Research Brief

OPPORTUNITIES FOR HARNESSING THE DEMOGRAPHIC DIVIDEND IN TANZANIA

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"Tanzania's demographic and economic profiles favourably position it to benefit from the demographic dividend if the country unleashes its full development potential by simultaneously prioritizing: reforms and investments that accelerate fertility decline; industrialization and job creation; investments in education and health to develop quality human capital; and improved governance and accountability in use of the country's financial and natural resources."

Executive Summary

This study examines the United Republic of Tanzania's prospects of harnessing the demographic dividend in the light of its Vision 2025 aspiration to transform the country from a least developed agricultural based economy to a semi-industrialized and modernized middle-income economy. The demographic dividend is the economic benefit a country may enjoy as the ratio of working-age adults significantly increases relative to young dependents due to rapid decline in birth rates if the surplus labour force is well educated, skilled, and gainfully employed.

Tanzania's demographic and economic profiles favourably position it to benefit from the demographic dividend. Over the past decade, Tanzania has experienced an impeccably steady economic growth rate of over 7%. The discovery of gas and other mineral resources, increase in direct foreign investment, and growing regional integration provide further opportunities for enhancing this growth. Due to high and slowly declining fertility levels in the midst of steadily declining child mortality, Tanzania has high child dependency burden with about 44% of the total population being below age 15.

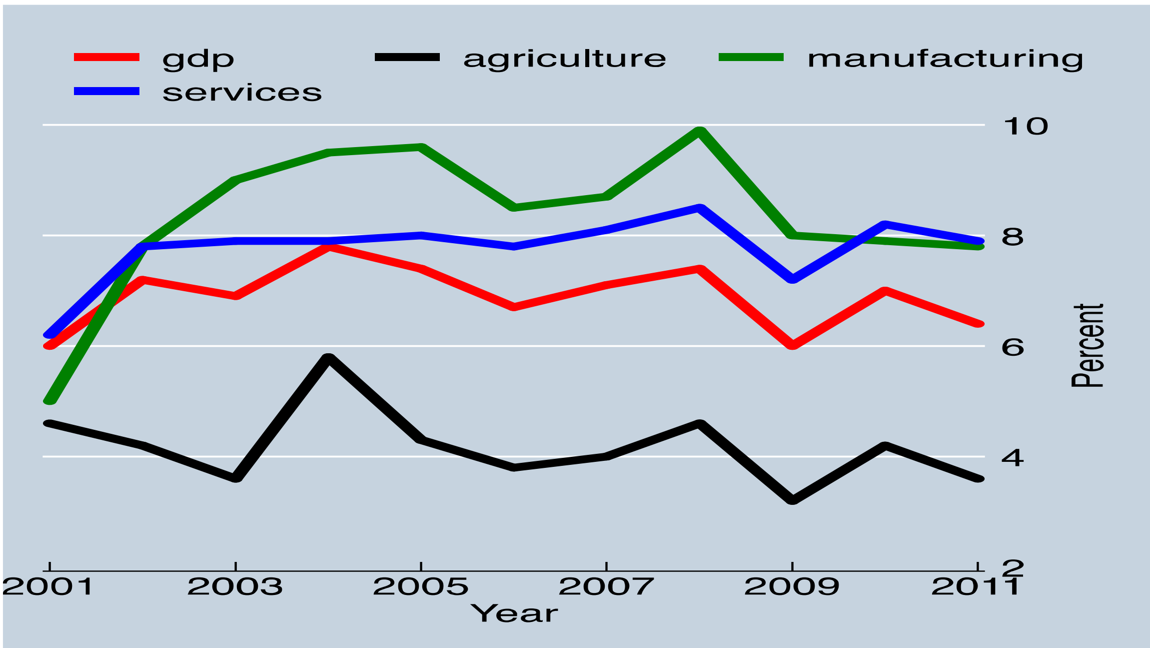
The modelling results show that Tanzania's per capita income could increase from the current level of $514 to $9,018, representing a massive demographic dividend of USD 3,147 per head. However, accomplishing this is not automatic or guaranteed. In order to earn such a demographic dividend, the country should simultaneously prioritize investments to accelerate fertility decline; stimulate creation of mass quality jobs, improve investments in education and health care and optimize governance and accountability in use of the country's resources. Reinforcing on-going efforts to address the key economic and structural bottlenecks in the implementation of Vision 2025 and walking the talk on the country's FP2020 commitment to increase contraceptive use from the current 27.4% to 60% by 2015 would help lay the foundation for moving Tanzania towards harnessing the demographic dividend in the next four decades or so.

