatives, particularly social services such as education, health care, and general governance.

6. Adherence to the rule of law in order to attract foreign and local investors and to empower the population to actively participate in development activities.

8.

Conclusion

Malawi's aspirations to transform into a technologically driven upper middle-income country can massively benefit from the demographic dividend. However, this opportunity is not guaranteed or automatic; the country must act fast by concurrently prioritising investments to accelerate fertility decline, improve human capital, reform the economy to create jobs for its growing working age population, and enhance good governance and accountability. The demographic dividend paradigm also offers a practical integrated framework to contextualise Malawi's Sustainable Development Goals and make them a game changer from the retired MDGs by shifting from seeking to merely reduce hunger, poverty, disease burden and illiteracy to investments that focus on sustainable wealth creation and ensuring that the vast majority of the people thrive as opposed to barely surviving. The demographic dividend also offers a practical integrated framework for conceptualising and developing Malawi's next long-term development blueprint that will replace Vision 2020.

> **The demographic dividend paradigm offers a practical integrated framework for Malawi to contextualise the SDGs and for conceptualising and developing Malawi's next long-term development blueprint that will replace Vision 2020.**

Malawi's population is very youthful with 80 percent of the population being under age 35 years and high child dependency burden whereby 46 percent of the population are under age 15. The youthful population is a direct result of past and current high levels of fertility amidst declining child mortality. A high child dependency burden stretches the resources of both families and the government that have to provide for the essential needs of a large population that does not contribute to economic productivity. It also limits the ability of both families and governments to save and make investments that can spur further economic growth. Malawi's 2012 Population Policy identified the high dependency burden as one of the main barriers to sustainable socio-economic development. The MES 2014 indicates that Malawi had a dependency ratio of 1.08 in 2015 meaning that there are almost 11 dependents for every ten Malawians of working age (15-64 years old).

Although the large young population in Malawi presents huge challenges to socio-economic development, it also offers a unique opportunity that needs to be harnessed for accelerated economic growth. Indeed, making strategic investments in youth can provide a stimulus for accelerating socio-economic development since youth can be critical agents for positive socio-economic change if they are empowered to innovate and engage in economic productivity. On the other hand, the price of inaction can be catastrophic since uneducated, unskilled, unemployed, and disillusioned youth can be agents of social unrest, crime, and violent extremism.

If the country's fertility of five births per woman declines rapidly, the age structure will shift from the present one dominated by child dependency to one in which there are more people in the working ages relative to dependents. If this change is accompanied by strategic and simultaneous investments in human capital development, economic reforms and job creation and good

governance, then Malawi can experience a sustained period of rapid economic growth. This can earn the country a substantial demographic dividend as the Asian Tigers did between the 1960s and 2000s. The key to success is to ensure the five wheels of the demographic dividend move together, reinforcing each other in an integrated approach to development.

> **Making strategic investments in youth can provide a stimulus for accelerating socio-economic development since youth can be critical agents for positive socio-economic change if they are empowered to innovate and engage in economic productivity. However, the price of inaction can be catastrophic since uneducated, unskilled, unemployed, and disillusioned youth can be agents of social unrest, crime, and violent extremism.**

Malawi has made significant strides in educational attainment since independence, but the current state of education and skills development in the country has significant room for improvement. The education sector is faced with three critical challenges: low quality of education, which is associated with low enrolment rates, especially at secondary and tertiary levels; disparities in school participation and education attainment by gender, place of residence and household wealth; and low mobility of education. Similarly, Malawi faces challenges in generating a healthy workforce.

Problems in the health sector range from high burden of diseases to challenges in health care delivery system, such as shortage of qualified healthcare workers. If Malawi is to harness a substantial demographic dividend, significant investments in human capital development must be made. Better health and education outcomes will increase GDP over the long run, generating a dividend that could be reinvested to further advance workforce skills and public health. However, economic trends reveal that levels of unemployment and underemployment are high, especially among youth and women. About 20 percent of the country's total labour force is unemployed and 27 percent of employed population is underemployed. The agricultural sector remains the most important employer, yet 95 percent of those employed in the sector are informally employed. Agriculture and manufacturing sectors have been identified as critical growth sectors, with SME's and the tourism sectors recognised to have potential for contributing to sustainable and job-rich economic growth. The economic challenges in Malawi are high interest rates, unstable currency, high cost of services and inflation. If eliminated, Malawi's prospects of achieving Vision 2020 will be increased.

