



POTRAIT OF DEVELOPING ECONOMY: RWANDA PERSPECTIVE

Rwigema, P, C.

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Rwigema, P, C.

Doctor, Member of East African Legislative Assembly (EALA), Rwanda

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ABSTRACT

Rwanda is a landlocked country situated in Central Africa, bordered to the North by Uganda, to the East by Tanzania, to the South by Burundi and to the West by the Democratic Republic of Congo. Considered to be among the smallest countries on the continent, Rwanda's total area is estimated to be 26,338 KM². According to Rwanda's National Institute of Statistics (NISR), in 2015, the population density in Rwanda was estimated to be 445 people per KM² and the total population is approximately 11,809,295 according to 2017 NISR projection. Also known as the 'Land of a thousand hills', Rwanda is situated at an altitude ranging between 1,000 m above sea level in the eastern part to 4,500 m of the Karisimbi, the country's highest mountain near the border with the Democratic Republic of the Congo. With an estimated population of about 12 million people (NISR, 2019 estimates), 52% of which are women, Rwanda has one of highest population densities in Africa (458.75/Km²). With over 40% of the population under the age of 30 (RPHC, 2012), Rwanda also boasts of one of the most youthful populations on the continent. With the support of the International Monetary Fund (IMF) and the World Bank, Rwanda has been able to make important economic and structural reforms and sustain its economic growth rates over the last decade. Rwanda has made good progress over the last two decades since the enormous challenges faced in the aftermath of a genocide against the Tutsi that destroyed the entire social and economic fabric of this country. Rwandans have benefited from rapid economic growth, reduced poverty and the equality and increased access to services including health and education. This has been possible through the strong leadership under H.E Paul Kagame, President of the Republic of Rwanda and vision through high level commitment by government of Rwanda. More to this is Rwandan people choice as can be seen the leadership attributes behind Rwanda's transformation change and continuity. Rwanda's institutions evolved and developed into stronger, stable and sustainable in such a way that their efficiency have become a culture a rarity among many African countries. The aim of the study was to assess how Rwanda has fared with respect to economic transformation over the past 27 years and suggest recommendations for accelerating its progress. In this study, we not only analysed the trends in Rwanda's economic indicators over time, but also reviewed the policies that underlined the observed trends, with the aim of giving policy explanations and policy recommendations to accelerate economic transformation in Rwanda. There is evidence of a significant increase in private sector investment following the introduction of a revised tax code and implementation of the doing business reforms since 2005 although there was a downturn due to the World economic crisis in 2009. Both foreign and domestic investments have increased with FDI exceeding local investment and new jobs have been created. Exports have increased and there is some evidence of a beginning of export diversification into areas prioritised by

government as well as an increase in revenues from tourism. However, imports have also increased and so the balance of trade has worsened. Rwanda has recently enjoyed strong economic growth rates, creating new business prospects and lifting people out of poverty. The Government of Rwanda is actively working to develop the economy and reform the financial and business sectors – improving the business climate dramatically between 2010 and 2016, increasing its rank from 139 to 62 on the annual World Bank Doing Business Report. Rwanda’s major foreign exchange earners include mining, tourism, coffee, and tea, and continued growth in these sectors will be critical for economic development and poverty reduction. USAID investments focus on enhancing private sector competitiveness with a focus on increasing market access and supporting the Government of Rwanda in removing barriers to private sector growth. The major exports of Rwanda are coffee, tea, minerals (tin, cassiterite, wolframite) and pyrethrum. Coffee is the main export revenues contributor and makes up a quarter of the total export value, while the mountain grown tea is considered to be one of the finest in the world. Tourism is also being developed in Rwanda and it is gradually benefiting the Rwandan economy. Tourists enjoy of some of the unique and fascinating features of Rwanda, including the rare mountain gorillas of the Volcanoes National Park, and the large numbers of animal species in Nyungwe and Akagera National Parks. Most of this plays out in the rainforests, which are home to a 1,000-strong population of mountain gorillas, some of the last surviving on the planet.

Keywords: Rwanda, GDP, Development

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INTRODUCTION

Rwanda is one of the best performing countries in Africa and an example of success in post-conflict reconstruction (McKinsey, 2013). Following the devastating effects of the genocide against the Tutsis on the Rwandan economy in 1994, the government embarked on an extensive reconstruction program based on sound economic policies, peace and stability. Rwanda has been widely acknowledged for the progress it has made in fighting corruption and promoting gender equality. It has made dramatic progress in creating a favourable business environment in recent years becoming one of the most improved countries in the world in the annual Doing Business Index (PwC Rwanda, 2018). The combination of these factors restored confidence in Rwanda as a nation, thus attracting private sector investment and overseas development assistance, both of which have been crucial in both the post-genocide reconstruction and setting a path for sustained economic transformation.

Growth of Rwanda is projected to rebound in 2021 and 2022, supported by high infrastructure spending on Bugesera airport and a pick up in the tourism sector as the effects of the pandemic dissipate (World Bank, 2020). The implementation of the African Continental Free Trade Area is expected to boost intraregional trade, which will support growth especially if Rwanda increases its share of intraregional exports (Simo, 2020). Inflation is expected to abate to within the policy target as reopened borders increase the food supply and domestic containment measures ease further. The fiscal deficit is projected to narrow to 7.8% of GDP in 2021 and to 7.2% in 2022 due to a planned fiscal consolidation in the 2021/22 fiscal year (International Monetary Fund, 2020). The current account deficit is projected to narrow to 10.4% of GDP in 2021 and further improve to 9.1% in 2022, mainly because a rollout of COVID-19 vaccines should trigger a rebound in tourism and foreign direct investment. The downside risks to the outlook include trade disruptions due to simmering

regional political tensions, a decline in the fiscal space due to a rising debt burden, and a resurgence of the COVID-19 virus (United Nations World Tourism Organization, 2020).

Economic Overview

Rwanda now aspires to reach Middle Income Country (MIC) status by 2035 and High-Income Country (HIC) status by 2050 (UNCTAD, 2020). This aspiration will be carried out through a series of seven-year National Strategies for Transformation (NST1), underpinned by detailed sectoral strategies that are aimed toward achievement of the Sustainable Development Goals.

Real GDP in Rwanda was estimated to contract by 0.4% in 2020 due to the COVID-19 pandemic, after growing 9.4% in 2019. Trade, transportation, and tourism services have been the sectors most affected by the global pandemic. COVID-19 also hurt investment and exports. Rising food prices, stoked by disruptions to regional and domestic supply chains, contributed to a 6.6% increase in inflation in 2020 (United Nations Economic Commission for Africa, 2020). That was far higher than the 2.4% in 2019 and breached the central bank's 5% policy target. The National Bank of Rwanda reduced the key policy rate to 4.5% in April 2020 from 5.0% in 2019 to stimulate growth, but private sector credit remained subdued, expanding by 10.2% in 2020, compared with 12.6% in 2019 (BNR, 2020). Low tax yield and elevated health and social protection spending caused the fiscal deficit to grow to 8.3% of GDP in 2020, compared with 7.3% in 2019 (MINICOM, 2020). The deficit was financed by COVID-19 budget support loans and grants from cooperating partners. Low exports and reduced foreign direct investment resulted in a current account deficit equivalent to 16.5% of GDP in 2020, compared with 9.3% in 2019. Gross reserves shrank. In 2020 they could cover 2.4 months of imports, compared with 4.5 months in 2019. Low external inflows contributed to a 4.6% depreciation of the Rwandan franc against the US dollar. The financial sector remains stable and well capitalized, with a capital adequacy ratio of 23.7%

in June 2020, above the 15% regulatory threshold. The latest available data show an unemployment rate of 22.1% in May 2020, compared with 15% a year earlier (International Monetary Fund, 2020a). Unemployment growth reflects the virtual shutdown of such major industries as transport, food, and hospitality during the lockdown and is like to increase the poverty rate which was 38.2% in 2017, the most recent data available (African Development Bank, 2018).

The watershed in the history of independent Rwanda is 1994, when the Genocide against the Tutsis took lives of more than a million people in mere three months and left the socio-economic fabric of the country destroyed (Rwanda Governance Score Card, 2016, 2018). The 1994 genocide against the Tutsi decimated Rwanda's fragile economic base, severely impoverished the population, particularly women, and temporarily stalled the country's ability to attract private and external investment. However, Rwanda has made substantial progress in stabilizing and rehabilitating its economy well beyond pre-1994 levels. GDP has rebounded with an average annual growth of 6%-8% since 2003 and inflation has been reduced to single digits. In 2015, 39% of the population lived below the poverty line, according to government statistics, compared to 57% in 2006 (MINICOM, 2008).

The government has embraced an expansionary fiscal policy to reduce poverty by improving education, infrastructure, and foreign and domestic investment. Rwanda consistently ranks well for ease of doing business and transparency. Nevertheless, a number of opportunities also exist and will be leveraged to achieve the desired socio-economic transformation. The youthful population (62% of Rwandans are under the age of 25 and 41% are under the age of 15, RPHC 2012) of the country will allow reaping the demographic dividend (Foreign Investment Advisory Service, 2016). The increasing integration in the global value chains, the investments in manufacturing, ICT, tourism and the active participation in regional integration

initiatives at EAC and continental level (with the Africa Continental Free Trade Area) will open new market opportunities. The continuous engagement in the international arena, supporting, shaping and championing regional and global agendas, such as Agenda 2063 and Agenda 2030 will help Rwanda achieve its ambitions and better position globally (United Nations Economic Commission for Africa), AUC (African Union Commission), and African Development Bank. 2019)

The NST1 came after the implementation of two, five-year Economic Development and Poverty Reduction Strategies—EDPRS (2008-12) and EDPRS-2 (2013-18), under which Rwanda experienced robust economic and social performances. Growth averaged 7.2 % over the decade to 2019 , while per capita growth domestic product (GDP) grew at 5% annually. The lockdown and social distancing measures, which were critical to control the COVID-19 pandemic, sharply curtailed economic activities in 2020. The government expects GDP to drop by 0.2% in 2020, compared to a projected expansion of 8% before the COVID-19 outbreak (World Bank, 2020).

Economic impact of COVID-19 in Rwanda

Rwanda was in the middle of an economic boom prior to the COVID-19 (coronavirus) pandemic (Rwanda Development Board, 2020). Economic growth exceeded 10% in 2019, driven mostly by large public investments for implementation of the National Strategy of Transformation. Strong growth was expected to continue in 2020 (World Bank, 2020).

The pandemic has disrupted international flows of goods and services with significant spillovers to the broader global economy. Exports and tourism are taking a strong hit amid disruption in international trade and travel (World Bank. n.d. 2020). Rwanda is already feeling mounting balance of payment and fiscal pressures (World Health Organization, 2020b). This could negatively impact the provision of public health services with respect to COVID-19 response and preparedness capacity, as well as adversely affect the provision of other essential health service

delivery in Rwanda, as healthcare workers and fiscal resources are redirected to the emergency response (Muchanga, 2020a).

To enable the government prevent, detect and respond to the threat posed by the pandemic, and strengthen national systems for public health preparedness, the World Bank Group provided \$14.25 million International Development Association credit in immediate funding to a new operation, the Rwanda COVID-19 Emergency Response Project (International Monetary Fund, 2020c).

The lockdown, social distancing, and increased costs associated with the COVID-19 pandemic have reduced output and employment, increased poverty, and depressed trade transactions; in the absence of a strong response by government, output will be lower over the next decade due to COVID-19 (Government of Rwanda, 2020). The pandemic-driven rise in the fiscal deficit is increasing public debt, thus exacerbating existing challenges to sustainability and increasing the urgency of shifting from large public investments to human capital development as the main driver of growth. The government's rapid response to the pandemic has succeeded in keeping the population share of new infections and of deaths well below that of most other countries. However, critical health services, particularly childhood immunization and nutrition services, have been disrupted, which is increasing stunting and preventable diseases (Ndiaye, 2020). The combination of poorer nutrition, limited health services, learning losses from school closures, and the likelihood that some children (particularly adolescent girls and children from poor households) may never return to school will reduce incomes and productivity over the medium term. The government responded rapidly and effectively to the challenges posed by the pandemic, putting in place the Economic Recovery Plan (ERP) to support households and firms, quickly imposing constraints on mobility to limit the spread of the disease, ramping up social protection programs, and setting up remote learning ((Ministry

of Finance and Economic Planning). 2020a. Economic Recovery Plan (May 2020 – December 2021). Key priorities going forward include: (i) improving the government's expenditure allocation, financial management and revenue mobilization; (ii) strengthening the resilience of the health system and preparing for administration of a vaccine; (iii) reducing learning losses (targeting the most vulnerable), improving skills and strengthening accountability in education; and (iv) expanding the flagship social safety net program, building adaptive systems to respond quickly to shocks, improving poverty targeting of safety net programs, and scaling up the use of digital payments (Access to Finance Rwanda, 2016).

Regional challenges on development

Rwanda's economic growth success has been driven by the country's services sectors and public investments, funded by foreign aid. There has been some degree of export diversification in the country away from coffee (the country's predominant historical export). However, the export basket has largely diversified to other primary commodities (particularly, minerals). The rapid growth of tourism receipts has also been vital for managing the country's large trade deficit. Driven by the desire to make Kigali into a hub of various kinds – from tourism to finance – there has been a construction boom, which has contributed to the expansion of the business tourism (Meetings, Incentives, Conferences and Events – MICE) and FIRE (Finance, Insurance and Real Estate) sectors (Rwanda Development Board (RDB), 2012). The transformation of the city of Kigali is evident, although critics argue that this 'visible' growth has not been redistributed equally to the majority, rural segments of the population. Within VISION 2020, the manufacturing sector has also been neglected, contributing to Rwanda's 'developmental state' strategy being quite different from successful East Asian latecomers like Korea and Taiwan (United Nations Development Programme, 2014).

Rwanda's public-sector led development model has shown limitations, as public debt has increased

significantly in recent years. Rwanda's growth model has relied heavily on large public investments (12.3% of gross domestic product (GDP) in 2019) leading to substantial fiscal deficits financed mainly through external borrowing. Consequently, the debt-to-GDP ratio rose to 56.7% in 2019 (from 19.4% in 2010) (World Bank, 2020). External financing through grants, concessional and non-concessional borrowing played an important role in financing public investments. Going forward, the private sector will play a bigger role in helping to ensure economic growth. Low domestic savings, skills, and the high cost of energy are some of the major constraints to private investment. Stronger dynamism in the private sector will help to sustain high investment rate and accelerate the growth. Promoting domestic savings is viewed as critical. Inclusive growth also remains a critical challenge. The poverty reduction momentum has weakened in recent years, increasing the urgency to design a medium-term public investment strategy to achieve a more efficient allocation of resources geared toward projects critical for broad-based and inclusive economic recovery following the pandemic (World Bank, 2011).