Economic Growth and Opportunities in Tanzania

Over the past decade, Tanzania has experienced an impeccably steady economic growth rate of over 7% (Figure 1). This growth rate was mainly driven by increased domestic and foreign investments in the manufacturing and service sectors that was facilitated by the economic and financial reforms and prudent monetary and fiscal policies that the country has undertaken over the past two decades or so. The GDP per capita increased from USD 308 to USD 525 between 2001 and 2010, while the GDP increased from USD 10 billion to USD 22.9 billion during the same period (World Bank, 2014). In addition, the country continues to amass other economic opportunities that if well exploited can enhance economic growth further. These include discovery of massive deposits of natural gas and other minerals, the mobile phone boom, and increasing foreign investments due to growing regional integration and partnership with the East.

The impressive economic growth over the past decade and emerging economic opportunities provide a spark of hope that the country's development aspirations articulated in Vision 2025 can actually be achieved by 2025 or a few decades later. The vision seeks to transform Tanzania from a least developed country characterized by low productivity agricultural economy to a semi-industrialized middle-income country with a modernized economy and high quality human capital. Recently the Government of Tanzania has adopted the Big Results Now (BRN) initiative to galvanize action towards the realization of the development ideals set out in Vision 2025. The BRN is modelled on the development approach followed by Malaysia, one of the Asian Tigers that achieved phenomenal socioeconomic transformation since 1970, partly due to the demographic dividend.

Figure 1: Growth Trends for GDP, Agriculture, Manufacturing and Services Sectors



Source: Research and Analysis Working Group, URT, 2012

Despite this impressive growth, there has been no significant impact on poverty reduction. This could be explained by the fact that the agricultural sector, where the majority of Tanzania's population are employed (74%) (Research and Analysis Working Group, URT, 2012), did not record high growth for the last decade (4.2%), compared to other sectors which grew by more than 10%, and which employ only a small proportion of the population.

As such, poverty Headcount Index declined only marginally from 35.7 in 2001 to 33.6 in 2007 (Research and Analysis Working Group, URT, 2012). Evidently, the country needs a major revision of its investment policy and ensure more inclusive economic growth by directing more resources to sectors with a high job-multiplier impact.