The analyses presented in this study report provide evidence that Malawi can harness a sizable demographic dividend. Malawi should develop policies and prioritise investments aimed at accelerating fertility reduction through voluntary and rights based interventions and education to open the window to harnessing the demographic dividend. On the other hand, Malawi has to make strategic investments in education and skills development, health, economic reforms and

job creation. Coupled with good governance and accountability, Malawi can create a globally competitive economy that would accelerate economic growth and thus earn her a substantial demographic dividend.

Under the social emphasis model, prioritising Investment in the social sector, including family planning, Malawi's per capita GDP would increase from USD 397 in 2014 to USD 2,148 in 2054. If on the other hand, Malawi embarks on the Economic emphasis model, prioritising on investments in human capital development, economic reforms and job creation it would increase its per capita GDP to USD 6,376 in 2054. Better still, if Malawi simultaneously invests fully in economic reforms, human capital development and family planning in the combined model, the GDP per capita would increase to USD 9,351. This translates to a demographic dividend of USD 2,975: the difference between the income level of Economic Emphasis model and the Combined model.

The model results also show that the task of job creation will be tough under all the scenarios projected. This is because Malawi will have a large population due to long standing high fertility. If no serious interventions are made to facilitate fertility decline for instance, under the Economic Emphasis model, Malawi's population will almost treble from the current level to 43 million people in 2054. In comparison, under the combined model, where, in addition to Economic Emphasis, priority is given to both family planning and education, the population will increase to 33 million people by 2054. Adequate and decent jobs have to be created to absorb the increased working age population. The projections show that by 2054 under the Economic Emphasis model, the difference between the population aged over 15 year and the number of available jobs (the employment gap) will increase to 3.5 million from the current 2.5 million. On the other hand, the employment gap will increase to 2.7 million under the combined model. These results show the urgency of huge investments, including a long-term job creation plan since high levels of unemployment can have a serious negative impact on security and stability of the nation.

In conclusion, the results of this analysis show that exclusive focus on economic reforms and investments will not suffice for Malawi to decisively reduce poverty and attain the socio-economic transformation envisaged in Vision 2020. The country has to prioritise concurrent investments in economic and social factors, particularly family planning and human capital development. That is precisely what the Asian Tigers did over a 40-year period between the 1960s and 2000s. The economic policies should focus on diversifying the economy, developing infrastructure and attracting Foreign Direct Investments (FDI). Increased investments to enhance education and skills development have largely been focused on expanding access to primary school. Malawi should also step up investments that promote universal secondary education and target a critical mass in attaining tertiary education. Curricula at all education levels have to target imparting market oriented knowledge and skills. Increased and targeted investments should also be made to improve the health of Malawians through high impact and cost effective interventions. However, to harness the demographic dividend, the window of opportunity has to be first opened. The government should thus take a leading role in initiating a rapid fertility decline including significant domestic

investments in family planning programmes and strategies that hitherto are largely reliant on donor funding.

If the Vision 2020 blueprint and the policies developed to operationalise it are effectively and efficiently implemented, including emphasis on governance and accountability, then Malawi will harness a sizable demographic dividend and achieve its goals and become an upper middle income country that it aspires to be in a few decades time.

Appendix

Appendix I: Demographic Dividend Modelling Workshop Attendance List – 7-10 July 2015