Despite some success in driving Rwanda's services-based strategy and making some progress in encouraging manufacturing (particularly the agro-processing sector), the sustainability of the growth of these sectors remains vulnerable (Uwamariya, 2018). Though business tourism – through heavy investments in the Kigali Convention Centre and Rwandair – has increased, there has been limited attention to supporting domestic linkages (with manufacturing and agriculture) that accompany increased demand for domestically produced goods (Ministry of Finance and Economic Planning, 2019). Investments in real estate in Kigali resulted in speculative investments in the hotel industry, with unhappy results for many. Skills, too, have lagged in relation to the speed of developments in the service sector, with the full potential of employment benefits far from realised. The reactive strategy to

reviving manufacturing sector growth coincided with economic nationalist sentiments across East Africa. Rwanda – as the only East African country to retain a ban against used clothes – has had to suffer short-term challenges after AGOA (African Growth and Opportunity Act) access was lost. Domestically-based companies were not yet in place to compete with imported clothes and secure the domestic market, and have led to foreign investors having to rethink their future strategies (AfDB, 2017).

Challenges appeared in Rwanda's attempt at 'leapfrogging', as surveys showed higher-than-expected unemployment and underemployment. In 2012, as part of the Economic Development and Poverty Reduction Strategy 2 (EDPRS 2), the government recognised that there had been difficulties in creating employment for its young, educated population. The EDPRS 2 included a job target of creating 1 million jobs (200,000 jobs annually) over a period of five years. In the National Strategy for Transformation 1 (NST 1), these targets were scaled up to creating 1.5 million jobs between 2017 and 2024 (214,000 jobs annually). Through the Workforce Development Authority (WDA) and other agencies, a number of programmes like the National Employment programme have been rolled out. Yet the challenge of creating decent jobs for the population persists, as government statistics recently showed, with 30 percent of the population categorised as underemployed (MINICOM, 2012).

Social Context

Rwanda's strong economic growth was accompanied by substantial improvements in living standards, with a two-thirds drop in child mortality and near-universal primary school enrollment (IMF, 2020a). A strong focus on homegrown policies and initiatives has contributed to significant improvement in access to services and human development indicators. Measured by the national poverty line, poverty declined from 77% in 2001 to 55% in 2017, while Life expectancy at birth improved from 29 in the mid-1990s to 69 in 2019 (UN DESA, 2019). The maternal mortality ratio has fallen from 1,270 per 100,000 live births in the

1990s to 290 in 2019. The official inequality measure, the Gini index, declined from 0.52 in 2006 to 0.43 in 2017 (National Institute of Statistics of Rwanda 2020a) However, the COVID-19 crisis is dramatically increasing poverty, and threatening human capital. The headcount poverty rate is likely to rise by 5.1 percentage points (more than 550,000 people) in 2021, compared to the no-COVID scenario. The combination of poorer nutrition, limited health services, learning losses from school closures, and the likelihood that some children (particularly adolescent girls and children from poor households) may never return to school because of the COVID-19 have the potential to threaten decades of progress in Human capital development (UNESCO, 2020).

Statement of the Problem

Rwanda's public debt was 58% of GDP in 2019 due to elevated spending on key infrastructure investment and a decline in aid flows. The COVID-19 crisis caused an increase in health-related spending and a decline in tax revenues, resulting in an increase in public debt to 66% of GDP in 2020, which is expected to reach 72% of GDP in 2021, above the safe debt ratio of 65%. In anticipation, the country's debt distress was raised from low to moderate by the International Monetary Fund and World Bank, effective in June 2021. An urgent fiscal adjustment to a safe debt ratio of 65% of GDP is required to avoid the risk of slipping into high debt distress (World Bank 2021). The planned transition to private sector-led growth, the use of blended finance and derisking strategies to fund infrastructure projects, drawing on reserves, and renegotiating debt will help avoid overburdening the public balance sheet. Capacity building in the management of fiscal risks from private-public partnerships should be prioritized to support a fiscal consolidation strategy.

While some countries that have borrowed to finance investment projects have had high growth rates (such as Ethiopia, Kenya, and Rwanda), there is also evidence that the link between debt financing and the growth-enhancing role of public

investment is weakened by low efficiency. To assess the impact of debt-financed public capital investment programs on growth, we use the Debt-Investment-Growth (DIG) Labor model, an open-economy, perfect foresight, general equilibrium model with three sectors, in which public investment in physical and human capital plays a complementary role in raising productivity in the different sectors (KT Press. 2019).

In general, Rwanda's efforts to prioritise export diversification seem to be paying off, although at a slow pace. Being a landlocked country with very high transportation and other trade-related costs hampers Rwanda's possibilities for export-led growth and diversification. In addition, non-tariff barriers are another factor that slows down export diversification. Despite Rwanda making significant improvements in lowering the time and cost of import and export handling, non-tariff barriers in the form of trade related procedures and formalities remain cumbersome. However, the prognosis for the future is optimistic. As a first step in the expansion of the international trade, regional trade provides opportunities that can be exploited in the short and medium term. The landlocked location is less of a hindrance to regional trade and many types of interactions between the neighbouring countries tie them ever closer together. Anecdotal evidence suggests that Rwanda's regional trade and crossborder trade with the Democratic Republic of Congo and Uganda is growing in value. To enhance regional trade, Rwanda joined the East African Community and has implemented a number of reforms in line with East African Integration process. Rwanda facilitated trade by extending the opening hours of the customs boarder offices, implementing an electronic data interchange system, and introducing risk-based inspections. Together with growth in the transport sector, this has reduced the time to export by five days and time to import by 27 days constituting a 40 percent reduction (World Bank, 2018).

Efforts to facilitate regional trade should be linked to the infrastructure investment in Rwanda both when it comes to main roads connecting to the transport routes in neighbouring countries as well as feeder roads in the rural areas of Rwanda. Expanding the size of the national market and access to the regional market might well provide a solid basis for economic diversification and increased competitiveness (Ministry of Information Technology and Communications and Innovation). 2017c.)

The investments, as well as enabling regulatory reforms, has helped Rwanda achieve some of the highest 3G and 4G network coverage rates on the continent, bringing virtually all Rwandans within range of mobile broadband. By 2019, mobile internet subscribers numbered 7million – 58.3 for every 100 people. It has also facilitated digitalization of other services, among them financial (mobile money, mobile banking services), agriculture (e-Soko), health (Mobile e-Health), and administrative services (Irembo). (Ministry of Information Technology and Communications and Innovation). 2019a.)

During the 32nd Ordinary Session of the African Union in Addis Ababa, President Paul Kagame said that digital identity is the start of a long and valuable chain of capabilities that make citizens better able to participate productively in the regional and global economy. "The future of the global economy is digital," he said.

For Rwanda to leverage digital transformation as a driver of growth, the REU15 says digital adoption will need to improve markedly by increasing affordability of digital devices and services and removing barriers to uptake. Rwanda will also need to bridge the lingering basic digital skills gap and boost the value proposition of digital tools and services to increase local demand for digitally-enabled platforms.

Moving forward, the report suggests the private sector will need to play a far greater role in spearheading digitization in Rwanda. This could be

through both increased technology adoption and support for innovation that can enhance productivity, spawn new services and create new off-farm jobs. Private sector-led digital economy growth will also need to be fueled by growing private sector investment in digital enterprise, the report says, as well as greater overall investment in human capital that boosts Rwanda's digital skills base, leveraging both traditional and non-traditional approaches.

"Rwanda has already begun charting an ambitious course for achieving rapid digital transformation and demonstrated a clear commitment to embracing the digital economy as a lever for accelerating growth, improving services delivery and increasing job creation," Isabella Hayward, World Bank Digital Development Specialist. "While Rwanda has made substantial progress and key investments in this area, critical challenges lie ahead – notably, bringing more Rwandans online, increasing use of digital services and crowding in the private sector."

Given its small market size, the report also notes that Rwanda will need to be at the forefront of efforts to create a larger, more integrated digital market in East Africa and beyond to help decrease the costs for digital services for consumers and create room for digitally-enabled firms to quickly scale. As digital adoption increases, the country also will need to do more to secure online transactions and protect users according to the REU15; through the expansion of digitally-enabled trust services, balanced data protection provisions and stronger cybersecurity capabilities; this will help create a virtuous cycle of further digital adoption.

Literature Review

Even though developing nations have very different backgrounds in terms of resources, history, demography, religion and politics, they still share a few common characteristics. At the moment the paper covers over eight common characteristics of developing economies.

Common Characteristics of Developing Nations

1. Low Levels of Living

In developing nations, general levels of living tend to be very low for the vast majority of people (World Bank, 2009). This is true not only in relation to their counterparts in rich nations but often also in relation to small elite groups within their own societies. These low levels of living are manifested quantitatively and qualitatively in the form of low incomes (poverty), inadequate housing, poor health, limited or no education, high infant mortality, low life and work expectancy, and in many cases a general sense of malaise and hopelessness. Let us look at some recent statistics comparing certain aspects of life in the underdeveloped countries and in the more economically advanced nations. Although these statistics are national aggregates, often have substantial errors of measurement, and in some cases are not strictly comparable due to exchange rate variations, they do provide at least a summary indication of relative levels of living in different nations (Balland et al, 2018).

2. Low Per Capita National Income

Low per capita real income is one of the most defining characteristics of developing economies. They suffer from low per capita real income level, which results in low savings and low investments. It means the average person doesn't earn enough money to invest or save money. They spend whatever they make. Thus, it creates a cycle of poverty that most of the population struggles to escape. The percentage of people in absolute poverty (the minimum income level) is high in developing countries (Kee and Nicita, 2016).

The gross national product (GNP) per capita is often used as a summary index of the relative economic wellbeing of people in different nations. The GNP itself is the most commonly used measure of the overall level of economic activity. It is calculated as the total domestic and foreign value added claimed by a country's residents without making deductions for depreciation of the domestic capital stock (Organisation for Economic Co-operation and

Development) and WTO (World Trade Organization) 2015). The gross domestic product (GDP) measures the total value for final use of output produced by an economy, by both residents and nonresidents. Thus GNP comprises GDP plus the difference between the income residents receive from abroad for factor services (labor and capital) less payments made to nonresidents who contribute to the domestic economy (Triplett, 2004). Where there is a large nonresident population playing a major role in the domestic economy (such as foreign corporations), these differences can be significant (Boyd, 2007). In 1990, the total national product of all the nations of the world was valued at more than U.S. \$20 trillion, of which more than \$16.6 trillion originated in the economically developed regions while less than \$3.4 trillion was generated in the less developed nations (Novy, 2013). When one takes account of the distribution of world population, this means that approximately 83% of the world's total income is produced in the economically developed regions by less than 23% of the world's people. Thus more than three-fourths of the world's population is producing only 17% of total world output. More important, on the income side, the Third World, with almost 77% of the world's population, subsists on less than 20% of the world's income (Hatzius, 2017). The collective per capita incomes of the underdeveloped countries average less than onetwentieth the per capita incomes of rich nations (Moulton, 2018).

3. Relative Growth Rates of National and Per Capita Income

The gross national product (GNP) per head and the related income measures are widely used to appraise the economic well-being of people living in different countries. These measures have been subject to much criticism for their failure to give any indication of how the total output of a country is distributed among its people. In addition to having much lower levels of per capita income, many Third World countries have experienced slower GNP growth than the developed nations (Bandura, 2017).

In 2018, world real GDP grew by 3.0 per cent, almost at the same pace as in 2017 (3.1 per cent). In 2019, the GDP growth rate is nowcast at 2.3 per cent. This would be the lowest annual growth rate recorded since 2009. Large differences in GDP per capita persist throughout the world (International Monetary Fund, 2018). In 2018, most developed economies produced an output per person greater than US\$30 000, with economies in Eastern Europe as the main exception (Financial Times, 2019b). By contrast, almost half of the developing economies in Africa all of them least developed countries (LDCs) recorded a per capita output of less than US\$1 000. Most developing economies in America, Western, Central and Eastern Asia and in Oceania reached an output higher than US\$3 000 per person (World Bank, 2019).

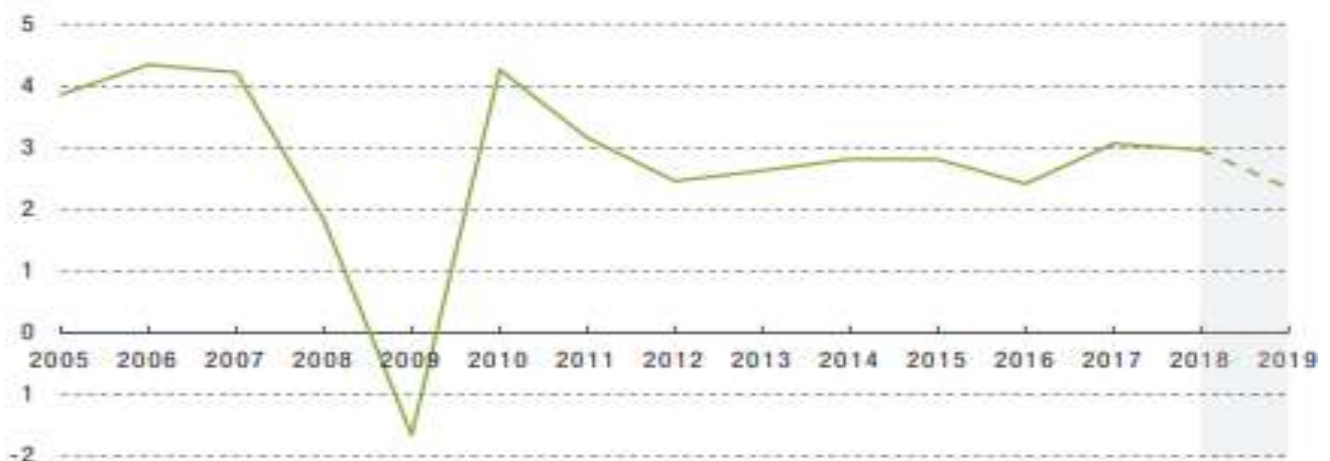


Figure 1: World real gross domestic product annual growth rate (Percentage)

Note: At constant 2010 United States dollars. The shaded area indicates UNCTAD Report 2018.

Not all regions of the world recorded equal economic growth in 2018. Growth remained high, at 5.3 per cent, in developing Asia and Oceania, whereas in the developing economies of America GDP increased by only 0.7 per cent. The growth rate of transition and developed economies stood at 2.8 and 2.2 per cent, respectively (World Bank, 2019).

GDP in LDCs grew at a higher rate than the world average in 2018, as in the previous year, but at 4.7 per cent their growth rate remained below the 7 per cent target set by the 2030 Agenda for Sustainable Development. GDP per capita increased by 2.3 per cent in LDCs.