Population Change and Development in Tanzania

Population structure and growth

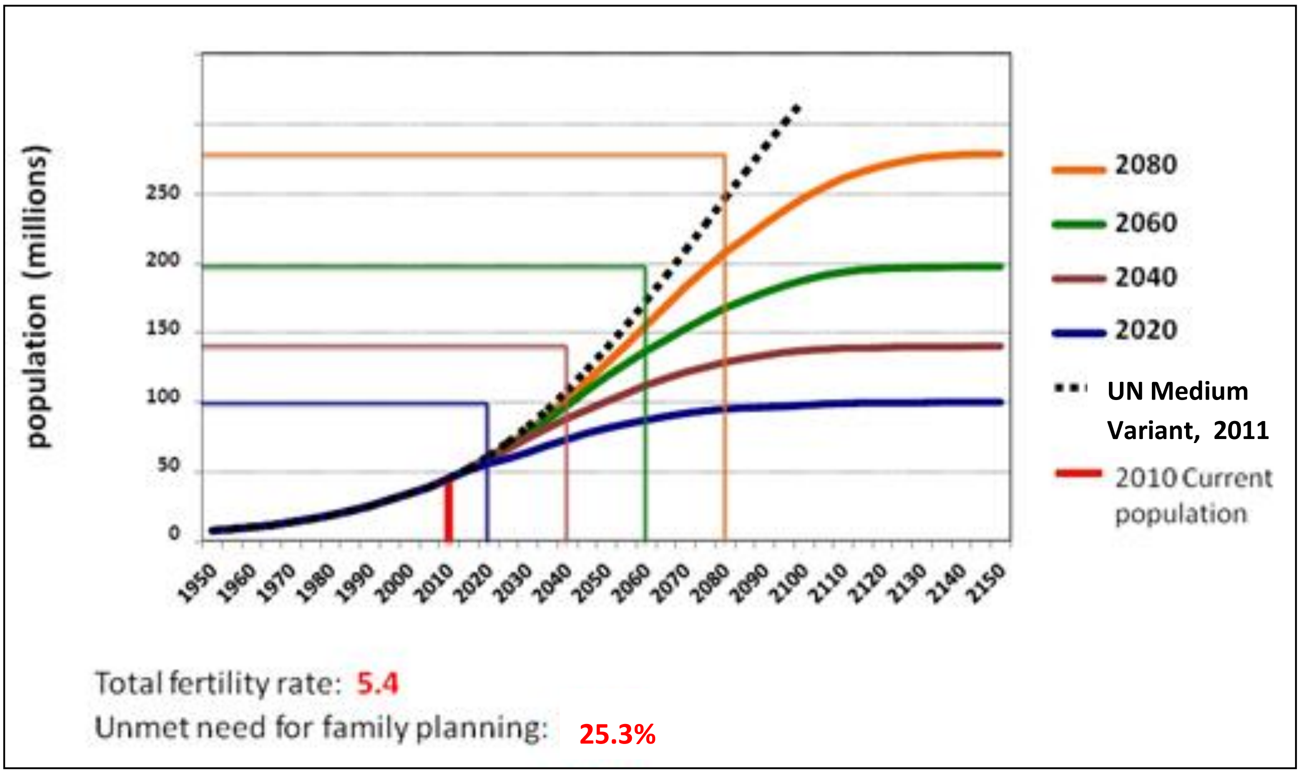
Because of high and slowly declining fertility at the time that child mortality declined significantly over the past four decades, Tanzania's population has grown rapidly and has high child dependency burden. For instance, under-five mortality rates declined from 141 to 81 deaths per 1000 live births between 1992 and 2010 while fertility rates barely declined from 6.2 to 5.4 births per woman during the same period (NBS and ICF Macro, 2011). Tanzania's population has almost trebled from 12.3 million in 1967 to 44.9 million persons in 2012. The UN medium variant projections show that the population size may grow to 129 million by 2050 (UNPD, 2012).

Tanzania's population is dominated by economically dependent children, with about 44% of the total population below age 15 (NBS, 2013). As noted in the 2006 National Population Policy, rapid population growth and the high dependency burden is one of the key factors undermining socioeconomic development in Tanzania (URT, 2006). The policy notes that rapid population growth tends to retard growth in national output through slow capital formation, as the increased consumption in education and health services draws resources away from savings for productive investment.

The youthful population also creates a high momentum for the population to continue growing for several decades even after reaching replacement level fertility of about 2 births per woman because there are many people who are yet to start and complete their childbearing. For instance, if the current level of fertility of 5.4 children declines to 2.1 births by 2040, Tanzania's population will continue growing and only stabilize at about 145 million people around 2100 (Figure 2). However, if replacement level fertility is reached in 2060 and 2080, the population will stabilize at about 200 and 280 million, respectively, around 7 decades later. Therefore, Tanzania is guaranteed to have a big population of at least 200 million people even if it were to emulate the rapid fertility decline to about 2 births per woman that propelled the demographic dividend in Malaysia and other Asian Tigers.

High fertility in Tanzania is driven by persisting demand for many children (especially in rural areas), early marriages and high dropout from school for girls, limited economic opportunities for women, high child mortality rates, and high levels of unmet need for contraception that results in high incidence of unplanned births. On the average Tanzanian women give birth to one child more than they desire to have and while only 27% of married women use modern contraceptives a quarter of those who would like to delay the next the next birth or stop childbearing altogether have unmet need for contraception (NBS and ICF Macro, 2011). Concerted efforts in addressing factors that sustain demand for many children and prevent many women who need to use contraception from accessing and using it would go a long way in reducing fertility in Tanzania.

