



**TRANSFORMING AND BUILDING  
RESILIENT ECONOMIES IN AFRICA:  
RESETTING PRIORITIES FOR THE POLICY AGENDA  
IN THE POST-COVID-19 ERA**

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# ACET African Center for Economic Transformation

The **African Center for Economic Transformation (ACET)** is a pan-African economic policy institute supporting Africa's long-term growth through transformation. We produce research, offer policy advice, and convene key stakeholders so that African countries are better positioned for smart, inclusive, and sustainable development. Based in Accra, Ghana, we have worked in nearly two dozen African countries since our founding in 2008.

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## ACRONYMS

<b>ACET</b>	African Center for Economic Transformation
<b>AfCFTA</b>	African Continental Free Trade Area
<b>AGOA</b>	African Growth and Opportunity Act
<b>ATI</b>	African Transformation Index
<b>ATR</b>	African Transformation Report
<b>DEPTH</b>	Diversification, Export competitiveness, Productivity increases, Technological upgrading, and Human well-being
<b>FDI</b>	foreign direct investment
<b>GFC</b>	Global Financial Crisis
<b>GVCs</b>	global value chains
<b>ICT</b>	information and communications technology
<b>ILO</b>	International Labour Organization
<b>IMF</b>	International Monetary Fund
<b>JICA</b>	Japan International Cooperation Agency
<b>MDGs</b>	Millennium Development Goals
<b>PRSPs</b>	Poverty Reduction Strategy Papers
<b>RVCs</b>	regional value chains
<b>SAPs</b>	Structural Adjustment Programs
<b>SDGs</b>	Sustainable Development Goals
<b>SMEs</b>	small and medium enterprises

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- **Ghana:** Institute of Statistical Social and Economic Research (ISSER) – Prof. Peter Quartey, Prof. Ebo Turkson, and Dr. Emmanuel Abbey.
- **Kenya:** African Technology Policy Studies (ATPS) – Dr. Nicholas Ozor, and Dr. Julius Gatune.
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# 1. Introduction

This document presents priorities for an African policy agenda to steer the continent along a sustained path of growth, economic transformation, and resilience in the coming decades. It also provides a framework for domestic and international investors, African civil society, and external development partners to engage further with African governments to reorient and deepen collaborative efforts for sustainable development on the continent.

The Japan International Cooperation Agency (JICA) facilitated this study as part of a broad research process to support the formulation of a new policy agenda to help Africa realize strong growth recovery while building resilient economies in the post-COVID-19 era. The report was prepared for discussion at the August 2022 Eighth Tokyo International Conference on African Development (TICAD8), co-organized by the Government of Japan, African Union Commission, UN Office of the Special Adviser on Africa, UN Development Programme, World Bank, and African governments.

The main message in this report is clear: **economic transformation is the key to building resilient economies in Africa.**

For example, the COVID-19 pandemic, unlike other global shocks that have impacted African countries recently, triggered a sudden, deep decline in activity, with severe impacts that will take a long time to counter. To better withstand the negative impacts of such shocks—and to quickly and strongly recover from them—African countries must take steps to prioritize and implement policies that support transformation: to further diversify their economies; be more competitive in the export markets; achieve higher levels of productivity, especially labor; and upgrade technology to improve the production and export of high-value-added goods and services. And countries must ensure this is done in a way that improves human economic well-being, such as through better jobs and opportunities, greater female participation in the paid formal work force, and reduced income inequalities. The evidence shows that, despite notable gains in these areas, overall progress has been very slow—and since 2008 it has been dramatically reversed by global shocks, including the COVID-19 pandemic.

The report also finds that there is an untapped growth potential that could be realized by promoting manufacturing since the sector holds higher relative labor productivity than agriculture and services. Jobs remain a critical challenge to Africa's economic development, especially for the continent's booming youth population, and a coherent industrial policy is a key way for governments to ensure that more labor is helping expand manufacturing activities rather than moving into the low-wage, low-productivity informal sector.

The findings and recommendations presented in this report build on lessons from African development, focusing on the role of structural change and economic transformation in the growth process. They also take into account the implications of other current global and regional issues and megatrends that will impact Africa's economic transformation agenda.

The remainder of the introduction further addresses the need for a development policy reset and outlines the approach and methods used in this study. Subsequent sections of the report provide the general approach, methodology, and analysis; a review of the legacies and megatrends that shape current challenges, outcomes, and key lessons; and policy priorities for accelerating economic transformation and building resilience.

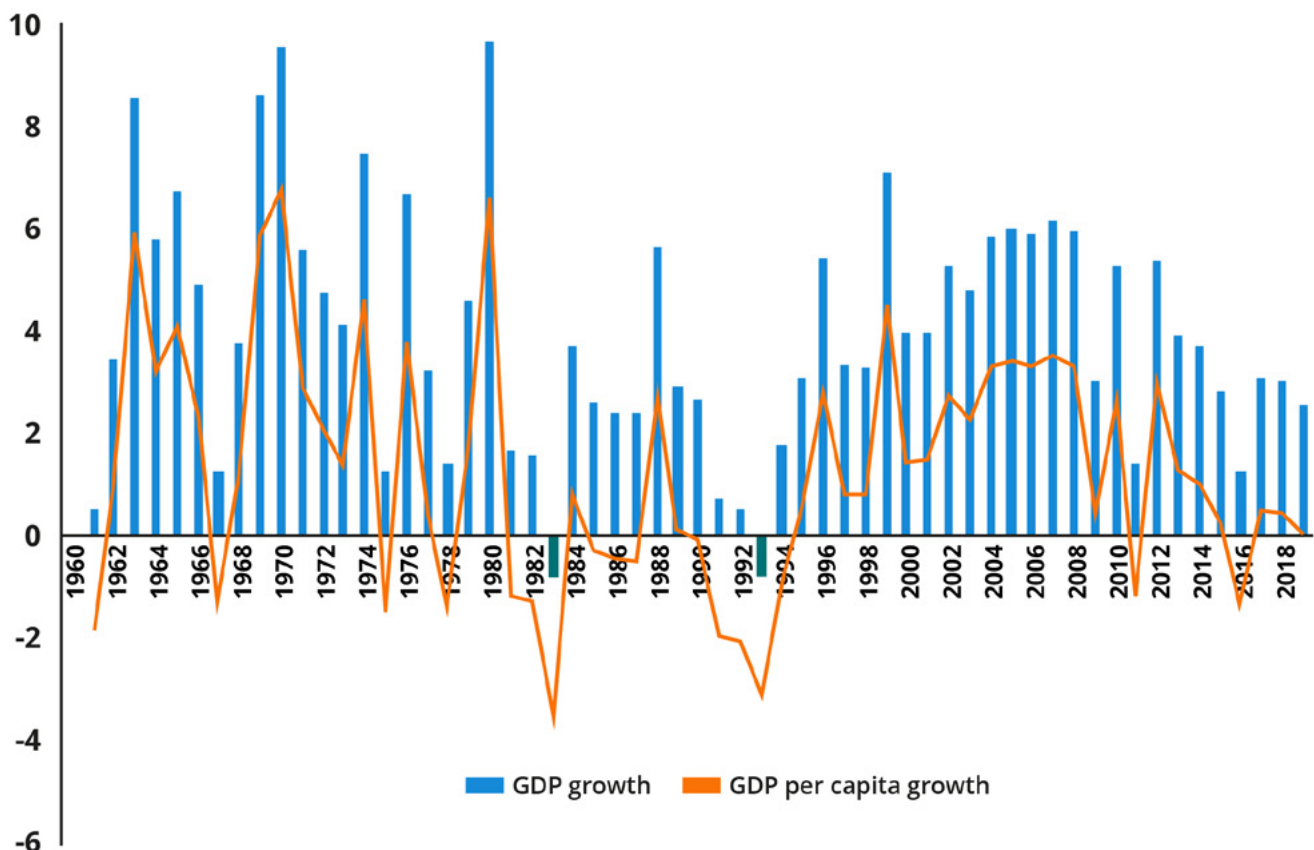
## 1.1. Why is a development policy reset needed in Africa?

Given today's global economy, geopolitics, and shifting trends, the policy approaches in most African countries are not sufficient to ensure the continent's long-term development or enable countries to withstand shocks—as the severe impacts of the COVID-19 pandemic proved. Several other facts concerning Africa's present reality underscore the need for a shift in policy priorities.

**Growth has not been sustained.** In the decade between the mid-1990s and the mid-2000s, Africa accelerated its pursuit of sustainable development. Strong growth performance at the start of this century brought hope that such development was at last in sight (Figure 1). However, the growth acceleration was driven by increased global demand for commodities that remained the backbone of Africa's economic structure—cocoa, crude oil and gas, coal, timber, metals and minerals, precious stones, and more. These exports were destined for foreign markets with little synergy with national and regional economies, and they did not create nearly enough decent jobs for a growing—and increasingly youthful—population.

As growth buckled under the impact of the 2007–08 Global Financial Crisis (GFC) and the end of the commodities boom, or “super cycle,” in 2014–15, the historic structural weaknesses of African economies resurfaced. Macroeconomic imbalances grew, fiscal deficits increased, and public debt deepened, all amid economic management failures and pervasive corruption. On the socio-political front, the Arab Spring movement in North Africa and increasingly frequent eruptions of social unrest elsewhere seemed to symbolize the disillusionment over Africa's lack of sustained, inclusive, and equitable growth.

**Figure 1. Trends of economic performance, 1960–2018 (percent)**



*Source:* ACET. Calculations based on data from the World Bank's World Development Indicators (2021).

**The Sustainable Development Goals are off track.** Despite the global commitment to achieving the Millennium Development Goals (MDGs), which were established in 2000, most countries fell short of expectations. Progress was made, but it was insufficient and not sustainable. As the MDGs expired, the global community coalesced around a new set of targets: the Sustainable Development Goals (SDGs), adopted by all UN member states in September 2015. The 17 SDGs were notable for underpinning poverty reduction goals with core tenets of economic transformation strategies. However, progress has not been promising. As UN Secretary-General António Guterres stated in the 2021 *Sustainable Development Goals Report*:

*“Regrettably, the SDGs were already off track even before COVID-19 emerged. Progress had been made in poverty reduction, maternal and child health, access to electricity, and gender equality, but not enough to achieve the Goals by 2030. In other vital areas, including reducing inequality, lowering carbon emissions and tackling hunger, progress had either stalled or reversed.”*

**Unfolding “megatrends” pose long-term challenges.** Ultimately, the success or failure of African countries to build resilient economies and achieve sustainable growth through transformation is dependent on how governments respond to an increasing number of critical challenges that transcend borders: climate change, population growth and urbanization, a surge in technological innovations and their applications, shifting trade and production patterns, and the COVID-19 pandemic and its aftermath. These megatrends must be faced against the background of increasing global policy isolationism, trade barriers, social inequality and insecurity, and more.

## 1.2. General approach and methodology

The study was undertaken using ACET’s Growth with DEPTH framework and its measurement tool, the African Transformation Index,<sup>1</sup> as the conceptual underpinning of the methodological approach, which consists of the following:

- An analysis of structural transformation, with a focus on sector labor productivity growth and contributions to economy-wide productivity.
- An analysis of economic resilience with a special focus on growth resilience.
- Cross-country case studies in Ghana, Kenya, Mozambique, Rwanda, Tunisia, and Zambia.
- A review of literature on other regions’ experiences.

The analysis led to the development of a country classification based on economic transformation metrics and growth resilience, combined with other metrics (such as income levels and vulnerability).

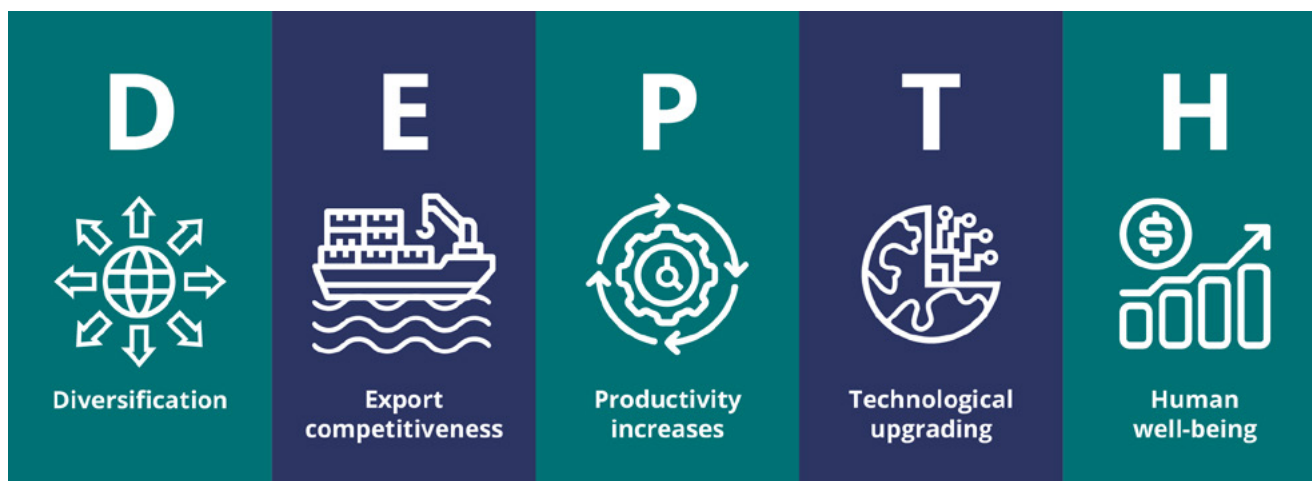
### ***Growth with DEPTH framework***

In its inaugural *African Transformation Report* in 2014, ACET defined economic transformation for Africa as “Growth with DEPTH,” which is shorthand for **D**iversification, **E**xport competitiveness, **P**roductivity increases, and **T**echnological upgrading—all to improve **H**uman well-being through better jobs and livelihoods:

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1 There are other similar indices, some of which include dimensions not included in the ATI (for instance, Lin, J.Y., Monga, C. & Standaert, S. The Inclusive Sustainable Transformation Index. *Soc Indic Res* 143, 47–80 (2019)). For this study, the ATI is preferred as the empirical underpinning of the Growth with DEPTH framework. The ATI captures the contextual factors relevant to economic transformation.





*“Recent economic growth, while welcome, will not by itself sustain development on the continent. To ensure that growth is sustainable and continues to improve the lives of the many, countries now need to vigorously promote economic transformation. Growth so far has come from macroeconomic reforms, better business environments, and higher commodity prices. But economic transformation requires much more. Countries have to diversify their production and exports. They have to become more competitive on international markets. They have to increase the productivity of all resource inputs, especially labor. And they have to upgrade technologies they use in production. Only by doing so can they ensure that growth improves human well-being by providing more productive jobs and higher incomes and thus has everyone share in prosperity.”*

ACET’s framework builds on, and is consistent with, the structural analysis of economic development. However, Growth with DEPTH goes beyond the classical and neoclassical approach to structural change, which focuses on relative sectoral productivity and resource shifts, to emphasize other issues such as such as technology, exports, and human well-being.

To track the progress of economic transformation on the continent through the Growth with DEPTH framework, ACET also developed the African Transformation Index (ATI), which aggregates scores of variables capturing the DEPTH attributes. Findings from the 2022 edition of the ATI, measuring 33 African countries from 1999 to 2019, are used throughout this report.

The ATI tracks indicators of the five dimensions of the DEPTH framework.

- Diversification of production and exports measures capacity to produce and export a broad array of goods and services.
- Export competitiveness measures the share of nonextractive exports in country GDP as the ratio of the share of global nonextractive exports in global GDP.
- Labor productivity measures the value added per unit of labor.
- Technology upgrading measures the medium- and high-technology content in manufactured goods and services.
- And human well-being measures economic and social outcomes and enablers in terms of incomes and equality, employment, and female participation in formal labor markets.

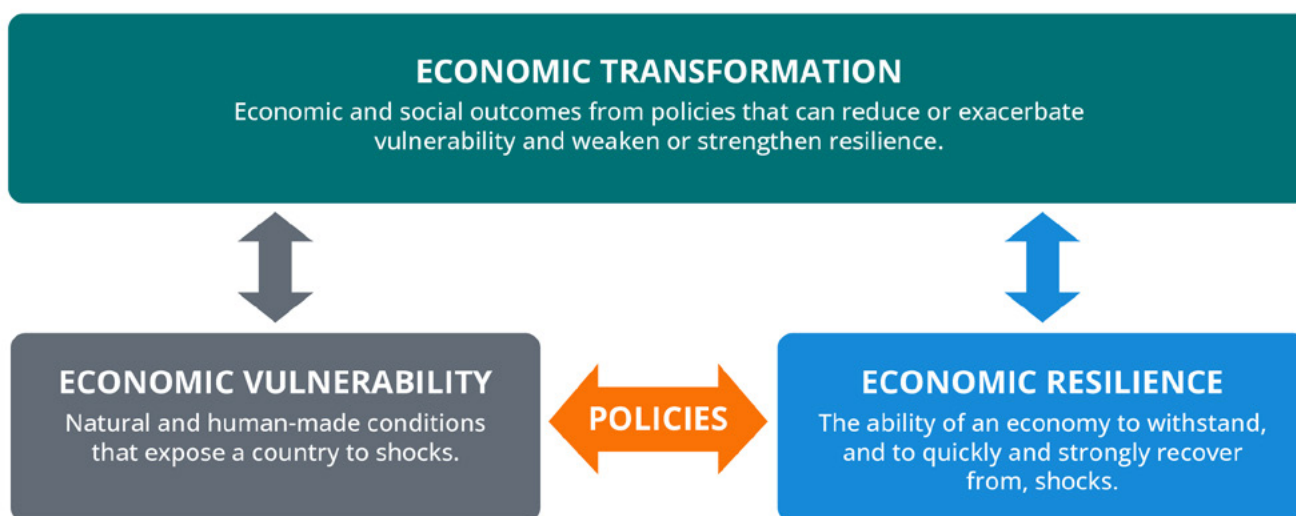
## Defining resilience

There are various dimensions to measure a society's resilience: economic, social, and physical (infrastructure). And there are different levels of resilience: macro, sectoral, firm, household, and individual. The dimension and level of resilience would determine the nature and scope of policy response. The analysis in this study is rooted in economic resilience, which is defined as a country's ability to withstand and quickly recover from adverse shocks, minimizing growth output losses in the process. The concept of growth resilience is predicated on the notion that only when output grows can incomes grow sustainably and other aspects of human well-being improve.<sup>2</sup>

A metric for growth resilience that matches this concept should have two attributes: (i) a measure of how much time it takes for an economy to recover from shock and attain a level of growth above the immediate pre-shock period; and (ii) a measure of the loss in growth that occurs as a result of the shock. To measure growth resilience of African economies, the 2007–08 GFC was taken as an example of a negative exogenous shock that was not country specific.

The study also recognizes the relationship between resilience and vulnerability (i.e., exposure to risk factors). Policies that influence one may also directly or indirectly influence the other. This creates endogeneity, which must be considered when relating the two (Figure 2).

**Figure 2. Economic transformation, vulnerability, and resilience**



## Analytical methods

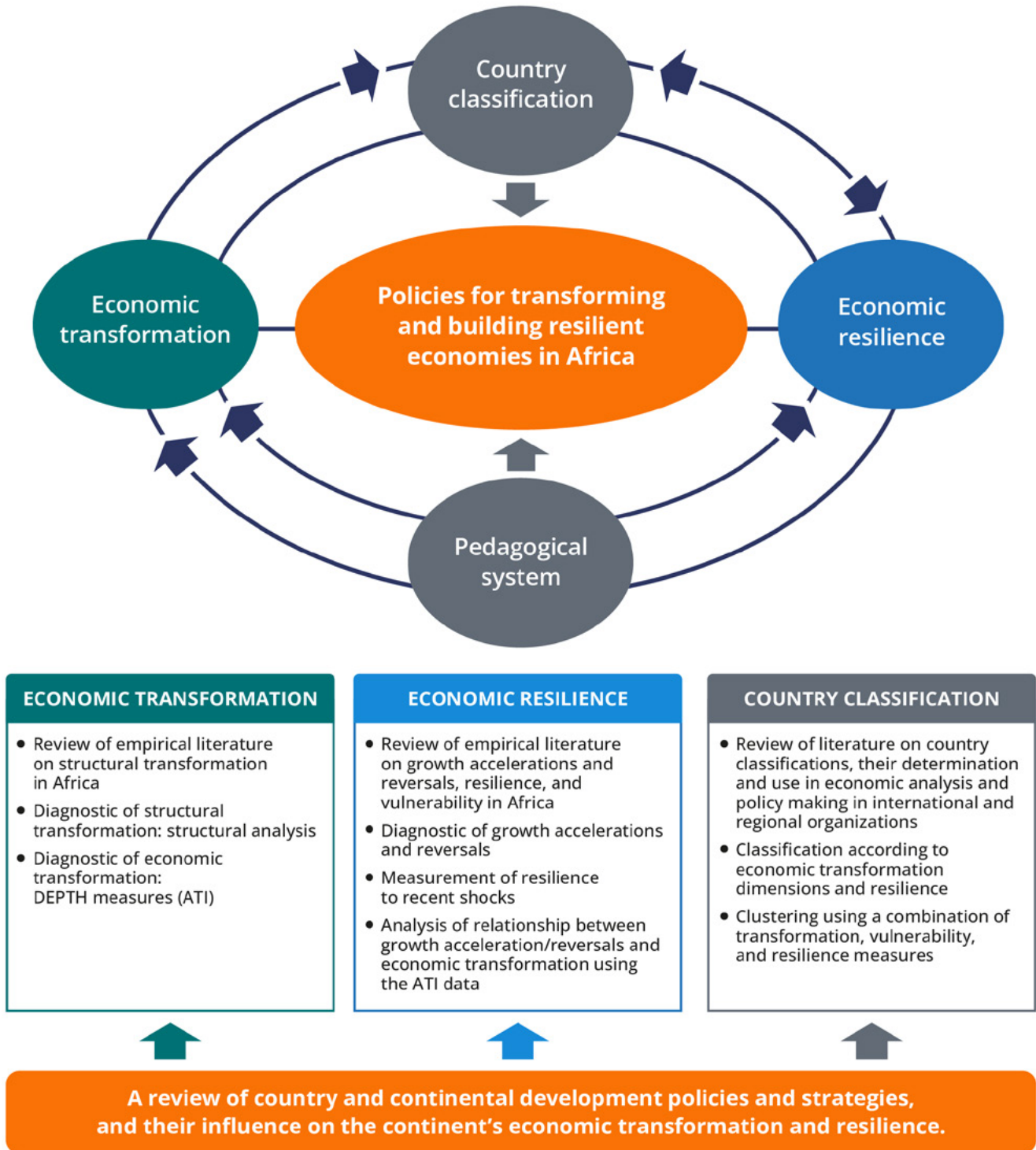
Figure 3 summarizes the analytical method used in the study. The analysis of the structural and nonstructural components of labor productivity growth gives a measure of the relative contribution of between-sector labor movements, which differs from within-sector labor productive growth. Within-sector growth is influenced by factors such as technological change or improvements in skills that do not involve resource reallocations.

Most of the empirical analysis included in this study covers the last two decades, but the review of policy experiences extends to the early 1960s and the immediate post-independence period in Africa. The focus of the analysis on the 2000s covers most of the latest growth acceleration that

<sup>2</sup> This approach is similar to that adopted by Sondermann (2016).

started in the mid-1990s, running until the onset of the GFC. By focusing the quantitative analysis primarily on these years, the study benefits from the availability of more consistent cross-country data from harmonized international data sets maintained by international organizations and established research institutions, which ACET has assembled into its 2022 ATI data subset. The six country case studies supplemented these sources with national databases where feasible.

**Figure 3. Schematic view of analytical methods**



# 2. Legacies and megatrends that shape current challenges and outcomes

## 2.1. Historical legacies

Africa's economic growth and transformation outcomes over the last two decades bear the scars of poor policy decisions in both the pre- and post-independence eras. Those policies specialized African economies in the production and export of primary commodities, and later in import-substitution industrialization. And governments played a direct role in the production, administrative allocation, and distribution of goods and commercial services beyond public goods (Stiglitz et al., 2017). There were initial successes; for example, value addition in manufacturing grew continent-wide from 4.5 percent in 1961 to 105 percent in 1968.<sup>3</sup>

Yet Africa's industrialization strategy largely failed as macroeconomic instabilities hindered the ability of governments to promote manufacturing as an engine of growth. Combined with other policy factors and weak governance, this failure ultimately contributed to Africa's inability to industrialize (Bevan et al., 1994; Ansu, 2013; Frankema and Van Waijenburg, 2018). For example, most of the African agro-industry stopped at the primary processing stage, without adding more or full value. A similar pattern occurred in the minerals sector.

Unsuccessful industrialization stifled the structural transformation of African economies. An inefficient and commercially uncompetitive manufacturing sector could not support the rural economy. It could not adequately supply the intermediate inputs, implements, and machinery necessary to make agriculture more productive. It also could not supply final consumer goods to make rural life prosperous. As a result, labor and other rural resources failed to find a path to more productive urban activities. Government-controlled prices and poor rural infrastructure created disincentives to produce cash crops and increase food surplus. And inadequate backward and forward linkages stifled innovation, technology upgrading, and productivity (Bevan et al., 1989; Noman and Stiglitz, 2015a). By pursuing extractive sector policies against the rural economy, the African states became de facto anti-development, destroying their revenue base. In doing so they undermined their own economic foundations (Bates, 2014; Robinson and Acemoglu, 2012).

As the continent's economic crisis became unbearable in the early 1980s, African governments turned to the World Bank and International Monetary Fund (IMF) for assistance. An era of macroeconomic stabilization policies and structural reforms followed, packaged in the Structural Adjustment Programs (SAPs) and informed by the neoclassical "Washington Consensus." These programs aimed to reorient fiscal and monetary policies to create a pro-growth development environment by opening markets, promoting the role of the private sector, and boosting foreign investment with associated technological transfers and business management capacity.

SAPs helped to revitalize some African economies, but their growth record did not match the immediate post-independence period. They lessened fiscal and balance of payments constraints and supported traditional export sectors through better producer price incentives, infrastructure rehabilitation, and export promotion. They also established Export Processing Zones in some countries to expand and upgrade production and exports of particular products (mostly primary commodities) and facilitated foreign direct investment (FDI) in the manufacturing sector. However,

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<sup>3</sup> Manufacturing value added (constant 2015 \$) extracted from 2022 World Development Indicators.

the socio-economic costs of adjustment were not adequately considered under the SAPs. This led to high unemployment, growing informality, and aggravated poverty and inequality. Poor sequencing of reforms also resulted in incompatible macroeconomic and sector policies that did not favor the development of the domestic private sector (Bevan et al., 1994; Nissanke and Aryeetey, 2003; Aryeetey and Moyo, 2012; Noman and Stiglitz, 2015b).

Perhaps most important, these programs did not address the fundamental structural challenges of African economies; rather, they reinforced the old production structures and trading patterns focused on primary commodities and import substitution. African economies remained largely vulnerable to external shocks, and growth volatility persisted.

The ensuing backlash against structural adjustment policies, which also marginalized African ownership over African development strategies, ushered in a new approach by the turn of the century: Poverty Reduction Strategy Papers (PRSPs), an attempt for a more collaborative, country-owned process. Introduced by the World Bank and IMF in 1999, PRSPs still emphasized the macroeconomic stabilization strategies of SAPs but aimed to refocus state budgets to also address social costs and enhance human well-being. Prepared by governments in consultation with civil society, they served as a framework for Bank and IMF financial support, supplemented by various other donor mechanisms and support.

The PRSPs also became the operational tool for articulating development strategy in the Heavily Indebted Poor Country initiative, which the Bank and IMF had launched a few years prior, and for implementing strategies to achieve the Millennium Development Goals (MDGs). Despite their more collaborative approach, the PRSPs and MDGs were limited largely to restructuring the existing aid architecture and did little to advance long-term poverty reduction strategies rooted in economic transformation. They also mostly failed to strengthen national policymaking processes (Whitfield et al. 2015).

The GFC and the end of the commodity super cycle exposed the weak foundations for growth that the SAPs, PRSPs, and MDGs had laid. Combined with other domestic and regional shocks—including natural disasters, civil and political unrest, and the Ebola epidemic—growth in many African countries began to buckle in the 2010s, and the continent veered off track in trying to achieve the follow-up to the MDGs, the Sustainable Development Goals (SDGs). Debt challenges reemerged, poverty reduction either stalled or reversed, and two decades of GDP gains were lost. Once the COVID-19 pandemic struck in early 2020, Africa was unprepared to face its impact, further bringing into focus the unresolved structural limitations that have undermined the continent's economic transformation and resilience in recent decades.

## 2.2. Emergent megatrends

Over the last 20–30 years, the world has experienced an increase in the intensity of some global and regional developments with far-reaching implications for growth and transformation in Africa. These megatrends include climate change and resource stress, rapid population growth and urbanization, technological progress and innovation, shifting trading patterns, and sweeping health crises. Addressing the challenges associated with these issues—and embracing the opportunities that they also bring—will go a long way in determining Africa's success at transforming economies and building resilience. Given their outsized importance to Africa's development future, understanding the megatrends and their impacts is crucial to resetting policy priorities in a way that will ensure growth resilience.

### ***Climate and resource stress***

Although Africa has contributed only 3.8 percent of total global emissions, it has borne the brunt of climate change. According to the African Development Bank, Africa loses between \$7–\$15 billion per year because of climate-related issues. This figure is expected to rise to \$50 billion by 2040. In 2020, parts of Malawi, Mozambique, and Zimbabwe were hit by Tropical Cyclone Idai, followed closely by Cyclone Kenneth. Around 3 million people were adversely affected, and some 600 people died because of these storms. In 2022, the area was again hit, as Tropical Cyclone Eloise caused severe flooding and more deaths. Other parts of the Sahel and East Africa have suffered from extensive climate-related events, such as droughts, floods, and dangerous locust swarms. The Sixth International Panel on Climate Change (IPCC) Assessment Report (AR6), *Climate Change 2022*, underscores that the impacts of climate-related events on food security and livelihoods in Africa are particularly severe—and that these impacts will intensify in the coming decades.

Notwithstanding these challenges, climate change offers encouraging opportunities for innovation and growth so long as governments and societies focus on finding the appropriate responses. Investing in more resilient and green infrastructure and developing and scaling up renewable energy will help build low-carbon economies with diversified and more cost-efficient energy sources. Sustaining blue ecosystems for healthier marine life could help combat pollution, strengthen food systems, and reduce environmental risks. And promoting climate-smart agriculture will help farmers increase productivity and lower costs while improving resilience to protect livelihoods and combat food scarcity.

As climate change and environmental sustainability issues become more intertwined in the global development agenda, adaptation and mitigation will gain prominence. Annual adaptation funding was roughly \$5 per capita between 2014 and 2018, totaling less than \$5.5 billion per year (Imasiku et al., 2020). This is only about half the adaptation amount aimed at reducing emissions. However, African governments estimate that they will need much more financial support, reaching into the tens of billions of dollars per year by 2050, to mitigate the impact of climate change.

### ***Population growth and urbanization***

Africa's population is a little more than 1.3 billion and is set to rise to 1.9 billion in 2035 and 2.5 billion in 2050. The continent already boasts one of the world's largest and youngest workforces, a comparative advantage that will only increase. Africa's lack of structural transformation, however, significantly limits the ability to absorb new entrants into the labor market, which has led to a youth unemployment crisis across the region. But as manufacturing wages in other countries rise Africa stands to gain, with a chance to become the world's main workforce—if the supply of skills meets the demand of industry.

An accelerated demographic transition could create a window of opportunity in which the change in age structure will generate long-term labor market outcomes if accompanied by strong investments in human capital, aligned with technology adoption and increased female participation in the workforce. This will have a reinforcing effect in helping to create a “virtuous cycle” of sustained economic growth.

Africa's growing urban centers will offer tremendous opportunities for modern infrastructure and give rise to a new middle class, leading to potential shifts toward more high-value consumer goods and services (Moriconi-Ebrard et al., 2020). For example, greater demand for digital and mobile

services will facilitate technology upgrading and productivity increases. If well managed, population growth and urbanization can be positive factors of economic transformation by creating positive agglomeration effects and access to skilled populations.

However, uncontrolled population growth and urbanization without matching formal employment, as has been the case historically in Africa, may further magnify the risks associated with low wages, unemployment, and poor living conditions that can lead to social and political instability (Adepoju et al., 2020).

### ***Technology and innovation***

Innovation and digital technologies are critical to productivity growth in farming, manufacturing, and service provision. They are also critical for acquiring and accumulating modern knowledge capital, a building block for transforming countries. Tech hubs and new electronic platforms are rapidly spreading across Africa,<sup>4</sup> as technology investments have helped narrow gaps in financial management and inclusion. Cashless payment systems such as mobile money and M-Pesa, digital banks, and cryptocurrency platforms are some of the ways in which organizations have developed innovative financial service solutions and better payment systems.

But, to fully realize the potential of technology and innovation, governments must adopt policies that also encourage and enable the private sector to develop the needed infrastructure and to promote digitalization, which can enhance productivity and competitiveness of firms (ACET, 2021a). Over the last decade, the average intensity of jobs in the information and communications technology (ICT) sector has increased by 26 percent in South Africa, while high ICT intensity in all formal sector employment increased by 6.7 percent in Ghana and 18.4 percent in Kenya (Leopold et al., 2017).

The major challenge to speeding up and expanding digitalization in Africa is accessibility and affordability. Evidence shows that, in 45 African countries, one gigabyte costs more than 6 percent of monthly average income, ranging from a low of 0.5 percent in Egypt to a high of 27 percent in Guinea Bissau.<sup>5</sup> In early 2020, Sub-Saharan Africa had 477 million subscribers to mobile services and 272 million mobile internet users. Yet internet adoption is still low. Sub-Saharan Africa is one of the least connected regions of the world, with only 28.3 percent of individuals using internet in 2019 compared to a global average of 51.4 percent (UNDESA, 2021). While expanding access is necessary, it must be noted that the overall quality of African education systems also affects the effectiveness of digitalization. Hundreds of millions of Africans will need training or retraining in digital skills to capitalize on technological advancements, especially in the job market.

Achieving universal access to broadband in Africa will be critical to further progress in technology upgrading and innovation. However, it will require public investment and policies that target incentives to operators to offer solutions to accelerate internet connectivity and affordability. Since equity schemes are not primarily directed at innovation, developing venture capital markets becomes vital for technology firms seeking resources to expand and grow. Such investment funds range from grants and informal lending to higher-risk investments that can be obtained from private equity or public markets (Rigby and Ramlogan, 2013).

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4 Countries that have made particularly notable strides include Cameroon, Egypt, Ethiopia, Ghana, Kenya, Nigeria, Rwanda, Seychelles, Somalia, South Africa, Tunisia, Uganda, and Zimbabwe.

5 See "The Most Expensive Data Prices in Africa," *Connecting Africa*, December 2019.

### ***Shifting trade and production patterns***

Global and regional value chains (GVCs, RVCs) are reshaping global production and trade structures, creating challenges and opportunities for advancing Africa's transformation. One key challenge is the difficulty that domestic firms face in meeting standards imposed by lead firms (such as cost, quality, lead time, and batch size) and governments (such as compliance and nontariff barriers). The ability of African firms, especially small and medium enterprises (SMEs), to comply with these requirements often is constrained by the poor domestic business environments in which they operate—poorly functioning financial markets, inefficient infrastructure, limited human capital, and weak local industry networks. Another challenge is the limited backward and forward linkages in the domestic economy, which limits RVC linkages to the rest of the African economy and creates incentives for efficiency-seeking investments to go elsewhere. These constraints increase the risk of African firms becoming trapped in low-value-added and less sophisticated segments of the value chains, with little opportunity for innovation or technological upgrading.

Notwithstanding these challenges, participation in GVCs and RVCs offers African firms opportunities for increased access to skills, technology, markets, and finance. Firms can acquire specific skills and enter or expand the production of medium- and high-technology goods without creating entire industries. African SMEs can participate in global and regional markets without having all the technological knowledge necessary to produce a globally competitive final product. A potential efficiency gain for African firms comes from the opportunity to access larger markets and benefit from economies of scale in production and in the provision of support services and infrastructure needed to connect national service providers to supply chains. However, to realize the full benefits of participating in the value chains, African governments must create a conducive business environment to attract FDI, help domestic firms interact effectively with multinational corporations, and leverage Africa's vast labor supply.

For example, China's labor-intensive manufacturing competitiveness is waning. According to Justin Lin,<sup>6</sup> China is forecast to possibly lose up to 85 million labor-intensive manufacturing jobs within the next decade. Wages for unskilled workers in China are set to increase fourfold in 10 years. Wage inflation and rising production costs will over time force China's manufacturers to focus on higher-value outputs. This can create opportunities for low-income economies with nascent manufacturing sectors, such as many of those in Africa, to increase manufacturing productivity and generate employment, assuming the labor supply is adequately skilled.<sup>7</sup>

### ***Regional integration***

ACET's 2021 African Transformation Report (ATR), *Integrating to Transform*, was built around a single question: Why have African countries not seen growth with DEPTH? The report's conclusion: too many are working in isolation, and their ability to transform will depend on collaborative efforts to build synergies and allow economies to scale. Most African markets are small and not diversified, which has a direct bearing on their trade volume. These countries cannot generate enough high-quality export, nor can they attract significant foreign investment. Low value addition in products and the lack of intra-African trade limit the development of regional production networks.

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<sup>6</sup> From the article "What China's economic shift means for Africa," published by World Economic Forum, March 11, 2015.

<sup>7</sup> There are, however, emerging competitors for the continent's manufacturing aspirations; the Philippines, Thailand, and Vietnam stand out in terms of labor costs.