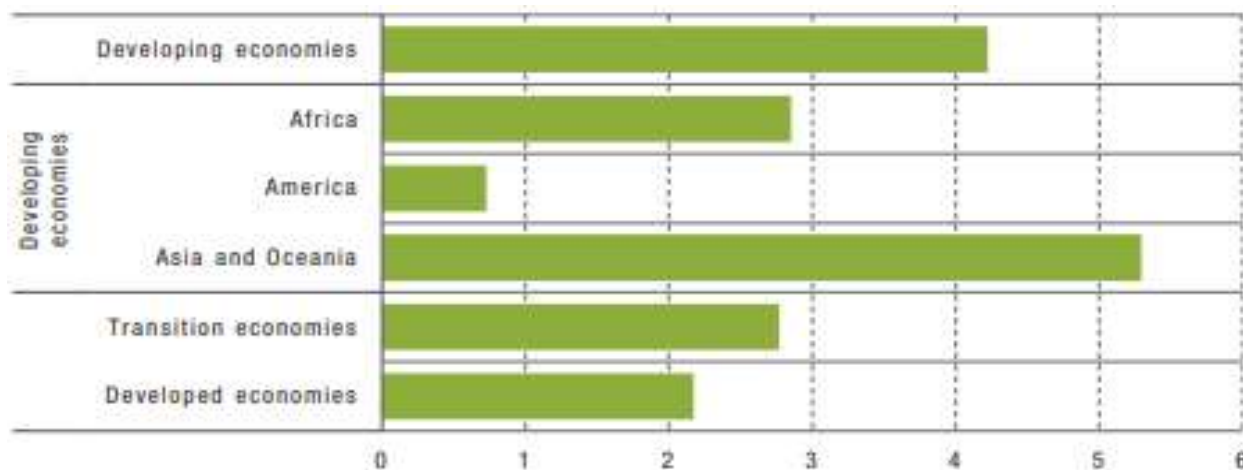


Figure 2: Growth of real gross domestic product by group of economies, 2018 (Percentage)

Note: At constant 2010 United States dollars. World Bank 2018.

4. Growing Gap of Distribution of National Income

Since the 1980s, labour's share in national income has fallen around the world (Rodriguez & Jayadev 2010). This development contradicts the long-standing fact of Bowley's law, which states that labour's share is remarkably constant in the long run. However, the fact of falling labour's shares led to a renewed interest in functional income distribution (Brueckner, Dabla Norris and Gradstein, 2015).

While most studies focus on the increase in personal income inequality, the present study is devoted to functional income distribution which shows how the returns from output are shared among capital and labour. Since the majority of the population receives its largest share of income from work rather than capital (OECD 2011), functional income distribution provides a comprehensive picture of how the returns from growth and the losses from stagnation are shared among the economy (Rodriguez & Jayadev 2010).

Following these different paradigms, it becomes obvious that every theory favours a different explanation in regard to functional income distribution. It comes as no surprise that the differences do not only relate to the theoretical level but also to the interpretation of recent developments. Neo-classical economists relate the declining share of labour in national income to technological change that increased the productivity of capital and high-skilled labour as well as to globalisation. Whereas heterodox economists stress the role of neo-liberalism, financialisation and the decline in workers' bargaining power (Brueckner and Lederman, 2015).

The growing gap between per capita incomes in rich and poor nations is not the only manifestation of the widening economic disparity between the world's rich and poor (Alichi, et al., 2016). To appreciate the breadth and depth of Third World poverty, it is also necessary to look at the growing gap between rich and poor within individual LDCs.

First, all nations of the world show some degree of income inequality. There are large disparities between incomes of the rich and poor in both developed and underdeveloped countries (Dabla-Norris, et al 2015). Nevertheless, the gap between rich and poor is generally greater in less developed nations than in developed nations. For example, if we compare the share of national income that accrues to the poorest 40% of a country's population with that of the richest 20% as an arbitrary measure of the degree of inequality, we discover that countries like Brazil, Ecuador, Colombia, Jamaica, Mexico, Venezuela, Kenya, Sierra Leone, South Africa, and Guatemala have substantial income inequality; others like India, Tanzania, Chile, Malaysia, Costa Rica, and Libya have moderate inequality; and others like Taiwan, Hong Kong, Indonesia, Canada, Japan, Sweden, and South Korea have relatively lesser inequalities in overall income distribution. Moreover, there is no obvious relationship or correlation between levels of per capita income and degree of income inequality (Bourguignon, 2015). Kenya, with the same low per capita income as India, has a much

wider income disparity between the top 20% and bottom 40% of the population (Piketty 2014). Similarly, Kuwait, with almost the same high per capita income as Belgium, has a much lower percentage of its income distributed to the bottom 40% of its population (Beddoes, Zanny Minton, 2012). This phenomenon underlines the important point that economic development cannot be measured solely in terms of the level and growth of overall income or income per capita; one must also look at how that income is distributed among the population at who benefits from development.

Several factors have contributed to the rise in within-country inequality, including globalization, technological change favoring higher-level skills and capital, structural changes in labor markets, the rising importance of finance, the emergence of winner-take-all markets, and policy changes such as shifts toward less progressive fiscal regimes. While the trend of rising within-country inequality during this period has been most consistent among advanced economies, several major emerging economies especially in the latter part of this period.

Table 1: Global Income Disparity between the Richest and Poorest 20 Percent of the World's Population, 1989-2019

	Percentage of Global Income		Ratio of Income Shares
	Poorest 20%	Richest 20%	Poorest to Richest
1989	1.4	82.7	59 to 1
1999	1.7	76.3	45 to 1
2009	2.3	73.9	32 to 1
2019	2.3	70.2	30 to 1

SOURCE: United Nations Development Program, Human Development Report, 2019 (New York: Oxford University Press, 2019), p. 36.

During the 1970s, as interest in problems of poverty increased, development economists took the first step in measuring its magnitude within and across countries by attempting to establish a common poverty line (Milanovic, 2016). They went even further and devised the now widely used concept of absolute poverty. It is meant to represent a specific minimum level of income needed to satisfy the basic physical needs of food, clothing, and shelter in order to ensure continued survival. A problem,

however, arises when one recognizes that these minimum subsistence levels will vary from country to country and region to region, reflecting different physiological as well as social and economic requirements. Economists have therefore tended to make conservative estimates of world poverty in order to avoid unsubstantiated exaggerations of the problem. One common methodology has been to establish an international poverty line at, say, a constant U.S. \$370 (based, for example, on the

value of the 1985 dollar) and then attempt to estimate the purchasing power equivalent of that sum of money in terms of a developing country's own currency (Milanovic, 2013).

Functional income distribution shows how output is divided between the factors of production, i.e. capital and labour. The wage share can be defined as compensation of employees as a share of value added or GDP. The profit or capital share is then the residual. This basic approach might render an inaccurate picture of how output is divided among the factors of production, when taking into account that the labour income of the self-employed is included in the profit share. Hence, changes in the sectoral composition of an economy, as for instance the shift from an agricultural to an industrial economy, i.e. a shift from selfemployment into dependent employment, can bias the development (Kravis 1959). Gollin (2002) finds large differences between wage shares of poor and rich countries almost vanish when corrected for the earnings of self-employed. Since Johnson (1954) it became common practice to assign 2/3 of proprietor's income (i.e. revenue to owners of unincorporated businesses) to the wage share, and 1/3 to the profit share (Krueger 1999). Another issue relates to the treatment of the government sector. Since the profit share of the government sector is zero by

definition, a decline in government activity automatically results in changes in labour's share of income (Gomme and Rupert 2004).

Figure 3 gives the densities of both national poverty lines and private consumption per capita for 95 countries (developed and developing). These are either official national poverty lines or (when these could not be found) they are the lines set by Eurostat and the World Bank. Both the poverty lines and consumption are converted to \$US's using purchasing power parity (PPP) exchange rates. The range of poverty lines in Figure 3 is huge, from \$0.62 to \$43 per day, though there is a pronounced lower mode of about \$2 a day (and a less pronounced upper mode just under \$30 a day). Even so, mean consumption is more dispersed (with a range from \$1.03 to \$93.85 a day). In Figure 3 the poverty lines are plotted against log consumption per capita; Comparing expected values conditional on mean consumption (as estimated by the non-parametric regression in Figure 3 the range is from \$1.25 to \$30 per day. The mean line for the poorest 15 countries in terms of consumption per capita is \$1.25 while the mean for the richest 15 is \$25 a day. One sees that national lines rise with mean consumption, which can be called their relativist gradient, though the relationship is clearly quite flat at low per capita consumption levels.

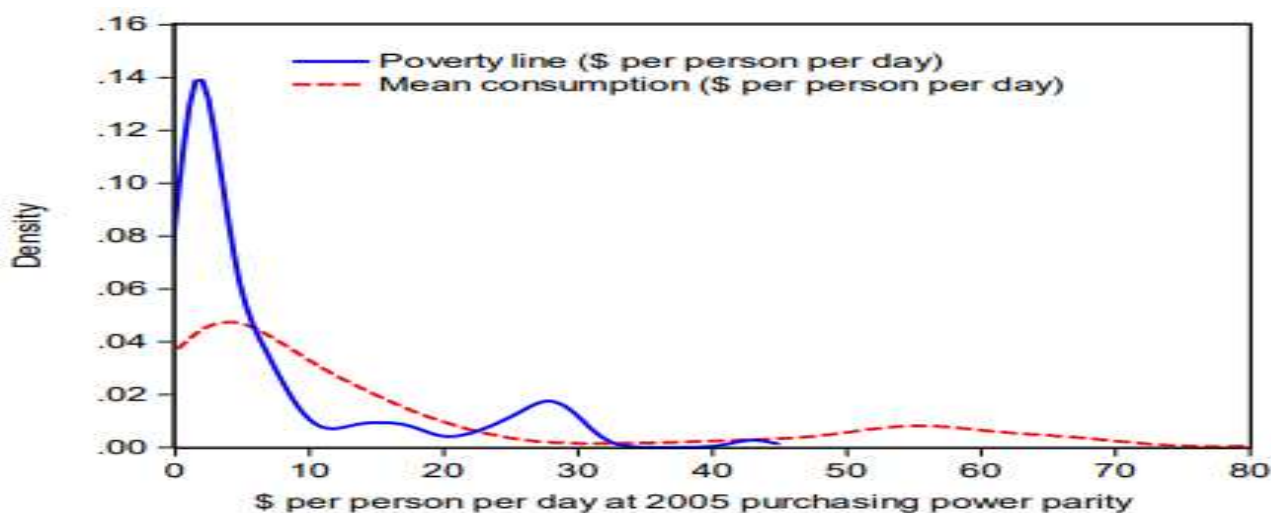


Figure 3: Density of poverty lines and mean consumption across the world in 2018

Source: Ravallion et al. (2018) (for developing countries) augmented for this paper by the author to included OECD countries (Eurostat lines plus official lines for Australia, Canada, Finland, USA).

a. Extent of Poverty

Poverty reduction lies at the core of the global development challenge. For the international development community, this objective serves not only as a source of motivation, but as a defining theme across its work. Many of the world's most prominent aid organizations cite poverty reduction as their overarching goal (Solt, 2009). To calculate the number of people in the world living in extreme poverty, we update the World Bank's official \$1.25 a day poverty estimates for 119 countries, which

together account for 95 percent of the population of the developing world. To do this, we take the most recent household survey data for each country, and generate poverty estimates for the years 2005 to 2015 using historical and forecast estimates of per capita consumption growth, making the simplifying assumption that the income distribution in each country remains unchanged. Today's massive reduction in global poverty represents the aggregate of a number of individual regional and national success stories.

Table 2: Regional and Global Poverty, 2005, 2010, 2015

	Number of poor (millions)			Poverty rate (% population)		
	2005	2010	2015	2005	2010	2015
East Asia	304.5	140.4	53.4	16.8%	7.4%	2.7%
Europe and Central Asia	16.0	8.4	4.3	3.4%	1.8%	0.9%
Latin America and Caribbean	45.0	35.0	27.3	8.4%	6.2%	4.5%
Middle East and North Africa	9.4	6.7	5.4	3.8%	2.5%	1.9%
South Asia	583.4	317.9	145.2	40.2%	20.3%	8.7%
Sub-Saharan Africa	379.5	369.9	349.9	54.5%	46.9%	39.3%
World	1,337.8	878.2	585.5	25.7%	15.8%	9.9%

Source: World Bank 2016.

Unlike previous decades, like the '80s (when the poverty rate increased in Africa) and the '90s (when it increased in Latin America and the former Soviet Union), poverty reduction is currently taking place in all regions of the world (Table 2). The sharpest fall in poverty is occurring in Asia. South Asia alone is expected to see a reduction in the number of its poor of more than 430 million over the 10-year period we study, representing a fall in its poverty rate of over 30 percentage points. East Asia already recorded a vast drop in poverty between 1980 and 2005, and this trend is continuing: a further 250 million people in the region are expected to escape. Perhaps the greatest surprise, however, is the one taking place in Sub-Saharan Africa. Between 1980 and 2005, the region's poverty rate had consistently hovered above 50 percent. Given the continent's high population growth, its number of poor rose

steadily. The current period is different. For the first time, Sub-Saharan Africa's poverty rate has fallen below 50 percent. The total number of poor people in the region is falling too, albeit slowly. Better still, by 2015, the poverty rate is expected to fall below 40 percent—a rate China did not achieve until the mid-90s (WDI, 2014).

The magnitude and extent of poverty in any country depend on two factors: (1) the average level of national income and (2) the degree of inequality in its distribution. Clearly, for any given level of national per capita income, the more unequal the distribution, the greater the incidence of poverty. Similarly, for any given distribution, the lower the average income level, the greater the incidence of poverty. But how is one to measure poverty in any meaningful quantitative sense? (Chinkin, 2011).

The global poverty rate has been declining since the 1950s, but SSA has made strides only since the mid-1990s. Between 1999 and 2010, the region reduced extreme poverty by 10 percentage points, in part due to growth acceleration. Nevertheless, the World Bank household surveys suggest that in 2010 the poor still accounted for striking 48 percent of SSA's population and 30 percent of the global poor. The poverty rate was more than double of the rate of the world's second poorest region, South Asia (Chandy and Gertz, 2011 and Olinto et al, 2013).

Rwanda has also achieved a strong level of political stability. Women make up 62% of the national legislature and previously marginalized opposition parties have gained parliamentary seats without disrupting the system's stability. These are indicators that will increase confidence in foreign investors. The importance of eradicating poverty by 2030 has been widely recognized and gained consensus among international organizations as the UN post-MDG goals have been discussed. Further, in 2013, the World Bank and its Governors endorsed two inter-linked goals: (i) to end extreme poverty by 2030 and (ii) to promote shared prosperity in every society. The specific targets are: (i) to bring the share of global population living below this threshold to less than 3 percent; and (ii) to foster the per capita income growth of the poorest 40 percent of the population in each country (World Bank, 2013; Basu, 2013). Poverty reduction always featured high on the policy agenda of the African Development Bank, and the

development agencies in both developed and developing countries also assigned high priority to it.