Figure 2: Projected effect of population momentum on the size at which the population of Tanzania would stabilize by different years when replacement level fertility is attained



Source: AFIDEP and VSHD (2012)

Urbanization

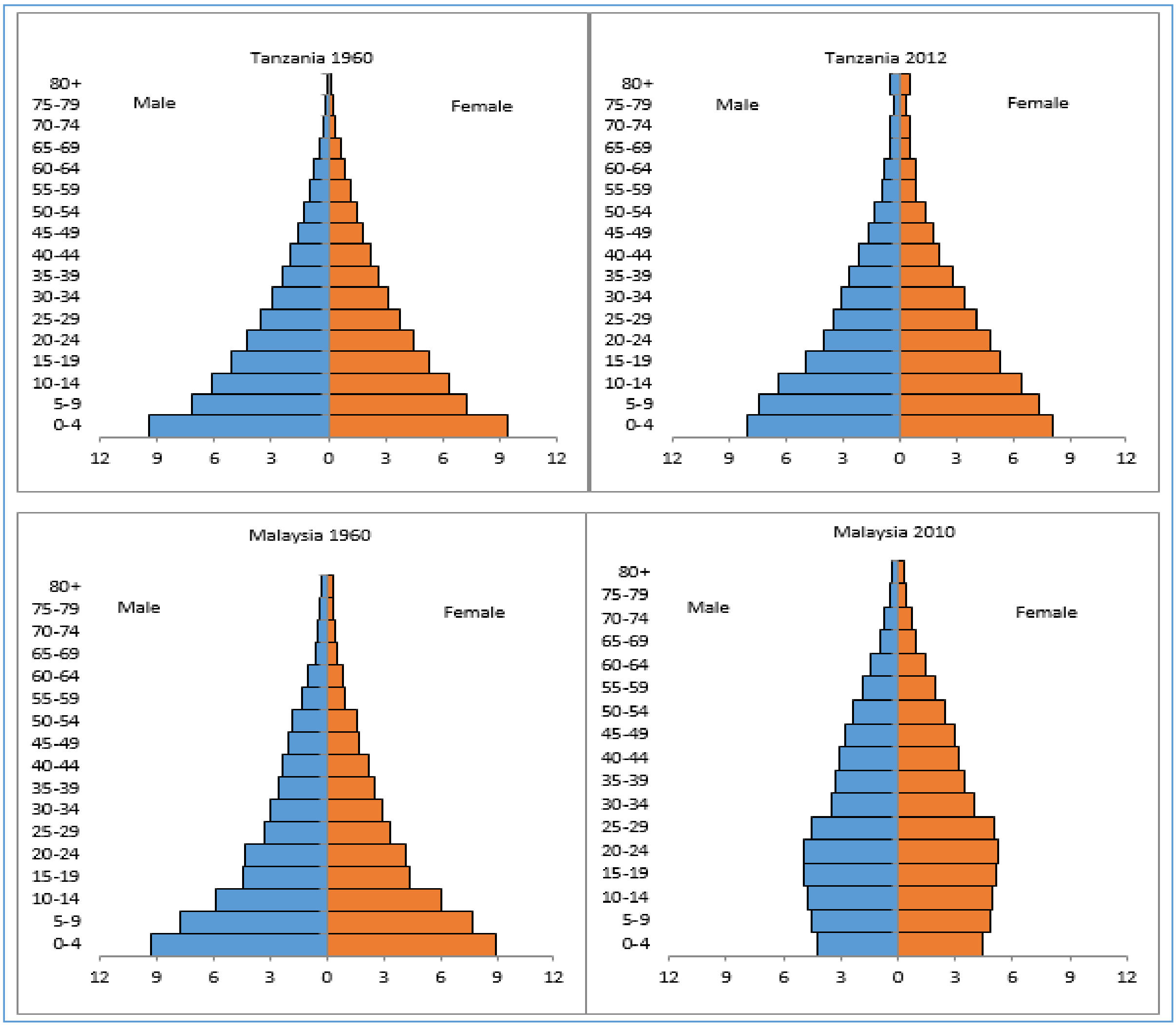
Another phenomenal change that Tanzania's population is poised to experience over the next four decades is the increase in urbanization. Between 1967 and 2012, the proportion of people living in urban areas grew from 6.4% to 29.6% (NBS, 2013). UN projections indicate that about 53% of the population of Tanzania will live in urban areas by 2050 (UNPD, 2014). In developed and emerging economies, urbanization has been a key engine for economic growth and overall socioeconomic transformation. However, rapid urbanization in Tanzania has been associated with rapid increase in urban poverty. UN-Habitat estimates that 65% of Tanzania's urban population live in slum settlements where they lack stable livelihoods and basic amenities such as sanitation, water, and proper housing (UN-Habitat, 2010). In order for Tanzania to transform its rapid urbanization into an asset for development it should improve urban planning and governance; scale-up urban economic infrastructure such as transportation, energy, and communication; fast-track creation of quality jobs for the rapidly growing work force in both urban and rural areas, and ensure universal access to basic amenities and social services.