Africa's quest for regional integration has been hampered by poor infrastructure, such as unreliable energy and poor roads, and administrative inefficiencies—customs authorities that create unnecessary barriers, for example. There are also the challenges of peace, security, and governance. In many African countries, crossing the border to trade means exposing life and assets to significant risk.

Enhanced regional integration offers immense socio-economic gains, starting with the African Continental Free Trade Area (AfCFTA), which offers expanded markets for SMEs and employment opportunities for the growing labor force. Being in a common market allows businesses setting up in the region to be treated in the same way as domestic firms. This further extends to service providers from one country to another without any restrictions. As long as migration policies and educational systems are aligned to the aims of the AfCFTA, labor mobility can benefit both workers and firms by pooling and sharing skills and employment opportunities. And removing barriers to imports can lead to lower prices for consumers and a wider variety of products in domestic markets.

But, to integrate faster and deeper, countries should go beyond trade and markets and collaborate to deliver regional public goods such as by building transport corridors, managing river basins, establishing cross-border digital connectivity, and controlling outbreaks of pests and disease. The disruption of regional and global supply chains due to the COVID-19 pandemic points to the need for stronger regional and subregional supply chains and rapid cross-border movement of goods and services to ensure the sustainability of critical industries.

# 3. Contextual analysis and key lessons

The analysis in this report uses data from the African Transformation Index (ATI), which aggregates scores of variables capturing the dimensions of ACET’s Growth with DEPTH framework. The ATI “core index” is measured on a scale of 0 to 100; it is an aggregate of four sub-indices capturing diversification, export competitiveness, productivity, and technological upgrading. To track the five dimensions of the Growth with DEPTH framework, indicators of human economic well-being are added to the core index. The overall Africa average score is weighted by the share of each country’s GDP in the total GDP of the 33 African economies that constitute the ATI sample.

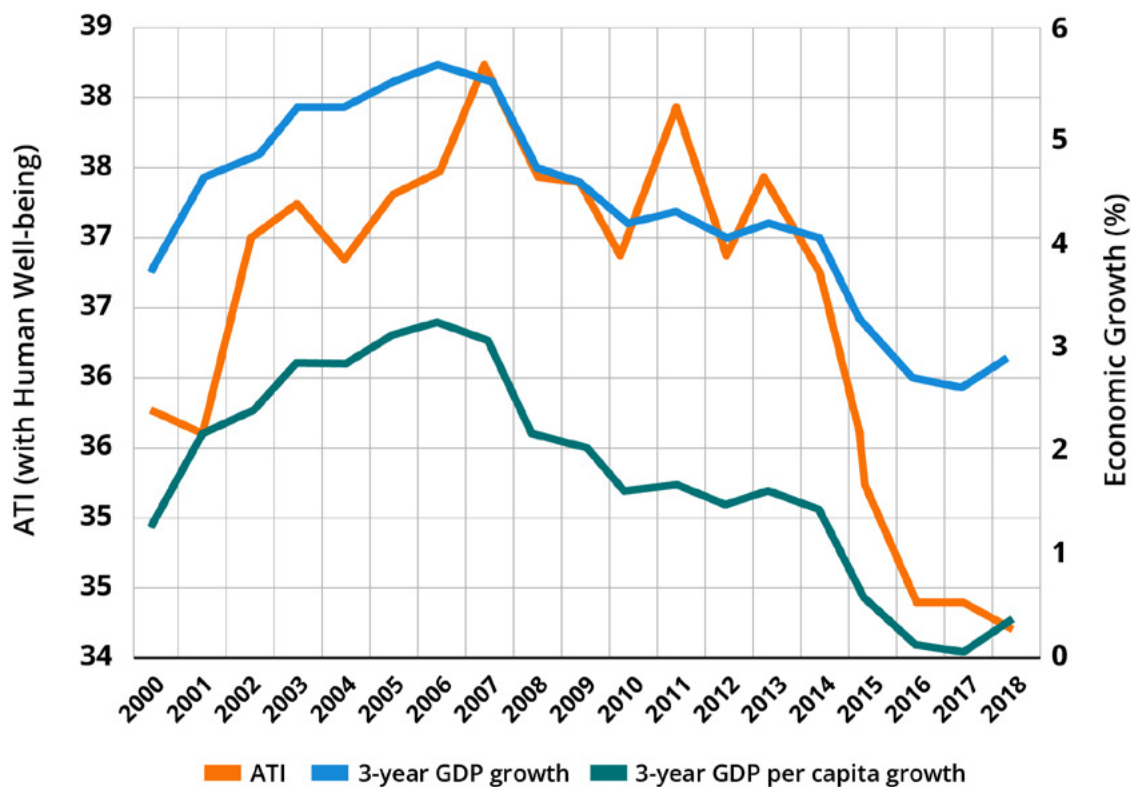
ATI data points are computed on the basis of three-year moving averages of the sub-components so that, for instance, data values for 2000 are an average of values for 1999–2001. Values for 2018 are averages of 2017–19. Thus, the sample for the ATI covers the period 1999–2019.

The 33 countries that make up the ATI accounted for almost 90 percent of Africa’s total GDP in 2017–19.

## 3.1. Transformation gains and losses: recent patterns in Africa

Africa’s growth volatility is closely associated with poor transformation outcomes. For most African economies, economic transformation peaked just at the onset of the Global Financial Crisis in 2007 with an ATI score of 35.5, followed by a continuous decline that grew sharper in 2014 (Figure 4).

**Figure 4. Aggregate GDP growth and economic transformation, 2000–19 (ATI countries)**



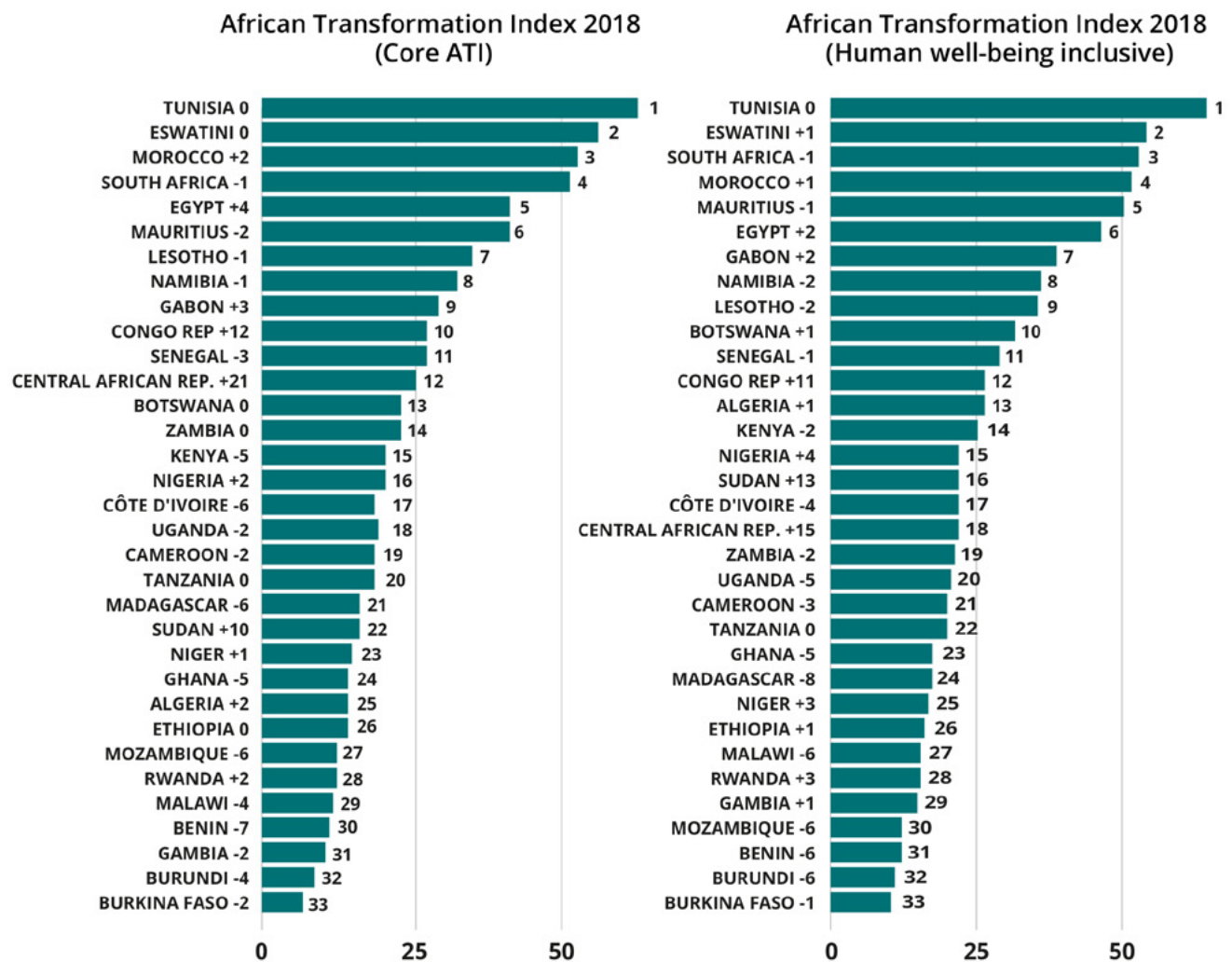
*Source:* ACET ATI project team. Calculations are based on data from various data sets incorporated in the ATI data set, including data from UNIDO, ILO, COMTRADE, and the World Bank’s World Development Indicators (2021).

However, there is substantial heterogeneity in transformation outcomes across Africa. Figure 5 shows country rankings, based on results of the 2018 ATI with human well-being included, along with each country's score from previous years. Figure 6 compares the scores including human well-being with scores from the core ATI, which does not include the human well-being dimension.

**Figure 5. African economic transformation per ATI scores, 2000–18**

ATI COUNTRY RANK		2018 SCORE	2007 SCORE	2000 SCORE
1	Tunisia	65.5	72.5	55.6
2	Eswatini	54.5	62.5	60.4
3	South Africa	53.1	64.6	59.4
4	Morocco	51.9	50.6	43.1
5	Mauritius	50.7	61.0	56.8
6	Egypt	46.9	40.2	42.6
7	Gabon	38.2	38.0	37.8
8	Lesotho	35.5	42.9	32.6
9	Namibia	35.4	46.0	35.8
10	Botswana	31.7	32.3	27.4
11	Senegal	28.8	33.6	33.5
12	Congo Rep.	26.3	17.8	13.5
13	Algeria	26.2	26.9	24.8
14	Kenya	25.1	30.4	25.5
15	Nigeria	22.2	20.9	14.9
16	Sudan	21.8	16.4	17.3
17	Côte d'Ivoire	21.8	28.9	27.8
18	Central African Rep.	21.5	7.9	7.0
19	Zambia	21.4	22.5	22.6
20	Uganda	20.7	23.2	14.9
21	Cameroon	20.2	22.0	18.8
22	Tanzania	19.8	18.7	19.5
23	Ghana	17.4	20.2	21.0
24	Madagascar	16.9	23.1	19.4
25	Niger	16.4	16.4	20.0
26	Malawi	15.5	18.8	14.2
27	Rwanda	15.3	13.2	11.0
28	Ethiopia	15.3	16.5	12.8
29	Gambia	14.6	15.2	18.5
30	Mozambique	12.1	17.6	19.1
31	Benin	12.0	16.7	13.5
32	Burundi	11.2	16.6	9.9
33	Burkina Faso	10.4	11.8	13.4
<b>All Africa</b>		<b>34.2</b>	<b>38.2</b>	<b>35.7</b>

*Source: ACET ATI project team. Calculations based on 2018 ATI with human economic well-being included.*

**Figure 6. ATI country rankings — Core ATI vs. human well-being inclusive**

**Source:** ACET ATI project team. Calculations based on data from the World Bank's World Development Indicators (2021).

**Note:** Vertical axis shows the changes in rankings between 2007 and 2018; ranks are 1 = best and 33 = worst; (+) rank improvement and (-) rank loss; horizontal axis is the percentage score. The chart on the left measures that change with the core ATI index only. The chart on the right measures the change with the human well-being dimension added.

For example, South Africa ranked fourth on the core ATI but moved up to third once human well-being was added, meaning that the country is shown to have more positive transformation outcomes when human well-being is considered. The opposite happened to Mozambique, where the human well-being outcomes were unfavorable enough to drop the country's ranking from 27 to 30.

Countries at lower levels of economic transformation tend to show relatively more progress on the transformation trajectory. The Central African Republic went from being the least transforming economy in 2007 to 12th in 2018, a gain of 21 positions. Other risers include Sudan (up from 32nd to 22nd position), Egypt (from 9th to 4th), and Gabon (from 12th to 9th). Morocco, Algeria, and Rwanda each gained two positions.

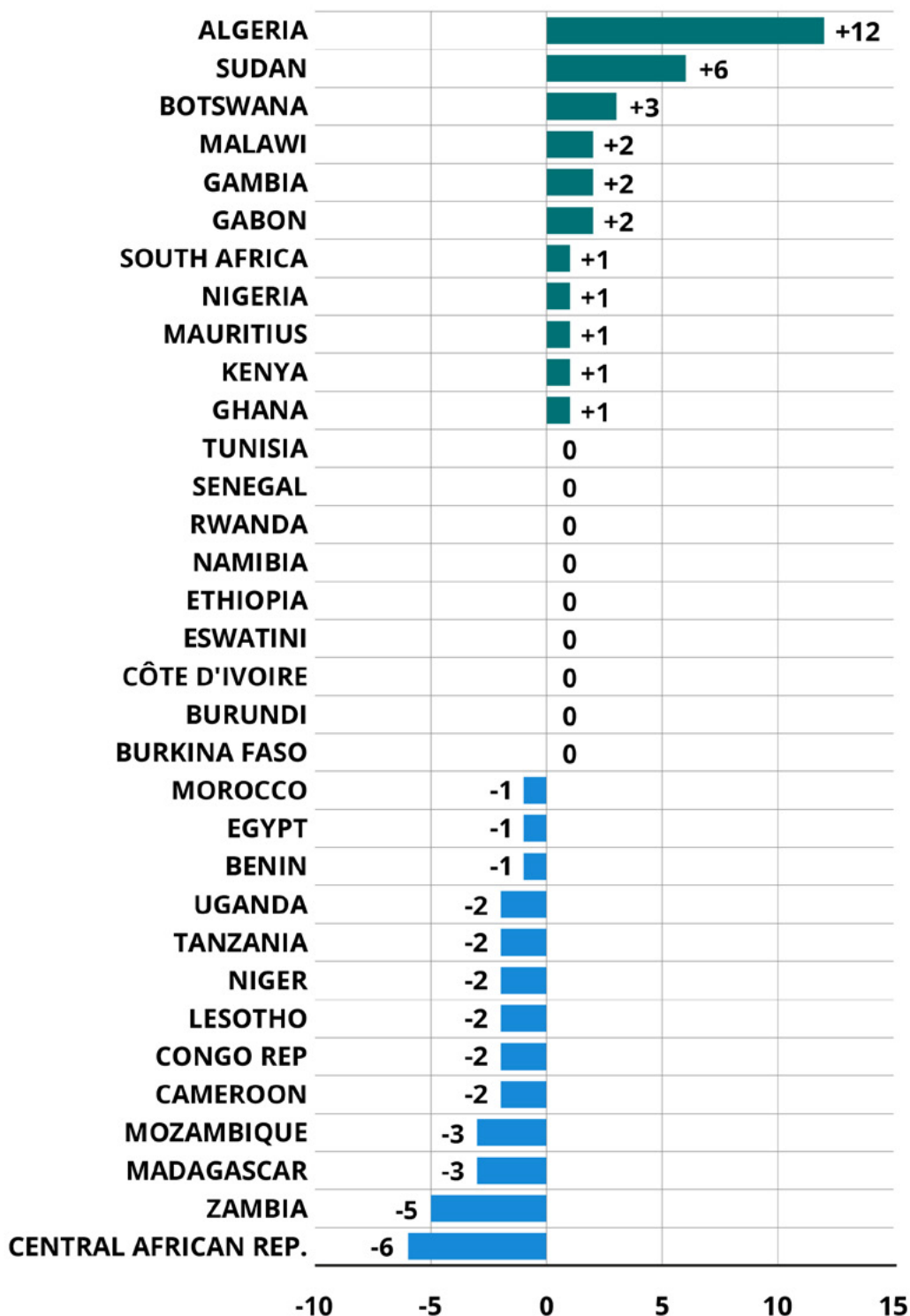
Countries that experienced the biggest setbacks in their economic transformation outcomes since 2007 include Benin (dropping seven positions, from 23rd to 30th), Madagascar and Mozambique (each dropping six positions, from 14th to 21st and 21st to 27th, respectively), and Kenya and Ghana (each dropping five positions, from 10th to 15th and 19th to 24th, respectively). Senegal fell three positions; Mauritius, Uganda, Cameroon, Gambia, and Burkina Faso each dropped two; and South Africa, Lesotho, and Namibia each dropped one.

Tunisia and Eswatini remained at the top among the high economic transformers with no change in position. Also unchanged: Botswana, Zambia, and Tanzania in the group of middle transformers, and Ethiopia in the group of low transformers.

Differences in ranking given by the core ATI and the ATI with human well-being included indicate a country's possible policy bias toward or against policies supporting the economic aspect of human well-being. Here too, wide heterogeneity is apparent (Figure 7). The Central African Republic and Zambia, followed by Madagascar and Mozambique, stand out as countries that rank worse when the human well-being dimension is considered. In the case of the Central African Republic, for example, this suggests that, even though substantial transformation progress was made, the progress was proportionately less in the area of human well-being. In total 13 countries share this characteristic.

By contrast, Algeria and Sudan, followed by Botswana, stand out among the countries that improve when the human well-being dimension is considered, suggesting development policies appear more favorable to human economic well-being in these countries. In total, 11 countries share this characteristic.

Figure 7. Changes in Core ATI rank (+/-) after the inclusion of human well-being, 2018

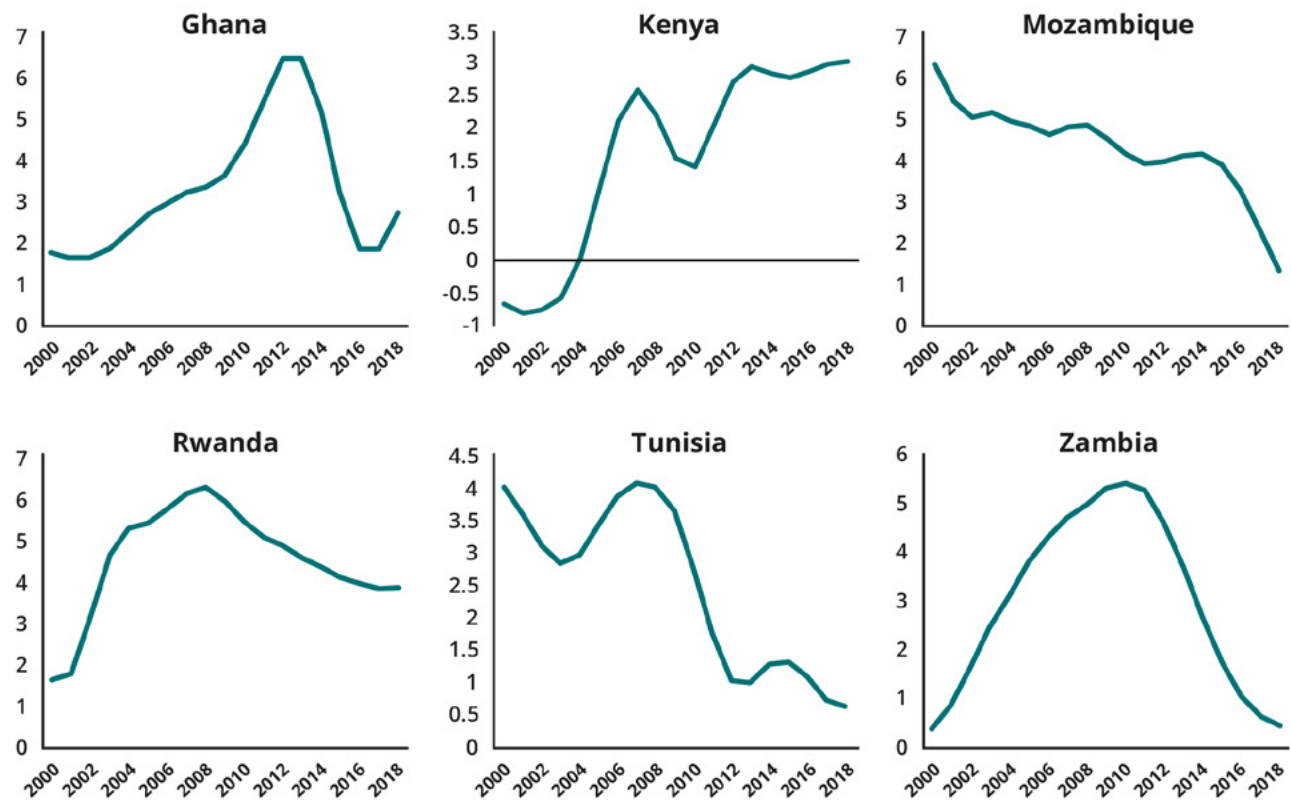


Source: ACET ATI project team.

Note: Positive (green) means a country's ATI rank improves against its core ATI rank when the human well-being dimension is added. For example, Algeria's rank with human well-being is 12 positions better than when the country is ranked by the core ATI only. By contrast, a negative number (red) means a country's ATI rank is that much worse with human well-being considered.

The diversity seen among the 33 ATI countries is partly illustrated in the examples of Ghana, Kenya, Mozambique, Rwanda, Tunisia, and Zambia—the six country case studies undertaken for this report. These countries are highly heterogeneous in their growth and transformation experiences, but all of them—with the exception of Kenya—have seen steep growth deceleration, or even collapse, in recent years (Figure 8).

**Figure 8. Per capita GDP 5-year rolling growth rates — country case studies, 2000–19 (percent)**

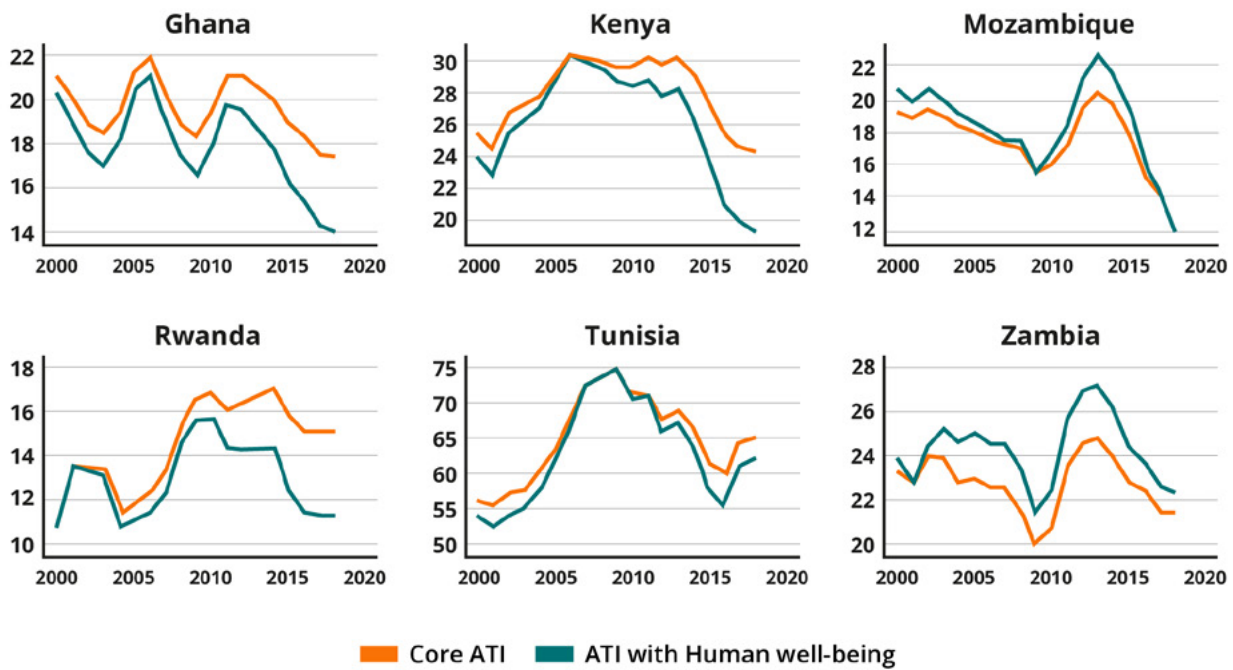


Source: ATI, 2022.

The transformation trend among all the country case study countries over the last decade is downward, and in some cases severely downward (Figure 9). Tunisia is the top economic transformer among the case study countries as well as the full ATI sample. The country ranks high on economic diversification, technology upgrading, export competitiveness, and human well-being. Yet its transformation progress has declined, a weakening performance due in part to political upheaval (including the Arab Spring and the Bardo National Museum attack, which led to the collapse of tourism, the third-largest sector of Tunisia's economy), women's low participation in the workforce, declining labor productivity in the manufacturing sector, and a lack of progress transitioning from low- to high-technology intensity manufactured exports.

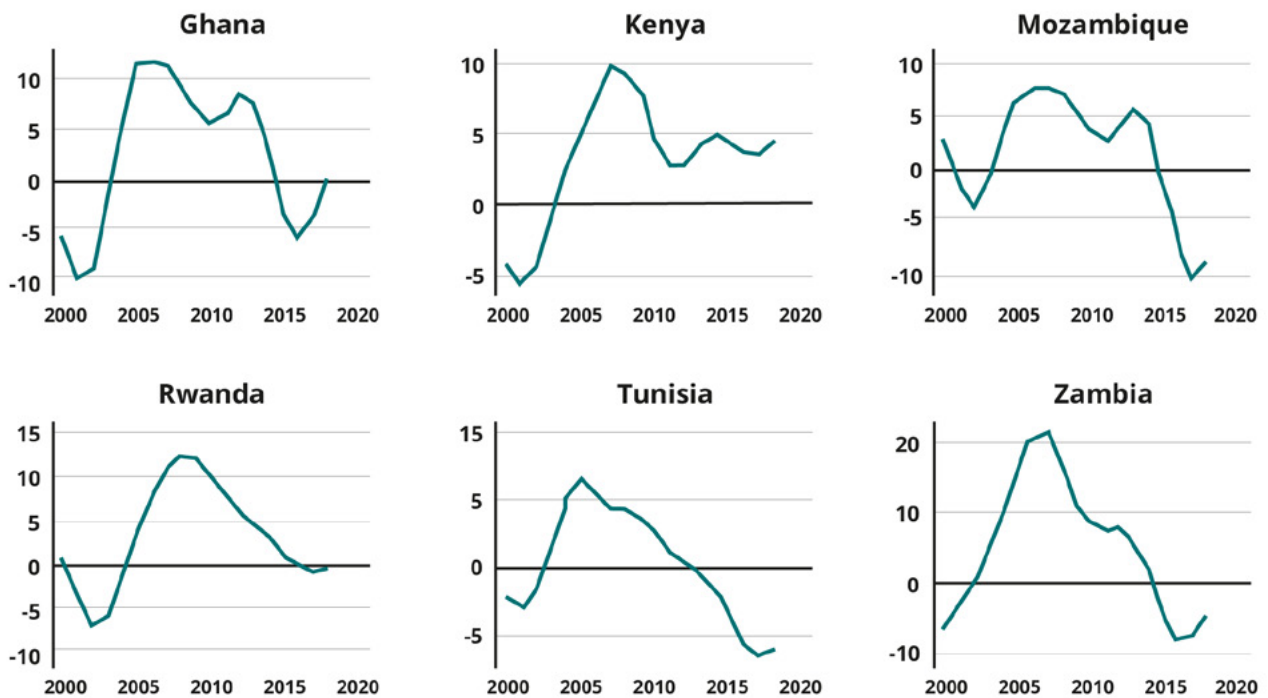
With the exception of Kenya, labor productivity growth has also turned negative (Figure 10).

**Figure 9. ATI total scores — country case studies, 2000–19 (percent)**



Source: ATI, 2022.

**Figure 10. Labor productivity 5-year rolling growth rates — country case studies, 2000–19 (percent)**



Source: ACET ATI project team. Calculations based on data from UNdata and ILO data sets.



## 3.2. The link between labor productivity and structural change

The poor growth of African economies is closely related to weak productivity growth of labor. In 1975, manufacturing value added per worker in Africa (\$9,214) was almost double that of comparator countries (\$4,678)—Brazil, Chile, Indonesia, Malaysia, Pakistan, Singapore, South Korea, Thailand, and Vietnam. By 2018, the relationship had inverted, with the productivity in comparators becoming more than four times that in Africa (\$40,446 versus \$9,841).

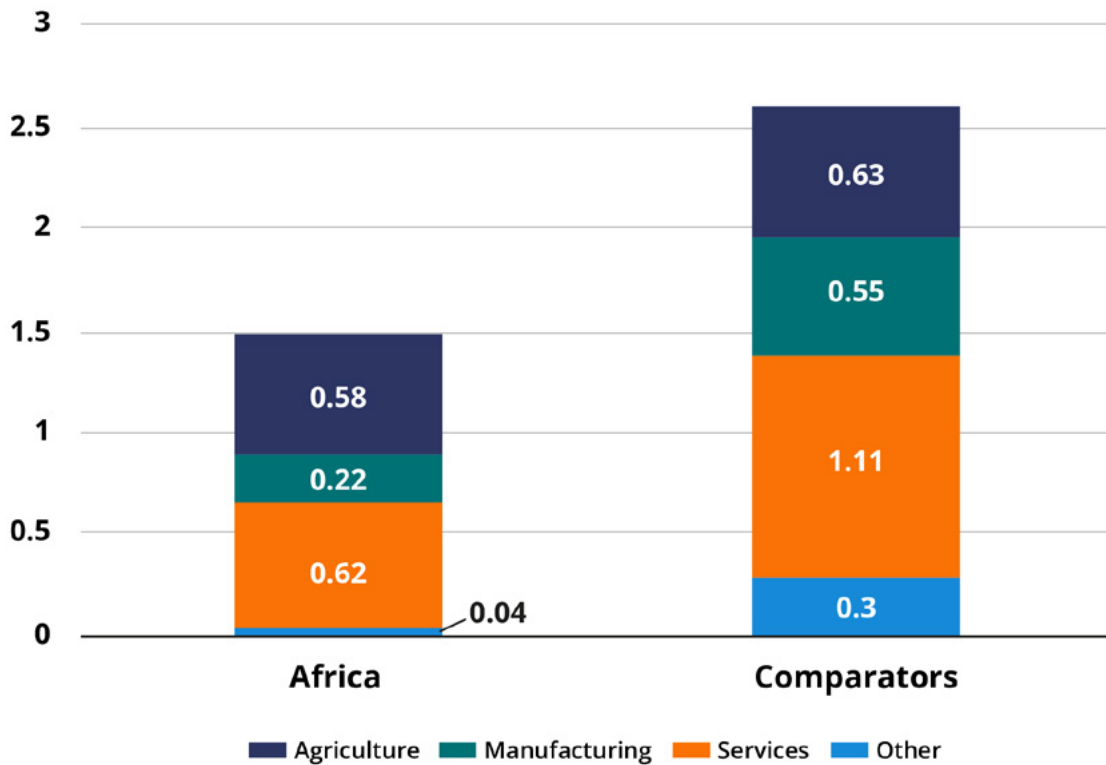
According to the International Labour Organization, agricultural value addition per worker in comparator countries in 1995 was about 4.22 times more than that of African countries. By 2018, the ratio had increased to 5.25. Economy-wide labor productivity in Africa increased by 30 percent in 20 years, from \$4,350 per worker in 1991 to \$5,655 per worker in 2019. This is equivalent to an average annual growth rate of 1.5 percent—well below the comparators of Asia and Latin America, which recorded 2.5 percent per year over the same period.

To assess progress, Africa's labor productivity performance in the 2000s can be measured against a subset of comparators (Brazil, Chile, South Korea, and Thailand) during the period they were undergoing structural transformation. The gap in economy-wide labor productivity between African economies during 2000–18 and these comparators during 1965–79 was only 0.8 percent. However, a close look at the sectoral patterns of these countries reveals striking differences between them and Africa's recent development (Figure 11). For instance, manufacturing labor productivity in the comparators subset was growing at an annualized rate of 7.1 percent during 1965–79, which is five times as much as manufacturing labor productivity in Africa during 2000–18. Another area of difference is in the role of services, where annualized labor productivity growth was 0.1 percent (1965–79) in the comparators against 1.6 percent in Africa (2000–18).

Africa's poor productivity performance and reversals in growth and transformation have taken place in a context of limited structural change (Figure 12). This is because virtually all gains to economy-wide labor productivity between 2000 and 2019 were attributed to the “within-sector” component—the growth in labor productivity of a sector, given that sector's share of total employment—versus the “structural” (or “between-sector”) component—the movement of labor from low- to high-productivity activities.

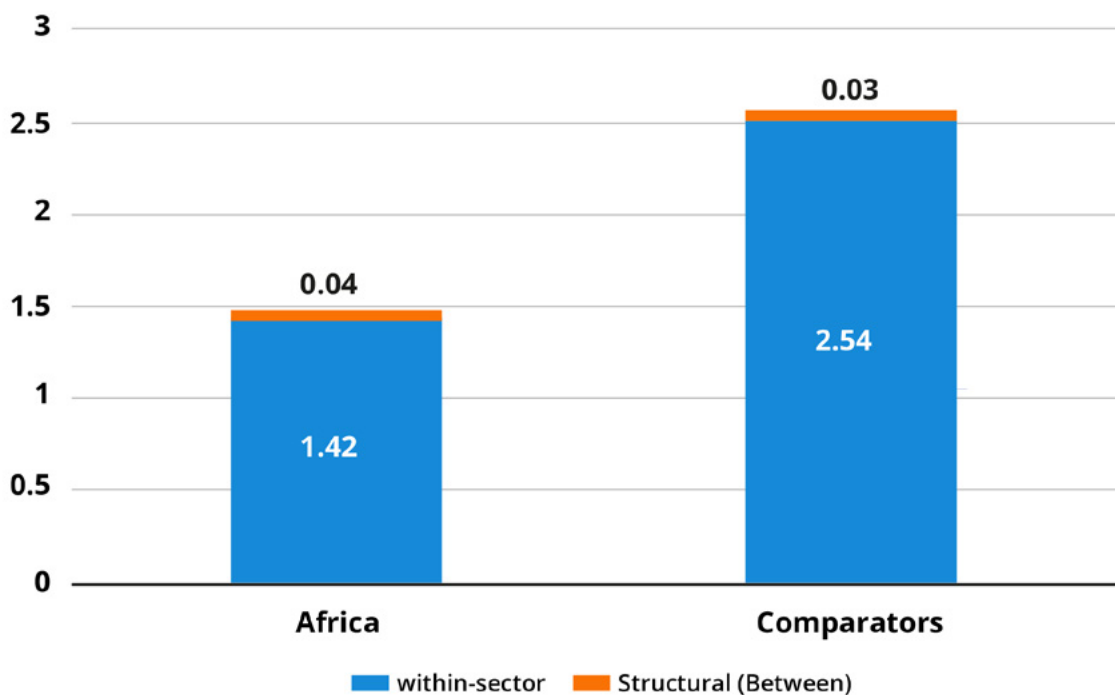
These patterns of within-sector and between-sector contributions are similar to those observed in the comparators in the same period, which is mostly due to the fact that by the 2000s the comparators had realized much of the potential gains from the structural changes they implemented during the 1960s and 1970s.

**Figure 11. Contributions to economy-wide labor productivity growth, total and by sector — Africa and comparator countries, 2000–18 (percent)**



Source: ATI, 2022.