The international human rights conventions do not contain an explicit human right to freedom from poverty and reliable information on the distribution of income and other resources is often scarce for developing countries. Hence, to relate rights to the measurement of poverty, a selection process is required to match the rights contained in the conventions to the severe deprivations of basic human need. However, many of the rights, as expressed in the relevant charters and conventions, are ambiguous or imprecise. Accordingly, it is said that human rights confer 'imperfect duties' upon others (UNDP, 2000). The formulation of rights does not generally include how a duty may be discharged.

Given Africa's diversity, substantial differences in poverty rates persist among sub-groups and countries. While frontier markets played a steady role in poverty reduction SSA during 2000s, contribution of fragile states has been subdued. Among frontier markets, Zambia and Tanzania, have maintained high rates of poverty, while some of the middle income countries such as Cape Verde or Seychelles have almost eliminated it. In contrast, high inequality and poverty prevailed in the MICs in Southern Africa. Among fragile states, both large (e.g. Democratic Republic of Congo) and smaller countries (e.g., Liberia) post very high poverty rates.

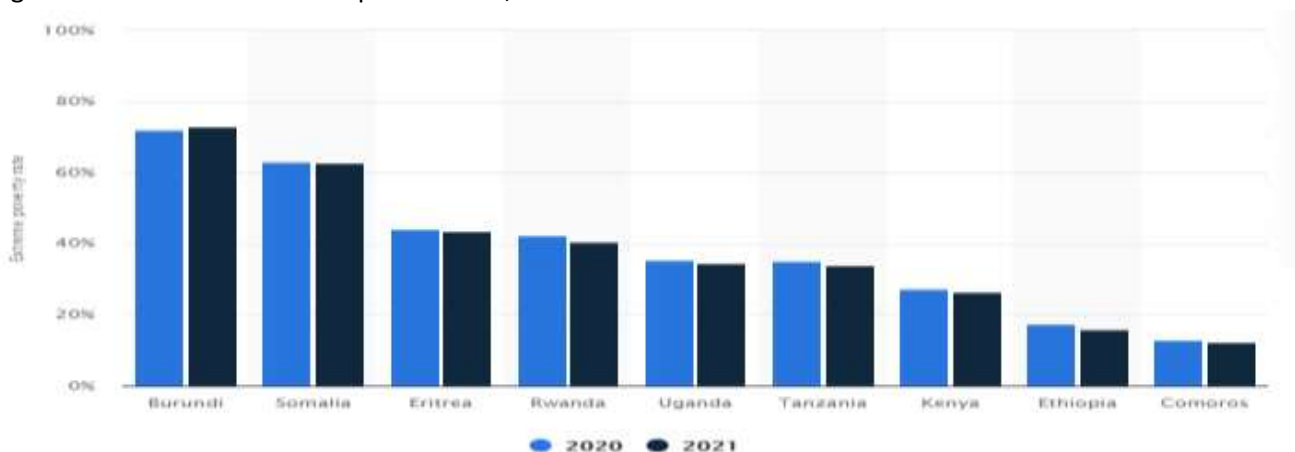


Figure 4: Extreme poverty rate in East Africa in 2020 and 2021, by country

Source: <https://www.statista.com/statistics/1200550/extreme-poverty-rate-in-east-africa-by-country/>

Nearly 73 percent of workers in Burundi were living below 1.90 U.S. dollars per day in 2021. It was the highest level of extreme poverty rate in East Africa, followed by Somalia with some 63 percent. On the other hand, Comoros and Ethiopia registered the lowest levels, at 12.4 percent and 15.9 percent, respectively. With exception from Burundi, all countries in analysis registered a slight decrease in the extreme poverty rate from 2020 to 2021 (World Bank, 2021).

To fully understand the current situation of vulnerable and marginalized groups, in 2018, Rwanda launched the Multidimensional Poverty Index and analyzed child poverty using the Multiple Overlapping Deprivation Analysis (Republic of Rwanda, 2010). These will inform appropriate policy actions. The assessments look beyond income and provide an understanding of how vulnerable groups are left behind across three key dimensions - health, education and standard of living. In 2018, the Government also conducted a profiling exercise for people living in extreme poverty (Ubudehe category 1 and 2), which led to the adoption of a national strategy to eradicate extreme poverty, which called for a multi-sectoral approach to help households to sustainably graduate from extreme poverty (The New Times, 2020)

Poverty in Rwanda is still significant; around 39% of the population lives below the poverty line. One contributing factor is that Rwanda suffers from a poor education system where only 68% of first-graders end up completing all six years of primary education. Another component is that domestic private investment in Rwanda has yet to take off, mainly due to low domestic savings (World Health Organisation (WHO), 2013). Additionally, many rural Rwandans operate subsistence farms and thus have little disposable time and income. Though Rwanda has problems that it cannot easily solve, there still is hope. Before the pandemic, Rwanda's economic growth exceeded 10% in 2019 (World Health Organization). 2020). A two-thirds drop in child mortality and near-universal primary school enrolment accompanied this statistic. Additionally,

two World Bank-funded projects including the Rural Sector Support Program, and the Land Husbandry, Water Harvesting and Hillside Irrigation Project have increased the productivity and commercialization of rural agriculture. As a result, maize and rice yields doubled and potato yields tripled between 2010 and 2018. These results are especially promising considering poverty in Rwanda is the most severe in rural areas.

b. Decomposition of GDP growth by sector

In 2018, real GDP in East Africa grew by an estimated 5.7 percent, slightly less than the 5.9 percent in 2017 and the highest among African regions. Economic growth is projected to remain strong, at 5.9 percent in 2019 and 6.1 percent in 2020. The countries with the highest economic growth are Ethiopia, Rwanda, Tanzania, Kenya, and Djibouti. In both Ethiopia and Rwanda, real GDP growth has been driven by industry and services (African Development Bank. 2020). The service sector has also been the main driver of growth in Tanzania and Kenya, followed by the agricultural sector, the main growth driver from the supply side. On the demand side, consumption has been the main driver of economic growth across East Africa (World Bank, 2020).

The region continues to face various downside risks that could undermine economic growth and development prospects. Major risks are agriculture's vulnerability to the vagaries of nature, heavy reliance on primary commodity exports, and in oil importing countries rising oil prices. Another key risk is persistent current account deficits and related increases in external indebtedness. Finally, state fragility with its adverse implications for security and economic progress is a risk for Burundi, Somalia, South Sudan, and, to some degree, Ethiopia (African Development Bank. 2020).

Notwithstanding the variation across countries, the region's fiscal deficit remained low, at an estimated 4.1 percent of GDP in 2018, and is projected to drop to 3.7 percent in 2019 and 3.5 percent in 2020. But current account deficits remain high, and two patterns are emerging. First, since almost all

countries depend on primary commodities for exports, falling global commodity prices have negatively affected their terms of trade. Second, the region's high growth has been achieved through high investment, which is above domestic savings. The internal investment–savings gap is strongly associated with the persistent current account deficit (or external gap).

As in 2017, East Africa's strong growth has not been matched by commensurate and substantial reduction in poverty and inequality. So in 2018, the region is still characterized by high poverty, inequality, and unemployment. Poverty pervades all countries in the region and is extremely high in Burundi and Rwanda and very low in Seychelles, Sudan, and Comoros (Byiers et al. 2018). Structural transformation remained markedly absent in the region. The service sector dominates the composition of GDP in the region, averaging 59.0 percent, followed by the agricultural sector, averaging 25.7 percent. Industry, which includes construction, is very small, averaging 15 percent. Similarly, the average share of manufactured exports about 14.6 percent also indicates the region's lack of structural transformation.

In the majority of East African countries, real GDP growth from the supply side is driven primarily by growth in services, followed by industry, where the contribution of the construction sector is considerable.

In 2020, the share of agriculture in Rwanda's gross domestic product was 26.25 percent, industry contributed approximately 19.33 percent and the services sector contributed about 46.42 percent. To achieve its aspiration of becoming a high income country by 2050, Rwanda will have to accelerate the growth of trade. Inflows of development assistance have financed a large share of investment and powered gross domestic product (GDP) growth in the past two decades, but they are likely to attenuate in the coming two decades as

Rwanda progresses toward middle-income status. Trade will become an increasingly important driver of growth. Exports will provide foreign exchange to purchase much-needed investment in equipment, high-technology goods, intermediate components, and product varieties and will foster productivity by allowing firms to exploit increasingly large economies of scale. Increased import capacity will facilitate access to high-technology goods and foster competition that drives productivity. Trade expansion also implies the need to attract foreign direct investment (FDI), since multinational companies bring in managerial, technical, and design skills at the same time that their networks facilitate access to new export markets (Freund & Moran 2017).

In 2018, eight East African countries had an economic vulnerability index¹ higher than the threshold for classification as a least developed country. Five countries—Burundi, Comoros, Eritrea, Seychelles, and South Sudan—had a value above the average for least developed countries. The most vulnerable countries have different economic and social characteristics—some are small island states, others landlocked—but generally depend on a few export products and suffer from instability in export earnings. And most are extremely vulnerable to natural disasters, with large fluctuations in agricultural production and a high reliance on the agricultural sector.

In 2019, East African Foreign Direct Investment (FDI) inflow increased from \$5.7 billion to \$11.5 billion in just a year. Inflows to all East African countries except Tanzania increased during this time period. This 103% increase is largely due to China as East Africa's largest investor. Chinese investment accounts for almost 60% of FDI inflow in East Africa. Investment is going into the technology, manufacturing and services sectors. FDI inflows created 89,877 jobs in 2018 and 211,084 in 2019. Employment increased in Uganda, Tanzania, Rwanda, Kenya, Burundi and South Sudan.

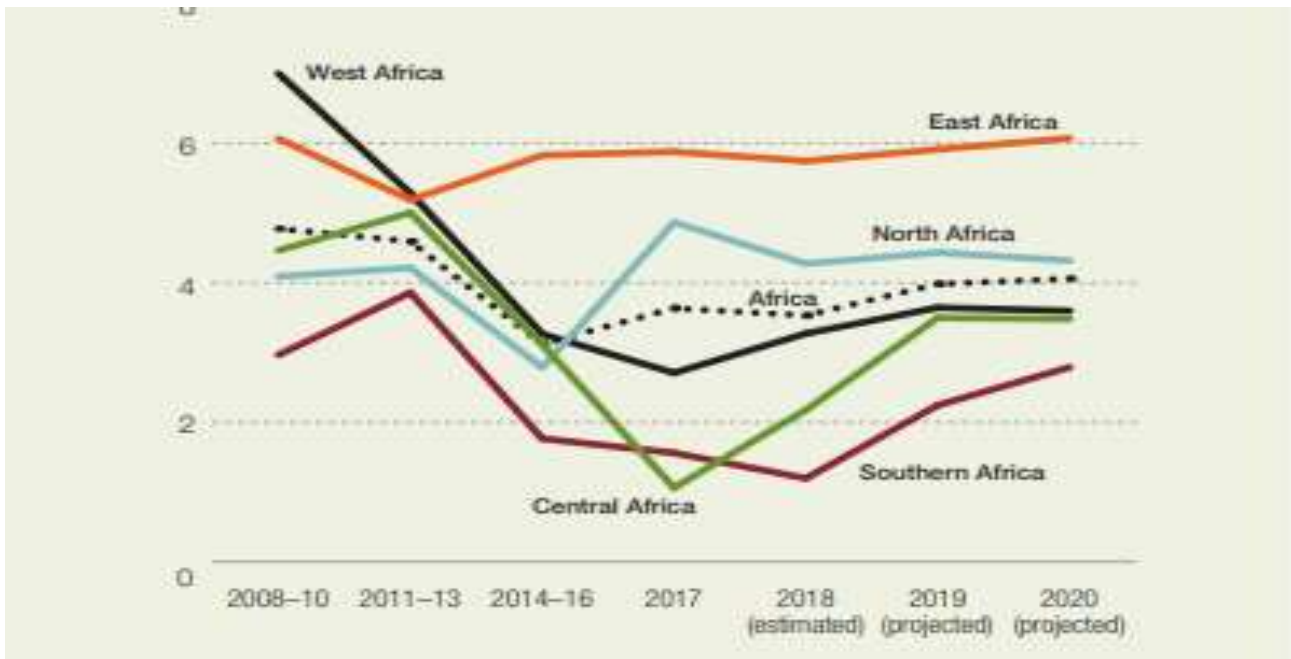


Figure 5: GDP growth, by region

Source: African Development Bank statistics 2008–20

Among the fastest growing countries in the region—Ethiopia, Rwanda, and Tanzania, which all saw growth above 6 percent in 2018—growth on the supply side is driven largely by growth in industry and services. In Ethiopia, industry (especially construction) grew by 18.7 percent in 2016/17, and services grew by 10.3 percent. In

Rwanda, industry grew by 8.3 percent, and services grew by 7.6 percent. Services is also the main driver of growth in Tanzania. The service sector’s contribution to growth was highest in Kenya, at 71 percent, while agriculture accounted for 15 percent and industry for 14 percent.



Figure 6: GDP growth in East Africa, by country.

Source: African Development Bank statistics 2014–20

On the demand side, consumption is the main driver of economic growth in East Africa, particularly in the fastest growing economies (Ethiopia, Kenya, Rwanda, and Tanzania). In Ethiopia, private consumption, was the main driver of growth from the demand side, followed by investment. In Kenya, private final consumption expenditure accounted for about 84 percent of growth during 2011–18. In Tanzania, private consumption's contribution to growth from the demand side was about 64 percent in 2018, followed by private investment (17 percent), and government consumption (12 percent).

c. Health

In addition to struggling on low income, many people in Third World nations fight a constant battle against malnutrition, disease, and ill health. Although there have been some significant improvements since the 1960s, in the least developed countries of the world, life expectancy in 1992 still averaged only 52 years, compared to 61 years among other Third World countries and 75 years in developed nations. Infant mortality rates (the number of children who die before their first birthday out of every 1,000 live births) average about 99 in the least developed countries, compared with approximately 74 in other less developed countries and 11 in developed countries (Chatterjee, 2005).. The rates for some specific countries are shown in Table 3 are even more revealing. In the mid-1970s, more than 1 billion people, almost half the population of the developing world (excluding China), were living on diets deficient in essential calories. One-third of them were children under 2 years of age. These people were concentrated in the poorest countries and, within these poor countries, in the lowest income groups. In the 1980s and early 1990s, the situation continued to deteriorate in sub-Saharan Africa, with deep declines in food consumption and widespread famine (McKay, 2013).