Prospects for Harnessing the Demographic Dividend in Tanzania

Tanzania's demographic and economic profiles favourably position it to benefit from the demographic dividend if the country adopts the nature of policy and investment roadmap that its Big Results Initiative benchmark country Malaysia followed between the 1970s and 2000s. The demographic dividend is the economic benefit a country may enjoy as the ratio of working-age adults significantly increases relative to young dependents due to rapid decline in birth rates if the surplus labour force is well educated, skilled, and gainfully employed (Bloom and Williamson 1998; Bloom et al. 2001).

Malaysia and other East Asian Tigers like South Korea, Thailand, and Indonesia were at the same level of development and had the same level of fertility as Tanzania in the 1960s, but took a drastically different development path through sustained investments in family planning, education, health, and export oriented economic reforms that helped to accelerate economic growth and job creation (Figure 3 and Table 1). Analyses of the phenomenal socioeconomic development experienced by the East Asian countries like Malaysia, South Korea, Thailand, Singapore, Hong Kong and Thailand show that the demographic dividend could account for a quarter to a third of the economic growth that these countries experienced between 1970 and 2000 (Bloom and Williamson 1998; Mason 2001). Analyses of the comprehensive reforms that facilitated the demographic dividend in Malaysia and other East Asian countries show that countries like Tanzania could achieve the same if they enact policy reforms and make simultaneous investments in family planning, education, health, industrialization and reinforce good governance and accountability in use of public resources as depicted in Figure 4. All the five policy pillars or wheels are interrelated and should be implemented concurrently in order to harness the demographic dividend.

Figure 3: Comparison of age Structures for Malaysia and Tanzania (1960-2010)



Source: UNPD (2012) and NBS (2012)

Table 1: Trends in Various Economic and Demographic Indicators for Tanzania and Malaysia

Indicator	1960		2010	
	Malaysia	Tanzania	Malaysia	Tanzania
GDP per Capita	299	319	8,754	514
Total Fertility Rate	6.0	6.9	2.0	5.4
Under five mortality Rate	85	242	9	81
Contraceptive Prevalence Rate (Modern Methods)	6.2	6.1	32.0	27.4
Net Secondary School Enrolment Rate (%)	35	12	96	27
Gross Tertiary Institution Enrolment Ratio (%)	4	0.5	37	3.9

Sources: NBS (Various Years); UNPD (2012) (TFR, Under five mortality & CPR); World Bank (2014) (GDP per capita and School Enrolment)

Figure 4: Policy wheels for creating and earning the demographic dividend

Source: Adapted from African Union Commission (2013)

Modelling the Potential Demographic Dividend in Tanzania

In order to demonstrate the potential benefits of the demographic dividend and illustrate the relative impact of various multisectoral policies and investments required to achieve the demographic dividend in Tanzania, we used the modelling tool DemDiv, developed by the USAID-supported Health Policy Project (HPP) at the Futures Group. The modelling was based on four policy scenarios;

i. ***Business as Usual Scenario***, where the prevailing lacklustre performance in both the economic and demographic environments continues (Birth rate of about 4 in 2050).