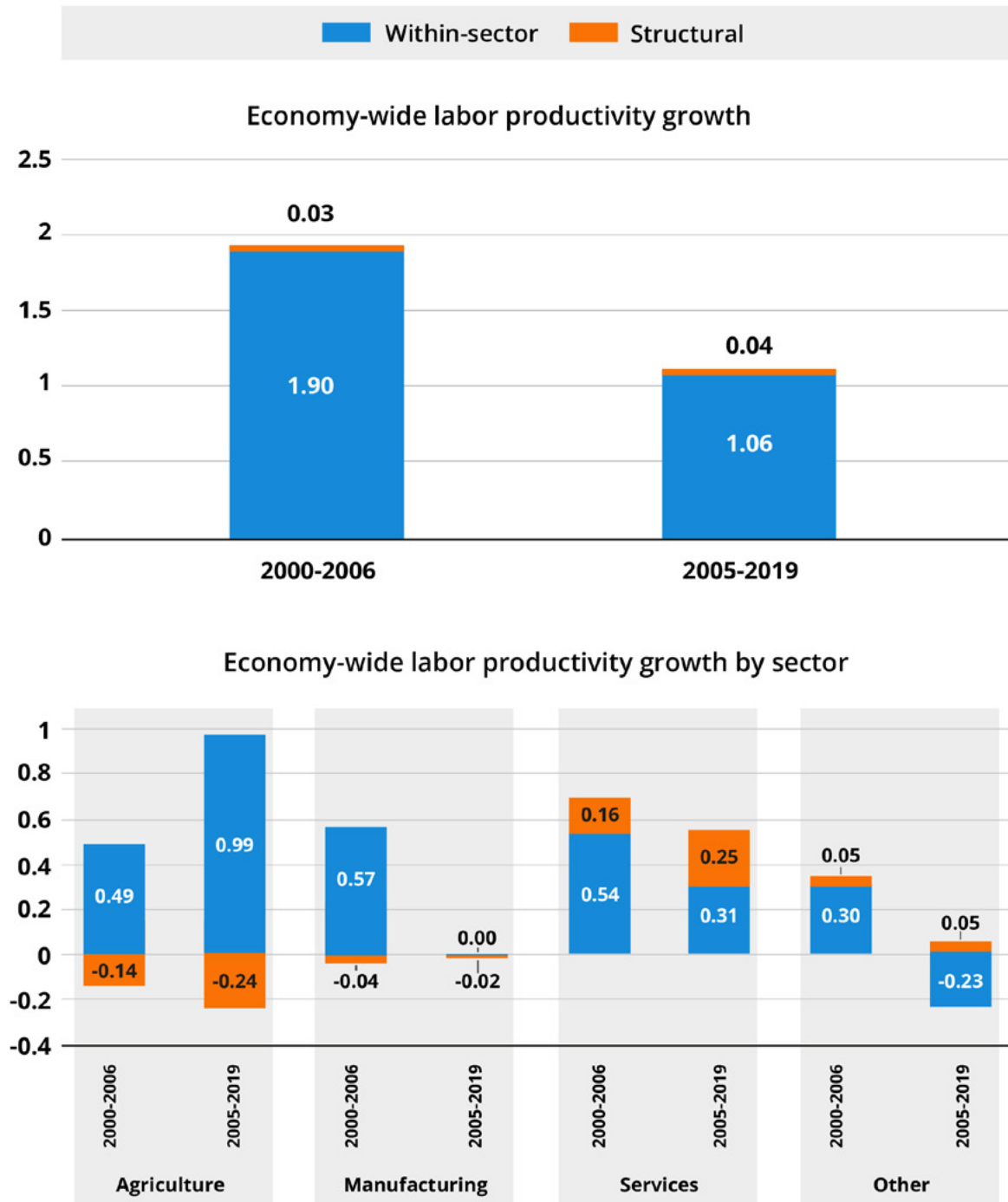
**Figure 12. Contributions to economy-wide labor productivity growth, within-sector and between (structural) components, 2000–18 (percent)**



Source: ATI, 2022.

Despite country heterogeneity in productivity growth, the structural component has made very little contribution to Africa’s economy-wide labor productivity. Modest growth came mainly from services and a few other sectors, primarily mining, utilities, and construction. Critical sectors such as agriculture and manufacturing have made negative or almost no contribution (Figure 13). This has significant ramifications for the creation of productive jobs.

**Figure 13. Components of Africa’s economy-wide labor productivity growth (percent)**

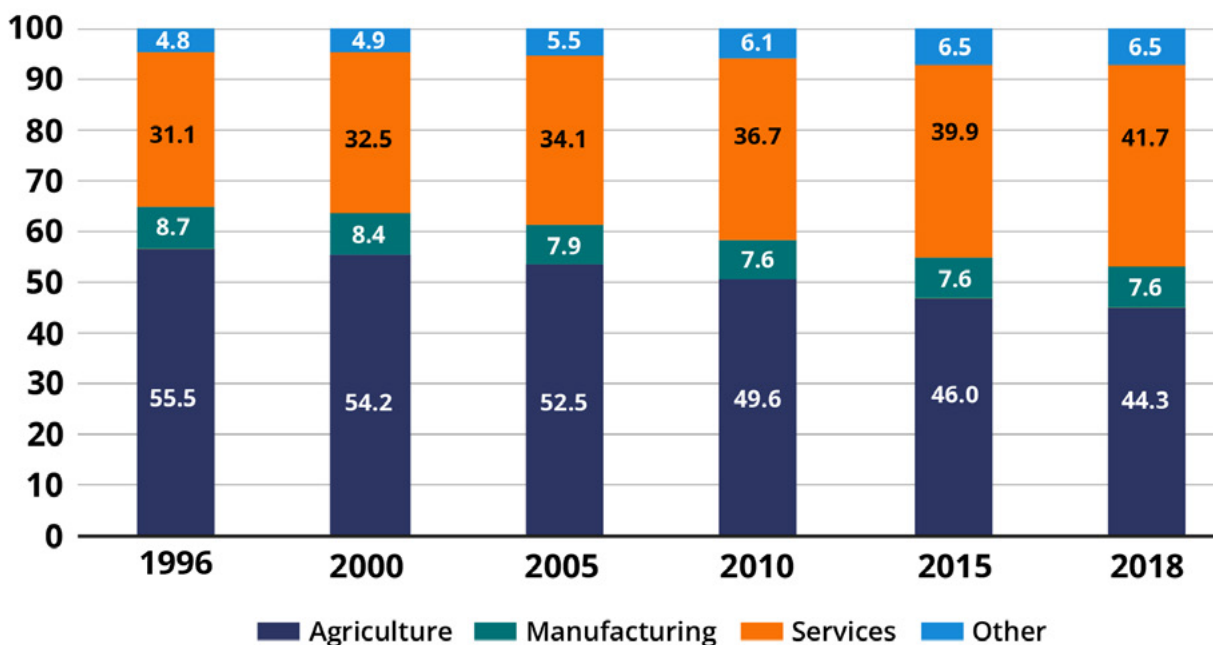


Source: Results of “shift analysis” computed by ACET ATI project team using UNdata and ILO data sets

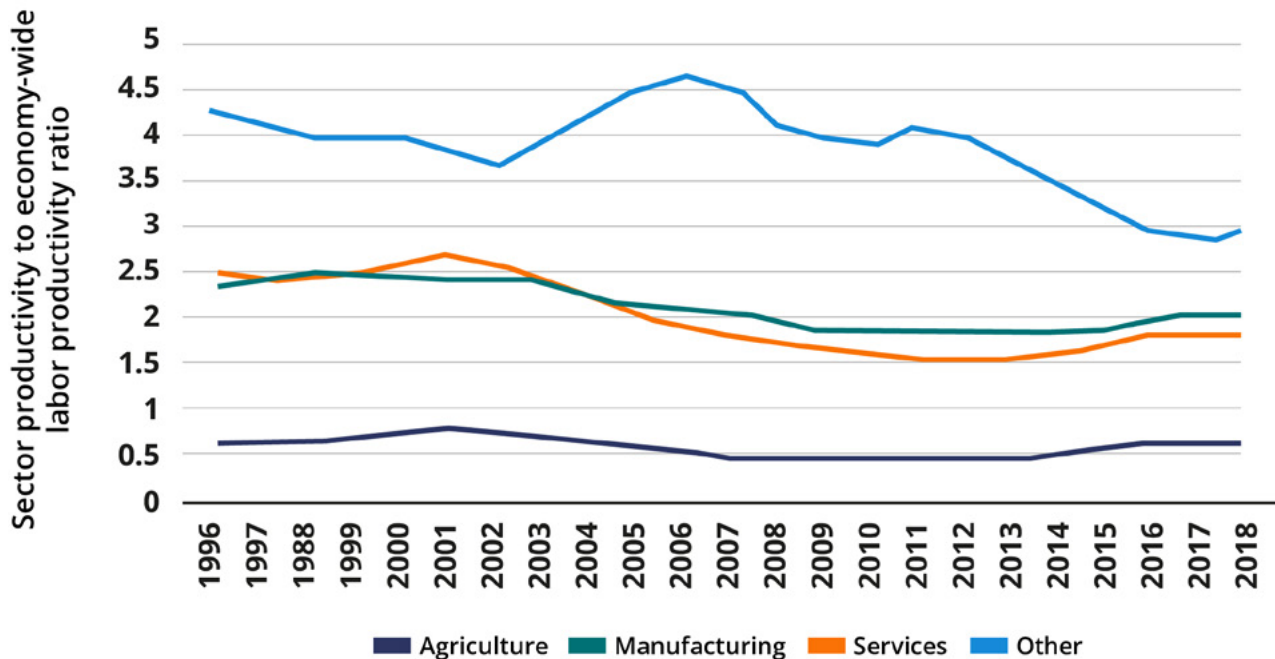
To understand how this happens, look at sectoral movements of labor and the relative labor productivity over time. Figure 14 shows that between 1996 and 2018 labor employment (in percentage shares of total economy employment) moved from agriculture (–11.2 percent) and manufacturing (–1.1 percent) mostly to services (+10.6 percent) and the “other” sectors (+1.7 percent) noted above. Conversely, Figure 15 shows that manufacturing’s relative labor productivity is greater than that of the services sector.

These results suggest that the greater structural contribution of services to economy-wide labor productivity growth is driven mostly by the disproportionately faster movement of labor from agriculture to services—despite labor productivity favoring manufacturing. This means that African economies are missing out on the potential growth-enhancing structural contributions to economy-wide productivity that manufacturing would provide if labor were moving faster into this sector than into services.

**Figure 14. Sector labor shares in Africa, 1996–2018 (percent)**



*Source: Computed by ACET ATI project team using UNdata and ILO data sets.*

**Figure 15. Relative sector productivity in Africa, 1996–2018**

*Source:* Computed by ACET ATI project team using UNdata and ILO data sets. Calculations of relative labor productivities follow the approach in Diao et al. (2019), pp.294–97, Equations. 9.1 and 9.2.

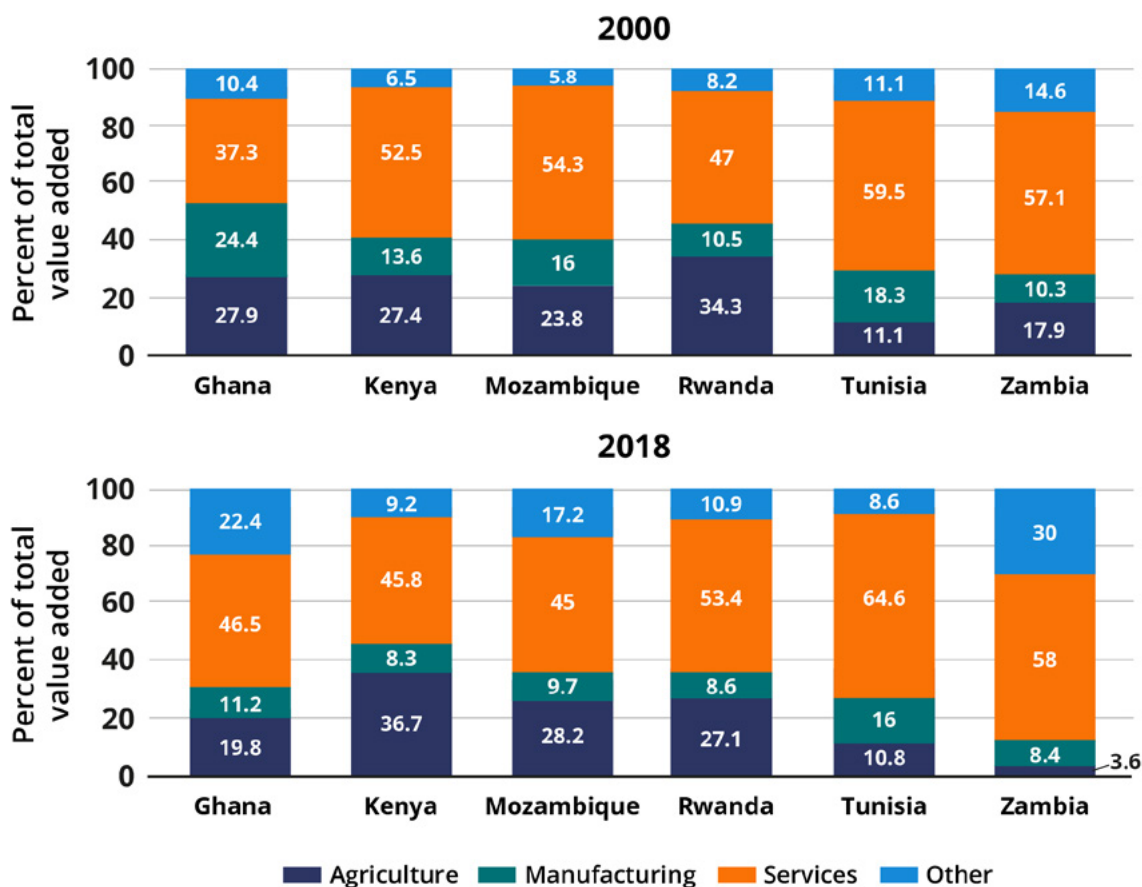
Combined, these aggregate results can be further explained considering the binary structure of Africa’s manufacturing sector. For instance, after disaggregating manufacturing firms by sizes, Diao et al. (2021) noticed that large firms in Ethiopia (covering 1996–2017) and Tanzania (covering 2008–16) exhibited superior productivity growth that is associated with capital intensive technologies, but created limited opportunity for employment expansion. Small manufacturing firms within these countries absorbed more labor but did not experience significant labor productivity growth.

Mensah et al. (2022) examined this situation further and found that, unlike the shift toward manufacturing and high-tech services in East Asia, Africa has seen a strong shift toward lower paid jobs in nontradable services. These nontradable services are often associated with high levels of informality relative to tradable services and manufacturing. Thus, they may have contributed to the low structural contribution of Africa’s manufacturing sector. The authors’ conjecture is consistent with the theoretical and empirical works associated with New Structural Economics, which show that Africa’s main strategic mistake has been to focus on capital-intensive industries—often in sectors that are not economically viable without government protection— instead of building labor-intensive industries more consistent with comparative advantages.

The policy implication is that structural transformation should be a guided process, whereby policies must deliberately redirect the movement of labor toward manufacturing. This requires industrial policy focusing intentionally on the development of the manufacturing sector to absorb labor released from a modernizing agricultural sector. Indeed, it could be argued that Africa’s weak structural transformation has been induced by unfavorable manufacturing industrial policy that has locked firms into the informal sector through regulatory rigidities, high entry costs, poor physical infrastructure, insufficient financing, skills mismatches, and more—hindering the reallocation of surplus labor to sectors with relatively more productive potential.

The review of the experiences of the six country case studies over the last two decades confirms the shrinking role of manufacturing in favor of services and other activities, including extractive industries (Figure 16). All six countries have declared national and sectoral policies that aim to transform the structure of their economies, but success has been limited, partly because of deficiencies in the design and implementation of industrial policies. Examples include the selection of priority sectors without adequate assessment of factor endowments, a lack of coherence and consistency among support systems, and frequent changes in priorities due to changes in government administrations and domestic and global economic circumstances.

**Figure 16. The shrinking role of manufacturing — country case studies, 2000–18**



*Source: ACET. Calculations based on data from UNdata.*

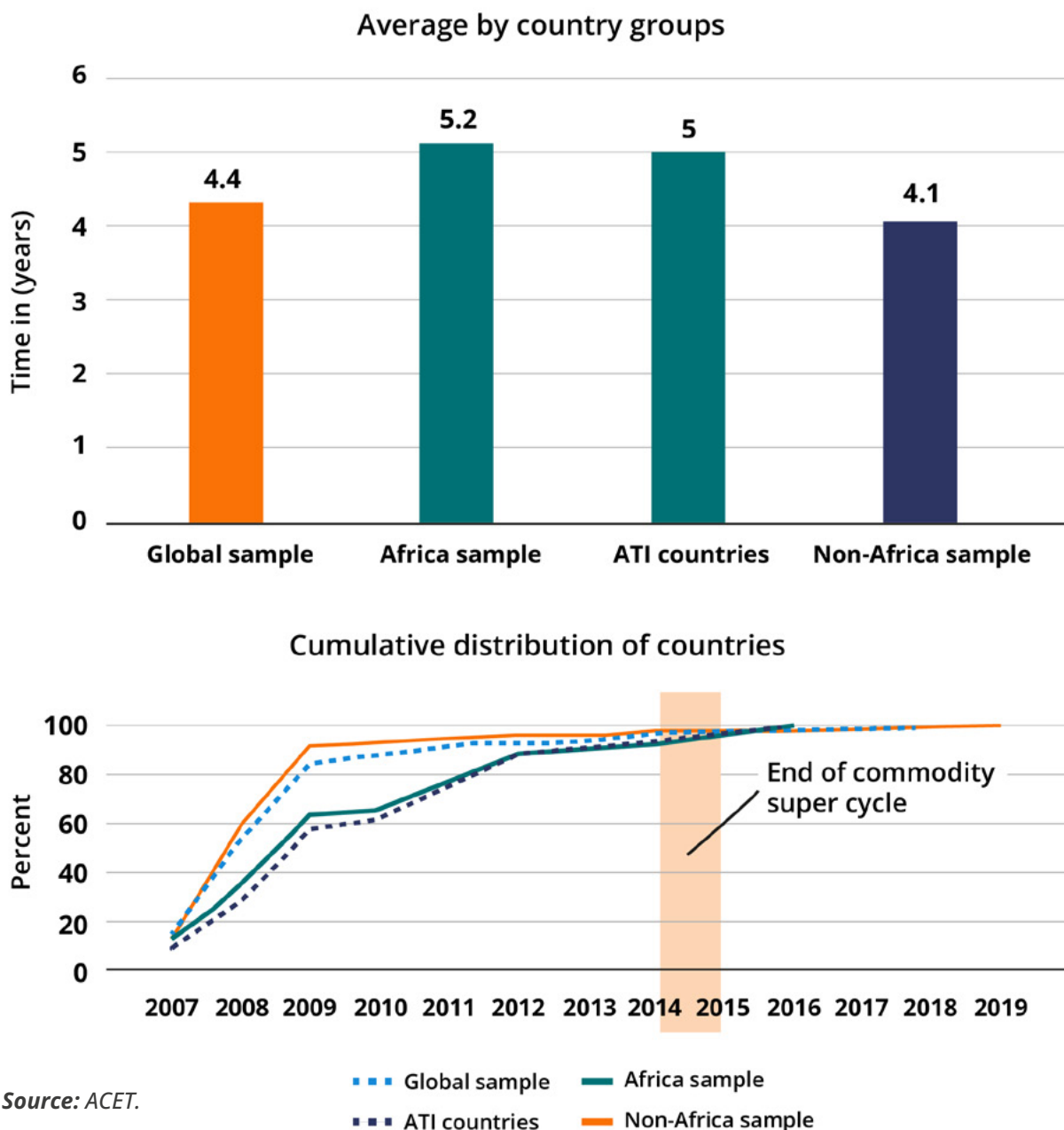
The patterns of structural transformation and growth summarized thus far raise two related issues: (i) whether Africa is experiencing a premature deindustrialization; and (ii) whether Africa can develop and build economic resilience by leapfrogging manufacturing as the typical engine of sustainable growth and transformation. Premature deindustrialization has been observed in some developing countries (Monga, 2012; Diao et al., 2019), and other studies have suggested the potential for services-led growth in lieu of manufacturing. (Nayyar et al., 2021).

### 3.3. The need for resilience

Building resilient economies must be a priority for African countries given their exposure to increasingly frequent and devastating shocks from world markets, natural disasters, environmental hazards, and health-related crises. Resilient economies stand as a defense against significant and persistent negative effects on income and employment, reducing growth volatility and more capably promoting positive social outcomes. By contrast, economies that are not resilient can experience deep and persistent downturns that can negatively affect their long-term growth and social cohesion.

Shocks may take time to show their full impact, but they have lasting effects on economies and societies in general. It took more than five years after the Global Financial Crisis (GFC) for African economies to “buckle,” or drop by 1.5 percent or more below the immediate pre-GFC rate, compared to four years in non-African countries (Figure 17).

**Figure 17. Average and cumulative “buckle time”**



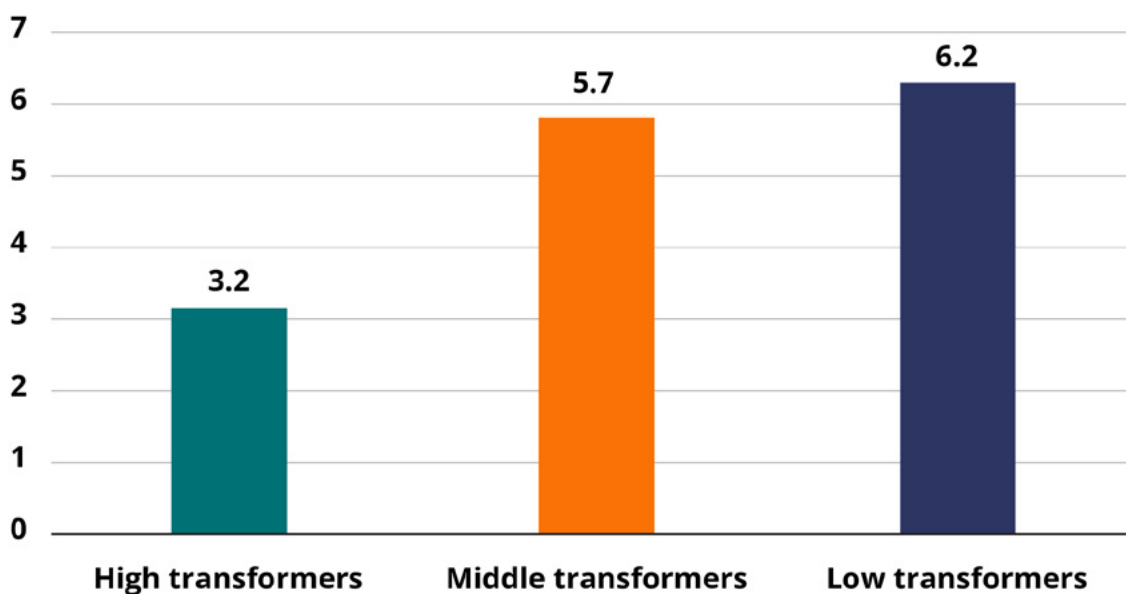
Source: ACET.

The pace at which countries “buckled” was also slower in Africa than in other parts of the world. By the second year of the onset of the GFC, per capita growth had fallen below the critical threshold in 60 percent of countries worldwide. The proportion was only 35 percent for African economies. The time lag between the onset of the global event that created the shock and its impact or manifestation in African economies is a window of opportunity for preparing appropriate responses. Seizing this opportunity requires a good understanding of the transmission mechanisms of the shocks, both by governments and societies at large.

High economic transformers tend to suffer lower losses in growth when hit by global exogenous shocks. Focusing on growth resilience, ACET research shows that the extent of loss in growth in GDP per capita that followed the GFC was greatest in countries that had relatively lower transformation outcomes. The growth losses suffered by low economic transformers are two times as much as those suffered by high economic transformers (Figure 18).

Of the 33 country economies included in the ATI, 31 suffered a reduction in growth, or buckled, following the GFC. Twelve of those economies recovered to their prebuckle growth in the first year after their reduction. Five recovered after two years. Seven took between three and four years to recover. The other seven failed to recover to their prebuckle growth rate in the period captured in the ATI data set (through 2019). The two countries to not buckle were Cameroon and Mauritius. In fact, Mauritius is the only country whose growth rate remained consistently the same throughout the two decades.<sup>8</sup>

**Figure 18. Average growth loss at “buckle time”- ATI countries (percent)**



Source: ATI, 2022.

<sup>8</sup> Mauritius is also the first—and only—African country to graduate to high-income status, which it did in 2019, according to World Bank classifications. However, it slipped back into upper middle-income status in 2021, due to the impact of COVID-19.



## 3.4. The relative role of services versus manufacturing

A distinguishing feature of Africa's growth over the last two decades is that services and agriculture led it, contributing 43 and 40 percent, respectively, to economy-wide labor productivity growth. By contrast, manufacturing contributed only 15 percent.

Research has found services growth and poverty reduction to be correlated (Ghani, 2009). First, the sector creates new jobs. Second, income from those jobs increases demand for goods and services, and it also boosts savings. This contributes to further investment and employment. Some African countries have sustained their economic gains by diversifying their economies into trade in services. For example, Egypt has emerged as a leading supplier of information technology services for the region and European markets, while Mauritius services export (\$2.94 billion) exceeded its goods export by \$0.74 billion in 2019. The diversification of these economies is characterized by exports in transportation and communications (including information and communications technology), insurance, financial services, and tourism services. Also, services growth tends to be geographically concentrated. Many fast-paced and technology-intensive services require medium- to high-skilled labor, which is only available in urban areas. Thus, skills demand and availability of suitable workers constrain the ability for the sector to generate decent jobs. In this regard, the benefits of services-led growth will not be equitably distributed.

However, six considerations qualify the proposition of services-led growth over manufacturing-led growth in Africa. First, besides formal tourism, banking, insurance and finance, the bulk of services employment in Africa is in low-education and low-skills informal activities characterized by low productivity. Second, skills shortages limit the ability of African economies to create, adopt, and adapt the new technologies needed for a services sector that drives sustainable growth. Third, Africa's weak digital infrastructure limits the potential for new technologies to enhance productivity across other sectors. Fourth, the African market for high-quality and high-tech services is still limited and needs to be expanded by growing an educated working and middle class. Fifth, official statistics mostly capture formal activities while missing informal ones, so there are enormous data uncertainties around the exact contribution of services. And, sixth, most African countries are at the early stages of their demographic transition.

Manufacturing and services hold a high potential for spurring growth in employment and productivity increases. However, consideration should be given to adequate sequencing of development strategies by allowing for an initial step during which countries expand education and skills to better enable services to become an engine of growth. Prioritizing services over manufacturing and other labor-absorbing activities could put countries at risk of missing out on manufacturing's potential to spur productivity and create jobs in the whole economy.

## 3.5. Key lessons

The paramount question for Africa is how to reignite rapid economic growth while realizing economic transformation and building resilience. Resetting policy priorities to answer this question will require more than addressing current challenges and opportunities; it also will require learning lessons from past experience. Two of the most critical issues in the context of this study are reviewed here: industrialization and COVID-19.

## ***Industrialization efforts and evolving thought***

The failure of many African countries to pursue labor-intensive manufacturing deepened a colonial legacy rooted in economic dependence on primary commodities and the exploitation of Africa's vast land and natural resources. When governments did embark on manufacturing-led industrialization, they neglected policies needed to stimulate productivity in the agricultural sector and provide stimulus and market linkages for the supply of raw materials to the manufacturing industries. As a result, growth faltered, and manufacturing became a "drag" on the primary sector, using up its export earnings to subsidize uncompetitive and ailing industries. This was contrary to the experience of East Asian economies, where investment in agriculture was used to enhance productivity before the onset of structural transformation.

African countries liberalized their economies at a time when the international trading environment was less favorable to Africa's industrialization agenda. Agricultural subsidies in developed countries discouraged the import of agricultural products from developing countries. This compounded the negative impacts of domestic policies that contributed to the stagnation of Africa's agricultural sector and its failure to provide rising incomes and support to overall economic growth (Schiff and Valdes, 1992). Political instability further created an atmosphere of uncertainty, which encouraged capital flight and "brain drain" of productive youth and discouraged the inflow of foreign capital (Mbakau, 1992). As a result, poverty and inequality increased, slowing progress in human well-being.

Africa's industrialization has also been hampered by the lack of implementation capacity. This is associated with the failure to invest in a competent bureaucracy with strong ethics to ensure good economic governance and effective implementation, resulting in many policy discontinuities and reversals that discouraged private investment (both domestic and foreign).

The failure of industrialization efforts in Africa has partly hinged on policies that promoted either state-led development or private sector development. However, experiences from successful East Asian economies show that strategic partnership between the state and private sector produces the best results for economic transformation. Africa's own experience with public-private partnerships in infrastructure demonstrates the viability of this approach.

Africa also needs to develop industrial policy that caters to continental interests. The relationship between Africa and China has generated benefits for the continent—cheaper imports and improved terms of trade, among others—but it has not helped African countries to diversify their production and export base. It has not advanced technology adoption. And it has not boosted labor-intensive industrialization; rather, it has actually deepened the continent's specialization in exports of primary commodities. There's been another notable drawback. Because of the African Growth and Opportunity Act (AGOA), the African market is used as transshipment hub for China to access the US market for textiles and garments. In this regard, countries that established some domestic production capacity for textiles and garments because of AGOA suffered high competition and displacement from Chinese imports. African governments should consider establishing rules of engagement for foreign direct investment to ensure effective incorporation of substantial local content in the activities of multinationals and avoid foreign competition with local entrepreneurs and small and medium enterprises (SMEs). Ethiopia offers a good example of such an approach.

Historically, industrial policy in Africa has been stigmatized, in large part because of its association with the failed strategies of the post-colonial era and the ideological connotations it carried. Those efforts specialized African economies in the production and export of primary commodities, and later in import-substitution industrialization, with governments often playing a direct role in the

production, administrative allocation, and distribution of goods and services. But, over the last two decades, a modern conceptualization of industrial policy has evolved that goes beyond the ideologies of free market versus government-led economic development.

Ohno et al. (2022) define industrial policy broadly as “any type of intervention or government policy that attempts to improve the business environment or alter the structure of economic activity toward sectors, technologies, or tasks that are expected to offer better prospects for economic growth or societal welfare than would occur in the absence of such intervention.” They further classify industrial policy into horizontal (or functional), aimed at improving the general business environment and promoting specific activities across sectors, and vertical (or selective) aimed at promoting specific activities or sectors.

This new conceptualization frames industrial policy as a key instrument for supporting structural transformation and ensuring inclusive development. Therefore, in a broader sense, industrial policy is not confined to manufacturing but also includes policies aimed at promoting other economic sectors—such as information technology or finance—as well as transforming and modernizing agriculture. Within the industrial sector, for example, computerized technologies have changed the dynamics of manufacturing and led to its globalization. This has changed the scope of industrialization from the mere concept of manufacturing to “servitization,” whereby services, particularly those founded on digitalization, interact and become more supportive to manufacturing and other activities in the economy.

The *Action Plan for Accelerated Industrial Development in Africa*, included in the African Union’s Agenda 2063 blueprint for sustainable growth, says, “No country or region in the world has achieved prosperity and a decent socio-economic life for its citizens without the development of a robust industrial sector.” Indeed, Agenda 2063 places economic transformation as one of the priority goals, emphasizing industrialization and value addition, economic diversification and resilience, and regional industrialization hubs linked to global value chains.

Given renewed interest in Africa’s industrial policy, the opportunity is apparent. The challenge is in finding practical ways to formulate and implement coherent policies around industrialization. More specifically, this includes the process of (i) setting clear industrial strategies supported by effective policy measures; (ii) finding the right mix of vertical and horizontal measures, and getting their sequencing right; and (iii) collaborating between the public and the private sectors.

### **COVID-19 impact and responses**

The COVID-19 pandemic starkly exposed the continent’s structural vulnerabilities to economic shocks. It weakened the education and health systems in most African countries, but its impact was mainly through disrupted linkages with the global economy. A drop in global demand for African commodities slowed transformation progress through a decrease in production and low export performance. Already weak public finances further deteriorated as revenue dropped from contraction of the tax base and disruption in tax collection services. At the same time, public spending had to be increased to support businesses and households coping with the disruption, resulting in high budget deficits. This pushed many African countries into a precarious debt situation and aggravated the condition of those already on an unsustainable debt path. Limited and fragile social protection systems left vulnerable segments of the population to face aggravated socio-economic circumstances, such as increased unemployment. Women were particularly affected given their already disadvantaged socio-economic position in many African societies.

A few important lessons can be derived from Africa's response to COVID-19 to serve as a guide to future development efforts and to help shape the recommendations in this report.

**Stronger systems are needed.** African governments must take seriously the importance of building fiscal buffers and strong social protection systems as a defense against tremendous shocks. Many African governments activated creative mechanisms to support businesses and households to cope with the initial impacts of the pandemic and maintain vital activities, but the scope and scale of such initiatives were limited by funding constraints. And, while a number of governments moved quickly to adopt digital solutions to offset disruptions in both the public and private sectors, and while many of the technologies were already widely available, most African governments did not actively pursue them.

**The digital divide must be addressed.** The pandemic highlighted the potential for technology to aggravate or perpetuate inequities if public policy does not promote corrective measures. The shift to remote learning offers the best example. The vast majority of African children and youth do not have internet access because of low accessibility and affordability. As a result, children from rural areas and poor urban families almost completely missed out on the 2020 and 2021 academic years, while those from the mostly urban middle and upper classes benefited. This digital divide and the inequities that it brought transcended the boundaries of individual countries because of Africa's weak technology infrastructure.

**Collaboration is critical.** Successful collaboration to combat the pandemic underscored the need to accelerate regional integration in Africa, taking the opportunities created by the African Continental Free Trade Area (AfCFTA) to increase local production and intra-Africa trade to mitigate the impact of disruptions in global logistics during future shocks. African governments can lean on regional institutions and act in concert, as they did to develop the initial testing capabilities and, later on, to procure vaccines. The newly established but well-run and versatile Africa Centers for Disease Control and Prevention coordinated with country institutions, such as the Nigerian CDC. The pandemic was also a wake-up call for the type of global collaboration needed to combat other threats, such as climate change.

**Industry must be flexible and adaptive to circumstance.** COVID-19 response efforts made clear the need to develop versatile business and technological ecosystems that match education, innovation, research and development, and production to enable small-scale industries to quickly transform their factories into production centers for essential emergency goods (such as medicines and health equipment) when necessary. This underscores the need to strengthen university-industry partnerships and to invest in scientific parks that can continuously work toward creating the required preparedness.

**Global events are African events.** African governments should be more aware of how global events affect the continent's economies. The initial belief that the collapse of some big banks in North America during the GFC would not affect African economies—because of the continent's relatively weak links with the financial systems of developed economies—was clearly mistaken. Equally, early misconceptions about the possibility of the COVID-19 pandemic having a serious negative impact on African economies were far too prevalent. Understanding the pathways and time lags of shock transmission and responses is critical to effective policy response. It requires strengthening investment in African socio-economic research institutions and establishing mechanisms to capture their findings for policymaking and implementation.

## 4. Policy priorities and recommendations for resilient growth

The research in this report shows that the ability of African economies to withstand shocks—and to recover quickly and strongly from them—is critical to sustained, inclusive growth. In other words, **growth resilience requires economic transformation.**

Therefore, it is imperative that governments, in planning and implementing for the post-COVID-19 era, prioritize policies that promote structural change—and target the dimensions of the Growth with DEPTH framework to accelerate transformation. A new African policy agenda that resets priorities to ensure resilient growth requires a state apparatus that is entrepreneurial, developmental, and delivery oriented.

As African countries make efforts to rebuild their economies from the negative impacts of recent global shocks and make them more resilient to future shocks, they should do the following:

- **Prioritize and promote sector diversification and technology innovations** to enhance cross-sector shifts of resources for higher and mutually reinforcing productivity growth. Such shifts must be supported by well-designed macroeconomic and sectoral policies with broader stakeholder inputs, to build ownership and ensure effective implementation. African governments, the private sector, civil society, academia, and international development partners all must align efforts and objectives.
- **Prioritize and invest in manufacturing and skills development** for more productive alignment with the future of work and economic growth that will increasingly be driven by innovation and technology.
- **Prioritize and commit to greater collaboration** and joint efforts with neighbors to build regional public goods.

The following actions and recommendations are presented as suggested ways to reset policy priorities to promote resilient growth through transformation. They are divided in two categories: (i) general recommendations, and (ii) country classification-related recommendations, which are tailored to countries sharing common characteristics in relation to their current state of economic transformation and growth resilience.

### 4.1. General recommendations

#### 1. Prioritize economic transformation.

- **Focus on policies and initiatives to promote sustainable, inclusive growth** through enhanced economic diversification, export competitiveness, productivity increases, and technology upgrades, all in the pursuit of improved human economic well-being.
- **Encourage the reallocation of investments and labor** to activities with higher relative productivity—such as moving from agriculture to agro-industry, manufacturing, and modern services—to raise economy-wide productivity, generate better jobs, and increase incomes.

## 2. Formulate a modern and coherent industrial policy.

- **Promote context-specific policies** (i.e., macro-fiscal, credit, investment, labor, technology, infrastructure, and monetary policies) to support structural transformation and to efficiently reallocate resources from lower to higher productivity activities.
- **Adopt systematic approaches and methods of industrial policy design**, learning from other countries that have already successfully done so, and mobilize the assistance of dedicated international organizations for support.
- **Strengthen the coordination, management, and financing of key industrial policy organizations** in both the public and private sectors, such as national development banks, investment and export promoting agencies, technical and vocational training institutions, industrial policy coordination units, and a variety of other institutions and agencies. In this regard, governments should prioritize the following:
  - *A support system for manufacturing* to promote strategic labor-intensive manufacturing based on each country's comparative advantage.
  - *A support system for tradable services* to enhance relative productivity growth across the services sectors.
  - *A support system for agriculture* to modernize practices, increase investments in entrepreneurial capabilities, and strengthen supply and value chains.
  - *The capacity of national research systems* to develop knowledge-based agricultural and industrial/manufacturing sectors.

## 3. Coordinate with the private sector.

- **Create strong and effective coordinating systems** to steer government policy implementation in partnership with the private sector, promote mutual accountability, and address market failures, including: (i) apex bodies and forums to promote public-private dialogue and coordination of plans for the provision of public goods; and (ii) inter-industry bodies to address self-selection externalities and parallel investments.
- **Promote long-term investment** by addressing key deterrents, such as policy uncertainty and risk, and developing institutions and organizations of economic governance that support private property rights and the growth of the private sector, in particular SMEs.
- **Ensure participation in global value chains to strengthen resilience and reduce economic vulnerability** to production and logistics shocks, such as those caused by COVID-19, by (i) promoting diversification of suppliers at the firm, country, and regional levels; and (ii) strengthening inter-industry information and coordination networks to promote transparency and the provision of backup logistics and supply options.
- **Promote start-ups** by adopting measures to decrease barriers to entry, simplifying and reducing administrative procedures and red tape, lowering the cost and complexity of product market regulation, and ensuring access to finance.
- **Invest in skills development**, particularly for women, by adopting and implementing programs that strengthen collaboration between education and training establishments and private industry to better align training and education systems to needs of the labor market and enhance work-based learning such as apprenticeships and internships.