In both Asia and Africa, over 60% of the population barely met minimum caloric requirements

necessary to maintain adequate health. Moreover, it has been estimated that this caloric deficit amounted to less than 2% of the world cereal production. This contradicts the widely held view that malnutrition is the inevitable result of an imbalance between world population and world food supplies (Ndikumana *et al.* 2015). The more likely explanation can be found in the enormous imbalance in world income distribution. Thus malnutrition and poor health in the developing world are perhaps even more a matter of poverty than of food production, even though the two factors are indirectly interrelated. Table 3 provides 1990 estimates of the extent of human deprivation in terms of some key health indicators. We see, for example, that more than one-third (1.45 billion) of people in poor countries are without access to health services, 1.33 billion do not have access to safe drinking water, a staggering 2.25 billion (more than half the population) live without sanitation facilities, and 180 million children under age 5 (those who managed to live that long) are malnourished. Another often used measure of malnutrition is per capita daily protein consumption, which can vary from as high as 97 grams per day in the United States to 63, 48, and 43 grams per day in Brazil, India, and Ghana, respectively. In terms of world grain consumption, in the 1980s average annual consumption per person was approximately 670 kilograms in developed countries, as contrasted with 185 kilograms in less developed countries (Shimeles, 2014).

The importance of access to clean drinking water, deaths would be quickly eliminated with safe water supplies which is one of the most important measures of sanitation, cannot be overemphasized. Water-borne diseases such as typhoid fever, cholera, and a wide array of serious or fatal diarrheal diseases are responsible for more than 35% of the deaths of young children in Africa, Asia, and Latin America. Most of these diseases and resulting.

Table 3: Global and regional per capita food consumption (kcal per capita per day)

Region	1964 - 1966	1974 - 1976	1984 - 1986	1997 - 1999	2015	2030
World	2358	2435	2655	2803	2940	3050
Developing countries	2054	2152	2450	2681	2850	2980
Near East and North Africa	2290	2591	2953	3006	3090	3170
Sub-Saharan Africa ^a	2058	2079	2057	2195	2360	2540
Latin America and the Caribbean	2393	2546	2689	2824	2980	3140
East Asia	1957	2105	2559	2921	3060	3190
South Asia	2017	1986	2205	2403	2700	2900
Industrialized countries	2947	3065	3206	3380	3440	3500
Transition countries	3222	3385	3379	2906	3060	3180

^a Excludes South Africa.

Source: World Bank 2016

Finally, medical care is an extremely scarce social service in many parts of the developing world. Recent data reveal that in 1990, the number of doctors per 100,000 people averaged only 4.8 in the least developed countries, compared with 210 in the developed countries. The ratio of hospital beds to population is similarly divergent between these two sets of nations. Moreover, when one realizes that most of the medical facilities in developing nations are concentrated in urban areas where only 25% of the population resides, the woefully inadequate provision of health care to the masses of poor people becomes strikingly clear (Aggarwal and Kumar 2012). For example, in India, 80% of the doctors practice in urban areas where only 20% of the population resides. In Bolivia, only one-third of the population lives in cities, but 90% of the health facilities are found there. In Kenya, the population to-physician ratio is 672 to 1 for the capital city of Nairobi and 20,000 to 1 in the rural countryside where 87% of the Kenyan population lives. In terms of health expenditures, more than 75% of LDC government outlays are devoted to urban hospitals that provide expensive, Western-style curative care to a minority of the population. Reducing this amount to 50% and using the difference to train 1

million health workers could, according to a recent United Nations Children's Fund (UNICEF) study, provide much needed health services to the poorest 1 billion people in the Third World (UNECA 2017).

d. Education

As a final illustration of the very low levels of living that are pervasive in Third World nations, consider the spread of educational opportunities. The attempt to provide primary school educational opportunities has probably been the most significant of all LDC development efforts. In most countries, education takes the largest share of the government budget. Yet in spite of some impressive quantitative advances in school enrollments, literacy levels remain strikingly low compared with the developed nations (Patil, 2012). For example, among the least developed countries, literacy rates average only 45% of the population. The corresponding rates for other Third World nations and the developed countries are approximately 64% and 99%, respectively. Currently, it is estimated that more than 300 million children have dropped out of primary and secondary school, and of the estimated 1 billion illiterate adults, more than 60% are women. The education of children who do attend school regularly is often ill suited

and irrelevant to the development needs of the nation (Sun, 2012). Summarizing our discussion so far, we can list the following common characteristics of developing countries:

- Low relative levels and, in many countries, slow growth rates of national income
- Low levels and, in many countries, stagnating rates of real income per capita growth
- Highly skewed patterns of income distribution, with the top 20% of the population receiving 5 to 10 times as much income as the bottom 40%
- Consequently, great masses of Third World populations suffering from absolute poverty, with 1 billion to 1.3 billion people living on subsistence incomes of less than \$370 per year
- Large segments of the populations suffering from ill health, malnutrition and debilitating diseases, with infant mortality rates running as high as 10 times those in developed nations
- In education, low levels of literacy, significant school dropout rates, and inadequate and often irrelevant educational curricula and facilities. Most important is the interaction of all six characteristics, which tends to reinforce and perpetuate the pervasive problems of "poverty, ignorance, and disease" that restrict the lives of so many people in the Third World.

5. Low Levels of Productivity

In addition to low levels of living, developing countries are characterized by relatively low levels of labor productivity. The concept of a production function systematically relating outputs to different combinations of factor inputs for a given technology is often used to describe the way in which societies go about providing for their material needs. But the technical engineering concept of a production function must be supplemented by a broader conceptualization that includes among its other inputs managerial competence, worker motivation, and institutional flexibility. Throughout the developing world, levels of labor productivity (output per worker) are extremely low compared

with those in developed countries. This can be explained by a number of basic economic concepts (OECD, 2012).

For example, the principle of diminishing marginal productivity states that if increasing amounts of a variable factor (labor) are applied to fixed amounts of other factors (e.g., capital, land, materials), the extra or marginal product of the variable factor declines beyond a certain number. Low levels of labor productivity can therefore be explained by the absence or severe lack of "complementary" factor inputs such as physical capital or experienced management.

To raise productivity, according to this argument, domestic savings and foreign finance must be mobilized to generate new investment in physical capital goods and build up the stock of human capital (e.g., managerial skills) through investment in education and training. Institutional changes are also necessary to maximize the potential of this new physical and human investment. These changes might include such diverse activities as the reform of land tenure, corporate tax, credit, and banking structures; the creation or strengthening of an independent, honest, and efficient administrative service; and the restructuring of educational and training programs to make them more appropriate to the needs of the developing societies. These and other noneconomic inputs into the social production function must be taken into account if strategies to raise productivity are to succeed. An old proverb says that "you can lead a horse to water, but you cannot make him drink." In underdeveloped nations it is equally true that you can create the economic opportunities for self-improvement, but without the proper institutional and structural arrangements you cannot succeed (Sako, 2006).

One must also take into account the impact of worker and management attitudes toward self-improvement; people's degree of alertness, adaptability, ambition, and general willingness to innovate and experiment; and their attitudes toward manual work, discipline, authority, and

exploitation. Added to all these must be the physical and mental capacity of the individual to do the job satisfactorily. The economic success stories of the four "Asian tigers"—South Korea, Singapore, Hong Kong, and Taiwan—are often attributed to the quality of their human resources, the organization of their production systems, and the institutional arrangements undertaken to accelerate their productivity growth (DTI, 2006).

The area of physical health most clearly reveals the close linkage that exists between low levels of income and low levels of productivity in developing nations. It is well known, for example, that poor nutrition in childhood can severely restrict the mental and the physical growth of individuals (World Bank, 2017). Poor dietary habits, inadequate foods, and low standards of personal hygiene in later years can cause further deterioration in a worker's health and can therefore adversely influence his or her attitudes toward the job and the people at work. The worker's low productivity may be due in large part to physical lethargy and the inability, both physical and emotional, to withstand the daily pressures of competitive work.

We may conclude, therefore, that low levels of living and low productivity are self-reinforcing social and economic phenomena in Third World countries and, as such, are the principal manifestations of and contributors to their underdevelopment. Myrdal's well-known theory of "circular and cumulative causation" in underdeveloped countries is based on these mutually reinforcing interactions between low living levels and low productivity differences are substantially smaller than the corresponding differences in birthrates. As a result, the average rate of population growth is now about 2.0% per year in Third World countries (2.3% excluding China), compared to population growth of 0.5% per year in the industrialized world (World Bank, 2017).

6. High Rates of Population Growth and Dependency

A high population growth is a growing concern throughout the world and a challenge to countries' economies. The world's population was about a

billion in 1800 and rose to 2.5 billion in 1950 (Martin 2009). In the year 2007 the world's population was 6.7 billion and is projected to rise to 9.2 billion by 2050 with almost all population growth projected to occur in what are now considered less developed regions. Between 1950 and 2000, when the world's population increased from 2.5 billion to 6.1 billion, the major shifts in population weights by continent were the result of changes in fertility and mortality rather than large-scale migration (Martin, 2009).

Another common characteristic of developing countries is that they either have high population growth rates or large populations. Often, this is because of a lack of family planning options, lack of sex education and the belief that more children could result in a higher labor force for the family to earn income. This increase in recent decades could be because of higher birth rates and reduced death rates through improved health care (Wolf, 2019).

Burdens Of the world's population of approximately 5.5 billion people in 1993, more than three-fourths live in Third World countries and less than one-fourth in the more developed nations. Both birth and death rates are strikingly different between the two groups of countries. Birthrates in less developed countries are generally very high, on the order of 30 to 40 per 1,000, whereas those in the developed countries are less than half that figure. Indeed, as shown, the crude birthrate (the yearly number of live births per 1,000 population) is probably one of the most efficient ways of distinguishing the less developed from the more developed countries. There are few less developed countries with a birthrate below 25 per 1,000 and no developed nations with a birthrate above it (World Bank (2018).

Death rates (the yearly number of deaths per 1,000 population) in Third World countries are also high relative to the more developed nations, but because of improved health conditions and the control of major infectious diseases, the countries (Bucci, 2013)

Table 4: Crude Birthrates throughout the World, 2019.

Crude Birthrate	Country
50	Niger, Mali, Tanzania, Zambia, Malawi, Yemen, Uganda, Rwanda
45	Lesotho, Saudi Arabia, Botswana, Cameroon, Chad, Pakistan, Honduras, Iran, Nepal
40	Zaire, Sierra Leone, Afghanistan, Sudan, Kenya, Mauritania, Iraq, Syria, Angola, Laos, Haiti
35	El Salvador, Paraguay, Guatemala, Bolivia, Algeria, Bangladesh
30	Peru, Malaysia, Myanmar, Philippines, Kuwait, South Africa, Egypt, Morocco, Venezuela
25	Brazil, Colombia, Panama, Indonesia, Costa Rica, Mexico, Turkey, Jamaica
20	China, Sri Lanka, Chile, Argentina, Thailand
15	United States, Canada, Australia, Ireland, Cuba, South Korea, Taiwan, Singapore
10	Switzerland, Austria, Germany, Hong Kong, Japan, Russia

SOURCE: Population Reference Bureau, 2019 World Population Data Sheet (Washington, D.C.: Population Reference Bureau, 2019).

NOTE: Crude birthrate = yearly number of live births per 1,000 population.

A major implication of high LDC birthrates is that children under age 15 make up almost 40% of the total population in these countries, as opposed to less than 21% of the total population in the developed countries (Ndulu et al 2008). Thus in most developing countries, the active labor force has to support proportionally almost twice as many children as it does in richer countries. By contrast, the proportion of people over the age of 65 is much greater in the developed nations. Older people as well as children are often referred to as an economic dependency burden in the sense that they are nonproductive members of society and therefore must be supported financially by a country's labor force (usually defined as citizens between the ages of 15 and 64). The overall dependency burden (i.e., both young and old) represents only about one-third of the populations of developed countries but almost 45% of the populations of the less developed nations. Moreover, in the latter countries, almost 90% of the dependents are children, whereas only 66% are children in the richer nations.

Population growth can influence economic growth through two essential channels including technical progress and economies of scale. An increase in population leads to innovations. Technological advances in turn promote productivity and economies of scale, hence the national output. There is need for the government to change the

education system to ensure that new training methods, which develop existing skills and create skills where they do not exist are implemented. There is also a need to put in place training policies that will strengthen the competitive capacities of the work force and increase the competitiveness. Education is the principal supplier of highly skilled and effective human resources. The most important thing is to take action to amend and reform mostly the higher education and makes it a useful tool in the service of the development process, and to link it to the global market so as to meet the demands of the labor market and create new job opportunities for the population (Thirlwal, 2013).

7. High and Rising Levels of Unemployment and Under-employment

The unemployment rate is by no means the only key economic indicator that has come under scrutiny. A parallel controversy has surrounded the "Gross Domestic Product" (GDP), which is the most important and most widely used statistical measure of national welfare. The basic assumption that a higher GDP would in all circumstances mean a higher rate of wellbeing has been disputed. For example, a rise in the number of traffic accidents and the related sickness expenses and repair activities, or traffic jams resulting in increased fuel consumption, or certain activities causing severe ecological damage, add to GDP, but obviously not to the standard of living. This is why both

economists and politicians have called for a review of the statistical indicators of welfare and eventually come up with new or better measurements. In analogy to the employment statistic that does not include non-market work, GDP does not take the value of non-market and honorary activities into account. It tells us nothing about the time spent at work, or about the distribution of national output. Furthermore, again parallel to labour market statistics, it has been suggested to complement GDP by indicators of the quality of life, such as health, life expectancy, education, income distribution and pollution of water and air in order to obtain a better measure of human welfare. It has been revealed that measured net disposable income is substantially lower than GDP in some countries, while it is higher in others. Also, an increase of the average per capita income of say three per cent in poor countries may have a different meaning for national welfare than the same per cent increment of income in prosperous countries. In 2008, the President of the Republic of France, unsatisfied with the state of statistical information about the economy and society, created a “Commission on the Measurement of Economic Performance and Social Progress”, headed by economists Stiglitz, Sen and Fitoussi. The recently published report by the Commission concluded inter alia that “the time is ripe for our measurement system to shift emphasis from measuring economic production to measuring people’s well-being” (Stiglitz et. al. 2009, p. 12).

In rural areas, unemployment suffers from large seasonal variations. However, unemployment is a more complex problem requiring policies beyond traditional fixes. One of the principal manifestations of and factors contributing to the low levels of living in developing nations is their relatively inadequate or inefficient utilization of labor in comparison with the developed nations. Underutilization of labor is manifested in two forms. First, it occurs as underemployment people, both rural and urban, who are working less than they could (daily, weekly, or seasonally). Underemployment also includes

those who are normally working full-time but whose productivity is so low that a reduction in hours would have a negligible impact on total output. The second form is open unemployment people who are able and often eager to work but for whom no suitable jobs are available (Van Heukelom, Byiers, and Bil. 2016).