No.	Name	Institution
1	Jollam Banda	Ministry of Finance, Economic Planning and Development
2	Isaac Dambula	Ministry of Finance, Economic Planning and Development
3	Dan Gareta	Ministry of Finance, Economic Planning and Development
4	Mariana C. Jumbe	Ministry of Finance, Economic Planning and Development
5	Waziona Ligomeka	Ministry of Finance, Economic Planning and Development
6	Hetherwick Njati	Ministry of Finance, Economic Planning and Development
7	Honourable Madalitso Kazombo	National Assembly
8	Honourable Juliana Lunguzi	National Assembly configuration
9	Henry Chingaipe	Institute for Policy Research & Social Empowerment
10	Isaac Chirwa	National Statistical Office
11	Dr. Rogaia Abdelrahim	United Nations Population Fund
12	Bill Chanza	United Nations Population Fund
13	Henry Chimbali	United Nations Population Fund
14	Martha Elisa	United Nations Population Fund
15	Grace Hiwa	United Nations Population Fund
16	Rose Khonje	United Nations Population Fund
17	Milika Mdala	United Nations Population Fund
18	Bernard Mijoni	United Nations Population Fund
19	Jean Mwandira	United Nations Population Fund
20	Dorothy Nyasulu	United Nations Population Fund
21	Veronique I. Omar	United Nations Population Fund
22	Chris Oyeyipo	United Nations Population Fund
23	Humphreys Shumba	United Nations Population Fund
24	Christopher Davids	United Nations Children's Fund
25	Stanly Graraya	United Nations Children's Fund
26	Kimanzi Muthenji	United Nations Children's Fund
27	Rebecca Chimjeka	Nation Publication Limited
28	Monica Jamali-Phiri	Chancellor College
29	George Mandere	Chancellor College
30	Richard Mussa	Chancellor College
31	Emmanuel Souza	Chancellor College
32	Sewenthe Chipofya Mahwayo	Youth Network and Counselling
33	Wezzie Kamphale	Youth Network and Counselling
34	Asante Undulu	UN Women

35	Ellias E. Ngalande	Independent Consultant
36	Makhosazana Mkhatswa	Private Sector
37	Evance Kazembe	Ministry of Education
38	Peterson Chitekwere	Ministry of Labour
39	Fazilla Tembo	African Press Agency
40	Chimwemwe Chipungu	Safe Motherhood (Ministry of Health)
41	Hendrina Mchenga	Independent
42	Gibson Mphepo	Leadership for Environment and Development Southern and Eastern Africa
43	Grace Kumchulesi	African Institute for Development Policy
44	Nissily Mushani	African Institute for Development Policy
45	Bernard Onyango	African Institute for Development Policy
46	Eliya Zulu	African Institute for Development Policy

Appendix II: Model Input Variables Used in the DemDiv Model for Malawi

Policy Area/Indicator	Description of Indicator/ Variable	Effects on Demographic Dividend
Demographic Model		
1. Family Planning	Contraceptive prevalence rate (proportion of women using modern contraception)	Reduces unplanned births and overall fertility; reduces child dependency ratio
		Improves maternal and child health by reducing high-risk births; improves overall health of the labour force
2. Period of Postpartum Infecundability	Duration (in months) after giving birth when women are not ovulating, and therefore not susceptible to conception, due to breastfeeding and/or postpartum sexual abstinence	Longer periods of postpartum sexual abstinence lower fertility, especially in population where contraceptive use is low in the postpartum period.
3. Sterility	The proportion of women who are not able to have children by the time they reach the end of their childbearing span (measured as the proportion of women aged 45-49 who are childless	High levels of sterility can reduce fertility. This indicator is not likely to change that much, and does not have a big impact on fertility, except in contexts with high levels of sexually transmitted infections
4. Education	Number of years of schooling	Delays marriage and start of childbearing
		Lowers fertility Improves health seeking behaviour and key for having a healthy workforce
		Improves skills, innovation and overall productivity of workers
Economic Model		
5. Labour Market Flexibility	Measurement (on a scale of 1-7) of labour market flexibility, including factors such as labour-employer relations, wage flexibility, hiring and firing practices and effects of taxation.	Policies and reforms in the labour market help attract FDI and create an enabling environment for optimising productivity of the labour force
6. Information and Communication Technologies (ICT) Use	Measurement (on a scale of 1-7) of use and capacity of Internet and mobile phone infrastructure	Efficien y of financial markets facilitates movement of funds and investments and promotes investments by local and foreign investors.
7. Financial Market Efficiency	Measurement (on a scale of 1-7) of efficiency of financial markets, including factors such as availability and affordability of financial services, financing through local equity market, ease of access to loans and venture capital availability.	Efficien y of financial markets facilitates movement of funds and investments and promotes investments by local and foreign investors.