#### 4. Invest more in innovation and digital technologies.

- **Strengthen state capacity for collaboration** with research institutions, learning labs, innovation hubs, and the private sector to (i) implement inclusive digital transformation strategies, and (ii) boost industry-relevant digital skills and entrepreneurship, especially among youth and women, to better support start-ups, local SMEs, and foreign firms.
- **Upgrade digital infrastructure and connectivity** to accelerate the transition toward labor-absorbing technologies and productivity-enhancing innovations in manufacturing and services, especially through improvements in telecommunications, electricity, and relevant regulations, such as those concerning data protection, privacy, and security.
- **Promote the digitalization of financial services** to facilitate financial inclusion, especially among women and youth, and to bring informal businesses online, linking them to the formal banking system and nonbanking financial and risk mitigation services.
- **Promote the digitalization of public services and public financial management systems** to improve efficiency, enhance regulatory compliance, and provide citizens and businesses with easy, secure, and trustworthy access (to digital IDs, social service delivery systems, tax payments, and more). Digitalization will also reduce transaction and compliance costs for firms and encourage them to formalize.

#### 5. Pursue fiscal policies that support transformation financing.

- **Set sustainable paths for fiscal balances** to ensure that medium- to long-term government financial operations contribute to generating public and private savings needed to support public investment transformative policies and programs.
- **Establish robust macro-fiscal strategies.**
  - *Minimize the debt service burden* on the economy and crowd in the private sector in the domestic financial markets.
  - *Channel rents from Africa's natural resource endowments* to finance human capital accumulation, technological upgrading, and physical infrastructure.
  - *Establish measures to manage fiscal risks and contingent liabilities*, including those emanating from public-private partnerships and exogenous shocks.
- **Strengthen expenditure and revenue management systems.**
  - *Establish strong systems of planning, approval, and monitoring* of large public investments to ensure close alignment to transformative policies.
  - *Strengthen tax administration and collections*, in particular digitalizing tax collection systems, building on lessons from successful COVID-19 responses.
  - *Strengthen national ownership of expenditure reviews*, which have usually been externally driven, by institutionalizing them as a regular part of annual budget preparation and management.

## 6. Turn climate challenges into economic opportunities.

- **Adopt green economic policies and strategies** at the local, national, regional, and continental levels to accelerate progress toward low-carbon economies and promote renewable energies, waste reduction and valorization, and biodiversity conservation.
- **Adopt realistic energy transition strategies** that ensure African oil and gas resources are used to develop the energy needed to power the expansion of African manufacturing industries and enhance access to affordable electricity for households and communities.
- **Promote climate-smart agriculture**, such as introducing heat-tolerant and drought-resistant crops, to help African farmers increase productivity and improve resilience.
- **Develop, update, and enforce functional industry environmental compliance systems** that are necessary to penetrate and compete in regional and global markets.

## 7. Foster greater regional economic integration.

- **Accelerate the implementation of AfCFTA strategies**, including plans and protocols to ease logistic bottlenecks, facilitate cross-border trade (through tariff and nontariff measures), and develop and enforce environmental and social standards.
- **Promote cross-border collaboration** to address common challenges to providing regional public goods, including transport corridors, digital connectivity, online payment systems, climate adaptation measures, river basin management, and more.

## 8. Reset the political economy of development.

- **Develop a collaborative leadership approach** that is capable of identifying common interests and building coalitions around core national development goals and strategies.
- **Invest in building a competent and merit-based bureaucracy** to boost investor confidence and steer more resources to growth-resilient productive sectors to achieve medium- to long-term impact on economic transformation.
- **Commit to policy consistency** by (i) setting clear objectives around industrial policy, with goals for implementing strategies, monitoring processes, and evaluating outcomes; (ii) avoiding policy reversals related to political cycles; and (iii) encouraging investors to make long-term, transformative investments. Governments should commit in particular to policy stability around taxes, finance, land, and support systems.



## 4.2. Classification-related recommendations

The following recommendations are tailored to economies sharing common characteristics along dimensions of transformation, resilience, and vulnerability. These classifications are complementary to other classifications relevant for policymaking, such as income level and dependency on natural resource rents. Based on the statistical clustering analysis, countries are grouped in three performance categories—high, medium, and low clusters—using measures of economic transformation (per ATI results), resilience (growth resilience), and vulnerability.

CLUSTERS	COUNTRIES	RECOMMENDATIONS
<b>HIGH</b> economic transformers	<i>Tunisia</i> <i>Eswatini</i> <i>South Africa</i> <i>Morocco</i> <i>Mauritius</i> <i>Lesotho</i> <i>Namibia</i>	<p>These countries scored the best across all the DEPTH dimensions and are more growth resilient. They suffer the least loss in growth when negatively impacted by a shock. They are the least vulnerable because they have policies in place that help reduce their vulnerability.</p> <p>They can further improve their transformation outcomes by focusing on policies that accomplish the following:</p> <ul style="list-style-type: none"> <li>● Improve human economic well-being and productivity growth by promoting structural shifts into higher productivity sectors.</li> <li>● Enhance proximity to external markets through regional integration and alignment of national policies to AfCFTA policies to lower trade and nontrade barriers and enhance competitiveness.</li> <li>● Promote product diversification within subsectors to improve export competitiveness.</li> </ul>
<b>MIDDLE</b> economic transformers	<i>Egypt</i> <i>Gabon</i> <i>Botswana</i> <i>Algeria</i> <i>Sudan</i>	<p>These countries scored above average on productivity and human well-being but worse on diversification, export competitiveness, and technology upgrading. They also suffer mild growth loss when negatively impacted by a shock.</p> <p>They can improve their transformation outcomes by focusing on policies that accomplish the following:</p> <ul style="list-style-type: none"> <li>● Improve economic diversification of production and exports.</li> <li>● Increase nonextractive exports to improve export competitiveness.</li> <li>● Invest in technology upgrading and skills development to facilitate structural change in labor productivity growth.</li> <li>● Diversify within subsectors to lower export instability.</li> <li>● Reduce vulnerabilities intrinsic to the agriculture sector.</li> </ul>

CLUSTERS	COUNTRIES	RECOMMENDATIONS
<b>LOW</b> economic transformers	<p><i>Senegal</i></p> <p><i>Congo Republic</i></p> <p><i>Kenya</i></p> <p><i>Nigeria</i></p> <p><i>Côte d'Ivoire</i></p> <p><i>Central African Republic</i></p> <p><i>Zambia</i></p> <p><i>Uganda</i></p> <p><i>Cameroon</i></p> <p><i>Tanzania</i></p> <p><i>Ghana</i></p> <p><i>Madagascar</i></p> <p><i>Niger</i></p> <p><i>Malawi</i></p> <p><i>Rwanda</i></p> <p><i>Ethiopia</i></p> <p><i>Gambia</i></p> <p><i>Mozambique</i></p> <p><i>Benin</i></p> <p><i>Burundi</i></p> <p><i>Burkina Faso</i></p>	<p>These countries scored the lowest across all the DEPTH dimensions. They are the least growth resilient and suffered the deepest growth loss when negatively impacted by shocks.</p> <p>They can improve their resilience outcomes by focusing on policies that accomplish the following:</p> <ul style="list-style-type: none"> <li>● Improve labor market rigidities to help transition labor into higher productivity activities such as manufacturing and tradable services.</li> <li>● Diversify economies from their narrow production base and promote nonextractive and nontraditional exports to improve competitiveness and build growth resilience.</li> <li>● Improve human economic well-being by expanding formal sector employment, increasing female labor market participation in paid employment, and increasing shared economic prosperity.</li> <li>● Invest in technology upgrading and skills development to increase the share of medium- and high-technology intensive manufactures in production and exports.</li> <li>● Diversify within subsectors to lower export instability.</li> <li>● Reduce vulnerabilities intrinsic to the agriculture sector.</li> </ul>

*\*Countries are ordered by rank within their clusters, based on ATI score*

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# Appendix A. Africa's economy-wide productivity growth

The growth in economy-wide labor productivity can be divided into two components. The “within-sector” component accounts for growth of economy-wide labor productivity resulting from growth in sector labor productivity given the proportions of labor resources between sectors, relative to total employment in the economy. The “structural” component (i.e., “between-sector” component) accounts for the effect of changes in the proportions of labor employed in different sectors. This component captures the increase (or decrease) in economy-wide labor productivity due to a shift of labor from low- (or high-) productivity sectors into higher- (or lower-) productivity sectors, even if the prevailing levels within sector productivity themselves do not change (McMillan and Rodrik 2011; De Vries et al. 2015; McMillan et al., 2017; Diao, et al., 2019; Hailu et al., 2020).

The decomposition of aggregate labor productivity into within-sector and structural components is achieved using the following specification:

$$\Delta P_t = \sum_{i=n} \theta_{i,t-k} \Delta P_{i,t} + \sum_{i=n} p_{i,t} \Delta \theta_{i,t}$$

where  $P_t$  and  $P_{i,t}$  are economy-wide and sector productivity, respectively, and  $\theta_{i,t}$  is employment in sector  $i$ .

## Data source

The study uses data on value added by economic activity (at current prices in US dollars) from the United Nations national accounts database. The annual employment (in thousands) data is extracted from the International Labour Organization. The study employs data for 54 African countries over the period 1991–2019, unless otherwise stated.

## Steps in the analytical process

- **Step 1:** Deflate the value added by economic activity data to constant prices (2010) using GDP deflator from World Development Indicators.
- **Step 2:** Reclassify the economic sectors into four broad sectors: Agriculture, Manufacturing, Services, and Others.
- **Step 3:** Interpolate or extrapolate missing data points.
- **Step 4:** By each year, generate the summation of the results for Africa and drop duplicate years.
- **Step 5:** Generate labor productivity (output per worker), output shares in total value added, and the employment share in total employment.
- **Step 6:** Calculate the annualized growth rate in labor productivity, the sector shares in total employment at initial and ending periods, and the change in sector share in total employment for the aggregate sectors.

- **Step 7:** Calculate the within-sector productivity, which is the multiplication of the sector shares in total employment and annualized growth in labor productivity.
- **Step 8:** Calculate the structural change (between), which is the difference between the annualized labor productivity growth and within-sector productivity growth.

### ***Countries included in the analysis***

Algeria, Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Cape Verde, Central African Republic, Chad, Comoros, Congo Republic, Côte d'Ivoire, Democratic Republic of Congo, Djibouti, Eswatini, Eritrea, Equatorial Guinea, Ethiopia, Gabon, Gambia, Ghana, Egypt, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Libya, Madagascar, Malawi, Mali, Mauritania, Mauritius, Morocco, Mozambique, Namibia, Niger, Nigeria, Rwanda, São Tomé and Príncipe, Senegal, Seychelles, Sierra Leone, Somalia, South Africa, South Sudan, Sudan, Tanzania, Togo, Tunisia, Uganda, Zambia, and Zimbabwe.

## Appendix B. Growth resilience calculations

The analytical process for growth resilience in this study builds on the works of Hausman et al. (2005); and Gruss et al. (2018).

### *Data source*

The study uses the annual per capita GDP (in purchasing power parity–US dollars) from World Development Indicators 2021. The data is linearized by taking natural logarithms. Annualized growth rate is then computed as the first difference of consecutive years. The result is then smoothed using three-year centered moving averages to avoid excessive variability. Unless otherwise indicated, the value for 2006, for example, is the average value for the period 2005–07.

### *Steps in the analytical process*

- **Step 1:** Find the three-year centered moving average of the per capita GDP growth at the year just before the onset of the Global Financial Crisis, or GFC (2006).
- **Step 2:** Find the year of the onset of the crisis after the GFC. This is the year in which the annualized per capita growth rate falls below the three-year centered moving average growth rate observed at the year just before the onset of the GFC in 2006 by 1.5 percentage points. The year of the onset of each country's crisis after the GFC is called the "buckle time."

**Note:** For countries where this is zero, it means that they fell below immediately in the year of the onset of the GFC.

- **Step 3:** For each country, determine the extent of the growth loss at buckle time. This is the year on or after the onset of the GFC (i.e., in 2007 or after) when for the first time the country's annualized per capita GDP was below the three-year centered moving average.

**Note:** The growth loss at buckle time is the difference between the three-year centered moving average growth rate (smoothed per capita GDP growth) just before the onset of the GFC (2006) and the annualized growth rate at the buckle time (on or after 2007).



# **Transforming and Building Resilient Economies in Africa: Resetting Priorities for the Policy Agenda in the Post-COVID-19 Era**

**August 2022**

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# AFRICA AFTER COVID-19: RESETTING POLICY PRIORITIES FOR RESILIENT GROWTH THROUGH ECONOMIC TRANSFORMATION



**EXECUTIVE POLICY BRIEF**  
**AUGUST 2022**

Economic  
Management 

This policy brief is derived from the August 2022 study, *Transforming and Building Resilient Economies in Africa: Resetting Priorities for the Policy Agenda in the Post-COVID-19 Era*, produced by ACET and facilitated by the Japan International Cooperation Agency (JICA).

# I. Overview

## Why reset priorities for Africa's policy agenda?

Given today's global economy, geopolitics, and shifting trends, the policy approaches in most African countries are not sufficient to ensure the continent's long-term development or enable countries to withstand shocks—as the severe impacts of the COVID-19 pandemic proved. Several other facts concerning Africa's present reality underscore the need for a shift in policy priorities.

**Growth has not been sustained.** Over the last two decades, Africa has accelerated its pursuit of sustainable, inclusive, and equitable development. While gains were made, growth buckled under the impact of the 2007-2008 Global Financial Crisis (GFC) and the end of the commodities boom, or “super cycle,” in 2014-2015. The historical structural weaknesses of African economies resurfaced—underscoring the lack of progress on economic transformation.

**Development targets are off track.** After most countries fell short of expectations for the landmark Millennium Development Goals (MDGs), UN member states adopted the Sustainable Development Goals (SDGs) in September 2015. The 17 SDGs were notable for underpinning poverty reduction goals with economic transformation strategies. However, as UN Secretary-General António Guterres stated in 2021, the SDGs “were already off track even before COVID-19 emerged. Progress had been made ... but not enough to achieve the goals by 2030.”

**Unfolding “megatrends” pose long-term challenges.** Ultimately, the success or failure of African countries to transform depends on how governments respond to an increasing number of critical challenges that transcend borders: climate change, population growth and demographic transition, a surge in technological innovations, and of course the COVID-19 pandemic and its aftermath. These megatrends must be faced against the background of increasing global policy isolationism, trade barriers, social inequality and insecurity, and more.

Despite the blueprint for development successes provided by the “Asian tigers” in the 20th century, Africa still finds it hard to move past its reliance on primary commodity production and export with minimum value addition. Moreover, the growing reliance on natural resource extraction reinforces the jobless growth that has characterized past development efforts and makes it difficult to build productive capacity of domestic firms or to expand employment in manufacturing. Focusing on these patterns of growth leaves African economies vulnerable to external shocks like COVID-19 that easily reverse gains made prior to their occurrence.

**As countries look to recover and rebuild from the pandemic, the urgency to prioritize policies that will promote resilient growth through economic transformation is apparent.**

## II. Analysis: The link between economic transformation and growth resilience

In the economic context, resilience refers to a country's ability to withstand and quickly recover from a shock. Resilient economies stand as a defense against significant and persistent negative effects on income and employment, reducing growth volatility and more capably promoting positive social outcomes. By contrast, economies that are not resilient can experience deep and persistent downturns that can negatively affect their long-term growth and social cohesion. When growth falls, and private incomes and public revenues also fall or stagnate, economic actors—public and private alike—are not able to save and invest at the same rate. As this happens, there are fewer transformative initiatives and projects than there would be otherwise. Then transformation stalls or regresses, leading back to even lower resilience.

**Economic transformation—involving structural change that occurs when resources are channeled from lower to higher productivity activities in the economy—is critical to building growth resilience.**

### Growth with DEPTH, and why it matters

Resetting priorities for Africa's policy agenda in a post-COVID-19 environment is rooted in the understanding of economic transformation as "Growth with DEPTH," which is shorthand for **D**iversification, **E**xport competitiveness, **P**roductivity increases, and **T**echnological upgrading, all in support of improving **H**uman well-being, especially through better jobs and livelihoods. The African Center for Economic Transformation (ACET) developed the Growth with DEPTH framework to identify pathways for African countries to pursue a transformation agenda, together with the African Transformation Index (ATI) as a measurement tool for progress. The ATI tracks indicators of the five dimensions of the DEPTH framework.

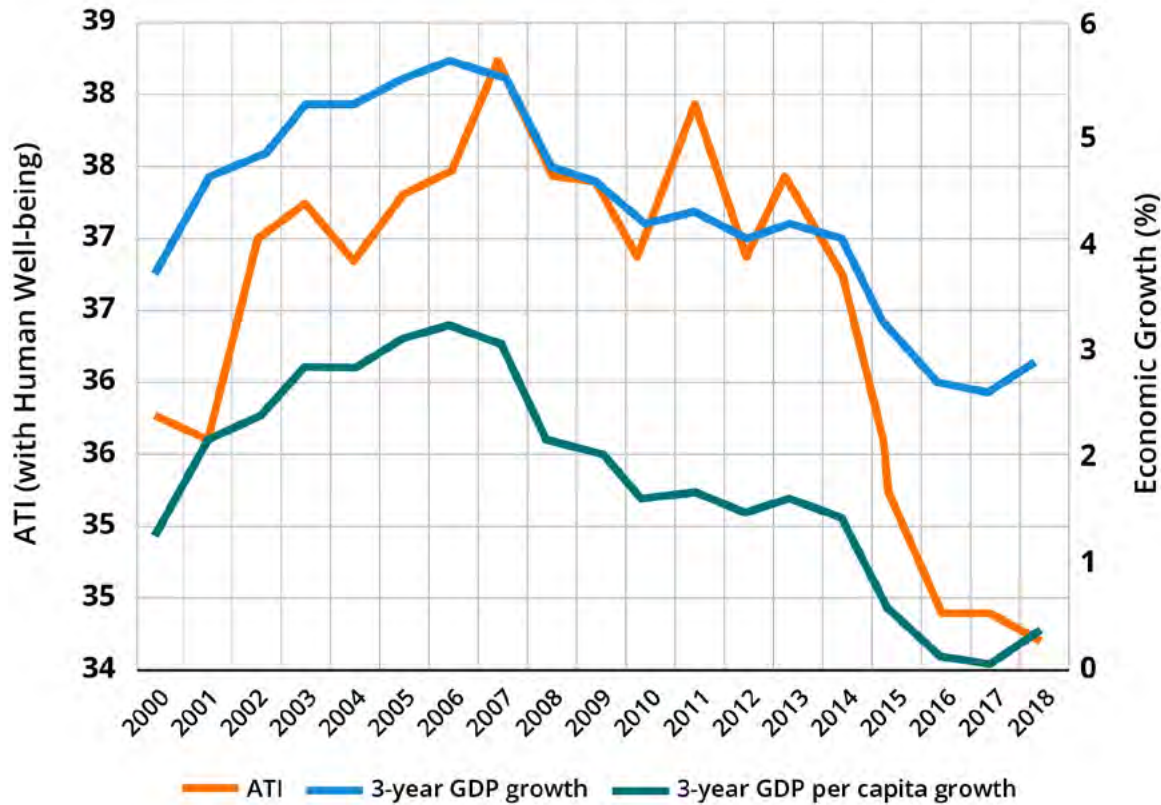
- Diversification of production and exports measures capacity to produce and export a broad array of goods and services.
- Export competitiveness measures the share of nonextractive exports in country GDP as the ratio of the share of global nonextractive exports in global GDP.
- Labor productivity measures the value added per unit of labor.
- Technology upgrading measures the medium- and high-technology content in manufactured goods and services.
- And human well-being measures economic and social outcomes and enablers in terms of incomes and equality, employment, and female participation in formal labor markets.

As stated, most of the gains from Africa's recent periods of growth have been lost, underscoring the DEPTH premise that **growth alone is not enough for sustainable development.**

For example, during the first decade of the 2000s, Africa experienced growth acceleration different from the past; it lasted longer and was more widespread, with six of the world's ten fastest-growing economies being in Sub-Saharan Africa (Angola, Chad, Ethiopia, Mozambique, Nigeria, and Rwanda). But by 2016-2018, after the GFC and commodities boom, Africa's aggregate GDP growth was almost half what it was a decade before, coming to a virtual standstill in per capita terms (Figure 1, right scale).

Africa's growth accelerations and collapses are closely associated with transformation outcomes, which have been weak. Aggregate ATI scores are less than 40 in a range of 0–100 (Figure 1, left scale) even at peak performance in 2007, with a sharper decline since 2014–2015.

**Figure 1. Aggregate GDP growth and economic transformation, 2000–2019 (ATI countries)**



Source: ACET, ATI 2022. Calculations based on data from various international datasets incorporated in the ATI dataset, including World Bank World Development Indicators, UNIDO, ILO, COMTRADE.

Note: Thirty-three African countries comprise the ATI. These countries produced 89 percent of Africa's total GDP in 2019. The aggregate ATI is a weighted average of individual country three-year centered scores, where the weights are country shares in the total GDP of the 33 ATI countries.

Many factors contributed to this decline, including weak productivity growth in agriculture and services, lack of diversification of the production base, and the slow growth in manufacturing. Overall, African economies were growing mostly from increased resource extraction, better terms of trade, and external demand for primary commodities. Countries were not making progress in establishing new activities to produce and export more varied goods and services. They were also failing to capture increasing shares in the external markets in which they participated, especially in the nonextractive commodity markets. They commanded low labor productivity and failed to sufficiently upgrade technologies for products and exports with higher value added. Economic well-being also suffered, as employment and incomes stagnated or declined, and progress against income inequality was halted or reversed.

**Even as African economies grew, they did not grow with DEPTH.**

## Better transformation outcomes lead to greater growth resilience

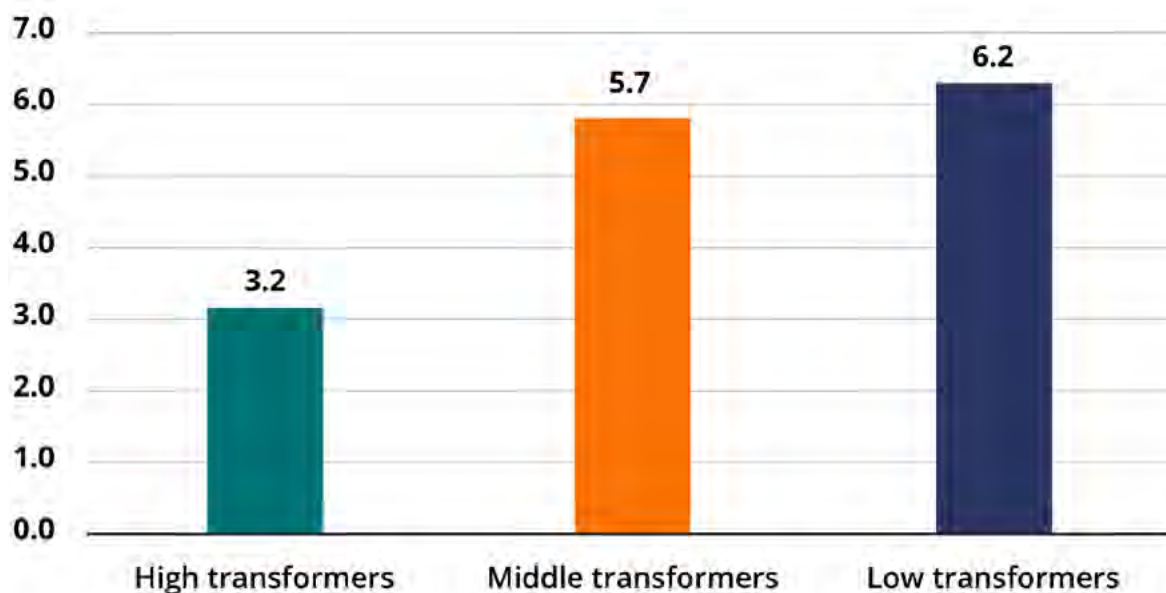
The prolonged, and at times sharp, reversals in growth reveal the weak resilience of African economies. Economies with production and trade concentrated on a small number of goods and services are most likely to suffer sudden and sharp declines in their total output when any one of those activities is negatively affected by a shock. Economies that participate relatively less in world exports than they participate in world output are unlikely to take good advantage of the growth of the global economy as they tend to produce low-value goods and services. High and growing labor productivity is the basis for high and growing incomes, which are in turn a source for transformative investments and consumption that are necessary to build the technological and human capabilities that make economies strong and resilient.

Focusing on growth resilience, ACET research shows that countries generally fall into three categories: high, middle, and low economic transformers. GDP per capita growth loss following the GFC was greatest in countries that had weak transformation outcomes. In fact, the growth losses suffered by low economic transformers are double those suffered by high economic transformers (Figure 2).

Of the 33 country economies included in the ATI, all but two suffered a reduction in growth, or buckled, following the GFC. Among those 31 economies, twelve recovered to pre-buckle growth in the first year, five recovered after two years, and seven took between three and four years to recover. The remaining seven failed to recover to their prebuckle growth rate in the period captured in the ATI dataset (through 2019). The two countries that did not buckle were Cameroon and Mauritius.

In fact, Mauritius is the only country whose growth rate remained consistently the same throughout the two decades. It is also the first—and only—African country to graduate to high-income status, which it did in 2019, according to World Bank classifications. (Due to the impact of COVID-19, Mauritius slipped back into upper middle-income status in 2021.)

**Figure 2. Average growth loss at “buckle time” among ATI countries (percent)**



Source: ATI, 2022.

**Building resilient economies must be a priority for African countries given their exposure to increasingly frequent and devastating shocks** from world markets, natural disasters, environmental hazards, and health-related crises. Shocks may take time to show their full impact, but they have lasting effects on economies and societies in general.

## The untapped potential of structural change

Africa's population is a little over 1.3 billion and is projected to reach 1.9 billion in 2035 and 2.5 billion in 2050. This large and youthful workforce will be instrumental to Africa's structural transformation—if workers are successfully absorbed into labor-intensive and productive sectors. A distinguishing feature of Africa's growth over the last two decades is that services and agriculture led it, contributing 43 and 40 percent, respectively, to economy-wide labor productivity growth. By contrast, manufacturing contributed only 15 percent.

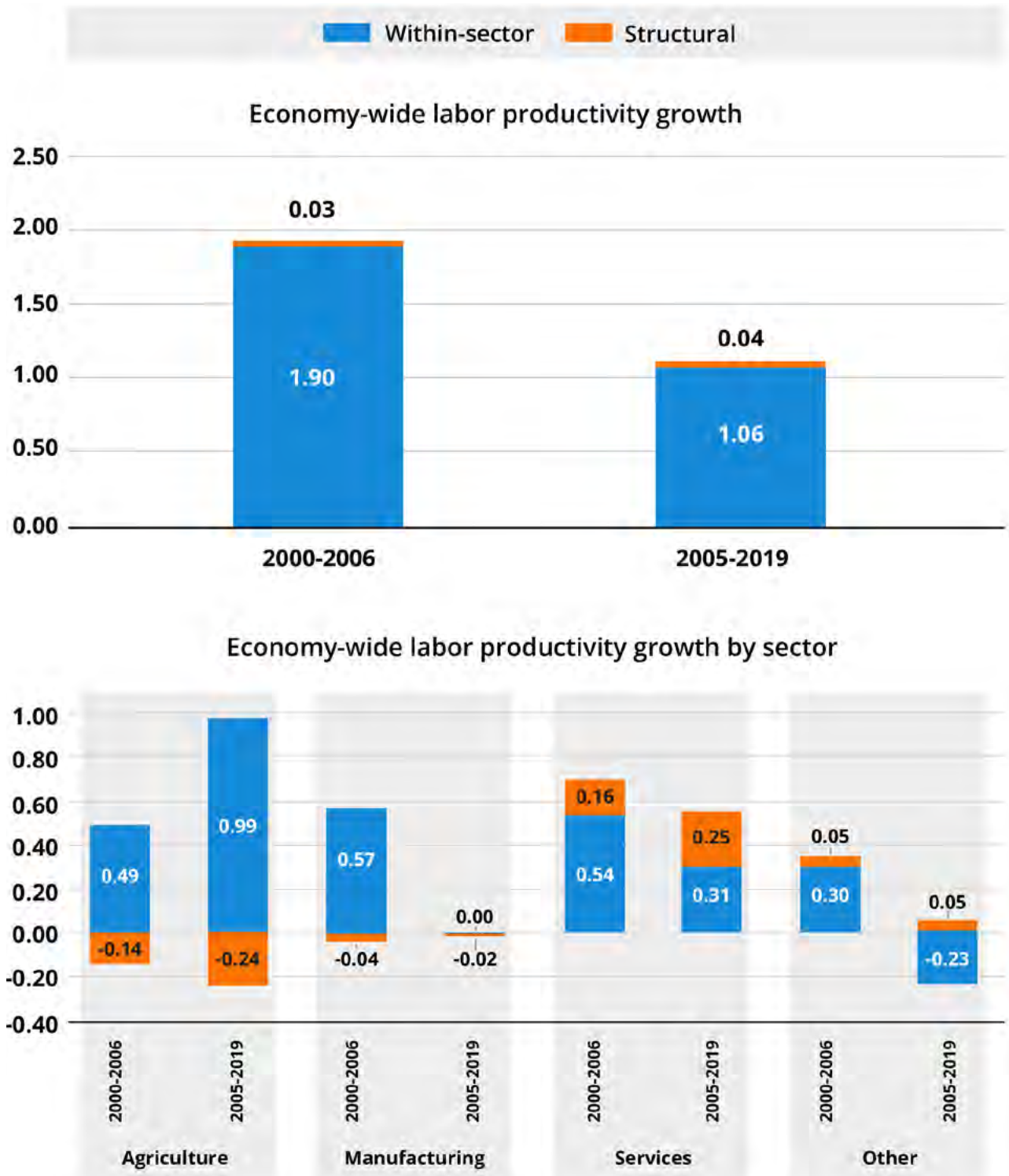
Economy-wide labor productivity in Africa increased from US\$4,347.75 per worker in 1991 to US\$5,654.76 per worker in 2019. Output per worker grew by an average of 1.47 percent annually compared to an average 2.41 percent in certain comparator countries (Brazil, Chile, Indonesia, Malaysia, Pakistan, South Korea, Singapore, Thailand, and Vietnam) over the period 2001-2019. Africa's labor productivity gap relative to these early transforming countries also widened during the same period.

In Africa, poor productivity performance and reversals in growth and transformation have taken place in a context of limited structural change. This is because virtually all gains to economy-wide labor productivity between 2000 and 2019 were attributed to the “within-sector” component—the growth in labor productivity of a sector, given that sector's share of total employment—versus the “structural” (or “between-sector”) component—the movement of labor from low- to high-productivity activities (Figure 3).

Indeed, the structural component has made very little contribution to Africa's economy-wide labor productivity. Modest growth came mainly from services and a few other sectors, primarily mining, utilities, and construction. Critical sectors such as agriculture and manufacturing have made negative or almost no contribution. This has significant ramifications for jobs. Between 1996 and 2018, labor employment (in percentage shares of total economy employment) moved from agriculture and manufacturing mostly to services and the “other” sectors noted above. As a result, countries are missing out on the potential growth-enhancing structural contributions to economy-wide productivity that manufacturing would provide if labor were moving faster into this sector than into services (Figure 4).

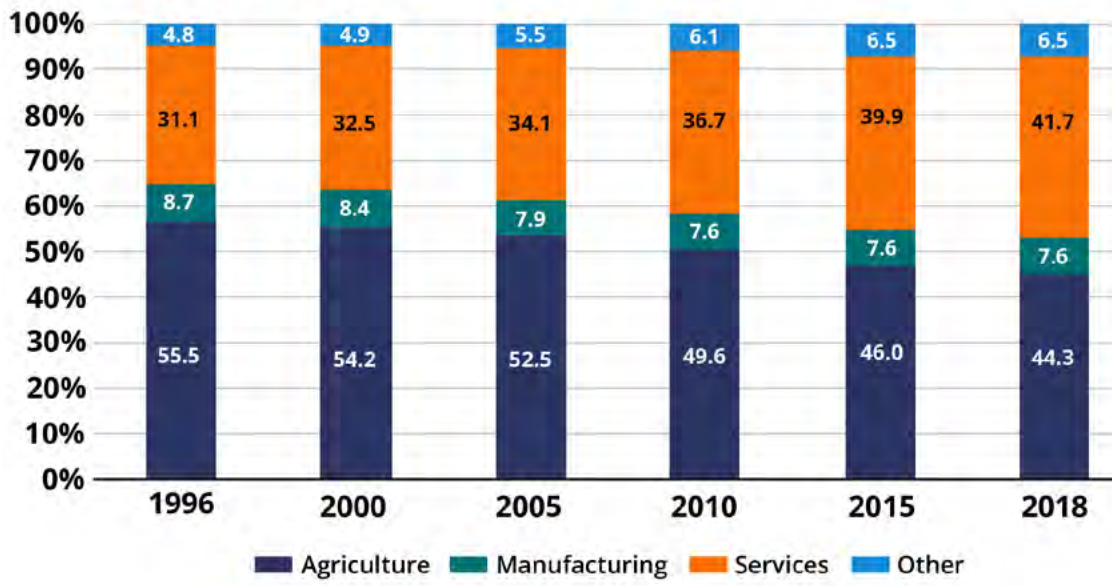
**The failure of Africa to develop a strong manufacturing sector is a critical limiting factor of economy-wide labor productivity growth—and in turn, economic transformation.** This adds to other disadvantages such as the inability of the economies to expand job opportunities for the bulging youth population. The absence of a robust African manufacturing sector also limits the reliable supply of industrial inputs and implements to other sectors, such as agriculture and the rural economy at large, at volumes and costs to enhance productivity and profitability.

**Figure 3. Within-sector vs. structural component gains in Africa (percent)**



Source: Results of “shift analysis” computed by the authors using UNdata and ILO data sets.

**Figure 4. Sector labor shares in Africa, 1996-2018 (percent)**



Source: Computed by the authors using UNdata and ILO data sets.



# III. Policy challenges and opportunities

The paramount challenge for Africa is how to reignite rapid economic growth while realizing economic transformation and building growth resilience. Given current global realities—and the poor progress toward achieving the SDGs—solutions will require rethinking key pillars of the policy agenda to overcome negative trends, such as Africa losing the labor productivity race to comparators. That said, **Africa can advance growth resilience by turning some of its most pressing challenges into development opportunities.** Starting with more modern and coherent industrial policies, African nations must address numerous megatrends with informed policy and bold action. In the context of building post-COVID-19 resilience, the most relevant ones include climate change and resource stress, population growth and urbanization, shifting trade and production patterns, technology and innovation adoption, and the enhanced need for economic integration and collaboration.

## Embracing a new approach to industrial policy

Africa's recent economic growth and transformation outcomes bear the scars of poor policy decisions in both the pre- and post-independence eras. Economies were initially directed to specialize in the production and export of primary commodities, with a subsequent focus on import-substitution industrialization. Governments often played a direct role in the production, allocation, and distribution of goods and services. This industrialization strategy largely failed, hindering the ability of governments to promote manufacturing as a key engine of growth.

Over the last two decades, however, a more modern conceptualization of industrial policy has evolved. Countries in Latin America and Asia (primarily Brazil, Chile, Indonesia, Malaysia, South Korea, Singapore, Thailand, Vietnam, and China) have created successful industries with state funding through development banks that were competently managed and supported by scientific advancement and technological innovations. Industries operated under some aspects of state direction—trade, monetary, and exchange rate policies, for example—but also with a respect for private property rights, free markets, and regulated competition. Such public-private partnership and collaboration helped prevent market failures, fostering transformation.

Based on these developing country successes, as well as new strands of economic thinking and discourse, African countries have moved toward a new approach to industrialization, embracing the view of industrial policy as any government action that (i) promotes the reallocation of resources within and between sectors; (ii) embraces technology; and (iii) supports increased productivity and sustained growth.

**This new conceptualization frames industrial policy as a key instrument for supporting structural transformation and ensuring inclusive development.** Therefore, in a broader sense, industrial policy is not confined to manufacturing but also includes policies aimed at promoting other economic sectors—such as information technology or finance—as well as transforming and modernizing agriculture. Within the industrial sector, for example, computerized technologies have changed the dynamics of manufacturing and led to its globalization. This has changed the scope of industrialization from the mere concept of manufacturing to “servitization” whereby services, in particular those founded on digitalization, interact and become more supportive to manufacturing and other activities in the economy.

The *Action Plan for Accelerated Industrial Development in Africa*, included in the African Union's Agenda 2063 blueprint for sustainable growth, says, "No country or region in the world has achieved prosperity and a decent socio-economic life for its citizens without the development of a robust industrial sector." Given renewed interest in Africa's industrial policy, the opportunity is apparent. The challenge is on formulating and implementing coherent—and practical—policies. The solution starts by setting clear industrial strategies, finding the right mix of measures and getting their sequencing right, and collaborating with the private sector.

## Tackling the megatrends that will shape future outcomes

Over the last 20-30 years, the world has experienced an increase in the intensity of some global and regional developments with far-reaching implications for growth and transformation in Africa. Addressing the challenges associated with these issues—and embracing the opportunities that they also bring—will go a long way in determining whether African economies transform. As such, understanding their impacts is crucial to resetting policy priorities in a way that will ensure growth resilience.