Sustainable Development Goal 8 calls for full, freely chosen and productive employment and decent work for all. Earnings from work are the main source of income for most people, making its availability and accessibility a primary concern. Yet, as emphasized at the start of this chapter, labour is massively underutilized and many workers are unable to access employment in the way they want. This mismatch between labour demand and supply, extending far beyond unemployment, creates a large labour market slack, which is unlikely to diminish given the current subdued global economic outlook. Furthermore, people experience insufficient labour market access highly unequally, depending on their gender, age, the country they live in or whether they live in rural or urban areas (UN, 2011).

Current rates of open unemployment in the Third World average from 10% to 15% of the labor force. But this is only part of the story. Unemployment among young people aged 15 to 24, many of whom have a substantial education, is typically almost twice as high as the overall average. Table 5 provides some estimates of open unemployment during 1994-2024. The employment-to-population ratio (EPR) presented first in this section is a good summary indicator showing the share of the population in employment and, implicitly, also the share of those who do not earn an income and are, in many instances, economically dependent. Studying the evolution of the EPR since the mid-1990s shows that a decreasing share of the working-age population are earning an income. This makes it more likely that the redistribution of national income required to ensure that everyone can enjoy a decent living will exceed the ability of households to support their own members. The

capacity of national public or private redistributive systems is also likely to be overstretched (ILO, 2018c).

It is important to know the reasons why people are not in employment or work fewer hours than they would like to. Being in employment is the combined effect of a decision to be in the labour force and the ability to find a job. Many people outside the labour force could still potentially join it in the near future. The “potential labour force” is thus an indicator identifying people who are not looking for a job while being available for work, or who are looking but are currently unavailable to take up a job.

Furthermore, people may be unable to join the labour force because of certain obligations, such as having to perform unpaid care work within their household – something that affects mostly women. Finally, employed persons may find themselves in time-related underemployment when they cannot work as many hours as they would like to. The second and third part of this section provide a comprehensive treatment of labour force participation and labour underutilization. Adequate access to labour markets has an important geographic dimension, which is why the fourth subsection disaggregates these labour market indicators by urban and rural areas.

Table 5: Employment-to-population ratio, by sex and age, global and by country income group, 1994–2024

Country income group	Demographic Level group (percentages)	2014–19 2019–24 2019	Five-year change (percentage points)					
			1994–99	1999–2004	2004–09 2009–14			
World	Total	57.4	-0.8	-1.0	-1.0	-1.0	-0.6	-1.1
	Female	44.6	-0.5	-0.8	-1.0	-1.2	-0.5	-1.2
	Male	70.3	-1.1	-1.3	-1.1	-0.8	-0.8	-1.1
	Youth	35.6	-3.8	-3.0	-2.6	-3.5	-1.8	-1.2
	Adult	63.2	-0.1	-0.4	-0.8	-0.8	-0.8	-1.4
Low income	Total	67.9	-0.5	-0.3	-1.3	-1.2	-0.1	-0.3
	Female	60.7	-0.3	-0.2	-1.5	-1.1	0.5	-0.5
	Male	75.3	-0.6	-0.4	-1.1	-1.3	-0.7	-0.2
	Youth	52.1	-1.2	-0.9	-1.8	-1.6	-1.0	-0.8
	Adult	76.2	0.0	0.2	-1.1	-1.0	0.2	-0.5
Lower-middle income	Total	52.3	-0.7	-0.3	-1.2	-1.7	-1.2	-0.5
	Female	32.1	-0.4	-0.2	-1.3	-2.0	-0.7	-0.3
	Male	71.9	-1.0	-0.4	-1.1	-1.5	-1.7	-0.6
	Youth	29.2	-1.5	-1.4	-3.4	-4.0	-2.4	-1.0
	Adult	60.3	-0.5	-0.1	-0.8	-1.5	-1.3	-0.8
Upper-middle income	Total	60.3	-1.7	-2.2	-1.2	-0.8	-1.4	-2.0
	Female	50.7	-1.3	-1.9	-1.2	-0.9	-1.4	-2.1
	Male	70.0	-2.0	-2.5	-1.1	-0.6	-1.3	-1.9
	Youth	36.6	-7.0	-5.9	-2.0	-4.4	-3.3	-1.9
	Adult	65.1	-0.5	-1.0	-1.3	-0.9	-1.7	-2.3
High income	Total	57.8	0.6	-0.2	-0.3	0.2	1.8	-1.2
	Female	50.4	1.4	0.7	0.8	0.4	2.0	-1.0
	Male	65.3	-0.1	-1.3	-1.4	0.0	1.6	-1.5
	Youth	40.7	-0.5	-2.0	-2.6	-0.5	2.8	-1.9
	Adult	60.5	0.7	0.0	0.0	0.1	1.4	-1.2

Note: “Youth” refers to ages 15–24.

Source: ILOSTAT, ILO modeled estimates, November 2019

8. Dominance, Dependence, and Vulnerability in International Relations

Almost 75% of the population of low-income countries is rurally based. As income levels rise, the structure of demand changes, which leads to a rise in the manufacturing sector and then the services sector. Since a significant portion of output originates from the primary sector, a large portion of exports is also from the primary sector. For many less developed countries, a significant factor contributing to the persistence of low levels of living, rising unemployment, and growing income inequality is the highly unequal distribution of economic and political power between rich and poor nations. As we shall see later, these unequal strengths are manifested not only in the dominant power of rich nations to control the pattern of international trade but also in their ability often to dictate the terms whereby technology, foreign aid, and private capital are transferred to developing countries. Other equally important aspects of the international transfer process serve to inhibit the development of poor nations. One subtle but nonetheless significant factor contributing to the persistence of underdevelopment has been the transfer of First World values, attitudes, institutions, and standards of behavior to Third World nations. Examples include the colonial inheritance of often inappropriate educational structures, curricula, and school systems; the formation of Western style trade unions; the organization and orientation of health services in accordance with the Western curative rather than preventive model; and the importation of inappropriate structures and procedures for public bureaucratic and administrative systems.

Of even greater potential significance may be the influence of rich-country social and economic standards on developing-country salary scales, elite life-styles, and general attitudes toward the private accumulation of wealth. Such attitudes can often breed corruption and economic plunder by a privileged minority. Finally, the penetration of rich-country attitudes, values, and standards also

contributes to a problem widely recognized and referred to as the international brain drain the migration of professional and skilled personnel, who were often educated in the developing countries at great expense.

The net effect of all these factors is to create a situation of vulnerability among Third World nations in which forces largely outside their control can have decisive and dominating influences on their economic and social well-being. Many countries—most of the 42 least developed certainly—are small, and their economies are dependent, with very little prospect for self-reliance. Their withdrawal from the world economy is virtually impossible. But as it can be seen, hope can be found in their joining forces economically to promote some form of collective self-reliance. Such cooperation can also strengthen the joint bargaining power of small nations and enable them to scrutinize more carefully and be more selective about foreign investment and technical assistance.

For Third World nations that possess greater assets and relatively more bargaining power, the phenomenon of dominance becomes manifested more in the general tendency of the rich to get richer, often at the expense of the poor. But as mentioned, this is not simply a matter of rich nations growing at a faster pace than poor nations. It is also a matter of rich and dominating sectors or groups within the LDC economy (e.g., the modern industrial or agricultural sector; landlords, trade union leaders, industrialists, politicians, bureaucrats, and civil servants in positions of power) growing richer, often at the expense of the much larger but politically and economically less powerful masses of poor people. This dual process of rich nations and powerful groups within poor nations prospering while others stagnate is by no means an isolated phenomenon. We shall see that it is a rather common characteristic of international economic relations.

Socio-economic indicators of Rwanda 2016-2020

The economic geography of Rwanda is characterized by relatively low levels of

urbanization (estimated at about 18.5% in 2016-2017 according to EICV 5 data), a high urbanization growth rate, high population density and the urban dominance of Kigali City, the capital.

Rwanda has urbanized rapidly over the past decade and will continue to experience further urban growth in the near future. Urbanization in Rwanda has been driven by two key forces: internal migration from rural areas towards cities and population growth in the vicinity of urban areas, where high population density areas have been gradually integrated into the urban fabric of the country. Achieving higher levels of urbanization is also a strategic objective of the Government of Rwanda and a key component of its strategy to reach middle income status. Rwanda's Economic Development and Poverty Reduction Strategy (EDPRS II 2013-2018) and the National Strategy for Transformation and Prosperity (NSTP 2017-2024) identify sustainable urbanization as a key driver of economic growth.

Urbanization in Rwanda has been dominated by Kigali City, the capital and "primary" city of Rwanda. Kigali accounts for almost 60% of the urban population (Population and Housing Census, 2012) and continues to experience very rapid population and economic growth. The rapid transformation of Kigali over the past decade is visible to the naked eye. The boundaries of the city have expanded, entire new neighbourhoods have appeared, and the city has modernized and upgraded its infrastructure and transportation systems.

Other secondary cities around the country - such as Rubavu, Musanze, Muhanga, Nyagatare, Rusizi and Huye - have also experienced a recent transformation. Their population levels are increasing, firm creation has been accelerating and

new businesses and services have appeared. This change is visible in the city centers, where new branches of banks, insurance companies, supermarket chains and petrol service providers - amongst others - have started operations.

The Government of Rwanda has been actively developing policy responses to manage the urbanization process and the changing economic geography of the country. There is a broad recognition that the urbanization needs to be well managed in order to achieve its intended goals, including becoming a key driver of economic growth, improving living standards and quality of life within cities and achieving a greater geographic integration of the Rwandan economy. The Government of Rwanda has made it a priority "pro-actively managing the urbanisation process and mitigate risks of urban sprawl, divided cities, high urban unemployment and high urban poverty.

One of the key policies of the Government of Rwanda with respect to urbanization is to promote the development of alternative centers of economic growth. These alternative centers of economic growth, aimed at attracting migrants looking for work and better living conditions, include six selected secondary cities, located across the country: Rubavu, Musanze, Rusizi, Muhanga, Huye and Nyagatare. The hope is that government-led promotion of economic activities in these cities can help correct regional imbalances and offer a larger proportion of the rural population access to offfarm employment. Each secondary city, according to the National Roadmap for Green Secondary City Development and the National Urbanization Policy, also has a brand attached to it with the aim of promoting targeted investments in selected economic activities and clusters. These include:

Table 6: City branding in the National Urbanization Strategy and the National Roadmap for Green Secondary City Development

Secondary City	National Urbanization Strategy	National Roadmap for Green Secondary City Development
Muhanga	Hydropower and Mining Centre ; Creative Economy ; Pottery and Fashion	Logistics and Trade Platform for Rwanda
Huye	Education, Knowledge and Cultural History	Knowledge, Culture and Agribusiness

Rusizi	Cross-Border Trade and Transportation Logistics, Nyungwe Forest	Western gateway for Tourism and Trade
Nyagatare	Cattle and Dairy Region/ Commercial Hub of Eastern Region	Commercial Hub of the East and the Dairy Centre
Musanze	Eco Friendly Mountain Tourism and Industry	Eco-Tourism City
Rubavu	International Gateway City and Tourism	Lakeside hub for Tourism and Industry

Adapted from EIVIC Survey report 2018

The case of Kigali

The City of Kigali has grown twice as fast as the rest of the country. Between 2002 and 2012 - years for which Census data is available – the population of Sectors in the Province of Kigali grew by 55% on average, corresponding to a compounded annual growth rate of 4.5%. Sectors within 5km to 15km from the city centre, experienced the fastest population growth of about 5.9% compounded per annum. This compares a compounded annual

growth rate of 2.4% for the rest of the country. In 2012, the City of Kigali represented about 58.5% of Rwanda's urban population.

Kigali is Rwanda's "primary" or "primate" city. It accounts for a larger proportion of the urban population than the capitals of its East African neighbours, but is very much in line with other smaller African nations such as Congo Brazaville for example.

Table 7: Primacy of capital city, international comparisons

Country	Year	Capital	Urban	Primacy of capital City (% of urban population)
Uganda	2014	1,507,114	7,425,864	20.3%
Kenya	2017	3,134,000	9,328,000	33.6%
Tanzania	2012	4,364,541	12,701,238	34.4%
Rwanda	2012	845,730	1,446,499	58.5%
Congo Kinshasa	2007	1,373,382	2,285,551	60.1%

Source: Population Census (Different countries)

Urban primacy is typically defined as the share of the largest metro area in the national urban population. Having a high level of urban primacy is part of the development process, in particular in small countries. Countries need a metropolis that connects them to the world. Vernon Henderson finds that for every level of economic development there is an optimal level of urban primacy; this optimal level of urban primacy increases up to a national GDP per capita income level of about US\$3000, before decreasing thereafter (Henderson, 2000). The literature on urban primacy is mixed on the effects of high urban concentration on economic growth at the national level. Henderson (2003) argues that overconcentration, in particular in higher income countries, can have detrimental effects on economic growth. David Castells-Quintana argues that there are conditions under which urban primacy is associated with positive growth effects (when the quality of urban

infrastructure and the access to basic services in the primary city is high), and conditions under which primacy is associated with negative growth effects (Castells-Quintana, 2017). While there is not sufficient evidence to conclude on the effects of urban primacy on GDP growth, the literature converges on the idea that urban primacy comes at the expense of spatial integration. In a recent paper, re-visiting evidence on urban primacy within the African context, Henderson and Kriticos demonstrate that urban primacy is high across Africa and that the urban hierarchy favours the largest city at the expense of the development of secondary cities, which are lagging in industrial development (Henderson and Kriticos, 2017). They show that there is a very high premium attached with living, working and operating out of the "primate city". Urban primacy in the African context has been associated with sprawl leading to cities that are crowded, disconnected and costly for both

firms and households (Lall, Henderson and Venebles, 2017).

The case of secondary cities and emerging towns

Rwanda's six secondary cities - and other emerging towns in the country - are an order of magnitude smaller than Kigali. The population of Kigali in 2012 was about double the total population of the next largest ten cities in the country. To estimate the size of cities more recently, we rely on satellite predictions from the 2015 CEISN-Facebook HRSL population data; it is not possible to use alternative data sources to predict city level population levels - such as EICV or LFS - due to low statistical power. Using this data we estimate that Kigali's urban population in 2015 was slightly less than million inhabitants, compared to fewer than 200,000 inhabitants for the next largest city, Rubavu. In turn, Rubavu's population, was about 1.5 times larger than the next largest city, Musanze, with an estimated population in 2015 of about 114,000. Remaining secondary cities - including Huye, Muhanga, Rusizi and Nyagatare - were estimated to have between 47,000 and 76,000 inhabitants. The ensuing discussion on the economic geography of Rwanda and the economic potential of secondary cities needs to be put into the context of this reality. There is one large and dominant city, Kigali; there is one medium sized city, Rubavu; the remaining secondary cities and other emerging urban towns in the country are small.