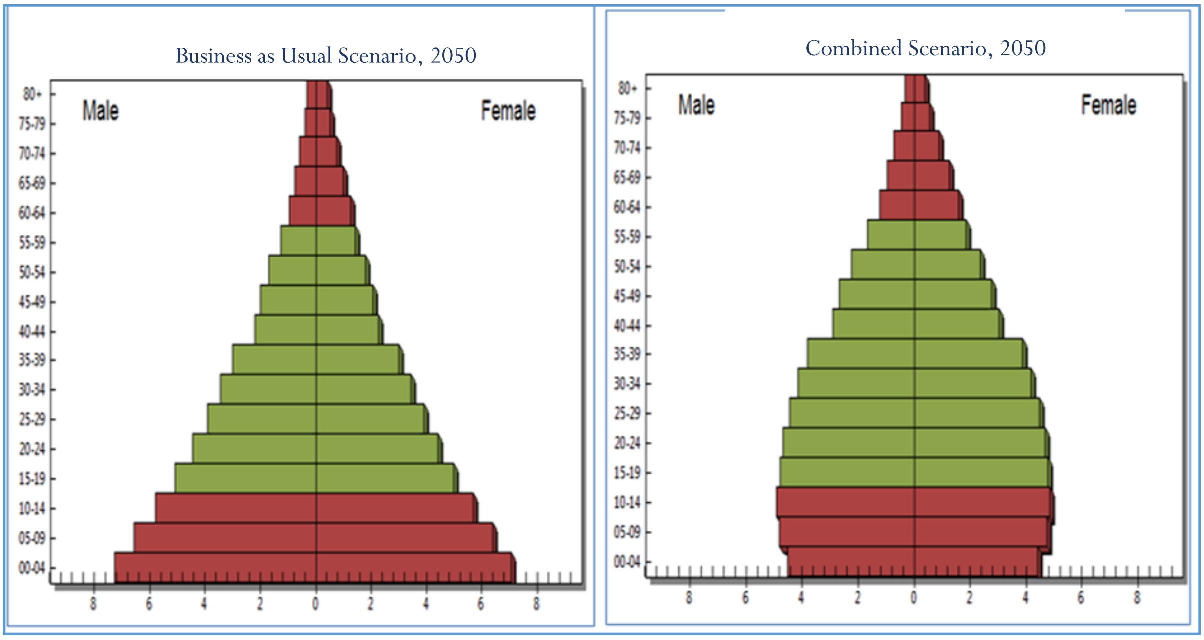
ii. ***Economic Emphasis Scenario*** where the country prioritizes economic reforms and investments to the level articulated in Vision 2025 and the BRN initiative.

iii. ***Economic Emphasis and Moderate Family Planning Scenario*** where the country makes moderate investments in family planning and education while maintaining economic indicators at the Economic Emphasis Model level (Birth rate of about 3 in 2050).

iv. ***Combined Economic and Demographic Emphasis Scenario*** where the country simultaneously prioritizes investments in economic reforms as well as in family planning, education, health care and governance to achieve the socioeconomic transformation envisaged in Vision 2025 and the BRN Initiative (birth rates of about 2 in 2050)

The results show that Tanzania's potential for harnessing the demographic dividend and achieving the socioeconomic transformation envisaged in Vision 2025 and the BRN initiative is real and attainable by 2050. Figure 5 shows that the shift in age structure from the business as usual scenario with high child dependency burden to the combined scenario with more working age population.

Figure 5: Projected Population Pyramids for Business as Usual and Combined Scenarios



The per capita Gross Domestic Product (GDP) would increase from USD 514 in 2010 to USD 2,513, USD 5,871, USD 7,316 and USD 9,018 in 2050 under the Business as Usual; Economic Emphasis; Economic Emphasis and Moderate Family Planning; and the Combined Economic and Demographic Emphasis Scenarios, respectively (Figure 6).

The difference between the *Economic Emphasis Model* and the *Economic Emphasis and Moderate Family Planning Scenario* (USD 1,445) represents the demographic dividend that Tanzania can harness by moderately increasing its family planning and education investments slightly above the level of the *Business as Usual model*. However, the country can harness a much higher demographic dividend of $3,147 if it reinforces its family planning and education investments to achieve the fertility and education levels that Malaysia and other Asian Tigers currently have.

Due to the high population momentum that Tanzania has accumulated over the years, the working age population will be very big for several decades. The big gap between employed population and the labour force aged 15+ (Table 2), shows that the country will have to use extraordinary strategies to accelerate economic growth and generate enough quality jobs for its youthful population and prevent political instability that may arise from unusually high unemployment rates. Nevertheless, with the combined scenarios, the country would have 12 million unemployed people as opposed to 31 million under the Business as Usual Scenarios and 19 million under the Economic Emphasis only Scenario.