**Climate change and resource stress.** Climate change creates enormous challenges to the development of agricultural and food systems, logistics and infrastructure, and heightens the financing needs of African governments. As Africa develops, resources tend to be over-exploited in a manner that has negative environmental impact, especially through major economic activities such as agriculture, energy production, and mining. These activities, alongside high population growth, lead to an array of socio-economic challenges, including high resource consumption, diseases, unplanned urbanization, impoverishment, and growing inequality. Still, climate change opens opportunities for growth, including through investment in more resilient and green infrastructure to build low-carbon economies and boost renewable energy sources, and through investment in the blue economy for less water pollution, healthier marine life, and better coastal livelihoods. Greater climate financing will be critical.

**Population growth and urbanization.** Africa already boasts one of the world's largest and youngest workforces, a comparative advantage that will only increase. Thanks to rising incomes and slowing labor supply growth, manufacturing wages in other countries are increasing. Africa stands to gain with a chance to become the world's main workforce, but only if the supply of skills meets the demand of industry—placing great importance on public-private collaboration for improved education and skills training that align to labor market needs. Africa's growing urban centers will offer opportunities for modern infrastructure and give rise to a new middle class, leading to potential shifts toward more high-value consumer goods and services. For example, greater demand for digital and mobile services will yield technology upgrades and productivity increases. If well managed, population growth and urbanization can aid economic transformation by creating positive agglomeration effects and access to skilled populations.

**Shifting trade and production patterns.** Regional and global value chains are reshaping global trade and production, offering African firms new opportunities to acquire specific skills and expand production of medium- and high-technology goods without creating entire industries, while reaping economies of scale. But challenges are abundant, starting with the emerging competitors to Africa's manufacturing ambitions—countries like Indonesia and the Philippines (for machines) or Thailand and Vietnam (for apparel). Domestic firms also face difficulties in meeting standards and operating in poor business environments lacking infrastructure, human capital, and networks. Limited backward and forward linkages in domestic economies present another challenge, creating incentives for

efficiency-seeking investments to go elsewhere. These constraints increase the risk of African firms becoming trapped in low-value-added segments of the value chains, with little opportunity for innovation or technology transfer.

**Technology and innovation.** New technologies are critical to productivity growth in farming, manufacturing, and services, and for acquiring modern knowledge capital—a building block for transforming countries. Occupations likely to include digital tasks—from the simple use of the internet to complex programming—have increased over the last decade (by 18 percent in Kenya and 26 percent in South Africa). Tech hubs and electronic platforms are spreading, and technology investments have helped to narrow gaps in financial access, management, and inclusion. The major challenge to speeding up and expanding digitalization in Africa is accessibility and affordability—Sub-Saharan Africa is one of the least connected regions of the world. Only 30 percent of individuals used the internet in 2020 compared to a global average of 60 percent, per the World Bank. And while expanding access is critical, access alone is not enough. Hundreds of millions will need skills training to capitalize on technology opportunities.

**Regional integration.** Most African markets are small and not diversified, which has a direct bearing on trade volume. These countries cannot generate enough high-quality export, nor can they attract significant foreign investment. Low value addition in products and the lack of intra-African trade limit the growth of regional production networks. Deeper regional integration, therefore, is a viable route to resilient growth by enabling governments and all economic actors to collectively address common challenges that constrain both national development and global competitiveness. In particular, the African Continental Free Trade Area (AfCFTA) offers growth opportunities through expanded markets for small and medium enterprises (SMEs) and job opportunities for the growing labor force. For example, as long as migration policies and educational systems are aligned to the aims of the AfCFTA, labor mobility can benefit both workers and firms by pooling and sharing skills and employment opportunities.

## Key lessons from COVID-19

The COVID-19 pandemic starkly exposed Africa's structural vulnerabilities to economic shocks. As leaders look toward policies to spur recovery and foster more resilient growth, a few key lessons can be derived to help inform the process, as well as the recommendations in this brief.

**Stronger systems are needed.** African governments must take seriously the importance of building fiscal buffers and strong social protection systems that can help their societies cope with tremendous shocks. Many African governments activated creative mechanisms to support businesses and households to cope with the initial impacts of the pandemic and maintain vital activities, but the scope and scale of such initiatives were limited by funding constraints.

**The digital divide must be addressed.** The pandemic highlighted the potential for technology to aggravate or perpetuate inequities if public policy does not promote corrective measures; the shift to remote learning and unequal access offers the best example. The divide transcends the boundaries of individual countries due to Africa's weak technology infrastructure.

**Collaboration is critical.** Successful collaboration to combat the pandemic underscored the need to accelerate regional integration in Africa, taking the opportunities created by the AfCFTA to increase local production and intra-Africa trade to mitigate the impact of disruptions in global logistics during future shocks. The pandemic was also a wake-up call for the type of global collaboration needed to combat other threats, such as climate change.

# IV. Policy priorities and recommendations

As highlighted, the research shows that the ability of African economies to withstand shocks—and to quickly and strongly recover from them—is critical to sustained, inclusive growth. In other words, **growth resilience requires economic transformation**. Therefore, it is imperative that governments, in planning and implementing for the post-COVID-19 era, prioritize policies that promote structural change—and target the dimensions of the Growth with DEPTH framework to accelerate transformation.

**A new African policy agenda that resets priorities to ensure resilient growth is more than an aspiration. It is a call to action.** Effective implementation of such a policy agenda requires a state apparatus that is entrepreneurial, developmental, and delivery oriented.

The following actions and recommendations are presented as suggested ways to reset policy priorities to promote resilient growth through transformation. They are divided in two categories: (i) general recommendations and (ii) country classification-related recommendations, which are tailored to countries sharing common characteristics in relation to their current state of economic transformation and growth resilience.

## General recommendations

### 1. Prioritize economic transformation.

- **Focus on policies and initiatives to promote sustainable, inclusive growth** through enhanced economic diversification, export competitiveness, productivity increases, and technology upgrades, all in the pursuit of improved human economic well-being.
- **Encourage the reallocation of investments and labor** to higher relative productivity activities—such as moving from agriculture to agro-industry, manufacturing, and modern services—to raise economy-wide productivity, generate better jobs, and increase incomes.

### 2. Formulate a modern and coherent industrial policy.

- **Promote context-specific policies** (i.e., macro-fiscal, credit, investment, labor, technology, infrastructure, and monetary policies) to support structural transformation and to efficiently reallocate resources from lower to higher productivity activities.
- **Adopt systematic approaches and methods of industrial policy design**, learning from other countries that have already successfully done so, and mobilize the assistance of dedicated international organizations for support.
- **Strengthen the coordination, management, and financing of key industrial policy organizations** in both the public and private sectors, such as national development banks, investment and export promoting agencies, technical and vocational training institutions, industrial policy coordination units, and a variety of other institutions and agencies. In this regard, governments should prioritize:
  - *A support system for manufacturing* to promote strategic labor-intensive manufacturing based on each country's comparative advantage.

- *A support system for tradable services* to enhance relative productivity growth across the services sectors.
- *A support system for agriculture* to modernize practices, increase investments in entrepreneurial capabilities, and strengthen supply and value chains.
- *Invest in the capacity of national research systems* to expand research and development, as well as extension services needed to develop knowledge-based agricultural and industrial/manufacturing sectors.

### 3. Coordinate with the private sector.

- **Create strong and effective coordinating systems** to steer government policy implementation in partnership with the private sector, promote mutual accountability, and address market failures, including: (i) apex bodies and forums to promote public-private dialogue and coordination of plans for the provision of public goods; and (ii) inter-industry bodies to address self-selection externalities and parallel investments.
- **Promote long-term investment** by addressing key deterrents, such as policy uncertainty and risk, and developing institutions and organizations of economic governance that support private property rights and the growth of the private sector, in particular SMEs.
- **Ensure participation in global value chains to strengthen resilience and reduce economic vulnerability** to production and logistics shocks, such as those caused by COVID-19, by (i) promoting diversification of suppliers at the firm, country, and regional levels; and (ii) strengthening inter-industry information and coordination networks to promote transparency and the provision of backup logistics and supply options.
- **Promote start-ups** by adopting measures to decrease barriers to entry, simplifying and reducing administrative procedures and red tape, lowering the cost and complexity of product market regulation, and ensuring access to finance.
- **Invest in skills development**, particularly for women, by adopting and implementing programs that strengthen collaboration between education and training establishments and private industry to better align training and education systems to needs of the labor market and enhance work-based learning such as apprenticeships and internships.

### 4. Invest more in innovation and digital technologies.

- **Strengthen state capacity for collaboration** with research institutions, learning labs, innovation hubs, and the private sector to (i) implement inclusive digital transformation strategies, and (ii) boost industry-relevant digital skills and entrepreneurship, especially among youth and women, to better support start-ups, local SMEs, and foreign firms.
- **Upgrade digital infrastructure and connectivity** to accelerate the transition toward labor-absorbing technologies and productivity-enhancing innovations in manufacturing and services, especially through improvements in telecommunications, electricity, and relevant regulations, such as those concerning data protection, privacy, and security.
- **Promote the digitalization of financial services** to facilitate financial inclusion, especially among women and youth, and to bring informal businesses online, linking them to the formal banking system and nonbanking financial and risk mitigation services.

- **Promote the digitalization of public services and public financial management systems** to improve efficiency, enhance regulatory compliance, and provide citizens and businesses with easy, secure, and trustworthy access (to digital IDs, social service delivery systems, tax payments, and more). Digitalization will also reduce transaction and compliance costs for firms and encourage them to formalize.

## 5. Pursue fiscal policies that support transformation financing.

- **Set sustainable paths for fiscal balances** to ensure that medium- to long-term government financial operations contribute to generating public and private savings needed to support public investment transformative policies and programs.
- **Establish robust macro-fiscal strategies.**
  - *Minimize the debt service burden* on the economy and crowd in the private sector in the domestic financial markets.
  - *Channel rents from Africa's natural resource endowments* to finance human capital accumulation, technological upgrading, and physical infrastructure.
  - *Establish measures to manage fiscal risks and contingent liabilities*, including those emanating from public-private partnerships and exogenous shocks.
- **Strengthen expenditure and revenue management systems.**
  - *Establish strong systems of planning, approval, and monitoring* of large public investments to ensure close alignment to transformative policies.
  - *Strengthen tax administration and collections*, in particular digitalizing tax collection systems, building on lessons from successful COVID-19 responses.
  - *Strengthen national ownership of expenditure reviews*, which have usually been externally driven, by institutionalizing them as a regular part of annual budget preparation and management.

## 6. Turn climate challenges into economic opportunities.

- **Adopt green economic policies and strategies** at the local, national, regional, and continental levels to accelerate progress toward low-carbon economies and promote renewable energies, waste reduction and valorization, and biodiversity conservation.
- **Adopt realistic energy transition strategies** that ensure African oil and gas resources are used to develop the energy needed to power the expansion of African manufacturing industries and enhance access to affordable electricity for households and communities.
- **Promote climate-smart agriculture**, such as introducing heat-tolerant and drought-resistant crops, to help African farmers increase productivity and improve resilience.
- **Develop, update, and enforce functional industry environmental compliance systems** that are necessary to penetrate and compete in regional and global markets.

## 7. Foster greater regional economic integration.

- **Accelerate the implementation of AfCFTA strategies**, including plans and protocols to ease logistic bottlenecks, facilitate cross-border trade (through tariff and nontariff measures), and develop and enforce environmental and social standards.
- **Promote cross-border collaboration** to address common challenges to providing regional public goods, including transport corridors, digital connectivity, online payment systems, climate adaptation measures, river basin management, and more.

## 8. Reset the political economy of development.

- **Develop a collaborative leadership approach** that is capable of identifying common interests and building coalitions around core national development goals and strategies.
- **Invest in building a competent and merit-based bureaucracy** to boost investor confidence and steer more resources to growth-resilient productive sectors to achieve medium- to long-term impact on economic transformation.
- **Commit to policy consistency** by (i) setting clear objectives around industrial policy, with goals for implementing strategies, monitoring processes, and evaluating outcomes; (ii) avoiding policy reversals related to political cycles; and (iii) encouraging investors to make long-term, transformative investments. Governments should commit in particular to policy stability around taxes, finance, land, and support systems.

## Classification-related recommendations

The following recommendations are tailored to economies sharing common characteristics along dimensions of transformation, resilience, and vulnerability. These classifications are complementary to other classifications relevant for policymaking, such as income level and dependency on natural resource rents. Based on the statistical clustering analysis, countries are grouped in three performance categories—high, medium, and low clusters—using measures of economic transformation (per ATI results), resilience (growth resilience), and vulnerability.

CLUSTERS	COUNTRIES	RECOMMENDATIONS
<b>HIGH</b> economic transformers	<i>Tunisia</i> <i>Eswatini</i> <i>South Africa</i> <i>Morocco</i> <i>Mauritius</i> <i>Lesotho</i> <i>Namibia</i>	<p>These countries scored the best across all the DEPTH dimensions and are more growth resilient. They suffer the least loss in growth when negatively impacted by a shock. They are the least vulnerable because they have policies in place that help reduce their vulnerability.</p> <p>They can further improve their transformation outcomes by focusing on policies that:</p> <ul style="list-style-type: none"> <li>● Improve human economic well-being and productivity growth by promoting structural shifts into higher productivity sectors.</li> <li>● Enhance proximity to external markets through regional integration and alignment of national policies to AfCFTA policies to lower trade and nontrade barriers and enhance competitiveness.</li> <li>● Promote product diversification within subsectors to improve export competitiveness (choice of product and export mix).</li> </ul>

CLUSTERS	COUNTRIES	RECOMMENDATIONS
<b>MIDDLE</b> economic transformers	<i>Egypt</i> <i>Gabon</i> <i>Botswana</i> <i>Algeria</i> <i>Sudan</i>	<p>These countries scored above average on productivity and human well-being but worse on diversification, export competitiveness, and technology upgrading. They also suffer mild growth loss when negatively impacted by a shock.</p> <p>They can improve their transformation outcomes by focusing on policies that:</p> <ul style="list-style-type: none"> <li>● Improve economic diversification of production and exports.</li> <li>● Increase nonextractive exports to improve export competitiveness.</li> <li>● Invest in technology upgrading and skills development to facilitate structural change in labor productivity growth.</li> <li>● Diversify within subsectors to lower export instability.</li> <li>● Reduce vulnerabilities intrinsic to the agriculture sector.</li> </ul>
<b>LOW</b> economic transformers	<i>Senegal</i> <i>Congo Republic</i> <i>Kenya</i> <i>Nigeria</i> <i>Côte d'Ivoire</i> <i>Central African Republic</i> <i>Zambia</i> <i>Uganda</i> <i>Cameroon</i> <i>Tanzania</i> <i>Ghana</i> <i>Madagascar</i> <i>Niger</i> <i>Malawi</i> <i>Rwanda</i> <i>Ethiopia</i> <i>Gambia</i> <i>Mozambique</i> <i>Benin</i> <i>Burundi</i> <i>Burkina Faso</i>	<p>These countries scored the lowest across all the DEPTH dimensions. They are the least growth resilient and suffered the deepest growth loss when negatively impacted by shocks.</p> <p>They can improve their resilience outcomes by focusing on policies that:</p> <ul style="list-style-type: none"> <li>● Improve labor market rigidities to help transition labor into higher productivity activities such as manufacturing and tradable services.</li> <li>● Diversify economies from their narrow production base and promote nonextractive and nontraditional exports to improve competitiveness and build growth resilience.</li> <li>● Improve human economic well-being by expanding formal sector employment, increasing female labor market participation in paid employment, and increasing shared economic prosperity.</li> <li>● Invest in technology upgrading and skills development to increase the share of medium- and high-technology intensive manufactures in production and exports.</li> <li>● Diversify within subsectors to lower export instability.</li> <li>● Reduce vulnerabilities intrinsic to the agriculture sector.</li> </ul>

*\*Countries are ordered by rank within their clusters, based on ATI score*





# Africa After COVID-19: Resetting Policy Priorities For Resilient Growth Through Transformation

## Executive Policy Brief August 2022

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## POLICY BRIEF SUMMARY

# AFRICA AFTER COVID-19: RESETTING POLICY PRIORITIES FOR RESILIENT GROWTH THROUGH ECONOMIC TRANSFORMATION

### Why reset priorities for Africa's policy agenda?

Given today's global economy, geopolitics, and shifting trends, the **policy approaches in most African countries are not sufficient to ensure the continent's long-term development** or enable countries to withstand shocks. Africa's most recent period of growth acceleration (1994-2015) lasted longer than any previous one, but progress stalled or even reversed due to the impacts of the 2007-2008 global financial crisis, the end of the commodity super cycle, and the onset of the COVID-19 pandemic—revealing Africa's lack of progress on economic transformation over the past two decades. The research proves that growth alone is not enough to sustain development or build resilience.

### The link between economic transformation and growth resilience

Resilient economies are more capable of quickly recovering from a shock, standing as a defense against significant and persistent negative effects on employment and income, and reducing growth volatility. By contrast, economies that are not resilient can experience deep and persistent downturns that can cripple long-term growth. **Economic transformation—involving structural change that occurs when resources are channeled from lower to higher productivity activities in the economy—is critical to building growth resilience.** Though each country circumstance is unique, economic transformation for African economies should be reframed as “Growth with DEPTH”—shorthand for Diversification in production, Export competitiveness, Productivity increases, and Technological upgrading, all in support of improving Human well-being, especially through better jobs and livelihoods. Resetting policy priorities for building growth resilience is rooted in this framework.

**Given their exposure to increasingly frequent and devastating shocks, African countries must make growth resilience an economic imperative.** Economies with production and trade concentrated on a small number of goods and services are most likely to suffer sudden and sharp declines in their total output when any one of those activities is negatively affected by a shock. Economies that participate relatively less in world exports than they participate in world output are unlikely to take good advantage of the growth of the global economy, as they tend to produce low-value goods and services. High and growing labor productivity is the basis for high and growing incomes, which are in turn a source for transformative investments that make economies strong and resilient.

Research from the African Center for Economic Transformation (ACET) shows that countries generally fall into three categories: high, middle, and low economic transformers. However, overall economic transformation in Africa peaked in 2007, with a sharp decline since 2014. Many factors contributed to this: weak productivity growth in agriculture and services, lack of diversification of the production base, and the slow growth in manufacturing. Compared to early transforming countries in Latin America and Asia, Africa's labor productivity gap also widened over the past two decades, a result of too little reallocation of labor from low-productivity work to high-productivity work.

The prolonged, and at times sharp, reversals in growth reveal the weak resilience of African economies, which in turn is closely related to weak transformation outcomes. Simply put, **countries with better economic transformation outcomes tend to show better growth resilience.** For example, GDP per capita growth loss that followed the 2007-2008 financial crisis was greatest in countries that had relatively lower transformation outcomes. The growth losses suffered by low economic transformers were double those suffered by high economic transformers.

## Challenges and opportunities

The paramount challenge for Africa is how to reignite rapid economic growth while realizing economic transformation and building resilience. Solutions will require rethinking key pillars of the policy agenda to overcome negative trends, such as Africa losing the labor productivity race to comparators. That said, **Africa could advance resilience by turning some of its most pressing development challenges into opportunities.** Starting with more modern industrial policies, African nations must also address numerous megatrends with informed policy and bold action. In the context of building post-COVID-19 resilience, the most relevant ones include climate change and resource stress, population growth and urbanization, shifting trade and production patterns, technology and innovation adoption, and the enhanced need for economic integration and collaboration.

## Policy priorities for building growth resilience

It is imperative that governments, in planning and implementing for the post-COVID-19 era, prioritize policies that promote structural change—and target the dimensions of the Growth with DEPTH framework to accelerate transformation. Effective implementation of such a policy agenda requires a state apparatus that is entrepreneurial, developmental, and delivery oriented with inputs from, and ownership by, multiple stakeholders. Top-level recommendations for countries include the following:

- **Prioritize economic transformation** by promoting economic diversification, productivity increases, export competitiveness, and technological upgrading; and encouraging the reallocation of labor and investments to raise economy-wide productivity, generate better jobs, and increase incomes.
- **Have a coherent industrial policy** with a modern perspective that promotes structural change, adopts systematic approaches and methods of policy design, and builds support systems to strengthen the coordination, management, and financing of key industrial policy organizations.
- **Coordinate with the private sector** to create stronger systems to steer policy implementation that: promotes mutual accountability and addresses key market failures; promotes start-ups, small businesses, and long-term investment; ensures participation in global value chains to strengthen resilience and reduce vulnerabilities; and invests in skills development, particularly for women.
- **Invest more in digital technology and innovation** by implementing digital transformation strategies; promoting the digitalization of financial services and public financial management systems; investing in digital skills development and entrepreneurship; and upgrading infrastructure and connectivity.
- **Fix the political economy of development** by building competent and merit-based bureaucracies; committing to collaborative leadership to identify mutual interests and build coalitions; maintaining policy consistency; and setting clear goals for project implementation, monitoring, and evaluation.

*Adapted from the Aug. 2022 study, **Transforming and Building Resilient Economies in Africa: Resetting Priorities for the Policy Agenda in the Post-COVID-19 Era**, produced by ACET with support from the Japan International Cooperation Agency (JICA).*

Working in partnership



# **A New Policy Agenda To Build Resilient Economies in Africa in the Post-COVID-19 Era**

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## 1. Introduction

Over the past two decades, various attempts have been made to enhance economic growth and development in the country. In the early 2000s, these attempts mainly involved the implementation of two major poverty reduction programs that amongst other things sought to enhance economic growth, promote good governance, and reduce poverty and inequality. Recent government policies to promote economic transformation saw the implementation of a Better Ghana Agenda through the implementation of the shared growth and development agenda. It is important to note that in these earlier programs, the agricultural and industrial sectors were prioritized, and these informed the type of policies that had to be implemented.

Although over the past two decades Ghana has recorded some of the fastest economic growth rates globally, second only to Asian and other emerging economies, this has not been reflected in employment and structural transformation. As noted by Aryeetey et al. (2021), this is so because the pattern of growth in Ghana, which is driven by the services sector, is contrary to the manufacturing export-led transformation previously observed in East Asia, with the capacity to absorb low to medium-skilled workers. Agriculture and agro processing continue to employ more of the labor force than services, yet this is not reflected in their contribution to growth as predicted by “empirical regularity” in the growth literature. Thus, implying that Ghana’s recent growth patterns are inconsistent with the empirical regularity of structural transformation (Aryeetey et al., 2021).

Currently, Ghana’s transformation agenda is being championed by emphasizing agro-processing and light manufacturing, in the expectation that it will drive higher value-added production and create more jobs. The policies supporting this recent transformation are guided by the 10-point industrialization agenda that aligns with the country’s medium-term frameworks, namely the Coordinated Program of Economic and Social Development Policies (2017-2024) and the Agenda for Jobs – Creating, Prosperity and Equal Opportunity for All (2018-2021).

Overall, the Ghanaian economy over the past two decades has followed an expansionary path with an average GDP growth of about 6 percent, except for period of the COVID-19 pandemic (see Figure 1.1). This growth has been driven by the services sector, with marginal growth from the industrial and agricultural sectors. Inflation, which used to be high, has been relatively tamed, averaging 10 percent.

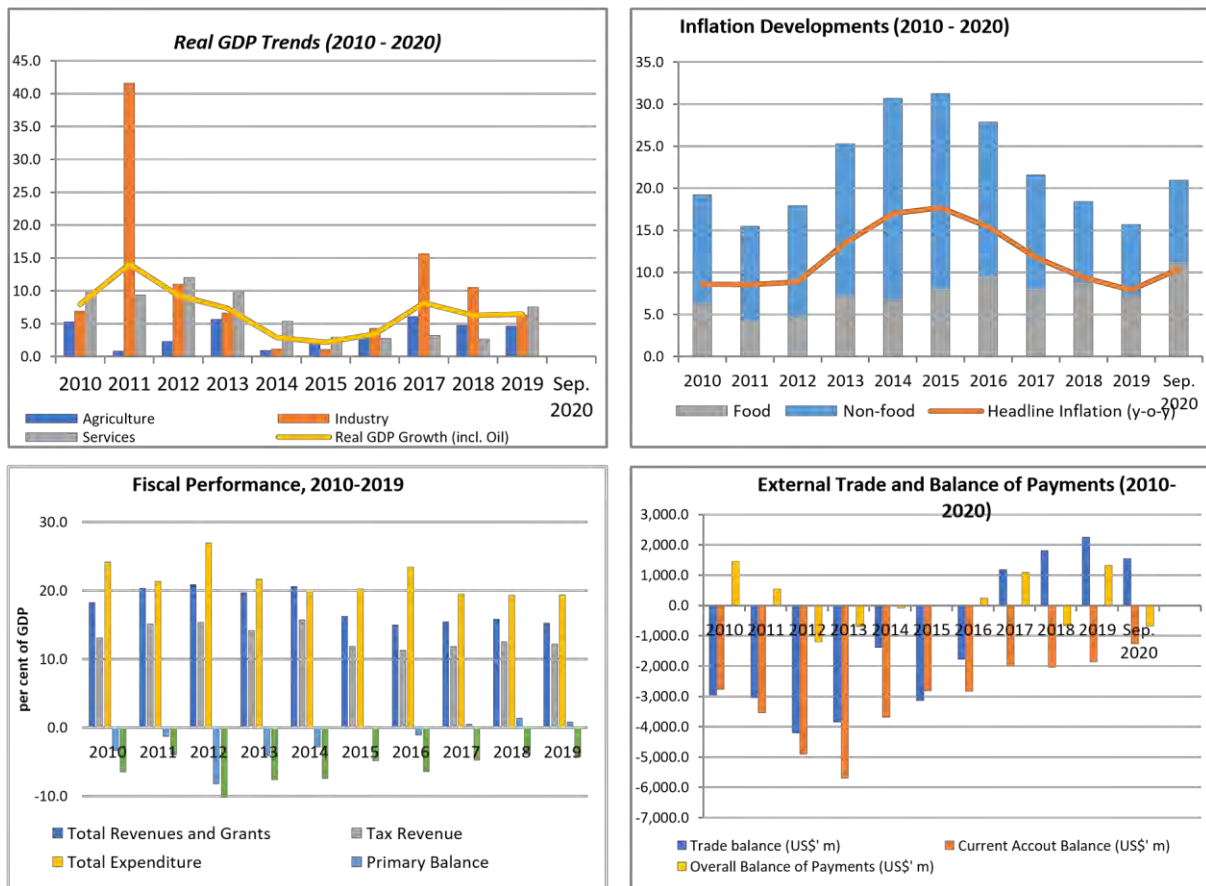
In terms of fiscal performance, tax revenue (as a percentage of GDP) over the past two decades has not shown a consistent pattern. Between 2010 and 2014, fiscal revenue exceeded the 15 percent threshold thrice but has remained below this threshold since 2015.

Total expenditure remained well above 15 percent of GDP all year round. Since 2017, the expenditure trends indicated consolidation efforts leading to reductions in total expenditure to 19.4 per cent of GDP in 2018 but that effort stagnated in 2019. The fiscal deficit (as a

percentage of GDP) fell to 5.9 percent in 2017 (the first time since 2006 fiscal year), which is just above the 5 percent threshold set by the government. To that end, the overall fiscal balance has remained in deficit since 2010 and above target over the period. In years that the primary balance was positive, high-interest payments and other expenditure items ensured that the overall fiscal balance remained negative.

In 2020, the large unanticipated fiscal obligations required to manage the socio-economic fallout of the Covid-19 pandemic impacted heavily, with fiscal slippages leading to a projected deficit of 11.4 percent of GDP (excluding financial and energy sector-related costs) but with a lower fiscal gap of 9.5 percent projected for 2021. The chronic fiscal deficits have caused the public debt stock to increase continually from GH¢17.04 billion in 2010 to a projected GH¢291.63 billion at end of 2020. Indeed, in 2020 alone, public debt increased by GH¢73.62 billion.

**Figure 1.1. GDP, inflation, fiscal performance and trade**

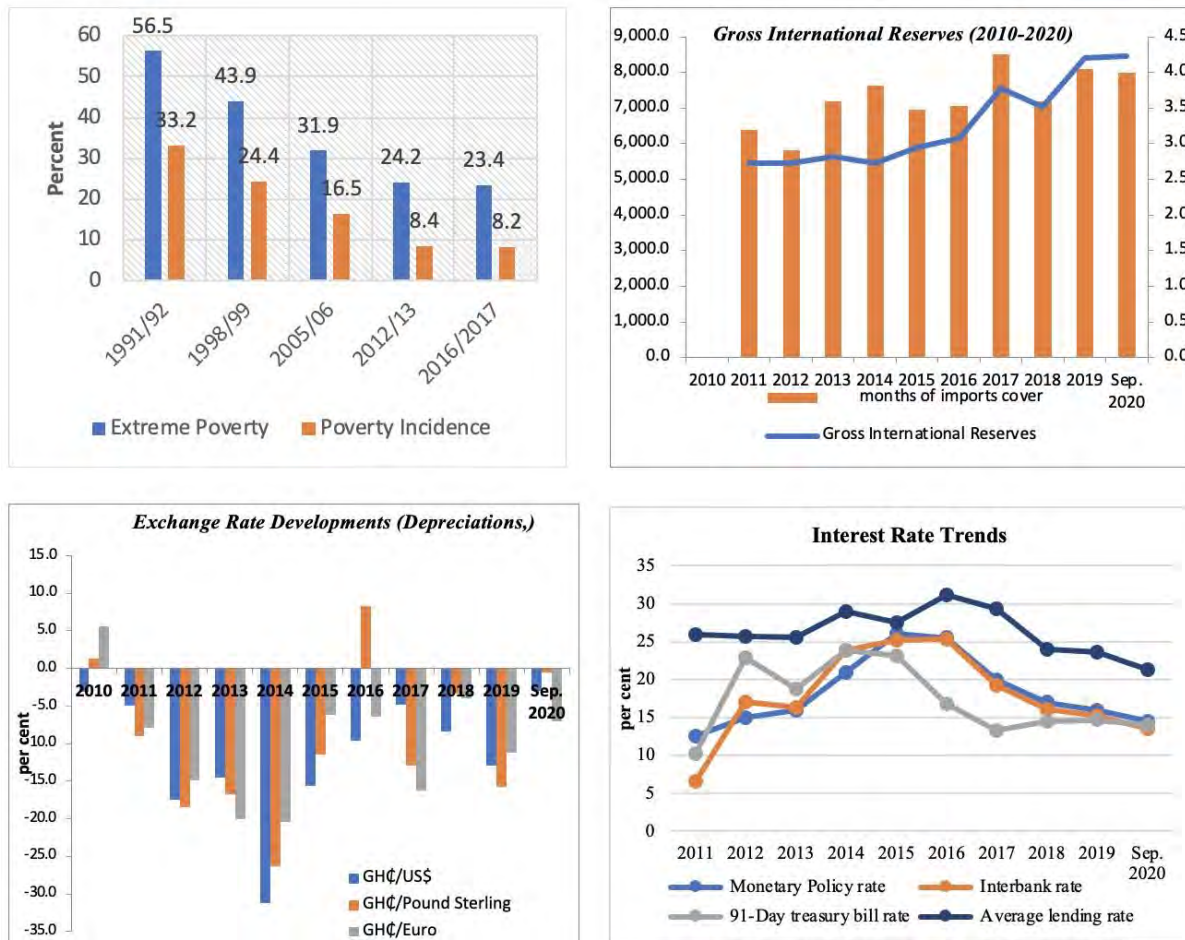


Source: Budget statements (various years); World Bank, World Development Indicators



The Ghanaian economy has historically been largely import-dependent and this is evident in developments in the merchandise trade balance. Not much has changed recently. From 2010 to 2016, the economy recorded trade deficits but was able to return to surpluses from 2017 to 2019. Though the COVID-19 pandemic disrupted international supply and demand for goods and services, the economy sustained the gains in trade with a US\$1.6 billion trade surplus. This notwithstanding, the current account has remained in deficit for the entire period under review, largely because the balances on the accounts for services and income remained in deficit. The Ghana cedi continues to depreciate against the three major trading currencies – the United States dollar, pound sterling and the euro. It is important to indicate that other factors such as foreign direct investment (FDI) and remittances have a role to play in the depreciation of the local currency but current account deficits remain the dominant cause.

**Figure 1.2: Poverty, international reserves, exchange and interest rates**



Source: Budget statements (various years); World Bank, World Development Indicators

Data from the Ghana Living Standard Surveys show that over a quarter of Ghanaians are poor, with roughly one out of every nine people being extremely poor. The expansion of the economy over the years has resulted in a more than 50 percent reduction in poverty when compared to early 1990 levels (Figure 1.2). However, absolute poverty only decreased from 24.2 percent to 23.4 percent throughout the four-year period (2012/2013 to 2016/2017). In terms of extreme poverty, which now stands at 8.2 percent, it is concentrated in the rural savannah, where more than one-third of those classified as extremely poor live (see Appendix 1).

Overall, the dynamics of poverty in Ghana during the last 12 years show that poverty remains mostly a rural phenomenon (Appendix 1). If Ghana's strategy is to achieve the desired levels of poverty reduction as a middle-income country, rural poverty reduction is a priority. Despite a slight decrease in national poverty, there is a growing disparity at regional level. In terms of poverty incidence, Greater Accra is the least impoverished region, while the Upper West Region is the worst, and the Northern Region contains the poorest people of any region in the country.

Despite the Ghanaian economy's positive developments, job patterns have remained relatively unchanged. The working-age group covers all persons aged 15 and above, with 60 being the required retirement age for those in the formal sector. According to the most recent Labour Force Survey (2015), 67.9 percent of the working-age population are employed, with 71.4 percent of males employed and 64.7 percent of females employed. Males have a greater employment-to-population ratio than females throughout the country (Table 1.1).

**Table 1.1: Employment-to-population ratio (2000-2017)**

	Females	Males	Total
<b>2000</b>	64.84	68.87	66.81
<b>2006</b>	65.59	69.22	67.3
<b>2010</b>	65.4	68.92	67.07
<b>2013</b>	71.97	77.4	74.48
<b>2015</b>	61.2	68.84	64.54
<b>2017</b>	52.89	56.45	54.55

Unemployment remains a major socio-economic problem in Ghana, although available data tend to downplay the enormity of the problem. Table 1.2 presents data on unemployment trends in the country by gender, location and age cohort based on household surveys and population census. In general, the rate of unemployment has risen marginally in the country over the years. Females over the years have a higher unemployment rate than males, while the unemployment rate among urban dwellers is higher (7.8 percent in 2017) than among rural dwellers. Also, the unemployment rate among young people is higher than that of their older counterparts.

The issue of jobless growth in Ghana has become a major concern against the backdrop of the relatively significant growth observed over time, with a rate of 6.3 percent in 2017, substantially above the sub-Saharan average of 3 percent. This notwithstanding, precarious and vulnerable employment persists in the country, particularly among young people. Most jobs available to the youth are vulnerable/informal and part-time/temporary (GoG, 2014).

**Table 1.2. Trends in unemployment in Ghana (1992-2017)**

Category	Proportion of labor force (%)						
	GLSS 3	GLSS 4	GLSS 5	GLSS 6	GLSS 7	Population and Housing Census	Population and Housing Census
	1992	1999	2006	2013	2017	2000	2010
<b>Total unemployment</b>	2.3	2.7	3.1	5.2	5.1	10.4	5.8
<b>Male unemployment</b>	2.2	3.4	3.2	4.8	4.5	10.1	5.4
<b>Female unemployment</b>	2.4	2.2	3.0	5.5	5.7	10.7	6.3
<b>Urban unemployment</b>	6.7	5.8	6.1	6.5	7.8	12.8	8.0
<b>Rural unemployment</b>	0.5	1.2	1.3	3.9	3.5	8.6	3.5
<b>Youth unemployment (15-24)</b>	5.2	5.0	6.6	10.9	7.1	16.7	12.9
<b>Adult unemployment (25+)</b>	1.4	2.1	1.9	3.4	4.1	8.6	4.0

Source: Calculations from Ghana Living Standards Surveys (GLSS 3-7) and Population and Housing Census 2000 and 2010

Structural transformation has at best been limited. Unlike the typical structural transformation story where resources move from low-productivity to high-productivity sectors, the case of Ghana is slightly different. Over the last two decades, the country has witnessed the movement of resources from the agricultural sector to the services sector, which are both low in productivity when compared to the industrial sector and manufacturing in particular. The services sector appears to have overtaken the agricultural sector in terms of overall contribution to GDP (Table 1.3). Employment growth over the past two decades is highest in the services sector, although sectoral growth rates have been highest in the industrial sector.

Table 1.4 shows that most of the people currently employed in the services sector are in wholesale and trade, transportation and storage, accommodation and food services as well as education.

**Table 1.3. Sectoral contribution to GDP and employment, 2000-2020 (%)**

	Employment			Contribution to GDP			GDP growth rate		
	Services	Industry	Agriculture	Services	Industry	Agriculture	Services	Industry	Agriculture
<b>2000-2004</b>	30.88	14.05	55.08	28.99	25.16	36.03			
<b>2005-2009</b>	32.72	14.03	53.25	46.93	19.30	29.16	7.08	8.55	4.30
<b>2010-2014</b>	39.34	14.43	46.22	43.92	27.40	22.76	10.26	13.15	3.06
<b>2015-2020</b>	47.72	19.79	32.49	43.62	30.13	19.18	3.50	5.73	4.65

Source: GLSS 3-7, Budget Statements (various years)

**Table 1.4. Population employed in the services sector, 2013, 2017 (%)**

	2013	2017
<b>Wholesale and retail trade</b>	19.5	21.3
<b>Transportation and storage</b>	3.8	3.6
<b>Accommodation and food service activities</b>	3.9	3.2
<b>Information and communication</b>	0.4	0.3
<b>Financial and insurance activities</b>	0.7	1.1
<b>Real estate activities</b>	0.1	0.2
<b>Professional, scientific and technical activities</b>	1.0	0.6
<b>Administrative and support service activities</b>	1.0	0.6
<b>Public administration and defense</b>	0.8	1.8
<b>Education</b>	3.6	5.1
<b>Human health and social work activities</b>	1.0	1.5
<b>Arts, entertainment and recreation</b>	0.4	0.7
<b>Other service activities</b>	3.8	3.2
<b>Activities of households as employers</b>	0.9	0.4

Source: GLSS 6 and 7

Ghana still faces some critical challenges that have affected its transformation process and resilience to global economic shocks. Although significant progress has been made with poverty reduction at national level, the incidence is still high in the northern regions and rural areas. Income inequality is similarly high in these regions. The issue of jobless growth has become a serious worry for the transformation process. Unstable and vulnerable work continues to exist in the country, especially among young people. With an average national unemployment rate of around 6 percent, it is believed that youth unemployment is substantially higher. About 59.6 percent of young people (aged 15 to 35) are employed, while 12.1 percent are unemployed, and the remaining 28.3 percent are out of the labor force. In addition, one out of every three young people (31.8 percent) is employed as an own-account worker in the non-agricultural sector.