Population growth estimates suggest that over the past five years the population of secondary cities have also been growing rapidly. On average, the population of secondary cities has grown at an estimated 4.6% during the 2012-2015 period. There is a lot of variation in the population growth rates of secondary cities. The fastest growing secondary city is also the smallest, Nyagatare, with an estimated population growth rate of 11.5%. Rubavu and Musanze appear to be expanding rapidly, with estimated growth rates above 4%. Rusizi, Muhanga and Huye are growing at a slower pace of between 0.8% and 3.7%. Population growth rates are a leading indicator of the economic attractiveness of cities.

Population density estimates in and around cities in Rwanda provide evidence of both densification and urban expansion. Cities are like magnets with a broad reach, attracting population over a large geographical span. We show this by studying the population density of Sectors (2012 Census) based on their distance to the nearest city. We calculate the distance between a Sector and the city centre using the centroid location of the Sector. Sectors are associated to the city that is closest to them. The analysis is imperfect, because sectors vary in size and shape - and because it is difficult to delineate precisely where a city starts and ends - but the comparison yields very clear patterns.

Table 8: Actual population and project population of Rwanda's main cities

City	City Type	Population 2012 (Census)	Estimated population 2015 (CEISN-Facebook HRSL satellite predictions)	Estimated population growth rate 2012-2015 (using POPGRID)
Kigali (urban)	Capital	845,727	941,573	3.6%
Rubavu	Secondary	148,939	174,865	5.5%
Musanze	Secondary	101,580	114,556	4.1%
Huye	Secondary	44,570	49,690	3.7%
Muhanga	Secondary	44,800	47,863	2.2%
Rwamagana-Kayonza	Emerging town	65,608	67,354	0.9%
Byumba	Emerging town	22,300	30,405	10.9%
Rusizi	Secondary	60,229	61,625	0.8%
Nyagatare	Secondary	47,670	66,008	11.5%
Nyamata	Emerging town	28,299	27,984	-0.4%

Source: Population Census 2012

First, density is highest in and around the largest cities. Cities expand not only through geographical expansion, but through a process of densification. Population density in Sectors within 5km of the centre in Kigali is the highest in the country, with more than 6,000 people per square kilometre. The Sector with the highest population density in Rwanda in 2012 was Gitega in Nyarugenge District (Kigali), with a density of over 25,000 people per square kilometre. This shows that even within the centre of Kigali there is still a lot of scope for further densification. Population density levels in Rubavu, at around 2,000 per square kilometre in Sectors within 5km of the city centre, were almost three times lower on average than in Kigali. The same figure in the remaining secondary cities was about 1,500 people per square kilometre or lower.

Second, population density decreases exponentially as we move away from the city centre, but continues to decrease over a relatively large geography area. Sectors that are further away from the city centre have lower levels of population density on average, but a higher level of population density than Sectors that are even further away. This holds true in all secondary cities, except the smallest – Nyagatare. Even small secondary cities such as Rusizi or Muhanga, with populations in the vicinity of 50,000 inhabitants, exert an influence over a geography radius of at least 10 km. The increasing densification of areas in the vicinity of cities is an indication of the potential presence of urban expansion.

The future economic potential of cities is not only determined by the size of their current population and the population density within the city boundaries, but also by the size of the population in surrounding areas. The zone of influence of cities extends beyond their current boundaries. Even though Rubavu currently has by far the largest population of secondary cities according to 2012 Census data, the size of the population living in Sectors that are within 10 km of the city is similar across Rubavu and Musanze, with Muhanga and Huye not too far behind. When we expand the zone

of influence of secondary cities to a radius of 15km, Musanze clearly stands out as the secondary city with the largest zone of influence. In 2012, over 500,000 people lived in Sectors that were located within a 15km radius from the city. This compares to between 340,000 and 370,000 for cities such as Rubavu, Muhanga, Huye and Byumba and 250,000 or less for Rusizi, Nyagatare, Nyamata, Kayonza and Rwamagana.

Leadership for economic growth and development

Rwanda has been experiencing a gradual structural transformation of its economy, away from agricultural activities, towards non-agricultural activities in both the services and manufacturing sectors. According to the 2002 Housing and Population Census data, an estimated 87.7% of the working population was employed in agriculture; this number had decreased to 75.2% by 2012 according to the 2012 Housing and Population Census; it decreased further to about 66.7% according to the 2016-2017 EICV 5 survey.

It is agreed that good leadership is key factor for economic growth since growth requires committed, credible and capable governments and high-growth economies typically built their prosperity on sturdy political foundations. Indeed, sustained growth does not just happen it must be consciously chosen as an objective by the country leadership as an organizing principle of the country's politics. It has to be planned for the long term and guided by the vision for the future direction of the economy (Commission on Growth and Development 2008). Twenty-seven years ago, Rwanda was considered as a dead country, whose future was simply unclear following the 1994 Genocide against the Tutsi. The whole system was destroyed from economy to security to justice and infrastructure. However important social economic gains have been achieved in Rwanda after the Genocide against the Tutsi. Although Rwanda still has challenges in its economic development due essentially to structural problems the country has achieved very good results and has built solid foundation for its development in long-term. These achievements are

as a result of good leadership committed to finding durable solutions for the Rwandan people despite significant challenges. Consequently, the country today is safe and stable with little corruption and clear anti-corruption policy (Kigabo, 2008).

However, at the national level - with few exceptions - we observe little convergence in the pace of structural transformation over the past 15 years between Kigali and other Districts. The proportion of the population working in agriculture (as their main activity) decreased in Kigali Province from an estimated 39% of the population in 2002 (based on estimates from the Population Census on the main activity over the past 30 days), to about 14% in 2016-2017 (based on data from EICV 5 on the main activity over the past 7 days). During the same period, the share of the population working in agriculture in other Districts decreased from 92% in 2002 to 75% in 2016-2017. The average gap between Kigali and other Districts in terms of the proportion of the employed population working in agriculture was 57 percentage points in 2002; it increased to 67 percentage points in 2012; and decreased to 60 percentage points in 2016-2017 (slightly higher than the gap in 2002).

Rwanda service exporter towards growth and development

As of 2014 Rwanda services policy review; services sector is the largest and most dynamic sector in the Rwandan economy. Though, there is a great competition among EAC countries, Rwanda is committed to becoming a service-based hub to serve the region in order to break its landlocked nature. The pace of change in globalization of services is much more rapid (Mann, 2004) and service sector is conceived as an avenue for economic transformation, as not all countries have a competitive edge in manufacturing (UNECA, 2015). Rwandan Service sector is subdivided into two broad categories such as trade and transport services. Trade and transport services include maintenance and repair of motor vehicles, wholesale and retail trade and transport service and so-called other services like hotels and restaurants,

information and communication, financial services, real estate activities, professional, scientific and technical activities, administrative and support services, public administration and defense and compulsory social security, education services, human health and social work services; cultural, domestic and other services. Many researchers in the field of economics argued that service sector growth has great implication in the growth of a country's economy. Among others Yanrui (2007), Shingal (2013 and 2014), and Singh and Kaur (2014) claimed that the India and China has recorded attractive economic growth that is closely associated with the dramatic development of the service sector.

Within the competitive global village, Rwandan economy has annually recorded 8% average GDP growth since 2001 and GDP per capita has increased more than three folds from about US\$211 per capita in 2001 to about US\$718 in 2014. The service sector spearheaded the strong economic growth journey as it has accounted for bigger share of GDP which is, by 2015, 47% of GDP compared to 33% of primary sector (agriculture, Forestry and Fishery) while the growth of service sector has been impressively around 9% by 2014 against 7% for industry and 4% in agriculture. The main subsectors are wholesale and trade, transportation, storage and communication services. The trade and transport services contribute greatly to the share of the services in gross domestic product from 159 billion rwf in 1999 to 784 billion rwf in 2014 of which the wholesale trade and retail trade occupy 615 billion rwf in 2014 against 133 billion rwf in 1999. Other Services including hotels and restaurants, information and communication, financial services and so forth increasingly contribute to GDP from 430 billion rwf in 1999 to 1505 billion rwf in 2014. The contribution of services grew up to 2,290 billion in 2014 against 563 billion rwf in 1999. The authorized loans by the central bank in the service sector increased from 1.5 billion rwf in 2010 to 12 billion rwf in 2014. All these statistics are in fixed 2011 prices and suggest

an increased attention and public support for the service sectors development.

The service sector's economic development is the only way of promoting economic structural adjustment and accelerating the transformation of economic growth (Zhou, 2015). A declining share of agricultural employment is a key feature in economic development (Alvarez-Cuadrado and Poschke, 2011); structural transformation usually coincides with a growing role of industry and services in the economy (UNECA, 2015). The growing size of the service sector and its impact on the other parts of the economy makes it all the more important to promote efficiency in the provision of services and thereby boosting economywide labor productivity as witnessed in OECD member countries. The slowdown in the service sector has brought down labor productivity in the entire economy from more than 4 per cent in 1976-89 to less than 2 per cent in 1999-2004 (Jones and Yoon, 2008).

Acharya and Patel (2015) confirm that the service sector is the fastest growing sector in India, contributing significantly to GDP, economic growth, trade and foreign direct investment (FDI) inflows as the total share of this sector to India's GDP is around 65 per cent. Singh and Kaur (2014) state that the main reasons for the growth in services are rapid urbanization, expansion of the public sector and increased demand for intermediate and final consumer services. Domestic investments and openness also positively affect the share of the service sector in GDP, and the main service sectors attracting FDI in India are telecommunications, construction and hotels and restaurants. Malin (2013) says that the service sector has become the main contributor to GDP not only in developed economies like the US, Japan and UK but also in developing economies like China, Indonesia, Pakistan and India. Concluding his study on the determinants of innovation capacity with empirical evidence from service firms, Madeira, Jorge, Sousa, Moreira and Mainardes (2014), affirms that the greater the financial investments in the acquisition

of machinery, equipment and software, in internal research and development, in acquisition of external knowledge, in marketing activities and other procedures, the greater the propensity for firms to innovate in terms of services.

According to Park and Shin (2012), general wisdom is that when a country industrializes, the shares of industry and service sectors in both GDP and employment rise whereas the share of agriculture falls and when a country de-industrializes and moves into the post-industrial phase, the share of services rises while the shares of both industry and agriculture fall. They found that when computing the contribution of agriculture, industry and services to GDP growth, in general the service sector made the biggest contribution. Furthermore, the lower the per capita GDP, the greater the scope for labor productivity growth in the service sector, which implies that there is still a lot of room for the growth in the productivity of services. Thus, Buera and Kaboski (2009) argue that as productivity grows, individuals consume new services. Eventually, labor productivity increases enough which makes the absolute cost advantage of market-production smaller and leads individuals to home produce customized versions of services which yield higher utility. In the early 1980s, Fuchs (1980) argued that the decline in agriculture was attributable primarily to differences in income elasticity of demand but the shift from industry to services was attributable primarily to differential rates of growth of output per worker. Economic growth also contributes to an increase in service employment through an increase in female labor force participation because families with working wives tend to spend a higher proportion of their incomes on consumer services.

Rwanda service sector's contributions to the economy

The rapid expansion of the service sector is principal to contemporary global economic restructuring; this is proven by the fact that the increase in the service sector's share in the global workforce from 24 per cent to 35 per cent between

1965 and 1990 led to its share in the world's domestic products increasing from 50.6 per cent to 62.4 per cent between 1960 and 1990 (William, 1996). Olofin, Olufolham and Jooda, (2015) have argued that in West Africa 60-65 per cent of the population is still engaged in farming and many are still food insecure. Research confirms a positive relationship between income growth and food security and researchers recommend putting in place policies and programs to ensure quality civil services. However, despite this in sub-Saharan Africa the service sector makes up nearly 60 per cent of GDP and is expected to grow as historical data shows that each 15 per cent increase in services' contribution to GDP is associated with a doubling of incomes per capita. The top ten African countries by services as percentage as reported by UNECA (2015) are Seychelles (81.1 per cent), Djibouti (77.0 per cent), Mauritius (71.5 per cent), Cabo Verde (70.3 per cent), South Africa (69.1 per cent), Botswana (61.8 per cent), Senegal (60.1 per cent), Eritrea (60.0 per cent), Lesotho (60.0 per cent) and Gambia also having a 60.0 per cent share of the service sector in its GDP. In the European region, Maroto-Sanchez and Cuadra-Ruara (2011) confirm that several service industries have shown dynamic productivity growth rates, contributing more than expected to productivity growth.

Ghani, Goswami and H. Kharas (2011) asserts that services accounted for more than 75 per cent of the global economy, of which 45 per cent belonged to developing countries where they claim services contributed more to GDP growth, job creation and poverty reduction as compared to industry. In fact services sector is the fastest growing sector in global trade and the share of developing countries in world service exports increased from 14 per cent in 1990 to 21 per cent in 2008. Moreover, Nayyar (2012) has argued that the rapid increases in international trade services draw attention to the fact there are some countries which are in a position to specialize and export products in which they have a comparative advantage. For instance, the size of the service sector in India was bigger

than the average lower-middle income countries in 2009. The Indian service sector consists of wholesale and retail trade, hotels and restaurants, transport, storage and communication services, financial services, real estate, electric and water utilities, media, communication, education, health, ownership of dwellings and renting services. Notably, 60 per cent of all the employment created in the OECD area came from rapid employment growth in the service sector due to: the strong performance in certain markets for services such as wholesale and retail services, telecommunications, transport, finance, insurance and business services and secondly the growing use of productivity enhancing technologies like ICT, (OECD, 2005). The household-serving sector has other services such as civic and social organizations and childcare (Kay et al., 2007).

UNECA (2015) has documented the performance of Rwanda in the service sector which shows that service exports grew from \$59 million in 2000 to \$395 million in 2011. A growth of more than 10 per cent occurred in wholesale and retail trade, education, finance and insurance, and transport, storage and communications since 2007. Over 2000 and 2011, the ICT sub-sector received investments amounting to \$552 millions, exports of travel were equivalent to 63 per cent of total services' exports and 29 per cent of merchandise and services exports in 2011. By 2012, FDI stocks in services were the largest at \$640.2 millions followed by \$391 million in ICT, \$124.1 millions in finance and \$125.1 millions in insurance, against just \$90.8 million in manufacturing. In the seven year government program, tourism is expected to grow at a compound annual rate of 25 per cent and by 2014 Rwanda had received 1,137,000 visitors mostly attracted by the Rwanda mountain gorilla, generating \$294 millions (up from \$62 million in 2000). In addition, the government is committed to increasing investments in services up to \$350 million by 2016 from \$46 million in 2015.