Figure 6: Growth in Per capita Gross Domestic Product by Policy Scenario (US$)

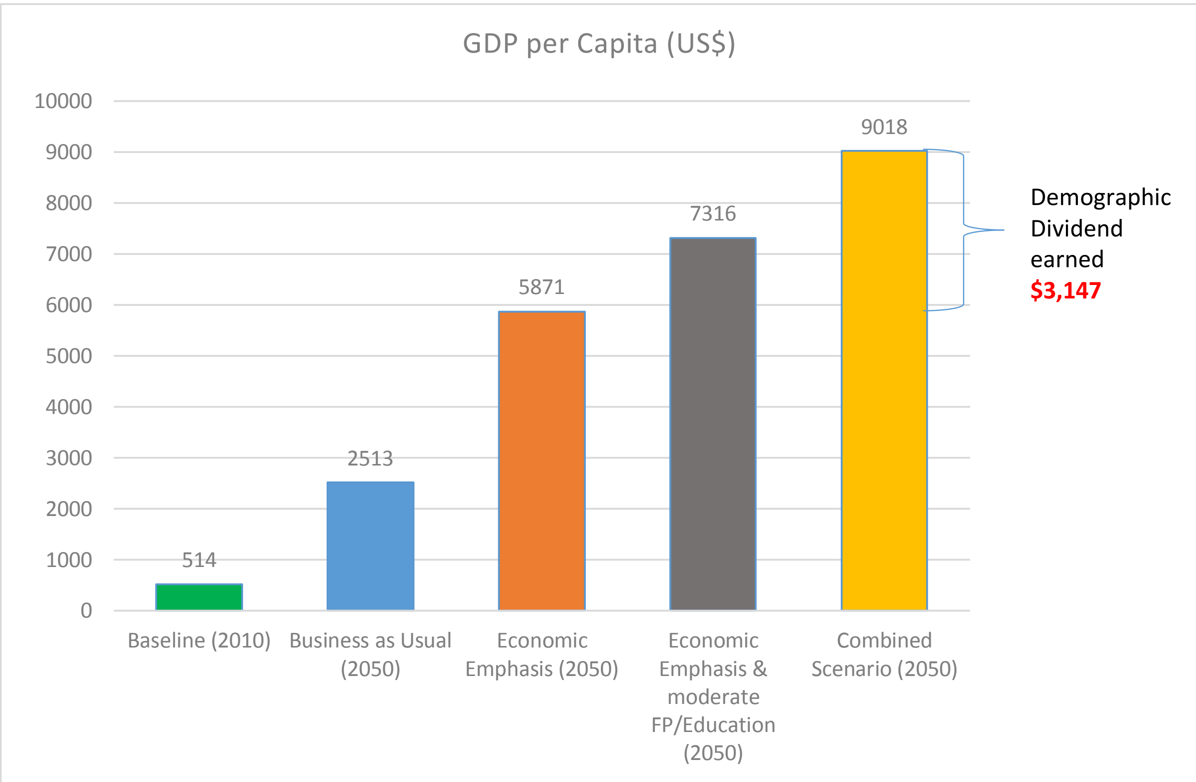


Table 2: Summary of key findings

Indicator	Baseline (2011)	Business as Usual	Economic Emphasis Scenario	Economic Emphasis & Moderate FP and Education Scenario	Combined Scenario
Total Population (million)	45	149	149	130	110
Population <15 (%)	44	39	39	35	28
Total fertility Rate (Number of children per woman)	5.4	3.8	3.8	3	2
Per capita GDP (USD)	514	2513	5871	7316	9018
Life expectancy at birth	57	65.5	65.5	67.6	69.7
Dependency ratio (Population 15-64 years divided by population <15 & 65+	0.91	0.77	0.77	0.65	0.51
Gap between population 15+ and Employment (i.e. unemployed population) - Millions	3	31	19	15	12
Percentage of labour force employed	88	66	79	82	85
Capital Formation (proportion of economic growth invested in fixed assets) US$	159	704	1608	2036	2594

Policy Recommendations for Harnessing the Demographic Dividend in Tanzania

In order for Tanzania to maximize the demographic dividend that it can potentially earn it should prioritize investments to accelerate reduction in fertility through voluntary family planning and education interventions at the same time step up investments aimed at creating a globally competitive labour force and industry focused economy that will ensure that the surplus labour force is gainfully employed. This entails adopting a people-centred integrated development framework that simultaneously allows all the five wheels of the demographic dividend to move and reinforce each other.