The COVID-19 pandemic has had a significant influence on Ghana's economy, worsening poverty and inequality indicators. According to the Ghana Statistical Service (GSS), the pandemic has resulted in a decrease in income for around 77.4 percent of Ghanaian households (equal to nearly 22 million people) since March 2020 (GSS, 2020). As a coping tactic, more than half of Ghanaian households (about 52 percent) have had to reduce their food consumption. These poverty-related and other livelihood-related effects, such as reduced access to services (health, nutrition, and education), can have long-term detrimental effects on individual and household income earning capacity.

With this background, this report discusses the new policy agenda required to build a resilient economy in Ghana in the post-COVID-19 era. Emphasis is placed on identifying the key lessons learnt from the pandemic and identifying the needed policies, measures or strategies needed to enhance inclusive growth, economic transformation and the economy's resilience to future shocks. Section 2 discusses the development policies pursued in the country over the past two decades. Section 3 discusses the country's response to the COVID-19 pandemic. Section 4 discusses the resilience measures that were adopted. Section 5 outlines the key lessons and policies for economic transformation and resilience building.

## **2. Development policies and economic transformation**

### **2.1. Development policies**

This section discusses the national plans and sectoral policies that have been implemented in Ghana over the past two decades, intended to promote structural change and economic transformation. It also discusses policies that were intended to enhance the country's response to global shocks such as those from climate change and natural resource stress, along with the usual phenomena of population growth, migration, urbanization, technology and trade.

Following the not-too-impressive economic conditions of the 1990s, the overarching goals of development policy in Ghana over the past two decades remained to accelerate economic growth, reduce poverty and ultimately improve the well-being of all Ghanaians. The main distinction between pre-2000 and post-2000 development policies was the improved breadth, depth and analytical clarity of the policies of the latter era. These post-2000 policies were captured in the following national development frameworks: (i) the World Bank/IMF-sponsored Interim Poverty Reduction Strategy Paper (I-PRSP) (2001-2002); (ii) the Ghana Poverty Reduction Strategy (GPRS I) (2003-2005); (iii) the Growth and Poverty Reduction Strategy (GPRS II) (2006-2009); (iv) the Ghana Shared Growth and Development Agenda (GSGDA I) (2010-2013) and (v) the Ghana Shared Growth and Development Agenda (GSGDA II) (2014-2017).

More recent strategies that are intended to enhance the transformation of the Ghanaian economy can be found in: (vi) the Coordinated Programme of Economic and Social Development Policies (2017-2024) as well as (vii) An Agenda for Jobs: Creating, Prosperity and Equal Opportunity for All (2018-2024). The overarching policy directives since 2017 have been derived from the Ghana Beyond Aid charter and agenda.

### ***2.1.1. Development policies between 2000 and 2010***

This section discusses the economic transformation policies implemented between 2000 and 2010, namely: (i) the World Bank/IMF sponsored Interim Poverty Reduction Strategy Paper (I-PRSP) (2001-2002), (ii) the Ghana Poverty Reduction Strategy (GPRS I) (2003-2005) and (iii) the Growth and Poverty Reduction Strategy (GPRS II) (2006-2009). The economic transformation policies presented in these development frameworks were intended to be consistent with the country's decision to opt for the Heavily Indebted Poor Countries (HIPC) initiative. The aim was to benefit from debt relief and put the Ghanaian economy on a sound footing in order to restore macroeconomic stability, with a clear focus on enhancing domestic production and promoting gainful employment. Other objectives included expanding human resource development and the provision of basic services, implementing special programs for poor and vulnerable groups (especially for women) and implementing policies to enhance good governance.

While the Interim Poverty Reduction Strategy Paper (I-PRSP) (2001-2002) contained measures to meet specific conditionalities for aid from development partners, the Ghana Poverty Reduction Strategy (GPRS I) (2003-2005) had a more developmental orientation, i.e., reduce poverty. GPRS I focused on three main issues to ensure macroeconomic stability and transform the economy: fiscal measures, monetary policies and international trade measures. The fiscal measures focused on the conversion of short-term debts into long-term instruments, the reduction in fiscal deficits, and effective revenue mobilization. The monetary policies focused on effective monetary management to ensure low and competitive interest rates, achieve a single-digit inflation rate, ensure stable exchange rates, ensure a reasonable spread between lending and savings rates, and the establishment of a long-term capital market.

With regard to the international trade measures, the focus was mostly on the mechanisms needed to diversify exports and enhance productivity to ensure international competitiveness and to achieve a sustainable level of foreign reserves. The strategies to increase production as well as gainful employment in the country were as follows:

- The development of marketing channels for agricultural produce.
- Ensuring the sustainability of basic resources for production activities.
- Addressing the gender dimensions of production including access to credit.
- Easing access to farming inputs such as fertilizers, insecticides, high-yielding seed varieties and irrigation-based farming techniques.
- Utilizing information and communications technology to support development efforts.
- Encouraging the growth of non-traditional exports in order to expand industrial production and gainful employment.
- Accelerated growth of small- and medium-scale manufacturing industries through among others, the diffusion of appropriate technologies and vibrant training programs.
- Vigorous encouragement of tourism to take advantage of both its foreign exchange earning capability and its direct and indirect employment creation potential.

The first component of the Ghana Poverty Reduction Strategy (GPRS I) (2003-2005) was largely successful in promoting economic growth and reducing poverty. Ghana, as of the end of 2000, was saddled with a large fiscal deficit of more than 20 percent of GDP, high inflation of about 40 percent, and exchange rate depreciation of about 50 percent with interest rates hovering above 40 percent. The country's international reserves amounted to only three weeks of import cover, giving another indication of the very precarious situation. By the end of 2005, when both the I-PRSP and GPRS I had ended, the country's fiscal deficit had fallen significantly to about 7 percent of GDP, inflation to 15.1 percent, and exchange rate depreciation also down at 0.9 percent while interest rates were hovering around 30 percent. Ghana had about three months of import cover in 2005 while poverty had also fallen significantly, from 62.1 percent in 1998 to 48 percent in 2005.

Unfortunately, the structure of the Ghanaian economy failed to transform, despite the remarkable economic growth attained and its effects on employment creation and poverty reduction. For most of the 2000-2005 period, agriculture remained the highest contributor to GDP and total employment. Ghana continued to rely on its traditional exports (such as cocoa, gold and timber), with little diversification and a weak industrial base which not properly linked with domestic resources (GoG, 2005). In addition, both hard and soft infrastructure to support industrial production were weak. Domestic production remained low because of over-reliance on inefficient technologies, while the gains from growth that Ghana enjoyed were unfairly distributed. Unemployment was pervasive and highest amongst the youth, while the brain drain was highest among health professionals (GoG, 2005).

GPRS II (2006-2009) sought to address these issues and also ensure faster economic growth and poverty reduction by implementing policies and programs that aimed for increasing the income of average Ghanaians to the level enjoyed by middle-income countries by 2015 (GoG, 2005). GPRS II was more growth oriented and anchored on the following priorities: (i) Continued macroeconomic stability (ii) Accelerated private sector-led growth; (ii) Vigorous human resource development; and (iv) Good governance and civic responsibility (GoG, 2005). The government intended to promote a private sector-led structural transformation process through the diversification of the export base and increased agricultural productivity within a decentralized and democratic political environment. The government would support these initiatives with prudent policies for macroeconomic stability, with low and stable inflation and interest rates, affordable credit to the private sector and stability in the exchange rate. This was critical in providing the macroeconomic environment needed for the private sector to thrive and help boost economic growth.

To drive the growth process in the medium to long term, the agricultural sector was expected to play a leading role by providing the necessary inputs to support a vibrant agro-processing industrial sector. Various initiatives were implemented to ensure that the private sector remained competitive such as supporting capacity growth, strengthening competencies and efficient operations, facilitating access to capital and adoption of technological innovation. Sectors that were strategically targeted, apart from agriculture, were trade and industry, ICT and tourism. Key interventions introduced in these sectors included support for strategic research and development activities, appropriate financing for value-added activities, improved marketing, efficient organization of production and boosting the capacity of producers.

It is important to mention that GPRS II also focused on social interventions such as human resource development and the promotion of good governance and social responsibility. Under human resource development, the intention was to promote formal education and training and skills development, improve access to health care, malaria control and HIV/AIDS prevention and treatment, increase access to safe water and adequate sanitation, improve housing conditions and slum upgrading and population management. Under the promotion of good governance and social responsibility, the focus of policy was on strengthening Parliament, enhancing decentralization, protecting rights under the rule of law, ensuring public safety and security, managing public policy, empowering women and other vulnerable groups, enhancing development communication, ensuring good corporate governance, increasing access to information, and promoting civic responsibility.

GPRS II was also largely successful in enhancing economic growth (through the implementation of prudent macroeconomic policies) and reducing poverty (GoG, 2010a, 2010b). Yet, these successes were marred by some structural challenges such as large fiscal and balance of payments deficits mainly because of fiscal over-runs and external shocks including an upsurge in crude oil and food prices. Remittances declined and access to private external financing became more difficult because of the global financial crisis. This was regardless of the favorable



global market conditions for cocoa and gold exports, which normally implied a high growth rate for the country. By the end of 2010, the services sector had overtaken the agricultural sector as the main contributor to GDP, while the agricultural and industrial sector contributions declined.

### ***2.1.2. Development policies between 2010-2017***

Between 2010 and 2017, the policies intended to promote economic transformation were captured in the (i) Ghana Shared Growth and Development Agenda (GSGDA I) (2010-2013) and (ii) Ghana Shared Growth and Development Agenda (GSGDA II) (2014-2017) (GoG, 2010a, 2010b). GSGDA I sought to lay the foundation for structural transformation through industrialization, especially manufacturing, based on modernized agriculture and sustainable exploitation of Ghana's natural resources, particularly minerals, oil and gas. The process was to be underpinned by rapid infrastructural and human development as well as the application of science, technology and innovation. The other sectors to be prioritized include agriculture, infrastructure, water and sanitation, health, education (including ICT, science, technology and innovation).

GSGDA I was expected to address the macroeconomic challenges that the country had faced during the implementation of GPRS II, by accelerating employment creation and income generation for poverty reduction and shared growth, anchored on the following thematic pillars:

- Ensuring and sustaining macroeconomic stability;
- Enhanced competitiveness of Ghana's private sector ;
- Accelerated agricultural modernization and improved natural resource management;
- Oil and gas development;
- Infrastructure, energy and human settlements development;
- Human development, employment and productivity; and
- Transparent and accountable governance (GoG, 2010).

The private sector was intended to be a key player in the implementation of GSGDA I as well as the economic growth and transformation process. Accordingly, policies implemented included those intended to enhance competitiveness by removing growth constraints. The key strategies contained in the GSGDA I for enhancing competitiveness were: (i) private sector development; (ii) good corporate governance; (iii) development of viable and efficient micro, small and medium enterprises (MSMEs); (iv) accelerated industrial development; (v) development of the tourism industry; (vi) and the promotion of the creative industry. Other policies were introduced with regard to the modernization of agriculture and effective exploitation of natural resources to enhance economic growth and development.

GSGDA I recognized that learning and the use of knowledge and skills in solving challenges in society are vital parts of national development initiatives and more so in promoting economic growth and social equality. Worsening income disparities and other human development indices in areas like education and skills acquisition, health, employment, productivity, social protection, and poverty reduction indicate substantial socio-economic issues for most emerging nations, including Ghana. In the medium to long term, efforts to structurally transform key sectors of the economy to raise living standards and productivity as the foundations of wealth creation and the optimization of the economy's potential will stall in the absence of a well-educated, skilled, and informed population.

GSGDA I aimed to address issues such as education; human resource development; employment and productivity; health promotion, including HIV/AIDS and STDs; population management, including migration and development; youth and sports development; ageing; disability; poverty reduction, and social protection.

The Ghana Shared Growth and Development Agenda (GSGDA II) (2014-2017) was meant to build on GSGDA I as a key component of the government's Coordinated Programme of Economic and Social Development Policies (2014-2020) – An Agenda for Transformation. It is important to mention that GSGDA I and GSGDA II were in line with government and international initiatives such as the Advancing the Better Ghana Agenda and the Millennium Development Goals (MDGs). GSGDA II recognized the fact that although Ghana had made progress in promoting economic growth and attaining lower middle-income status, challenges persisted in areas such as the creation of decent jobs.

While overall poverty had declined, some parts of the northern regions still had a high incidence of poverty. Inequality at the national level had also increased. This situation was compounded by dwindling donor inflows because of the country's middle-income status. Overall, there was the need to review the transformation process in order to realize its benefits.

Similar to GSGDA I, the medium-term priorities of GSGDA II were anchored on:

- Ensuring and sustaining macroeconomic stability;
- Enhanced competitiveness of Ghana's private sector;
- Accelerated agricultural modernization and improved natural resource management;
- Oil and gas development;
- Infrastructure, energy and human settlements development;
- Human development, employment and productivity; and
- Transparent and accountable governance (GoG, 2010).

### ***2.1.3. Recent development policies (2017-to date)***

More recently, the main development strategies for economic transformation can be found in: (i) the Coordinated Programme of Economic and Social Development Policies (2017-2024) as

well as (ii) An Agenda for Jobs: Creating, Prosperity and Equal Opportunity for All (2018-2021). Industrial development and job creation were again the key pillars for the economic transformation agenda which comprised 10 initiatives and themes, namely: (i) National Industrial Revitalization Programme; (ii) One District One Factory (1D1F); (iii) Strategic anchor industries; (iv) Industrial parks/Special economic zones; (v) Development of small and medium enterprises (SMEs); (vi) Export development programme; (vii) Enhancing domestic retail infrastructure; (viii) Business regulatory reforms; (ix) Industrial sub-contracting exchange; and (x) Improving public-private sector dialogue. The 10-point Agenda was to build on existing industrial policy actions and also align with the medium-to-long term development agenda.

Following the emergence of the COVID-19 pandemic, the set of policies that constitute the government's agenda for economic transformation include stabilization, revitalization and transformation, improved fiscal performance and debt sustainability, monetary and financial policy management, external trade and investment strategy. With regard to stabilization, revitalization and transformation, the intention was to maintain and strengthen macroeconomic stability and to ensure that the wheels for growth continue to function. The stabilization policies implemented included the Ghana COVID-19 Alleviation and Revitalization of Enterprises Support (Ghana CARES Obaatanpa) programme, which sought temporary reduction in the cost of basic utilities, food security, a strengthened health system and supporting businesses and workers. These all helped minimize losses in economic growth, as evidenced by the faster than expected rebound in economic activities following the lockdown and ongoing restrictions in selected segments of the economy. The programme was in two forms: the stabilization phase (2020) and the revitalization/transformation phase (2021-2023).

With regard to improved fiscal performance and debt sustainability, the intention was to promote a Ghana Beyond Aid agenda that emphasizes domestic revenue mobilization. This was to be supported by the government's digitalization agenda, such as the Ghana Card, mobile money payment interoperability, a universal QR code, and the one-stop government payment site (Ghana.gov). These digital platforms, particularly the National Identification Card, were intended to aid in broadening the economy's revenue base. The e-procurement platform digitization of public sector procurement would continue to plug income leakages and lower the likelihood of corruption. Furthermore, rationalizing tax exemption as a policy tool would help maximize the legislation's intended advantages while reducing unforeseen costs. To assist domestic revenue generation efforts, increasing non-tax revenue through improved efficiencies and smart business expansion of viable and profitable state-owned enterprises and other income-generating state institutions were found to be critical. There were other expenditure rationalization policies as well as debt management policies that were introduced.

Under monetary and financial policy management, the policies to be introduced include price stability and exchange rate management, reforms in financial sector regulation and governance, digital financial inclusion and domestic production and investment promotion. Finally for

external trade and investment strategy, the overriding aim is to increase foreign direct investment and thereby increase foreign reserves. As a result, the government created the Trade Sector Support Programme (TSSP) to carry out trade policy. The success of the TSSP would be determined by an increase in the value and volume of exports, a strong flow of domestic and foreign direct investment (FDI), and enhanced local business performance in comparison to other international firms.

The National Export Development Strategy aims to boost international trade. To attract FDI, the government expects to build a world-class exhibition center at the Ghana Trade Fair Site as part of the National Export Development Strategy. Furthermore, the government, in collaboration with the private sector, intends to establish industrial parks to house labor-intensive manufacturing enterprises producing for export under the One Region One Park concept. Finally, the Paperless Port System is another policy reform to improve Ghana's external trade.

### **Box 1: Industrial sector policies**

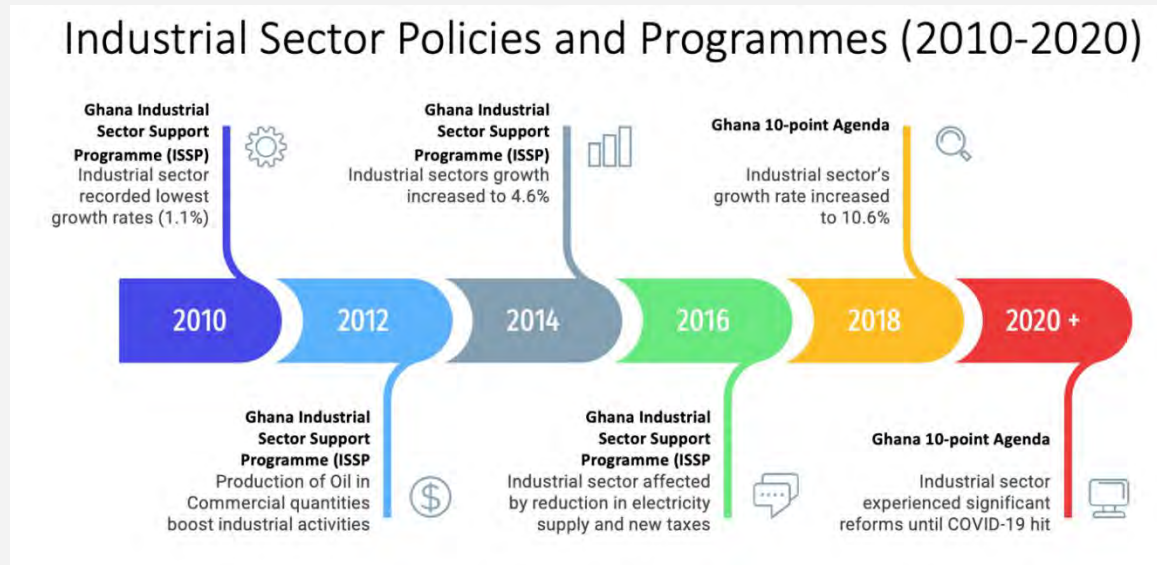
The industrial sector has attracted a lot of attention in development policy making in the country because of its importance for economic growth and the transformation agenda. It is to be noted that industry in Ghana is dominated by micro and small firms, privately owned and mainly located within urban areas. Industrial sector policies, over the years, have sought to empower firms to enhance their competitiveness, productivity, their job-creating ability and their technological capabilities. More importantly, there have been efforts to enhance their linkages, particularly with the agricultural sector, through the promotion of agro-based industrial enterprises and value-added manufacturing.

Between 2000 and 2010, the main strategies guiding industrial policy making in Ghana were outlined in the Ghana Industrial Sector Support Programme (GoG, 2011). This sought to create an industrial architecture based on value-added processing of Ghana's natural resources through the private sector. Set within the context of Ghana's strategic aim of achieving middle-income status, the key development objectives of the policy were to: (1) Expand productive employment in the manufacturing sector; (2) Create a modern productive economy with high levels of value addition; (3) Expand technological capacity in the manufacturing sector; (4) Promote agro-based industrial development; (5) Promote balanced spatial distribution of industries in order to achieve reduction in poverty and income inequalities; (6) Provide consumers with fairly priced, better quality products and services; (7) Make firms within the industrial sector—especially manufacturing firms—competitive on both domestic and international markets (GoG, 2011). Although the policy initiatives cut across 21 thematic areas, they consist of four main components, namely (i) Production and distribution; (ii) Technology and innovation; (iii) Incentives and regulatory regime; and (iv) Cross-cutting issues.

The industrial sector responded positively to these policies, with notable progress recorded in the manufacturing, construction and mining sectors with average growth rates above 5 percent. The industrial sector in 2005 was, however, faced by some challenges that significantly affected its growth prospects. High costs of credit (high lending rates), unreliable power supply, and rising fuel prices continued to compel especially import-dependent manufacturing firms to cut back production

(Ackah, Adjasi and Turkson, 2016). In addition, the liberalization of external trade continued to expose many vulnerable domestic manufacturing firms to severe competition from imported manufactured goods, making the sector less attractive to potential investors (Ackah, Adjasi and Turkson, 2016).

The subsequent period saw the introduction of the Ghana Industrial Sector Support Programme (ISSP) (2010-2016) and more recently, the 10-point Agenda.



Despite the measures pursued under the ISSP, over the period 2010-2015, the industrial sector underperformed, with relatively low overall growth and such low annual growth rates as 1.1 percent in both 2014 and 2015 and 4.3 percent in 2016. The underperformance of the industrial sector was largely due to erratic electricity supply, high taxes, and rising fuel prices which compelled many firms, especially import-dependent manufacturers, to cut production (Fenny, 2017).

A major turning point in Ghana's industrial policy was the launch of a 10-point Agenda as part of the industrial transformation agenda. The 10-point Agenda was in line with the medium-to-long term development agenda (i.e. the Ghana Beyond Aid strategy). The main components of the 10-point agenda included: the National Industrial Revitalization Programme; One District One Factory Initiative; the Strategic Anchor Industries Initiative; Industrial Parks and Special Economic Zones; and Development of Small and Medium-Scale Enterprises.

## 2.2. Economic response to global shocks

Although the Ghanaian economy faced structural challenges emanating from fiscal indiscipline and external shocks that led to fiscal and balance of payment deficits, its growth patterns appear to have been quite resilient to shocks, including those from natural resource stress,

population growth, migration, urbanization, technology, trade and globalization. As in many developing countries, these shocks were expected to affect almost all sectors of the economy with dire implications for growth. For instance, natural resource stress is expected to affect water resources, energy supplies, crop productivity, and food security, with adverse implications for agricultural productivity and industrial output. Similarly, technology, globalization and trade shocks can affect employment and industrial productivity differently, thereby affecting growth in almost all the economic sectors. Finally, migration and population growth can have differing effects on the country's labor force and ultimately affect all sectors.

Table 2.1 shows that although growth has been somewhat volatile, the Ghanaian economy has been quite resilient to negative global economic shocks when considering the growth in overall GDP, at least over the past two decades.

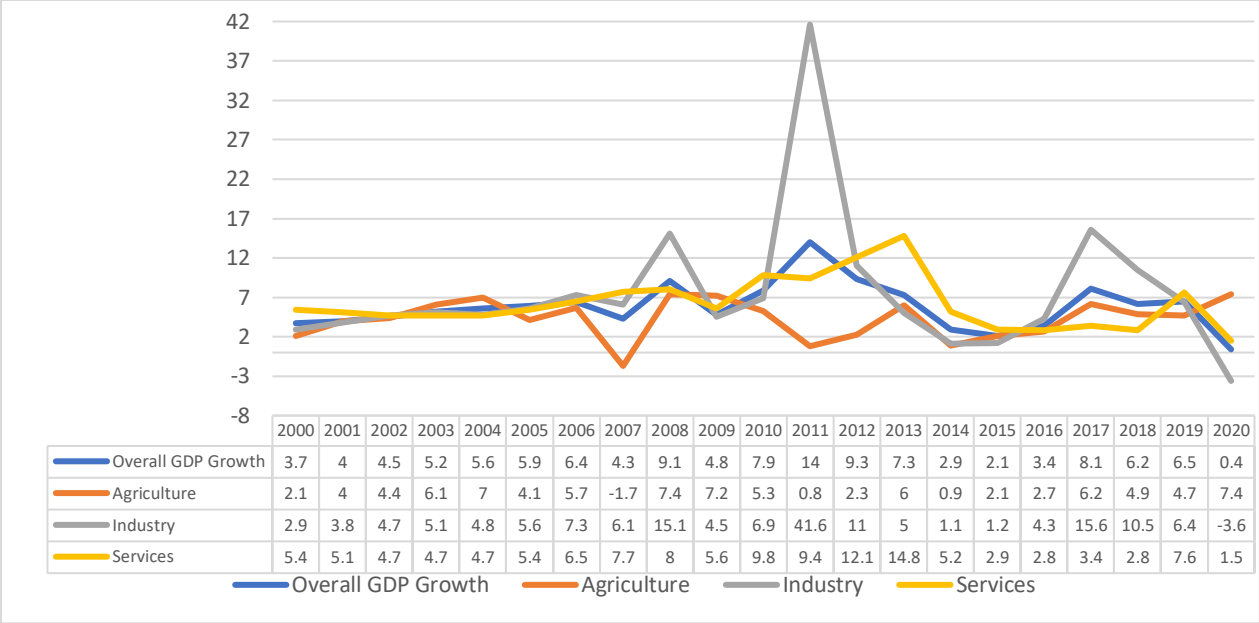
**Table 2.1. Annual growth rate of industrial sector and sub-sectors, 2010-2020 (%)**

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020Q1
<b>Industry</b>	<b>7</b>	<b>41.6</b>	<b>11.0</b>	<b>6.6</b>	<b>1.1</b>	<b>1.1</b>	<b>4.3</b>	<b>15.7</b>	<b>10.6</b>	<b>6.4</b>	<b>-3.1</b>
<b>Manufacturing</b>	1.0	17.0	2.0	-0.5	-2.6	3.7	7.9	9.5	4.1	6.3	-1.8
<b>Electricity</b>	-	-0.8	11.1	16.3	1.3	17.7	-5.8	19.4	5.5	6	14.9
<b>Water and Sewage</b>	-	2.9	2.2	-1.6	5.9	13.9	-11.8	6.1	-3.6	-4.4	8.7
<b>Construction</b>	7.9	17.2	11.2	8.6	-0.4	9.5	8.4	5.1	1.1	-4.4	0.1
<b>Mining and Quarrying</b>	10.5	106.5	16.4	11.6	5.4	-8.3	-0.2	30.8	23.3	12.6	-7
<b>o.w. Oil</b>	-	2023.4	9.1	18.0	6.8	2.0	-15.6	80.3	3.6	15.1	-1.4

*Source: Ghana Statistical Service (2020), National Accounts*

Apart from two noticeable instances when GDP growth slowed and dropped below 5 percent, over the period between 2003 and 2020 Ghana enjoyed relatively higher growth than most developing countries and in 2008, 2010-2012, and 2017 grew above 8 percent. The dip in growth in those two periods was mostly attributable to changes in rainfall patterns and resultant energy crisis (due to climate change) that affected the agricultural and industrial sectors between 2014-2016 and the more recent COVID-19 pandemic (see Figure 2.1).

**Figure 2.1. Overall and sectoral GDP growth in Ghana**



Source: World Bank, World Development Indicators and Budget Statements (various years)

The first most noticeable shock to GDP growth was over the period 2014-2016 and this was due to a decline in the growth of industrial output (due to the energy crisis) and agricultural output (due to rainfall patterns) and productivity. The second visible shock was in 2020, when the industrial and services sector witnessed significant decline due to the emergence of the COVID-19 pandemic. The agricultural sector in 2020 grew by 7.4 percent. It is important to indicate that the robust growth in the services sector (averaging 6 percent ) was very important in enhancing the country’s resilience to economic shocks.

Despite the overall resilience, the agricultural sector was one of the hardest hit, having recorded negative growth rate in 2007. Growth in the industrial sector declined to 1.1 percent in 2014 and reached a negative rate (-3.6 percent) in 2020 mainly due to COVID-19 and poor macroeconomic performances. The World Bank has indicated that climate change poses a significant challenge to Ghana, particularly through the channels of rising food prices and worsening health outcomes (World Bank, 2021). It has also been shown that under optimistic scenarios of low climate impact, the country may lose close to 9 percent of GDP (Hallegate et al., 2016). In addition, the increasing deterioration of water quality and water-related disaster events also continue to put Ghana’s development at risk.

To more explicitly appreciate the extent to which the Ghanaian economy has been resilient to economic shocks, the case of the industrial sector is adopted. It is to be noted that the industrial sector has assumed a more prominent role in recent times in the development policy framework of the country. It is also important to note that the government is relying on the industrial sector to champion its transformation agenda and enhance employment creation.

It is useful to note that Ghana recorded one of its highest growth rates in the industrial sector in 2011, and this corresponded with the commencement of crude oil production. This growth rate, however, started declining from 2012 due to the base effect in the reduction of crude oil production as well as poor performance from the manufacturing and electricity sub-sectors. The industrial sector recorded its lowest growth in 2014 and 2015 (1.1 percent ). In both years, the mining and quarrying sectors recorded negative growth rates. Growth in the industrial sector, has since been averaging above 5 percent until 2020, when COVID hit.

Industrial sector growth has been boosted within the past two decades by mining and quarrying (oil and gas production), electricity, construction, and in some years (2011 and 2012) the manufacturing sub-sector. The contribution of the mining and quarrying sector has been consistently the highest, except in 2015 and 2016 (see Table 2.2). The electricity sub-sector recorded an average growth rate of about 11.6 percent between 2012 and 2015 before falling in 2016 to a negative growth rate of 5.8 percent (see Table 2.1). The sub-sector recovered in 2017 with a positive growth rate of 17.7 percent as a result of the significant increase in the generation of electricity after the 2016 energy crisis. It is important to mention that the electricity sub-sector has received generous support from the government, and this may have accounted for its continuous growth. The construction sector's contribution to industrial activities has consistently been positive with the exception of 2014 and more recently 2019 (see Table 2.1).

As part of the commitment of the government to revitalize the construction industry, the government has allocated GH¢ 952,587,681 and GH¢136.340.132 to roads infrastructure and railway development in the 2021 Budget. In addition, plans are underway to pass the Home Ownership Financing Bill. The passage of this bill is expected to anchor the housing agenda and reduce the housing deficit. The construction of hospitals under the Agenda 111 Scheme will provide jobs for local construction companies. The Agenda 111 scheme has prospects of deepening capacity in the construction industry. With regard to the manufacturing sub-sector, the data show that its growth fell drastically in 2012 to 2 percent and even negative growth rates in 2013 and 2014, before picking up in 2015 with 3.7 percent growth, and then rising to 7.9 percent and 9.5 percent in 2016 and 2017 respectively (see Table 2.1).

It is worth noting, though, that the unstable growth realized in the industrial sector was mainly due to the volatility in the growth of highest sub-sector performer (oil production under mining and quarrying ) – a sub-sector that remains at the mercy of global economic shocks. On the other hand, the manufacturing sub-sector, which was the highest performer before oil production commenced, has enjoyed enormous policy support over the years. It is also important to note that a lot of effort has gone into making Ghana's industrial sector more competitive with the introduction of technological innovation, and the prioritization of agro-based industrial development. There has been a renewed effort since 2017 to support Ghana's industrialization drive by making sure that the agricultural sector provides the raw material



base for industrialization. Thus, in recent times, policy has sought to establish a critical link between industry (mainly manufacturing) and the agricultural sector.

Initiatives such as the 10-point Industrialization Agenda support increased resilience and job creation for the youth. For instance, to reduce Ghana's continual dependence on commodity trade (makes Ghana more susceptible to price and exchange rate volatility), the One-District One-Factory (1D1F) initiative has the potential to increase value addition to Ghana's commodity exports while at the same time producing import-competing goods or import substitutes to reduce dependence on imports.

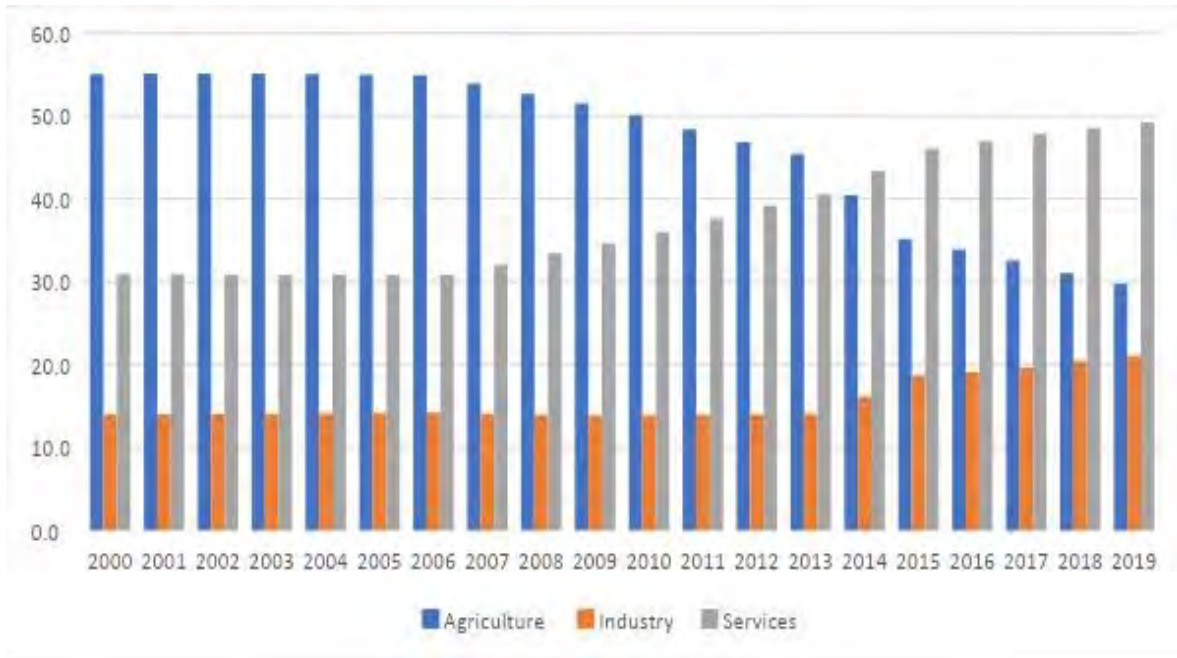
### **2.3. Economic transformation and the African Transformation Index (ATI)**

Ghana has had difficulties with its economic transformation process and has been unable to meet most of the criteria for economic transformation. For instance, McMillan, Page and Te Velde (2015) define economic transformation as “the continuous process of (a) moving labor and other resources from lower- to higher-productivity sectors (structural change) and (b) raising within-sector productivity growth”. They define within-sector productivity growth as entailing the adoption of new technologies and management practices that increase the efficiency of production. The African Center for Economic Transformation (ACET) in turn defines economic transformation as Growth with DEPTH (Diversification, Export competitiveness, Productivity increases, Technological upgrading and improved Human well-being).

When relying on the definition of economic transformation by McMillan, Page and Te Velde (2015), one is expected to witness the movement of labor and other resources from the agricultural sector (often a low-productivity sector) to the industrial sector (often a relatively high-productivity sector). While this transformation has not been witnessed in Ghana, what is obvious from the data is that labor resources are gradually moving into the services sector which is not very productive when compared with the industrial sector; most of the growth in services is coming from the ICT sub-sector. More importantly, there is limited information about the use of technological innovation as well as other critical resources in other sub-sectors that contribute to employment growth and productivity for the critical mass of the labor force.