According to Sethi and Gott (2016) India and China continued to occupy the top two spots in the Global

Service Location Index (GSLI). Their positions were thanks to major gains in educational skills, cultural adaptability and financial attractiveness because of increased values of the renminbi over the US dollar and improved governance and financial liberalization in China while India has the first overseas research and development center and the 4th largest smartphone vendor in the world. Surprisingly, eight of the top 20 and six of the top 10 countries on the list are Asia Pacific countries due to their financial attractiveness and the availability of skilled people. Latin America and Western Europe both have five countries in the top 20 as Latin America shows a spike in the availability of skilled people and Western Europe has a conducive a business environment. In Africa, the only country that appears among the top 20 is Egypt which ranks 16th due to its strong performance in financial attractiveness. Ghana is ranked 29th and Mauritius 30th. Tunisia is ranked 38th, Kenya 39th, Senegal 45th and South Africa 48th. Among the East African countries, only Kenya comes first at a rank of 39 as a high-ranking newcomer to GSLI due to a top 10 score in financial attractiveness. It is argued that many Kenyan companies have based their growth on serving customers first in Kenya and neighboring countries like Uganda and Tanzania.

Determinant factors of the growth of the service sector

Increasingly, contemporary literature on economic growth in economies across countries underlines factors that contribute to the remarkable growth in the service sector. These factors include but are not limited to increasing foreign direct investments, openness of a country's economy, expansion of skill development, quality health services, applying information technology and increasing consumption expenditure. Iashmi and Kumar (2012) and Das and Raut (2014) conclude that the growth of output in the service sector came from the rapid development of skill intensive services in the information technology and service segments. This is mostly oriented to the external market. In

addition there is also the implementation of new economic policies such as reduction in government expenditure, opening of the economy to trade and foreign investments, adjusting the exchange rate from a fixed rate system to a flexible exchange rate system, deregulation in most markets and removal of restrictions on entry, exit, capacity and pricing. Earlier, Ramakrishna (2010) summarized the sources of growth of the Indian service sector as income elastic demand, open policies and growth in services like communications, business, banking and insurance and trade.

Latha and Shanmugam (2014) claim that the advancement of the service sector in India was a result of the expansion of both the health and education sectors where health is defined as a state of complete physical, mental and social well-being and not just the non-existence of diseases and ailments. This approach in literature is called Salutogenic healthcare. Mujahid and Alam (2014) show that the growth of the service sector in Pakistan can be attributed to its population, foreign direct investments, consumption and investments. Talking of key industries driving service sector growth in India, Harini and Indira (2014), say that India's tourism and hospitality industries contribute the most because of strong growth in per capita incomes, an increasing young population coupled with changing lifestyles which have led to greater expenditure on leisure services.

Heshmati and Kim (2012) conclude about the Korean economy that the competitiveness in its service industry can be driven by the incentive system for skilled workers and investing more in research and development in order to increase labor productivity. In addition, the Korean government should implement an open market policy to liberalize labor movement and induce low paid labor to a large extent to move to the production process.

Rwandan service sector's development and growth

The service sector is now the largest and most dynamic sector in the Rwandan economy. The main

service sub-sectors and contributors to the growth of the service sector were wholesale and retail trade and transport, storage and communication services from 2006 to 2010 (Mashayekhi, 2014). Several other service sub-sectors are also rapidly developing. According to the Rwandan Integrated Household Living Condition Survey or Enquête Intégrale sur les conditions de Vie des ménages (EICV4), the indicator of an increase in private and business oriented mixed establishments by industry in 2011-14 increased up to 24 per cent in which the contribution of each service sub-sector reveals a rise and fall in percentage change. An increase was found in wholesale and retail trade, and repair of motor vehicles and motorcycles (21 per cent), accommodation and food service activities (34 per cent), transport and storage (7 per cent), professional, scientific and technical activities (3.9 per cent), administrative and support services (23.1 per cent), health and social work activities (33.1), art, entertainment and recreation (31.0 per cent), financial and insurance activities (18.4 per cent), private form of education (0.6 per cent) and other service activities (32.0 per cent), whereas a fall was recorded in information and communication (-28.3 per cent) and real estate activities (-76.5 per cent).

Employment change in private and business oriented establishments by industry in 2011-14 grew up to 34.5 per cent within which in the service sub-sector a large increase was recorded in administrative and support activities (268.3 per cent), financial and insurance activities (81.2 per cent), transport and storage (54.9 per cent), arts, entertainment and recreation (67.7 per cent), health and social work activities (50.2 per cent), accommodation and food service activities (37.7 per cent), wholesale and retail trade and repair of motor vehicles and motorcycles (28.7 per cent) By 2020, the contribution of services is projected to be 57 per cent to GDP as compared to 24 per cent by agriculture followed by 19 per cent by industry. As per EICV4, the service sector was the biggest contributor to GDP growth with 2,536 billion Rwf in 2013 compared to 774 billion Rwf for industry and

1,785 billion Rwf for agriculture in the same year. This reflects the transition of the Rwandan economy towards a service-based economy. This is also evidenced by a change in the share of economic sectors in GDP from 1970 to 2010. In 1970 agriculture led other sectors as it had a 55.9 per cent share in GDP compared to a 19 per cent share of industry and 25.0 per cent of services. Since 2000, the service sector is leading with a contribution of 45.6 per cent to GDP in 2000, 49.7 per cent in 2010 and 53.3 per cent in 2013.

Rwanda service to development by economic activity

The distribution of businesses by economic activity shows that the service sector achieved positive growth in both rural and urban areas. The main sub-sectors in the service sector that showed more than 30 per cent growth include accommodation and food services, human health and social work activities and art, entertainment and recreation activities. According to Singh and Kaur (2014) rapid urbanization is a key factor which contributes to the growth of services and leads us to analyze this growth of the service sector in urban and rural area in 2011-14. Accommodation and food service activities showed the greater growth; they had 26,190 registered establishments in 2011 and 36,545 registered establishments in 2014 in rural areas showing a 40 per cent increase whereas in urban areas 7,095 establishments were registered in 2011 and 8,076 in 2014 corresponding to a 13.8 per cent increase. The average growth of the accommodation and food services sub-sector was 34 per cent between 2011 and 2014 in private establishments and the business oriented mixed sector by economic activity where 33,285 accommodation and food establishments were registered out of 119,270 in 2011 and 44,621 establishments out of 148,376 were registered in 2014. It is obvious that the accommodation and food services sub-sectors are growing faster in rural areas than in urban areas and the growth of this sub-sector contributed to the overall growth of the service sector (NISR, 2014).

As stated by Latha and Shanmugam (2014), advancement of the service sector is correlated with the expansion of quality health services indicated by complete physical, mental and social well-being and not just the non-existence of diseases and ailments. While analyzing the service sector development in Rwanda, it was found out that human health and social work activities demonstrated an interesting growth of 33.1 per cent. In rural areas, 83 human health and social work establishments were registered in 2011 compared to 167 registered in 2014 showing a 101 per cent increase over the period. In urban areas, 261 establishments in human health and social work activities were registered in 2011 as compared to 291 registered in 2014 or a 11.5 per cent increase in human health and social work establishments in urban areas. The growth of establishments in human health and social work activities was eight times higher in rural areas as compared to urban areas from 2011 to 2014. Therefore, there is a great conviction that the growth of the service sector is linked to high growth in its subsectors, particularly in rural areas.

Though wholesale and retail trade and repair of motor vehicles and motorcycles are not mentioned among the fastest growing service sub-sectors, it is worth analyzing them since they had a lion share in the service sector. In wholesale and retail trade, there was an average increase of 7 per cent by 2014 while the motor vehicles and motorcycles repair sub-sector had a 37 per cent increase in rural areas as compared to a 7 per cent increase in urban areas.

Employment growth in the service sector

A growing body of literature supports employment to measure growth in a sector by looking at female labor participation in services (Fechs and Victor, 1981) and measuring the growth of firms since they reflect both short-term and long-term changes Isaga (2015). In keeping with this thinking, this section gives a descriptive analysis of employment in the service sector in Rwanda. According to the Establishment Census (2014), the service sector

employed 401,173 workers or 81.3 per cent of the total workers. The biggest service sub-sectors in terms of the people employed included wholesale and retail trade, repair of motorcycles and motor vehicles (with 120,482 employees equivalent to 24.4 per cent of the total employment), followed by education employing 83,569 (16.9 per cent of the total employment) and accommodation and food service activities having 82,213 employed people (16.7 per cent of the total employment). These sub-sectors supported the growth of the service sector since they provided more jobs as compared to other economic sectors.

Men were still predominant in almost all the service sub-sectors except human health and social work activities where they represented 47.7 per cent of the total employed while female workers reached 52.3 per cent. A general picture of the share of employment within the service sector shows that gender inequalities persist. Only 36.8 per cent of the total employment in the service sector was comprised of female as compared to male workers who had the lion's share of the service sector employment at 63.2 per cent of services employment. Considering the share of women in the total population in Rwanda -- 53 per cent as compared to 47 per cent for men -- there is hope that the service sector will continue to grow if there is full participation of women in the service sector's employment.

GDP share of service sector growth

According to the National Institute of Statistics of Rwanda (2014), the service sector was the biggest contributor to GDP. The shift from an agriculture based economy to a service led economy has been effective since 2004 when the annual output in agriculture was 879 billion Rwf compared to output in the service sector at 882 billion Rwf. Until 2016 the service sector spearheaded the contribution of economic sector to the growth of GDP in Rwanda. The impressive growth of the service sector is documented around 9 per cent by 2014 against 7 per cent for industry and 4 per cent for agriculture while the annual average GDP was 8 per cent by

2014. The total output in the service sector increased up to four times from 1999

The service sub-sectors that contribute more include wholesale and retail trade with a contribution of 130 billion Rwf in 1999 and 615 billion Rwf in 2014. Though they do not show growth, real estate activities contributed more to the share of the service sector in GDP. In 1999, the total output in real estate activities was 283 billion Rwf which did not grow much and amounted to 311 billion Rwf by 2014. Tremendous growth in hotels and restaurants (accommodation and food activities) is witnessed by the contribution of this sector to GDP. In 1999, hotels and restaurants contributed 19 billion Rwf which grew to 113 billion Rwf in 2014. In general, the contribution of the service sector to GDP shows that the sector has been growing since 1999. The effective transition of the economy happened in 2004, at a time when the service sector became the top sector.

The Conceptual Framework Model

Services, in this study are conceptualized as non-agricultural and non-manufacturing economic activities in firms operating in the Rwandan economy. National accounting of GDP complies with the International Standards Industrial Classification (ISIC) of all economic activities.

Openness is conceived as an interaction with activities outside the Rwandan service sector in terms of import and export of services, foreign direct investment firms and acquisition of working capital externally. Yeboah, Naawaab, Saleem and Akuffo (2012) have argued that the trade effect on productivity is much greater in an outwardly-oriented economy than in an inwardly-oriented nation. The relationship between trade openness and economic growth is significantly positive in developing countries (Tahir and Azid, 2015). The openness of a firm's founders and early preparations for growth determine both the extent of organizational learning and the speed at which it is developed and used (Hagen and Zucchella, 2014). Growth is conceptualized as the increase in the

service sector measured as GDP. King and Levine (1993) claim that financial development is robustly correlated to the future rate of economic growth, accumulation of physical capital and improvements in economic efficiency. Growth in foreign sales contributes to a firm's growth if there is greater interaction among the management team's members and a higher degree of joint decision making among the owners and managers of small firms (Reuber and Fischer, 2002). Sustaining economic growth and improving living standards requires shifting labor into both the manufacturing and service sectors (Eichengreen and Gupta, 2011).

A firm's growth is conceived as an increase in the product or service as the main business, increase in sales, increase in the number of new employed persons and the size of the establishment in the service sector. Smith and Verner (2006) found that the proportion of women in top management jobs had a positive effect on a firm's performance and that the effect depended on the qualifications of female top managers in Denmark. Dawkins, Feeny, and Harris (2007) have argued that both large firms and those which are highly specialized, enjoy higher profit margins, whereas the more capital intensive the firm the lower is its profitability.

CONCLUSION AND RECOMMENDATIONS

The phenomenon of underdevelopment must be viewed in both a national and an international context. Problems of poverty, low productivity, population growth, unemployment, primary product export dependence, and international vulnerability have both domestic and global origins and potential solutions. Economic and social forces, both internal and external, are therefore responsible for the poverty, inequality, and low productivity that characterize most of the Third World nations. The successful pursuit of economic and social development will require not only the formulation of appropriate strategies within the Third World but also a modification of the present international economic order to make it more responsive to the development needs of poor nations. Although the picture of life in most of the

Third World painted throughout the review is rather bleak, it should be remembered that many countries have succeeded in raising incomes, lowering infant mortality, improving educational access, and increasing life expectancy. By pursuing appropriate economic and social policies both at home and abroad and with effective assistance from developed nations, poor countries do indeed have the means to realize their development aspirations.

Rapid economic growth is Rwanda's overarching development goal— a strategic choice to anchor its long-term vision. Vision 2050 encapsulates this choice with long-term, income-based goals that aim to attract upper-middle-income status by 2035 and high-income status by 2050. With this vision, Rwanda has aligned itself with the successful East Asian economies that began their development journey with a similar quest for high growth. The prioritization of long-term growth recognizes an important truth—sustained growth does not just happen, especially in a global landscape marked by forces of technology, trade, and tremendous competition. It requires a combination of leadership, social cohesion, and deep investments in core capabilities—of people, firms, and institutions—to harness the opportunities on offer. The implications of different growth pathways are staggering. At its current pace of growth (4 percent per capita), Rwanda will barely cross the threshold for lower middle- income status by 2035. At growth of 7 percent per capita, average income would reach US\$2,400 (2017 prices). To become an upper-middle-income country by 2035, Rwanda will need to grow at more than 10 percent per capita. In 2035, the economic landscape of Rwanda could resemble that of present-day Bangladesh or,

alternatively, surpass that of today's Vietnam or even Georgia and Indonesia. It is not surprising, therefore, that almost 70 percent of Rwandan respondents in a recent survey mentioned high economic growth as their first priority for the country. Economic growth is not only an issue of income. Growth matters for a broad range of other development outcomes, including poverty reduction, as shown globally and in Rwanda's own experience as chronicled in this report. Sustained high growth for Rwanda: to escape from its tragic past; the country understandably is keen to put great distance between a bright future and a painful past. This is not to say that economic growth should be the only area of policy focus. The challenges of inequality, public service delivery, and environmental sustainability, among others, are just as important for development and need to be looked at in parallel, as is being done in Rwanda. Rwanda's income ambitions are built on a strong and widely acknowledged record of success. Emerging from the devastation of the 1994 Genocide against the Tutsi, which itself followed three decades of economic stagnation, the country has seen its average income rise three-and-a half-fold since. This rapid progress was made possible by the second-fastest growth of gross domestic product (GDP) per capita on the continent, sustained over two decades. Past successes justify bold ambitions but do not guarantee them.

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