8. Imports as a Percentage of GDP	Imports as percent of GDP. Total imports refer to the sum of total imports of merchandise and commercial services.	As economies advance, they specialise in industries and sectors where they have a comparative advantage and import products that they are not well placed to produce. At the early stages of economic transformation and industrialisation, level of imports increases and falls and this may fall as developing countries develop capacity to produce a lot of the products that they import.
Governance and Accountability		
9. Public Institutions	Measurement (on a scale of 1-7) of public institution strength, including factors such as property rights, division of powers, corruption, regulatory burdens, transparency, waste in government spending and public safety.	Strong public institutions help enforce accountability in use of public resources, service delivery, and protection of public and private property and investments and in ensuring public safety, all key ingredients for promoting investments and economic productivity.

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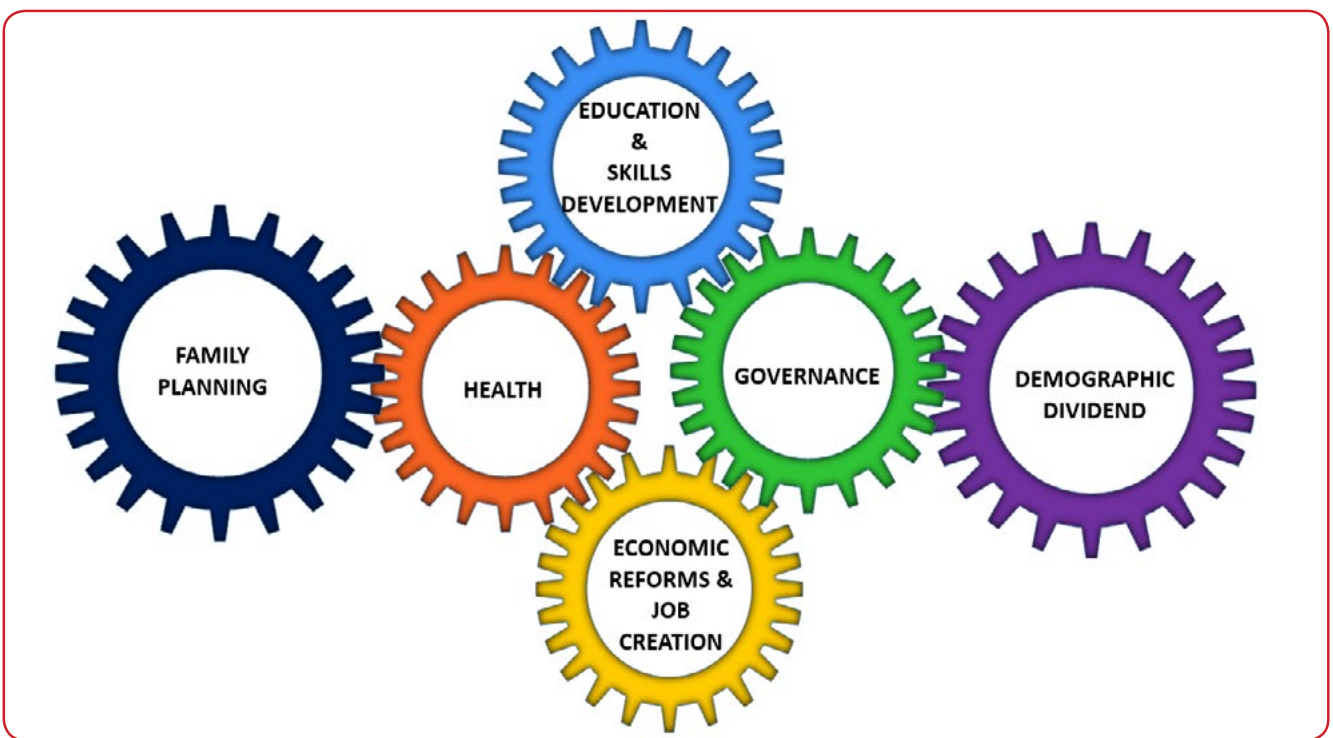*Guttmacher Institute. (2014). Benefits of Meeting the Contraceptive Needs of Malawian Women. Brief 2014.*

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To harness the demographic dividend Malawi should simultaneously prioritise and invest in interventions to accelerate fertility decline, human capital development, inclusive economic growth and governance

Adapted from African Union Commission, 2013