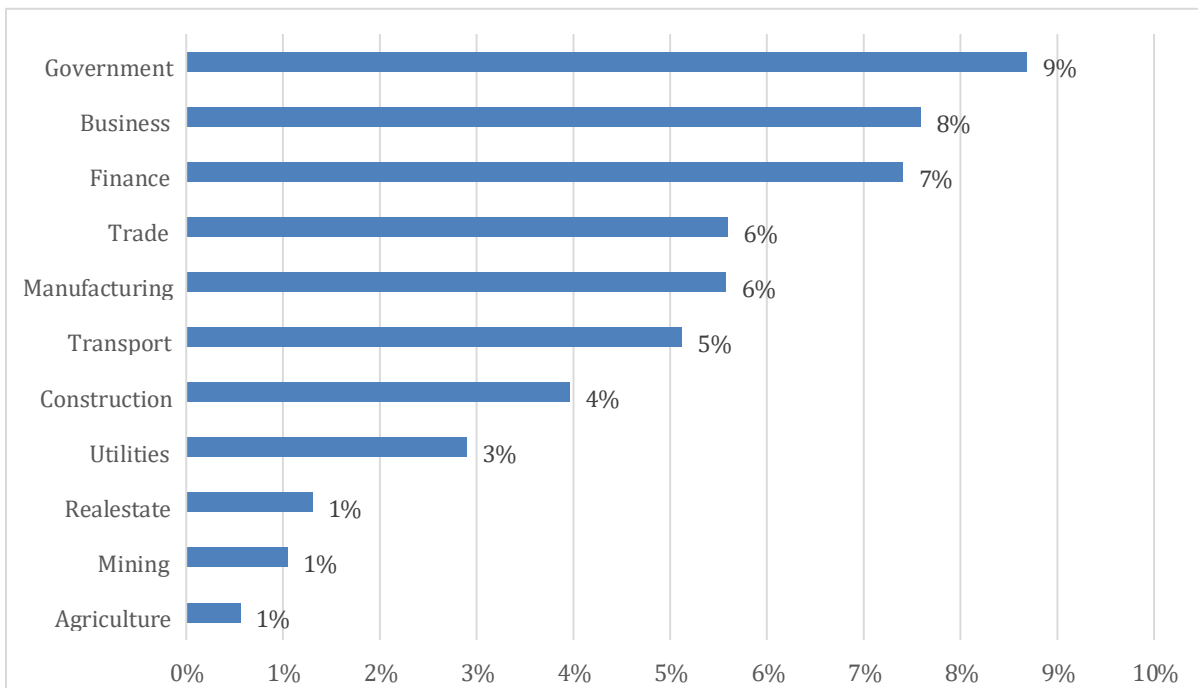
Accordingly, the services sector has overtaken the agricultural sector in terms of overall contribution to GDP. Employment growth over the past two decades has been highest in the services sector (see Figure 2.2); in government, finance, business and trade (see Figure 2.3) as well as gross value added (see Figure 2.4). It is, however, important to note that labor productivity has not been highest in the services sector (see Figures 2.5 and 2.6). Rather, they have been highest in other industrial sub-sectors such as mining and construction over the past two years (see Figures 2.5 and 2.6). Also, it is important to note that the ICT sub-sector is the highest contributor to GDP growth in the services sector (see Table 2.2).

**Figure 2.2. Sectoral contribution to total employment, 2000-2019 (%)**



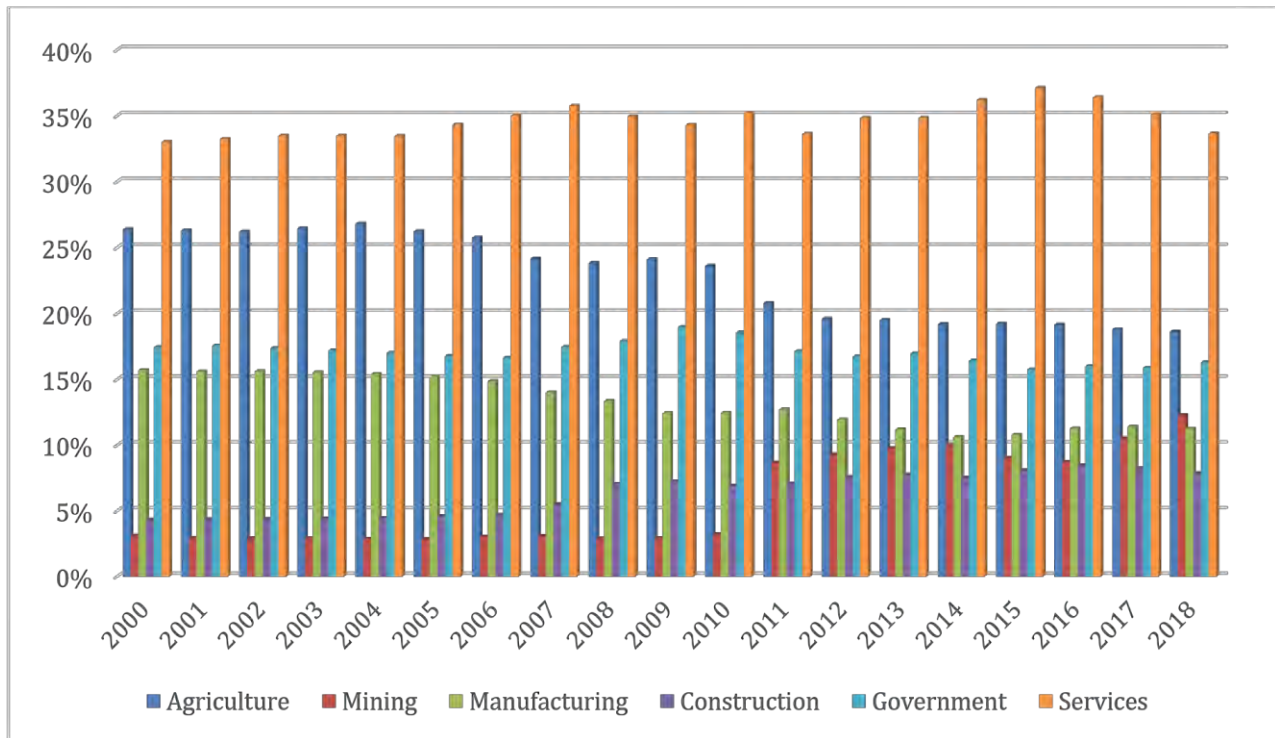
Source: World Bank World Development Indicators

**Figure 2.3. Sectoral average employment growth rates, 2000-2018**



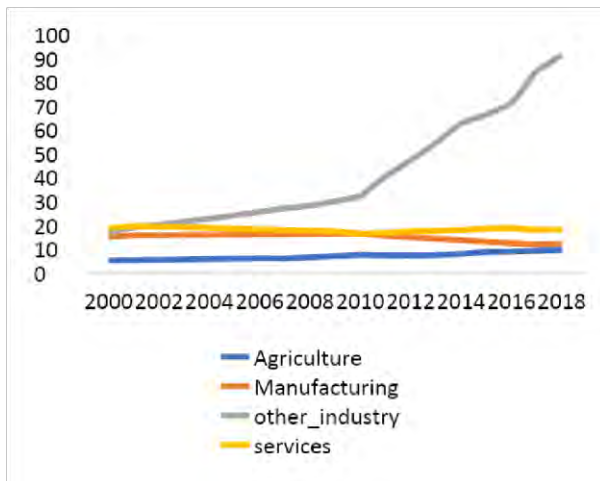
Source: GGDC Economic Transformation Database

**Figure 2.4. Sectoral shares of gross value added at constant prices, 2015**



Source: GGDC Economic Transformation Database

Figure 2.5. Labor productivity, 2000-2018



Source: GGDC Economic Transformation Database

Note: Other industry is mining and construction

Figure 2.6. Labor productivity growth, 2000-2018

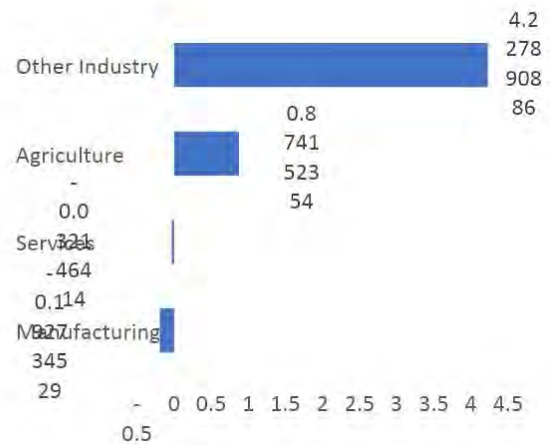


Table 2.2. GDP growth in the services sector, 2014-2020 (%)

	2014	2015	2016	2017	2018	2019	2020
<b>Services</b>	5.2	2.9	2.8	3.4	2.7	7.6	1.5
<b>Trade; repair of vehicles, household goods</b>	2	0.5	-0.4	8.2	2.8	3.7	-1.1
<b>Hotels and restaurants</b>	1.5	4.1	2.3	7.6	3.2	6	-34.8
<b>Transport and Storage</b>	5.8	2.6	1.1	8.9	1.1	4.3	3.7
<b>Information and communications</b>	29.7	11.9	5.6	4.2	13.1	46.5	22.5
<b>Financial and insurance activities</b>	21.4	12.9	8	-17.7	-8.2	1.6	5.5
<b>Real estate</b>	-0.3	3.1	3.2	3.8	-6.5	19.9	12.5
<b>Professional, administrative and support service activities</b>	6.8	1.4	-4.2	2.9	0.3	5.1	-5.9
<b>Public administration and defense; social security</b>	-3.5	-2.6	8.9	4.2	4.3	3.7	7.3
<b>Education</b>	-0.3	-0.5	2.3	6.3	3.9	9.4	7.8
<b>Health and social work</b>	2.7	-4.4	4	14.1	22.6	10.4	8.2
<b>Other services activities</b>	1.4	2.7	-0.1	5.3	3.1	2.6	1.1

Source: Budget Statement, 2021

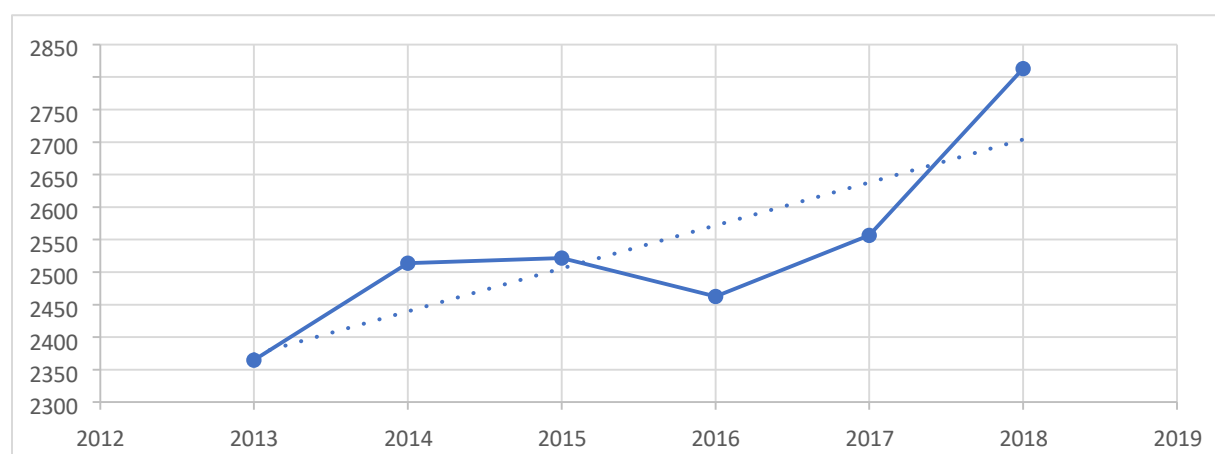
The evidence of little or no economic transformation is even more pronounced when relying on the definition as well as data provided by ACET. Out of the five DEPTH indicators for economic transformation, Ghana only performs better than the ACET average with regard to export competitiveness. For all the other indicators, the country's performance is lower than the ACET average and the case of technological upgrading is the most pronounced. This is not surprising since Ghana's overall ATI rank is 16<sup>th</sup> out of 21 countries implying it is one of the countries with the poorest record of economic transformation.<sup>1</sup> In terms of the other indicators, Ghana ranks 17<sup>th</sup> in terms of diversification, 7<sup>th</sup> in terms of export competitiveness, 12<sup>th</sup> in terms of productivity, 20<sup>th</sup> in terms of technological upgrading, and 8<sup>th</sup> in terms of human well-being.

There are several possible reasons for the evidence of little or no economic transformation in Ghana when relying on the ACET DEPTH indicators. The higher than average increase in export competitiveness is mainly due to the following: (i) the ratification of some trade policies including the Economic Partnership Agreement (EPA) with Europe that was initiated in 2014, and led to tariff-free exports of goods between Ghana and Europe; (ii) the increase in the export of traditional commodities (such as cocoa, gold and other natural resources); (iii) expanding the export base to include a large range of value-added products under the Trade

<sup>1</sup> <http://africantransformation.org/wp-content/uploads/2014/02/country-transformation-profiles.pdf>

Sector Support Programme; (iv) the exports of electricity to neighboring countries; and (v) the export of petroleum products. Table 2.3 shows the trend in the value of total non-traditional exports in Ghana. Non-traditional exports, which include agricultural products, handicrafts and processed/semi-processed goods have increased steadily in recent times. Table 2.4 also shows the structure of the country's exports that is dominated by traditional exports such as gold, cocoa beans and cocoa-related products and manganese.

**Table 2.3. Total non-traditional exports, 2013-2018 (US\$ millions)**



Source: ISSER, *The State of the Ghanaian Economy, 2018*

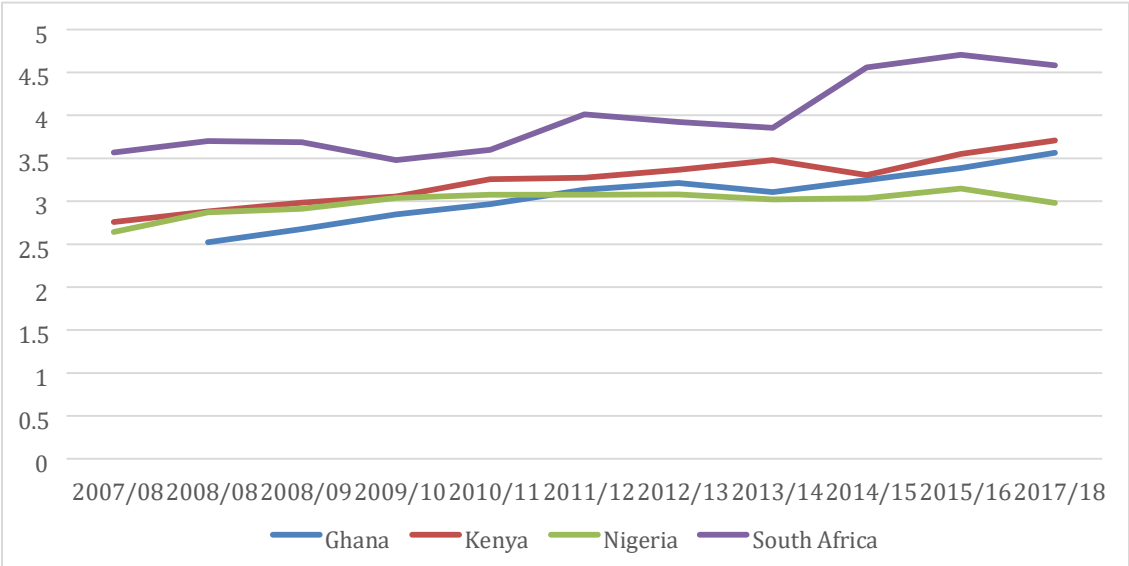
**Table 2.4. Ghana's export structure (2019)**

	Proportion of exports (%)
Gold	36.0
Petroleum oil	31.0
Cocoa beans	11.0
Cocoa paste	2.4
Manganese ores and concentrates	2.1
Cocoa butter, fat and oil	2.0
Coconuts, brazil nuts and cashew	1.5
Colloidal and precious metals	0.7
Palm oil and its fractions	0.7

Source: *Observatory of Economic Complexity*

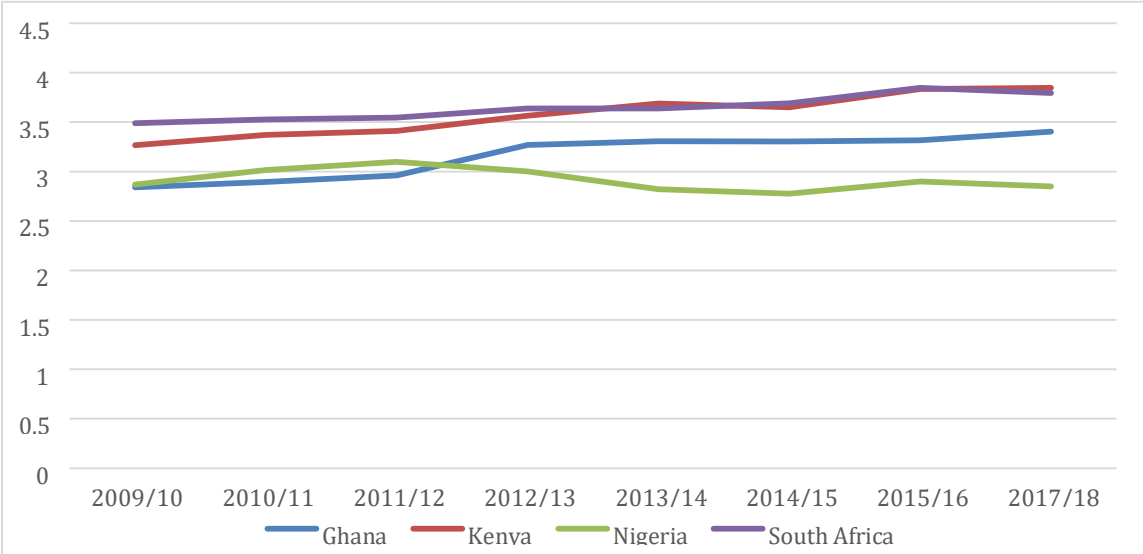
With respect to technological upgrading, Ghana lags behind notable economic giants in Africa. It is therefore not surprising that the country ranks below the average of ACET’s technological upgrading index. Figure 2.7 shows the extent to which Ghana lags in terms of its technological readiness, relative to countries like Kenya, Nigeria and South Africa. The country also lags between most of these countries in terms of innovation (see Figure 2.8).

**Figure 2.7. Technological readiness of Ghana relative to other SSA countries**



Source: World Economic Forum

**Figure 2.8. Innovation in Ghana relative to other SSA countries**



Source: World Economic Forum

Finally, with regard to productivity and human well-being, data from the GGDC Economic Transformation Database as well as the World Development Indicators show Ghana's performance relative to other countries in Africa. In Tables 2.5 and 2.6, it can be observed that Ghana lags behind Kenya, Nigeria and South Africa in terms of average productivity and average GDP per capita. It is therefore entirely not surprising that the country lags behind in the ACET DEPTH indicators.

**Table 2.5. Average productivity, 2000-2019**

	Kenya	Nigeria	South Africa	Ghana
<b>2000-2004</b>	1,120,692.17	11,576,137.66	1,100,541.62	12,851.19
<b>2005-2009</b>	1,992,008.24	33,964,491.80	1,882,103.86	38,002.79
<b>2010-2014</b>	3,936,816.72	71,688,554.80	2,950,140.00	114,227.12
<b>2015-2019</b>	7,108,984.45	109,286,240.00	4,007,771.75	254,719.99

Source: GGDC Economic Transformation Database

**Table 2.6. Average GDP per capita, 2000-2019 (US\$)**

	Ghana	Sub-Saharan Africa	Sub-Saharan Africa (excluding high income)	Nigeria	South Africa	Kenya
<b>2000-2004</b>	1,052.01	1,237.42	1,236.37	1,706.39	4,727.16	1,002.55
<b>2005-2009</b>	1,211.95	1,423.95	1,422.87	2,101.84	5,417.64	1,091.24
<b>2010-2014</b>	1,582.40	1,589.44	1,588.29	2,530.78	5,681.05	1,229.80
<b>2015-2019</b>	1,824.23	1,642.62	1,641.36	2,561.43	5,659.05	1,423.12

Source: World Bank, World Development Indicators

## 3. COVID-19 responses and lessons

### 3.1. Ghana's experience

This section discusses Ghana's experience with COVID-19 so far and concentrates on the monthly spread statistics, the peak periods and the details of vaccinations. Ghana recorded its first two imported cases of COVID-19 on March 12, 2020. Afterwards, Ghana witnessed a sharp rise in average daily severe cases from 2 in April to 19 in June 2020 (see Figure 3.1). Over the same period, average critical cases increased from 0 to 5 while average deaths increased from 0 to 3. The next quarter (July to September) saw a downward trend in average severe cases, critical cases, and deaths. The period from October 2020 to February 2021 was characterized by a sharp increase in average severe cases (from 10 to 97), deaths (1 to 7) and critical cases (3 to 30). This could be attributed to political activities (campaigning, rallies and the elections) and the end-of-year festivities.

Ghana's COVID-19 experience is characterized by spikes amid low rates of infections and deaths. Peak periods for new daily infections were July to mid-August 2020, mid-January to early March 2021 and early August to early September 2021 (see Figure 3.2). Similarly, total cases and recoveries rose sharply between mid-June and August 2020, February and April 2021, and August and mid-October 2021, total infections and recoveries rose sharply (see Figure 3.3). In 2020, Ghana started recording severe and critical cases in April and May, respectively (See Table 3.1). Since then, two major peak periods have been recorded with regard to severe and critical cases. The severe and critical case count began to rise in January 2021, peaked towards the end of January and began to fall (see Figure 3.4). The second peak was recorded between August and October 2021 (see Figure 3.4).

With regard to vaccinations, Ghana received a first tranche of 600,000 COVAX vaccine doses on February 24, 2021, as part of the AstraZeneca/Oxford vaccines earmarked for distribution to low- and middle-income countries<sup>2</sup>. This was followed by other tranches of the AstraZeneca COVID-19 vaccines received in September 2021 (1.5 million doses) and October 2021 (530,000 doses). Other vaccines received were 1.2 million Moderna vaccine doses that the US government donated<sup>3</sup>, and 1,178,400 doses of the Johnson & Johnson single-shot vaccine in August, September, and October 2021.

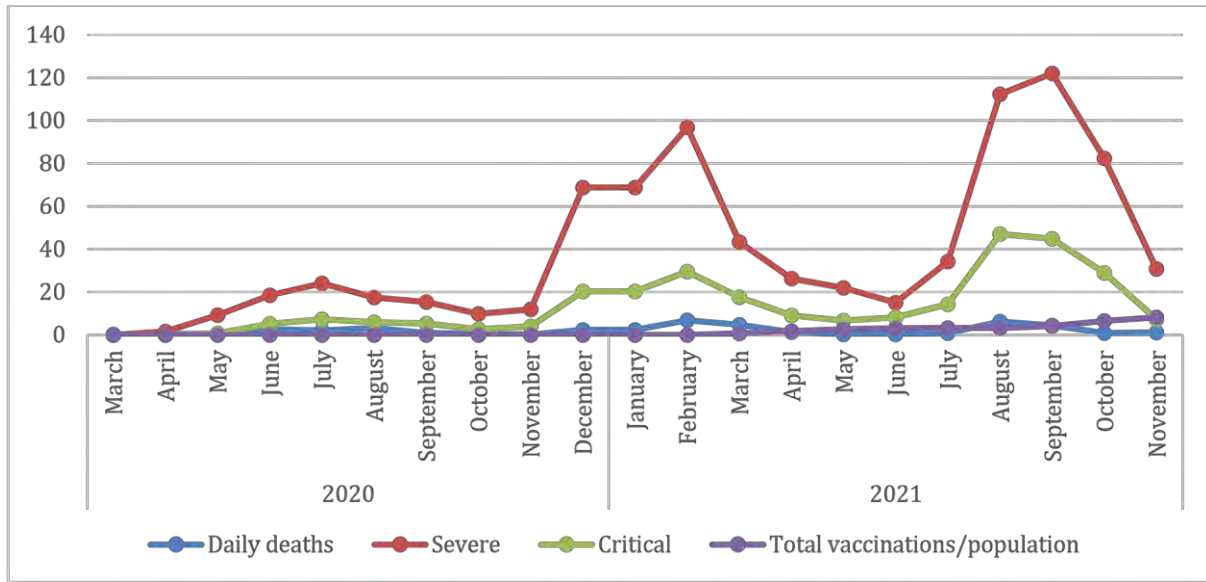
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<sup>2</sup> <https://www.afro.who.int/news/ghana-becomes-recipient-historic-first-shipment-covax-vaccines>

<sup>3</sup> <https://gh.usembassy.gov/u-s-donates-1229620-moderna-covid-19-vaccines-to-ghana/>

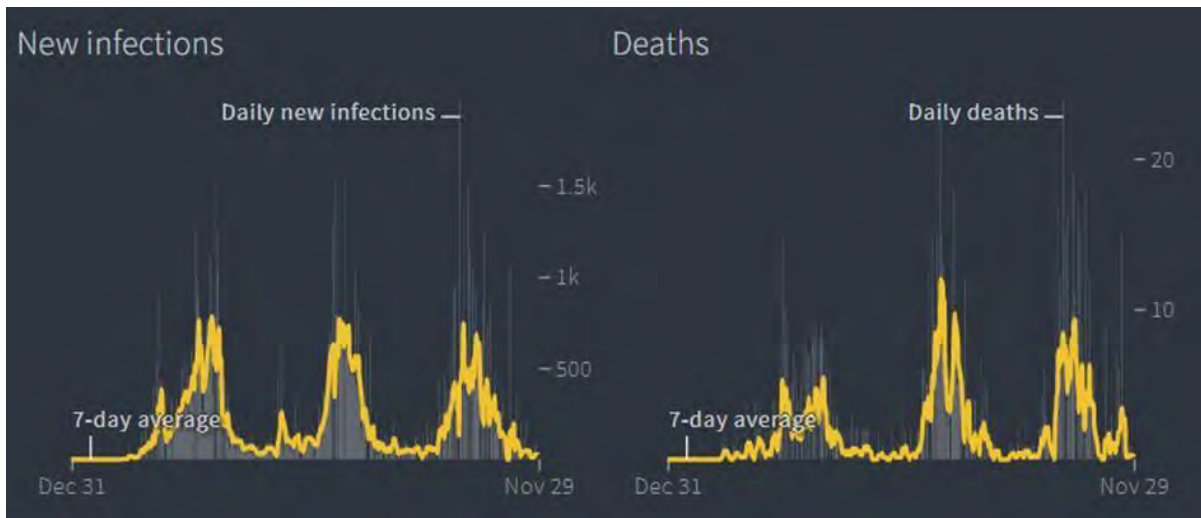


**Figure 3.1. Monthly average of daily severe cases, critical cases and deaths**



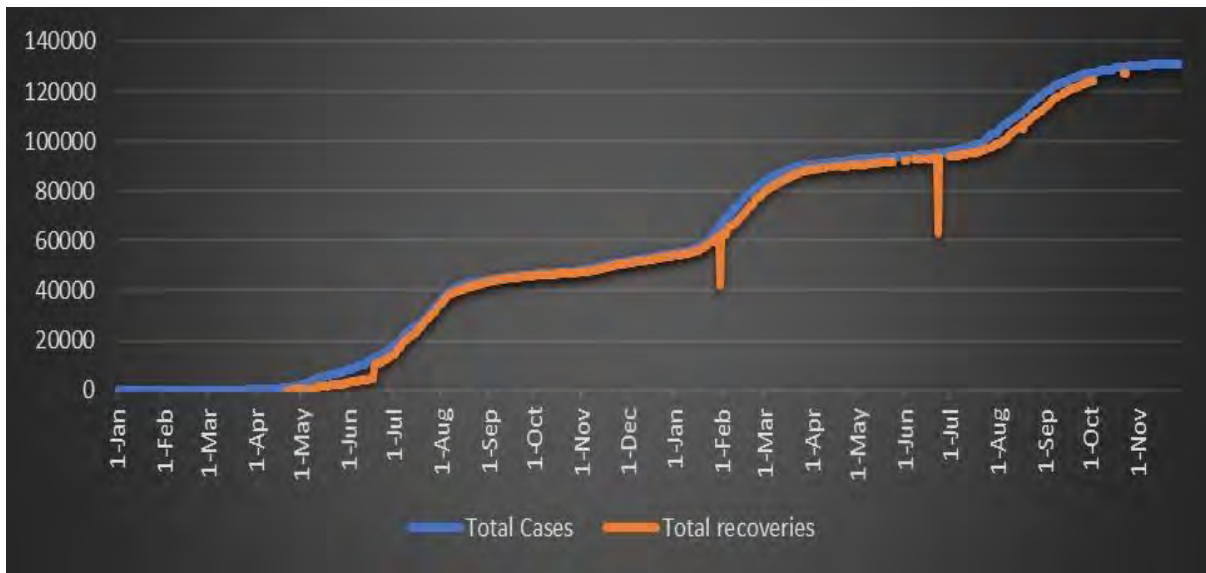
Source: Author's construction using data from Ghana Health Service

**Figure 3.2. New infections and deaths**



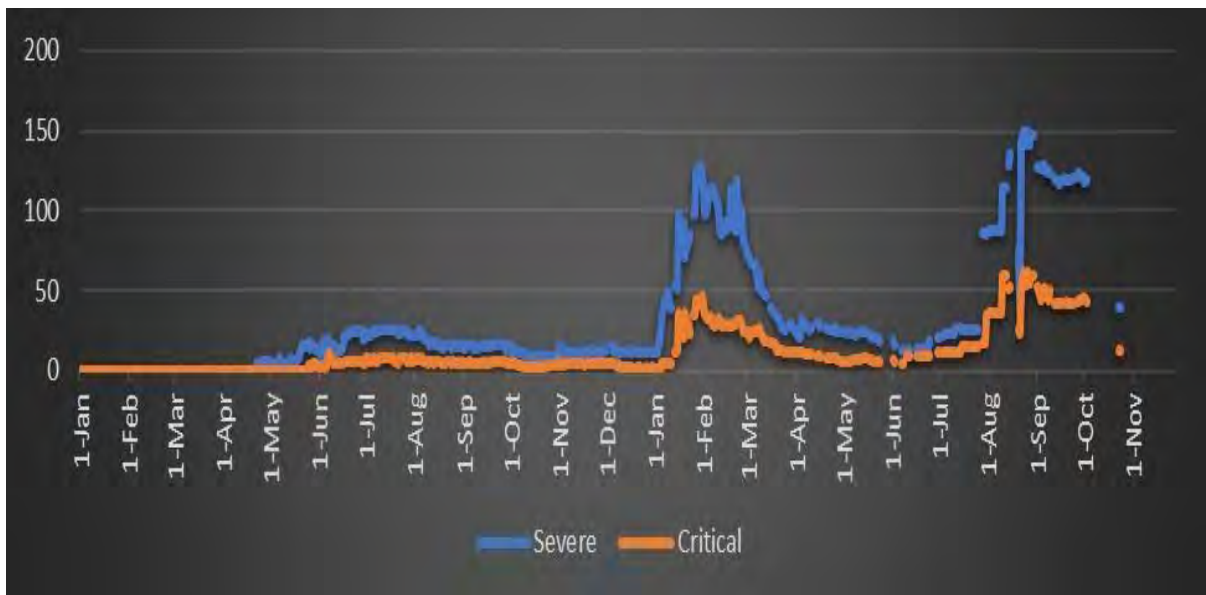
Source: Reuters COVID-19 Tracker. Accessed at <https://graphics.reuters.com/worldcoronavirus-tracker-and-maps/countries-and-territories/ghana/>

**Figure 3.3. Total COVID-19 cases and total recoveries**



Source: Author's construction using data from Ghana Health Service

**Figure 3.4. Severe and critical COVID-19 cases**



Source: Author's construction using data from Ghana Health Service

As of November 24, 2021, Ghana had administered almost 3.5 million COVID vaccines [3]. Vaccinations have increased very fast since September 2021 (see Table 3.1). This has informed a prediction that about 15 percent of Ghanaians should be vaccinated after 279 days. Besides, the daily recorded cases have also been on a downward trend since the vaccinations picked up (see Table 3.1).

**Table 3.1. Monthly average of daily severe cases, critical cases and deaths**

	Month	Daily deaths	Severe	Critical	Total vaccinated (% of population)
<b>2020</b>	March	0.3	0	0	0
	April	0.4	1.6	0	0
	May	0.6	9.2	0.7	0
	June	2.6	18.5	5.2	0
	July	2	24.1	7.3	0
	August	3.3	17.5	5.9	0
	September	0.8	15.3	5.3	0
	October	0.6	9.8	2.7	0
	November	0.1	11.9	4	0
	December	2.3	68.8	20.3	0
<b>2021</b>	January	2.3	68.8	20.3	0
	February	6.8	96.9	29.5	0
	March	4.7	43.3	17.6	0.7
	April	1.3	26.3	9	1.8
	May	0.2	22	6.7	2.6
	June	0.3	15	8.2	3.1
	July	0.9	34.2	14.3	3.2
	August	6.3	112.3	47.1	3.2
	September	4.4	122.1	44.8	4.1
	October	0.8	82.4	29	6.6
	November	1.2	30.7	7.3	8.2

Source: Author's computation using data from GHS

As a result of the vaccinations which began in March 2021, the average severe cases, critical cases, and deaths fell. In June, the administered doses of the COVID-19 vaccines were enough to ensure that about 3.1 percent of the population should have received at least one dose. Ghana recorded the biggest increase in average daily severe infections (34 to 112) and critical cases (14 to 47) between July and August 2021. Between September and November 2021, the average number of deaths, severe and critical cases dropped from 4, 122 and 45 to 1, 31 and 8, respectively. Over the same period, the vaccination doses-to-population ratio rose from 4.1 percent to 8.2 percent.

As of November 2021, Ghana has gone through COVID-19 waves, recording 130,710 cases and 128,885 recoveries. The number of active cases and deaths stands at 734 and 1,208, respectively. Moreover, out of the targeted and total population of 20,000,859 and 31,742,357, respectively, the number of fully vaccinated persons stands at 842,255 while some 2,820,092 persons have received at least one dose.

### ***3.1.1. Measures to limit and prevent spread***

Broadly, the measures to contain the pandemic included wearing masks, observance of personal hygiene (handwashing and use of hand sanitizers), social distancing, staying at home, closure of all borders, and construction of more intensive care unit facilities.

A few days after Ghana reported its first two cases of COVID-19, the government put in place measures to limit the spread of infection should community-level cases be recorded. The government closed down all academic institutions as a precaution against spread and put a ban on public gatherings. Then, the Imposition of Restrictions Bill was passed into law by Parliament to enforce the directives to control the increasing incidence of COVID-19 cases. This allowed the government to impose a 21-day partial lockdown in the Greater Accra and Greater Kumasi areas starting March 30, 2020<sup>4</sup>.

As the number of cases began to rise rapidly, the government banned from entering Ghana all travelers from countries where confirmed cases exceeded 200. In addition, the government instituted safety protocols for health workers when the infection rates among health workers began to soar. To ensure information flow and timely updates of the situation, an online portal was set up to give digital updates in real time. The government also declared a mandatory self-quarantine for travelers entering the country to limit imported cases of infection.

Human traffic (via air, land and sea) was restricted by closing all the borders from March 22, 2021. This measure lasted for several months; on September 1, some restrictions on air travel were removed to allow entry and exit while restrictions on travel by sea and land remained in

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<sup>4</sup> The span of this measure included the Greater Accra Metropolitan Area (GAMA) and the Greater Kumasi Metropolitan Area; the restrictions took place in over 40 Metropolitan, Municipal and District Assemblies (14 in Greater Kumasi and 26 in Greater Accra) and covered about a quarter of the nation's population (an estimated 7.7 million individuals).

place. In spite of these measures, the reported cases in Ghana kept surging, especially in Accra and Kumasi. By March 27, 2020, the count of confirmed cases had reached 137, with 2 recoveries and 4 deaths. Other measures included beefing-up hygiene protocols at public places and in homes, contact tracing and testing of contacts and individuals who present with symptoms, and increased civil education about the pandemic and safety protocols as well as the mandatory wearing of masks in public places.

Amidst the rising case count, school restrictions were partially relaxed, allowing online and multiple-track education in June 2020 (see Figure 3.5). The trend in infections declined in September 2020 because of the containment measures but picked up again in mid-January 2021, possibly as a direct result of the political events culminating in the December 2020 general elections. This led to a call for school closure. However, the government scrapped all educational restrictions at the end of January, following a drop in infection rates. Shortly after removing all school restrictions, Ghana experienced a second spike in daily infections. The post lockdown period was characterized by periods when closure was advised and others where some sectors were required to close down (See Figure 3.6).

**Figure 3.5. School closure and daily COVID infections**



Source: Reuters COVID-19 Tracker. Accessed at <https://graphics.reuters.com/world/coronavirus-tracker-and-maps/countries-and-territories/ghana/>

**Figure 3.6. Workplace closure and daily COVID-19 infections**



Source: Reuters COVID-19 Tracker. Accessed at <https://graphics.reuters.com/world/coronavirus-tracker-and-maps/countries-and-territories/ghana/>

**Figure 3.7. The stay-at-home measure and daily COVID-19 infections**



Source: Reuters COVID-19 Tracker. Accessed at <https://graphics.reuters.com/world/coronavirus-tracker-and-maps/countries-and-territories/ghana/>

**Figure 3.8. Border closure and daily COVID-19 infections**



Source: Reuters COVID-19 Tracker. Accessed at <https://graphics.reuters.com/world/coronavirus-tracker-and-maps/countries-and-territories/ghana/>

Another measure to contain the spread of infections was that all Ghanaians were required to stay at home as much as possible. This measure was implemented in early April 2020 amidst a rising number of infections (See Figure 3.7). It was, however, relaxed for about nine months, followed by a recommendation (a more lenient version of the measure) for people to stay home (between February and August 2021).