The dividend period is a window of opportunity rather than a guarantee of improved standards of living. Failure to implement the socioeconomic reforms in a timely manner may result in social and political instability when the youthful "surplus" labour force is not economically engaged. Tanzania has a golden opportunity to avoid such an eventuality and optimize its demographic dividend if it prioritizes all the five wheels of the demographic dividend. Below are specific interventions and policies that the country should adopt under each pillar in order to harness the demographic dividend.

Accelerate fertility reduction to open the window of opportunity

i. Operationalize Tanzania's FP2020 commitments seeking to double the number of family planning users to 4.2 million by 2015 to reach a national contraceptive prevalence rate of 60 percent by declaring FP a key national development priority in order to mobilize all sectors to contribute to FP programmes.
ii. Increase national budget allocation for FP commodities and educational campaigns.
iii. Enhance capacity of FP programmes to address all barriers of demand, access and use of contraception among married and unmarried couples, and underserved populations, with special focus on expanding method choice and commodity security, task shifting and strengthening of community-based services.

iv. Prevent early marriages and teen-age childbearing by promoting school attendance, progression to secondary school and improving access to FP to adolescents and youth.
v. Reinforce interventions to reduce child mortality including immunizations, IMCI, nutrition, ITNs
vi. Reinforce public-private partnerships in delivery of family planning services.

Improve health status of the population and labour force

i. Increase budgetary allocations and investments in health to at least meet the Abuja target of 15% of national budget.
ii. Improve health infrastructure and systems, including hiring more health workers, training and job retention incentives; supply chain management to ensure commodity security; referral and M&E systems.
iii. Expand provision of maternal and child health care services, including child nutrition, through health promotion and community based services in rural areas in order to reinforce recent gains in child survival.
iv. Reinforce capacity to address pervasive diseases like HIV/AIDS and malaria and emerging ones like non-communicable disease
v. Reinforce public-private partnerships in health care delivery

Fast-track education reforms to have skilled and innovative labour force

i. Increase budgetary allocations to education to improve infrastructure, teaching materials, and student/teacher ratios.
ii. Restructure education system to prioritise universal secondary and higher education.
iii. Address underlying causes of deteriorating quality of education at primary, secondary and tertiary education levels.
iv. Reform education curricula and teaching methods to focus on innovation, skills development, science and technology, and entrepreneurship in order to produce globally competitive and industry-relevant labour force.
v. Incorporate in school curricula practical approaches for enhancement of leadership skills of young people to turn them into strategic agents of socio-economic change and accountability.
vi. Address the huge geographical inequities in education coverage and gender differences at tertiary level.

Enhance economic productivity and job creation

i. Speed up industrialization and prioritize investment in sectors with high job multiplier effects. Particular focus should be on industrializing from the agricultural base through value-addition industries.
ii. Invest in development of economic infrastructure including energy, transportation, and communication to reduce the costs of doing business and attract domestic and foreign investment.
iii. Improve urban planning and governance and development of urban economic infrastructure to turn Tanzania's rapid urbanisation into a valuable engine for socioeconomic transformation.
iv. Effect industrial policies, strategies and interventions to promote growth of indigenous firms and entrepreneurship

Enhance governance and accountability

i. Reform macroeconomic policies and financial institutions to promote private savings and domestic as well as foreign investment
ii. Strengthen governance, national security and anti-corruption systems in order to optimize investor confidence and ensure all public resources are used for national development initiatives that would help Tanzania harness the demographic dividend
iii. Improve efficiency and accountability in delivery of public services by improving local technical capacity in effective priority setting, resource allocation, program design, implementation and monitoring.
iv. Adopt policies and laws that empower women and enhance their leadership roles and equitable participation in the labour force.

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