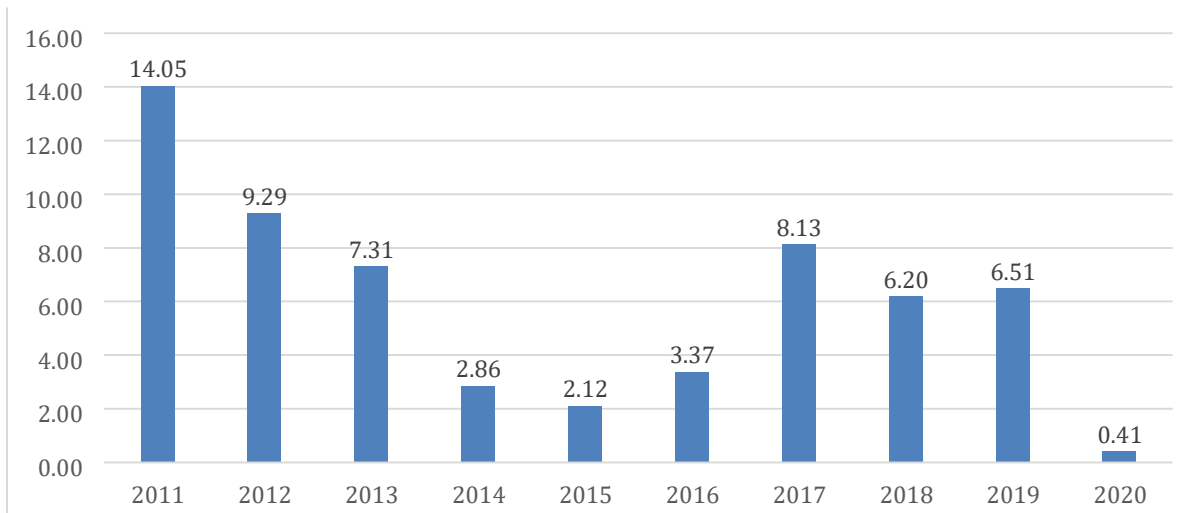
Ghana began the fight against the pandemic by screening all arrivals. After positive counts of infections were recorded, an initial ban on arrivals from some regions preceded a lengthier ban on all international arrivals from March 22, 2020, when 23 cases and one death were recorded (see Figure 3.8). Regardless of the strict closure of borders, the daily infections and deaths kept rising and only began to decline in early August 2020. Kotoka International Airport was then open to passengers on September 1, 2020. The screening of arrivals has been carried out unabated since its inception.

## **3.2. Economic impact of the pandemic**

### **3.2.1. Macroeconomic impact**

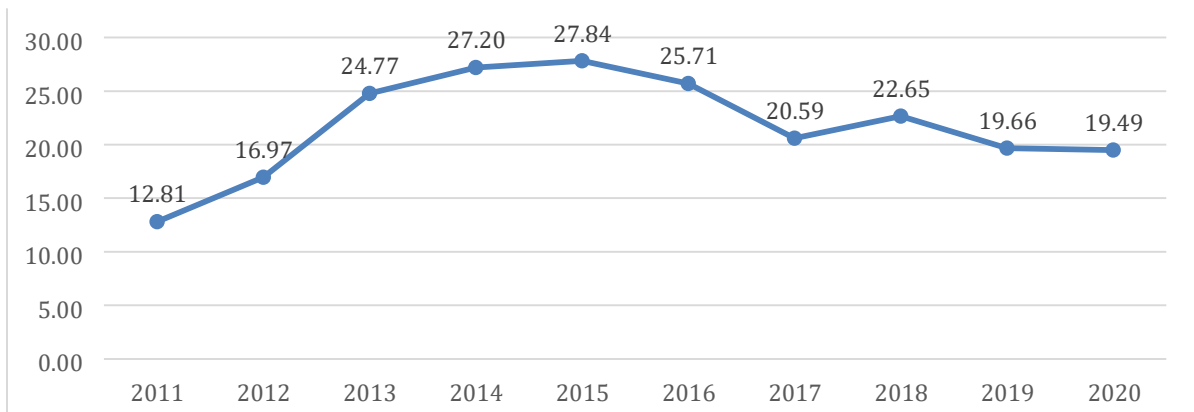
Globally, efforts to reduce the spread of COVID-19 infections had some negative socio-economic ramifications. Growth projections were altered in many countries and Ghana was not exempted. Ghana recorded 0.4 percent annual GDP growth rate in 2020, down from 6.5 percent growth the previous year (see Figure 3.9). This was the lowest GDP growth rate since 1984 (WDI, 2020). Besides, this was a significant reduction when compared with the projected growth rate of 6.8 percent for 2020 (Ministry of Finance, 2020).

**Figure 3.9. GDP growth, 2011-2020 (annual %)**



Source: World Bank, World Development Indicators

**Figure 3.10. Gross capital formation, 2011-2020 (% of GDP)**

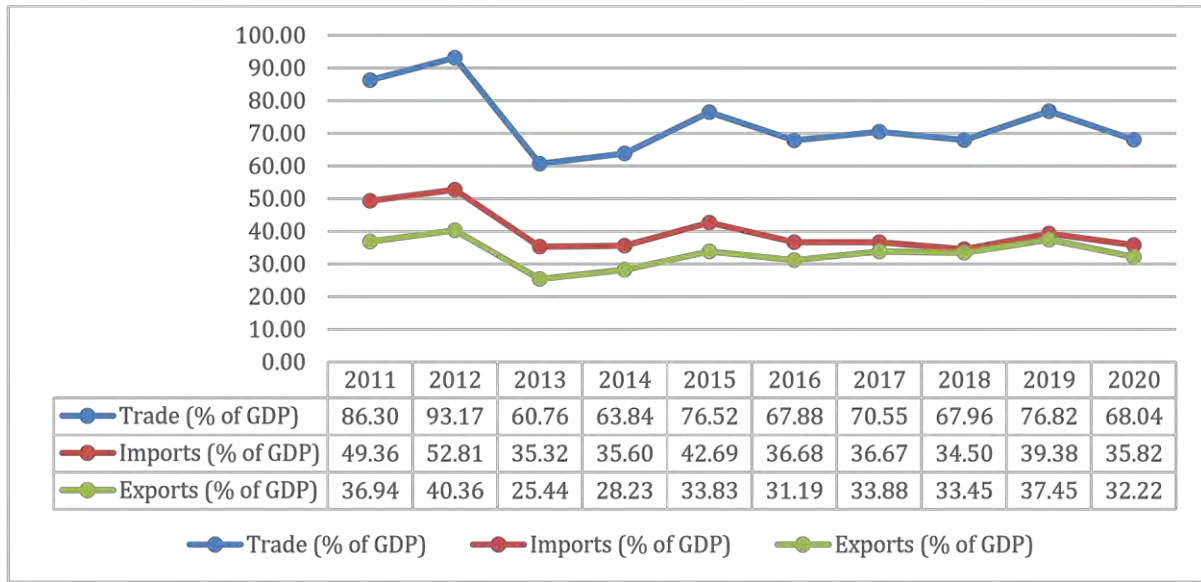


Source: World Bank, World Development Indicators

Trade as a percentage of GDP fell from 76.8 percent in 2019 to 68 percent in 2020 (see Figure 3.11). This was due to a 5.23 percent reduction in the exports-to-GDP ratio as well as a 3.46 percent reduction in the imports-to-GDP ratio (see Figure 3.11). The trade outturn for 2020 was not significantly lower than the average since 2016. The pandemic led to a dip in demand and hence prices of petroleum and cocoa. Petroleum prices fell from a projected US\$62.6 per barrel (the provision in the 2020 Budget Statement) to US\$22.7 at the end of March 2020 (IMF, 2020). In addition, the demand for cocoa products is tied to disposable incomes, tourism and travel; the pandemic, therefore led to reduced cocoa demand and hence, the price of cocoa. The price of gold however held strong as the metal was seen to be a safe haven during the crisis. The price of gold generally remained on an upward trend, peaking in mid-2020 (see Figure 3.12).

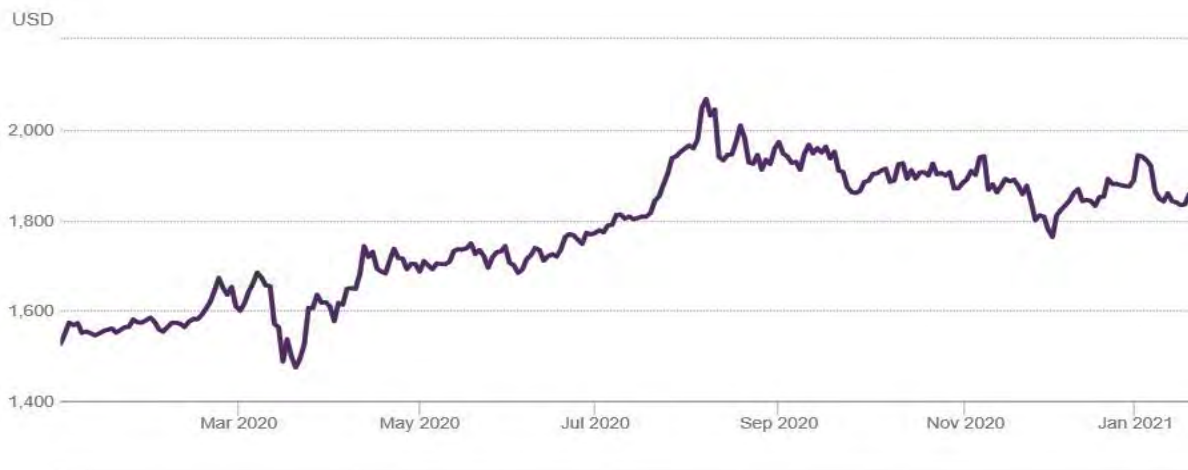


**Figure 3.11. Exports, imports and total trade, 2011-2020 (% of GDP)**



Source: World Bank, World Development Indicators

**Figure 3.12 Price of gold (US\$/oz)**



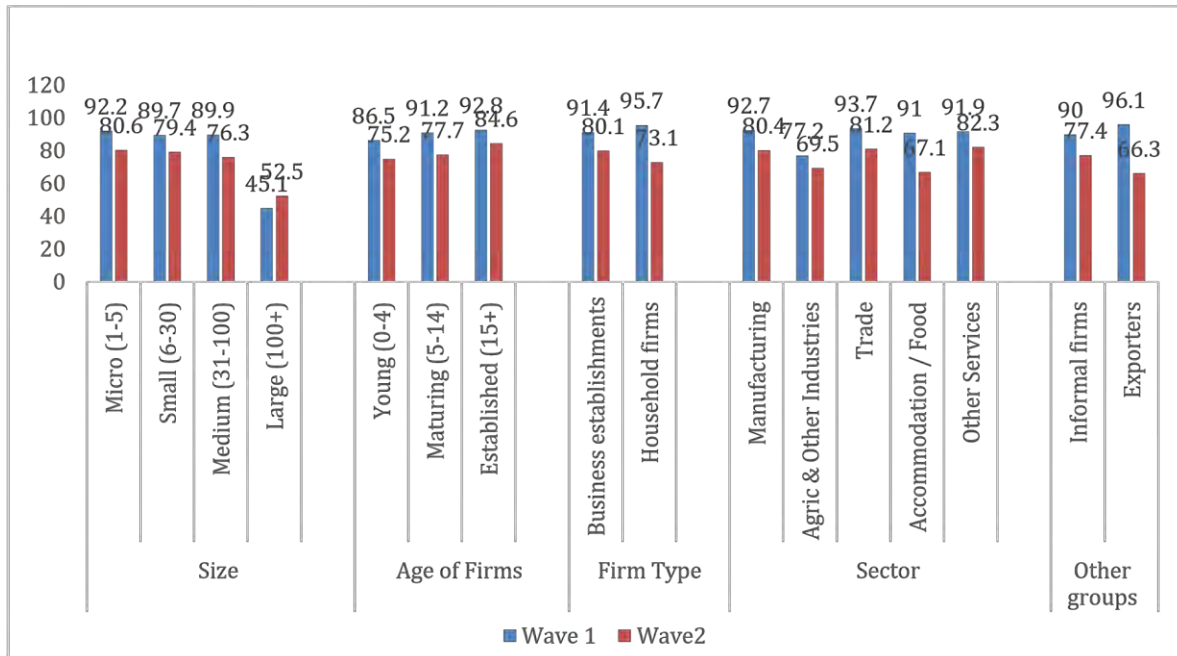
Source: GoldHub.

### 3.2.2. Impact on households and businesses

The pandemic's effect on businesses is very pronounced, altering the behavior of firms and consumers alike. Businesses have had to adopt coping strategies in order to survive the economic downturn. To discuss the impact on businesses in Ghana, we draw on the findings of the Business Tracker Survey (BTS) that was carried out by the Ghana Statistical Service in coaction with the United Nations Development Programme (UNDP) and the World Bank. In the survey, 3,658 and 4,311 firms were interviewed in the first and second rounds between May and June 2020 (August/September 2000).

Figure 3.13 shows responses when the respondents of the BTS were asked about their current sales compared to sales in the previous year. In both rounds of data collection, nearly all business categories experienced a decrease in sales, with the average proportion of these changes exceeding 50 percent. Household businesses experienced the greatest turnover reduction between the first and second data-gathering rounds. Using sector classification, enterprises in the trading and manufacturing industries were the most affected, with 9 out of every 10 firms reporting lower sales compared to the previous year. The margins between the two waves were 10 percent and 8 percent respectively. Primarily, the reduction in sales occurred as a result of control measures such as the partial lockdown and social distancing that were implemented. Demand for many products and services, apart from protective clothes, hand sanitizers and food items, was very low. This led to a general reduction in sales.

**Figure 3.13. Decrease in sales in 2020 (%)**



Source: Business Tracker Survey, 2020

Presently, many Ghanaian firms have not recovered from the impact of the pandemic; they have adopted cost-cutting strategies such as laying off workers and reducing staff hours and wages. The findings of the BTS 2020 revealed the laying off of over 270,000 people who also had to forfeit their salaries. Notably, some 770,000 workers in Ghana experienced reductions in their working hours (and salaries) (World Bank, GSS and UNDP, 2020). Besides, almost two-thirds of firms were forced to either fully or partially close down during the lockdown. For firms in the Greater Accra and Ashanti regions, about 82.1 percent and 87.3 percent, respectively were closed down during the lockdown (World Bank, GSS and UNDP, 2020). The BTS of 2020 also revealed that about 4 percent (0.8 percent) of businesses laid off their workers during the first and second rounds of the data collection. Small firms (6-30 employees), young firms (0-4 years) and businesses in the accommodation and food were most affected by the layoffs. Furthermore, about 36 percent and 27 percent of firms respectively reduced work hours in the first and second rounds of the data collection. Most young firms (0-4 years), services firms, informal firms and medium-sized firms (31-100 employees) cut down their employees' work hours

### ***3.2.3. Impact on Ghana's health system***

The pandemic also had adverse effects on the various sources of healthcare financing and, generally, healthcare delivery in Ghana. Considering the reduction in tax and other non-tax streams of revenue and the burdensome expenditure commitments, support from the government could easily be re-channeled into combatting the pandemic. As the more advanced countries themselves had to deal at domestic level with the pandemic, donor support was also likely to be reduced. The patronage of the National Health Insurance Scheme (NHIS) was predicted to suffer a downturn as many subscribers were not encouraged to renew their health insurance policies due to the fear of the virus spreading among visitors to health facilities (Abor and Abor, 2021). Besides, health consumers' non-attendance at health facilities would likely reduce out-of-pocket payments, hence, a fall in the hospitals' capacity to generate internal funds to finance their operations (OECD, 2012; Abor and Abor, 2021).

The pandemic exposed Ghana's lack of adequate health infrastructure as the health system was stretched to its limits, necessitating the construction of emergency wards to take care of the increasing hospitalization demand. Patients with chronic diseases who could not access healthcare due to the conversion of some wards into COVID treatment and isolation centers were in danger of worsened health, at best.

### ***3.2.4. Fiscal impact***

The fiscal impact of the pandemic cannot be ignored. In just one quarter after the pandemic hit Ghana, there were clear revenue shortfalls emanating from reduced international trading activities and tax incentives to mitigate the impact of the pandemic on households and businesses. In addition, the patronage of the services offered in the hospitality industry fell

sharply. Revenue from income, profit and import taxes also fell sharply due to the reduced levels of economic activity. Available data for the first half of 2020 show a 26 percent shortfall in targeted revenue mobilization; this shortfall was attributable to a fall in customs receipts, oil revenue and non-oil non-tax revenues (Ministry of Finance, 2021). Meanwhile, expenditure far exceeded projected levels as a result of the pandemic during the first half of 2020. This resulted in a fiscal deficit of 6.3 percent of GDP compared with the projected 3 percent of GDP by the end of June 2020. The purchase of core logistics, risk allowances for emergency health workers, goods and services, medical supplies and the cost of training medical personnel and investing further in health facilities accounted for the deficit.

Over the second half of 2020 and beyond, the government indicated its intention to pursue fiscal measures aimed at protecting jobs and businesses. Updated fiscal estimates for 2020 indicate that revenues in 2020 fell short of the budget by GH¢13.4 billion, an equivalent of 2.5 percent of GDP. This arose from a GH¢5.2 billion loss of petroleum revenue (1.0 percent of GDP), non-oil tax revenue shortfall of GH¢2.6 billion (0.2 percent of GDP) and non-tax revenue shortfall of GH¢4.2 billion (1.0 percent of GDP). Expenditures also increased by GH¢11.8 billion, representing 4.5 percent of GDP, and this was mainly from COVID-19 Preparedness and Response Plan and Coronavirus Alleviation Programme.

It should be noted that pandemic costs in addition to the cost of elections, security, outstanding claims and capitalization of the National Development Bank contributed to the increased expenditure. The expenditure increases of an equivalent of 2.5 percent of GDP and the revenue shortfall of 4.5 percent of GDP meant that the government had an additional financing need of almost 7.0 percent of GDP. Thus, given the initial pre-COVID-19 programmed fiscal deficit of GH¢18.9 billion (4.7 percent of GDP), the government revised the fiscal deficit (on cash basis) to GH¢44.9 billion (11.7 percent of GDP). Given the reduction in donor support, the increased deficit was financed from borrowing and other sources including central bank financing. Thus, the major fiscal impact as described in the data above is the widening fiscal gap and increased borrowing, with the debt-to-GDP ratio reaching 77.6 percent by September 2021. Such unsustainable debt levels have adverse implications for debt-service costs as well as the limited fiscal space to undertake development activities.

### **3.3. Response measures to mitigate the economic impact**

The government sought to ease the difficulties being faced by Ghanaians, especially the vulnerable populations, small and medium firms and front-line health workers with fiscal policy measures immediately. It announced a commitment to provide the cedi equivalent of US\$100 million to enhance COVID-19 preparedness and response through the expansion of infrastructure, purchase of materials and equipment, and for public education. In addition, about GH¢1 billion from the Stabilization Fund was committed under Ghana's Coronavirus Alleviation Programme (CAP) to assist affected industries and households.

The fiscal measures and reliefs under CAP were aimed at minimizing the impact of COVID-19 on the demand and supply sides of the economy, especially for vulnerable and less privileged people. This included a 100 percent water bill subsidy to all households and businesses for nine months ending December 2020 and further extended to March 2021 for people who use up to five cubic meters of water per month; a 100 percent rebate electricity bill subsidy for one million lifeline customers (consuming below 50 kilowatts per month) were given from April to December 2020 and further extended till March 2021; 50 percent subsidy for all other consumers based on March electricity bills for three months ending June 2020.

In addition, incentives were offered to health workers including free transportation, tax exemptions on employment emoluments from April to June 2020, insurance packages with an assured amount of GH¢350,000; an allowance of GH¢150 per day for personnel who embarked on contact tracing, and an allowance of 50 percent of basic monthly salary for front-line workers from March to June 2020. In collaboration with some civil society organizations (CSOs), the CAP initiative provided free hot meals to about 400,000 homeless and vulnerable persons and families during the lockdown period in Kumasi, Kasoa, Accra and Tema.

To support businesses, the government procured about GH¢65 million in personal protective equipment (PPEs) from domestic firms and provided a GH¢600 million stimulus package to support over 200,000 MSMEs under the Coronavirus Alleviation Programme Business Support Scheme (CAPBuSS) which was launched on May 19, 2020. According to the Ghana Enterprises Agency (GEA)<sup>5</sup>, about 120,000 firms received financial support from the CAPBuSS Programme<sup>6</sup>, out of about 700,000 firms that applied.

The government also provided support worth GH¢200,000 to disabled entrepreneurs in the Savannah, Northern and North-East regions to enable them to remain in business. The Ghana Revenue Authority (GRA) devised flexible terms, including a two-month extension for annual tax returns and field audits, as well as a penalty remission for taxpayers who repaid their outstanding bills by June 30, 2020. The Ghana Standards Authority (GSA) also waived a GH¢20,000 certification charge and auditing and penalty waivers for taxpayers who repaid their outstanding arrears by June 30, 2020. At the height of the pandemic, the Ghana Standards Authority (GSA) waived a GH¢20,000 certification charge and ensured the speedy certification of prototype PPEs for mass production.

A COVID-19 National Trust Fund was also set up to help alleviate the effects of the pandemic on institutions and individuals. The Bank of Ghana, in collaboration with banks and telecom companies, made digital payments below GH¢100 free. In addition, the Know Your Customer account onboarding procedures and requirements were eased in terms of verifying clients' identities. Furthermore, the limits on daily mobile money transactions were increased.

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<sup>5</sup> Formerly the National Board For Small-Scale Industries (NBSSI)

<sup>6</sup> "120,000 Businesses receive COVID-19 support". Graphic Online. Retrieved on November 21, 2021.

### 3.4. Post-pandemic recovery challenges and preparedness for future shocks

#### 3.4.1. Recovery challenges

Considering the substantial impact of the COVID-19, recovery is not only desirable but also imperative. Some post-pandemic recovery challenges are discussed in this section.

First, the pandemic has brought about output shortfalls in all three sectors of the economy. The cost of restoring the sectors to optimal levels of production remains a challenge. Table 3.2 compares pre-COVID-19 and post-COVID-19 levels of output across the agriculture, industry and service sectors.

**Table 3.2. Output losses in agriculture, industry and services due to COVID-19, 2020-2023**

	2020	2021	2022	2023*	2020-2023*
<i>Pre-COVID-19</i>					
<i>GH¢ millions</i>					
<b>A. Real GDP</b>	176,563.9	185,284.0	193,779.4	206,400.3	762,027.6
<b>B. Agricultural sector output</b>	33,419.0	35,353.4	37,217.4	39,186.6	145,176.4
<b>C. Industrial sector output</b>	69,483.0	71,753.4	73,415.2	78,349.3	293,000.9
<b>D. Services Sector Output</b>	63,876.0	67,696.8	71,937.9	76,889.2	280,399.9
<i>COVID-19 and Post-COVID-19</i>					
<b>U. Real GDP</b>	166,116.7	17,4401.7	183,036.2	192,317.7	715,872.3
<b>V. Agricultural sector output</b>	33,054.4	34,380.5	35,850.3	37,598.5	140,883.7
<b>W. Industrial sector output</b>	60,990.2	63,900.3	67,302.5	70,927.7	263,120.7
<b>X. Services sector output</b>	63,192.9	66,753.3	70,047.4	73,424.5	273,418.1
<b>Agricultural output loss (V-B)</b>	346.6	972.9	1,367.1	1,588.1	4,292.7
<b>Present Value US\$</b>	346.6	900.8	1,172.1	1,260.7	3,680.2
<b>Industry output loss (W-C)</b>	8,492.8	7,853.1	6,112.7	7,421.6	29,880.2
<b>Present value (\$)</b>	8,,492.8	7,271.4	5,240.7	5,891.5	26,896.3
<b>Services output loss (X-D)</b>	683.1	943.5	1,890.5	3,464.7	6,981.8
<b>Present value</b>	683.1	873.6	1,620.8	2,750.4	5,927.9
<b>Loss of GDP</b>	-5.92%	-5.87%	-5.54%	-6.82%	-6.06%
<b>Loss of agricultural sector output</b>	-1.04%	-2.75%	-3.67%	-4.05%	-2.96%
<b>Loss of industrial sector output</b>	-12.22%	-10.94%	-8.33%	-9.47%	-10.20%
<b>Loss of services sector output</b>	-1.07%	-1.39%	-2.63%	-4.51%	-2.49%

Source: Author's computation. Discount rate = 8%. Data on Real GDP and industrial sector output were obtained from the 2020 and 2021 Budget Statements.

Output losses were recorded in all three sectors due to the pandemic. The industrial sector recorded the highest percentages of output loss, ranging between 8.3 percent and 12.2 percent. The projected GDP losses attributable to the pandemic range from 5.5 percent to 6.8 percent over the period 2020-2023. This has huge effects on business survival, profitability and unemployment. Bringing the economy to its initial levels of buoyance would require a combination of factors such as the use of improved technology that would enhance productivity and minimize waste.

In addition, Ghana has been plunged into huge debt as government revenue, external support and business finances have been significantly depleted by the pandemic. As a result of the fiscal expansion needed in the short term to manage the impact of the pandemic, public debt levels have risen. Ghana's public debt hit 76.11 percent of projected GDP at the end of 2020, much above the Market Access Countries' maximum early warning sustainability criterion of 70 percent (Addison, 2020). The country's debt service metrics and gross finance needs have exceeded the sustainability thresholds. As a result, a plan must be devised to reduce debt to sustainable levels to reduce the risks posed to future budget funding, exchange rate stability, and financial sector stability following COVID-19. Regarding the banking sector, the pandemic's economic impact may lead to larger non-performing loan volumes, bank capital erosion, excessive risk exposure, poor asset quality, excessive risk exposure, lack of profitability, capital loss and liquidity concerns, all of which are common signs of bank failure.

### ***3.4.2. Ghana's preparedness to tackle future shocks***

Consumers have suffered job and income losses, leading to reduced levels of demand. Improving livelihoods is key as the expected restoration of output to pre-COVID-19 levels would have to be matched with proportional levels of consumer demand. When well executed, the solutions proffered would also help build resilience against future shocks from diverse sources such as climate change, global economic downturns, epidemics and pandemics.

A key lesson from the pandemic is that Ghana's health system could benefit from increased investment to expand its service delivery. The level of health infrastructure, prior to the government's intervention to build COVID-19 emergency centers, was very poor. The situation at the early stages of the pandemic was that there was less than one hospital bed per 1,000 people and 1 physician per 5,000 people (Craig et al., 2020; United Nations Economic Commission for Africa, 2020). Indeed, Ghana had the lowest score for its system for delivering and receiving medical countermeasures and health personnel during a public health emergency, scoring 52 percent on the International Health Regulations core capacity for emergency preparedness (Afulani et al., 2000; WHO, 2017). Therefore, more investment to expand the health sector and boost the capacity of the sector to handle such occurrences is crucial.

Fortunately, the government has initiated the Agenda 111 Project and has secured start-up funds for the project. This project aims to improve the quality of healthcare in the country in light of the overwhelming pressure on existing health facilities at the peak of the pandemic. Agenda 111 involves building 111 health facilities made up of 101 new district hospitals, 1 refurbished and 6 regional hospitals, and 1 refurbished and 2 new psychiatric hospitals. The objective of this project is to ensure that every Ghanaian has access to quality health care. The successful completion of Agenda 111 will put Ghana in a position to contain any future pandemic or health shock.

Regarding Ghana's productive capacity, preparedness is not optimal. Due to the rudimentary nature of productive technology, shocks such as the pandemic could have a dire impact on output levels. More efforts are required to enhance productive capacity and productivity levels and reduce inefficiency and wastage. Indeed, improved digitalization will be critical for recovery and resilience-building initiatives in times of shocks.

There is also an opportunity to strengthen the government and business financing. To manage the high levels of debt, there is a need to give priority to expenditure rationalization and efficiency and improving revenue collection. In addition to helping to reduce Ghana's debt stock from unsustainable levels, such a culture would lead to wider fiscal space and adequately support interventions for firms and individuals.

## **4. Economic resilience**

### **4.1. Key vulnerabilities and risks faced by Ghana**

#### ***4.1.1 Trade and Globalization***

Ghana is heavily reliant on commodity trade. Three primary commodities – gold, crude oil and cocoa – account for over 80 percent of Ghana's export revenues and Ghana is, therefore, classified by UNCTAD as commodity dependent (UNCTAD, 2019c). Besides, most of these commodities are exported in their raw form (See Table 4.1). As such, the country is exposed to negative commodity price shocks and volatility. These shocks result in random fluctuations in agricultural product supply and demand for industrial items utilized in commodity production. When commodity prices demonstrate a high frequency of peaks and extended troughs, the impact of these variations might be exacerbated (Deaton and Miller, 1996). Volatile commodity prices contribute to uncertainty in output and investment, which slows per capita GDP growth (UNCTAD, 2012). Exporters suffer from these price shocks and volatility. Price transmission from global markets to the Ghanaian market for primary commodities has welfare implications for households. Also, commodity reliance makes people more vulnerable to climate change shocks (UNCTAD, 2019a).



**Table 4.1. Share of raw commodities in Ghana's export revenue, 2015-2019 (%)**

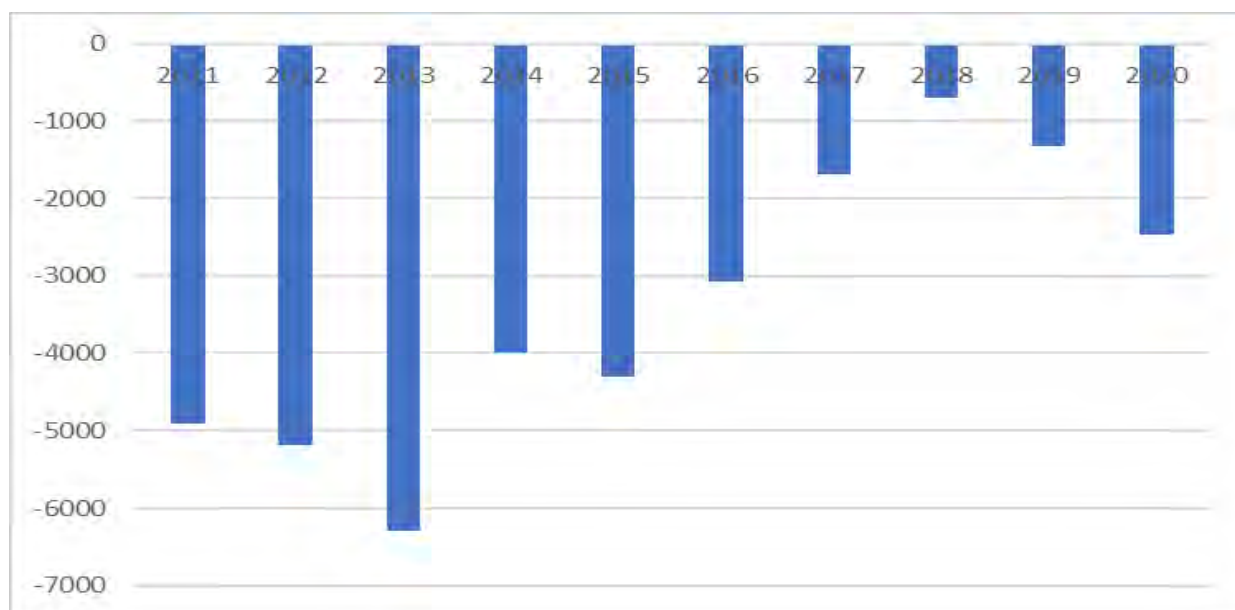
	2015	2016	2017	2018	2019
<b>Gold</b>	43.5	55	45.9	48.6	49.8
<b>Cocoa</b>	14.4	14.1	10.5	8.63	7.39
<b>Crude petroleum</b>	13.5	8.4	21.5	24.5	24
<b>Total</b>	71.4	77.5	77.9	81.73	81.19

*Source: Author's computation using data from Observatory of Economic Complexity*

Another vulnerability that Ghana is exposed to is overdependence on imports. Although exposure to foreign markets may offer access to cheaper products and a wider variety of products, dependence on imports may cause disruptions in consumption patterns in crisis times. A strong preference for imported goods and services may cripple local capacity to produce. Thus, liberalization may aggravate the vulnerability of import dependence when it leads to a weakened local productive capacity.

Furthermore, due to Ghana's rich natural resource endowment, the country is vulnerable to a phenomenon called the Dutch disease. This occurs when a surge in commodity export earnings results in real exchange rate appreciation, causes inefficient resource allocation and a loss of competitiveness in the non-commodity sectors.

**Figure 4.1. Net trade in goods and services, 2011-2020 (current US\$ million)**



*Source: World Bank, World Development Indicators*

#### **4.1.2. Climate, environmental and natural resource stress**

Ghana faces pressures from environmental degradation and the effects of global climate change, including changes in rainfall patterns, coastal erosion and sea-level rise (GoG, 2013). The country is divided into savannah, forest, and coastal zones, each having peculiar natural resources and varying environmental risks and vulnerabilities. Some critical environmental and climate vulnerabilities include the repercussions of mining activities and erratic rainfall patterns. The Greater Accra Region has been affected by pollution, climate change and environmental degradation. Industrial waste has polluted the air and waterways while construction along the coast drives away wildlife and fish critical for food production.

In the same way, illegal logging can degrade soil quality and destroy natural ecosystems, weakening resilience to natural disasters like flooding. According to World Bank's Ghana Country Analysis (CEA), environmental deterioration costs Ghana \$6.3 billion per year or approximately 11 percent of its GDP in 2017. Thus, close analysis must be made with regard to the pros and cons of natural resource exploration. This is because non-renewable resources (for instance, gold and oil) cannot lead to sustained growth since the quantities will deplete. Renewable resources (like timber, cocoa and other food and tree crops), on the other hand, depend on proper environmental stewardship.

Electricity generation is one of the most important components of Ghana's economic growth and it is inextricably tied to industrialization. Hydropower and fossil fuel (thermal energy) are the main sources of electric power generation in Ghana. Although the energy produced from renewable sources are environmentally friendly, they account for only 0.6 percent of the total energy generated (Jabik and Bawakyillenuo, 2017). Hydropower, the main source of power generation in Ghana, is vulnerable to climate variability; the low impoundment levels of the Akosombo dam and the drop in Lake Volta's water level in the dry season or in periods of erratic rainfall have historically caused power supply disruptions (Owusu et al., 2008). This means that environmental vulnerabilities have a direct implication for power generation, manufacturing and industrial development and Ghana's economic development.

Ghana has, over time, developed policies, strategies and plans regarding renewable energy, low carbon development, climate change, forests and wildlife, and a Forest Investment Program, all of which have a direct impact on green economy transformation. In response to the green economy's development, Ghana has signed a number of international accords, including the Kyoto Protocol and the Paris Agreement. Ghana has a higher chance of transitioning to a green economy as a result of these initiatives.

Mining activities, particularly *galamsey* (small-scale, illicit mining), provide a source of income for millions of Ghanaians, but they often have negative consequences, especially when monitoring and regulation are lacking. Coastal erosion from salt mining and sand mining, soil salinization from mining, and changes in rainfall patterns have all influenced agricultural output, displaced coastal populations, harmed fishers and farmers' livelihoods.

The negative environmental effects of *galamsey*, such as water contamination, vary by region. Illicit mining, for example, degraded the water source in the Brong-Ahafo Region to the point where tap water was dangerous, according to the Country Risk and Vulnerability Assessment (2017). Illegal mining can cause substantial environmental harm to land and waterways, rendering the resources useless for generations.

The government has made efforts to halt illegal mining, with mixed results. For instance, Operation Vanguard<sup>7</sup> effectively halted *galamsey* operations initially in several mining sites for many months. However, the program did not offer alternative livelihoods for the miners. This brought about tensions between Operation Vanguard personnel and some local community members. Other negative impacts of the closure of mining sites included some youth taking up armed robbery and other unlawful activities.

In recent times, measures to contain illicit mining include the cessation or withdrawal of excavators<sup>8</sup> which could not be accounted for and the burning of excavators, which has led to litigation and some judgement debts<sup>9</sup>.

Sadly, some traditional rulers remain culpable as they collaborate with some family leaders, to sell arable land to mineral and salt miners. Most of the time, this is done without the consent of residents, other family members and legitimate independent owners of the land. Also, most mining communities have not received infrastructural development commensurate with the resources extracted from them. Typically, mining areas may have poor road networks (for example, Obuasi, the biggest mining area in the Ashanti Region) and suffer from high rates of air and water pollution. The result is mounting tension that could breed avoidable conflicts.

Regarding forests, climate change causes increased temperatures and changes in precipitation patterns (Diffenbaugh et al., 2017). Furthermore, the resulting increased occurrence of extreme weather events changes the genetic nature of trees and results in the loss of plant species, thus threatening the functioning of the ecosystem. Higher temperatures may also increase the likelihood of fires, pests and disease prevalence and may change the quality of forest products.

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<sup>7</sup> Military Police Joint Task Force that was established by the government in 2017 to fight *galamsey* operations.

<sup>8</sup> "I'll give comprehensive report on seized excavators in due course – Jinapor". Retrieved from <https://citinewsroom.com/2021/04/ill-give-comprehensive-report-on-seized-excavators-in-due-course-jinapor/> [Accessed November 19, 2021]

<sup>9</sup> "Government slapped with \$15 million judgment debt over unlawful seizure of excavators". Retrieved from <https://www.myjoyonline.com/a-kumasi-high-court-has-slapped-government-with-a-15-million-judgment-debt-for-the-unlawful-seizure-of-excavators/> [Accessed November 20, 2021]

### **4.1.3. Population dynamics**

The growth rate of Ghana's population<sup>10</sup> has been declining steadily over the past decade (from 2.58 percent in 2010 to 2.15 percent in 2020). Ghana has an average life expectancy of about 65 years, an infant mortality rate of about 13/1,000 live births, an under-5 mortality rate of about 45/1,000 live births, and the majority of the population (about 57 percent) live in urban areas<sup>11</sup>. With a median age of about 22 years,<sup>12</sup> the country has a youthful population. Although a youthful population implies a potential abundance of labor, it comes with many vulnerabilities, including the capacity of the educational system to absorb and empower the youth with labor-relevant skills, the capacity of employers to absorb the youth and the capacity to involve youth in policy making. The equitable spatial distribution of amenities and resources also matters. The absence of these conditions gives rise to many vulnerabilities.

For instance, the lack of formal employment opportunities, coupled with inadequate entrepreneurial training, may incite the youth to take up illicit activities such as cybercrime, prostitution, drug peddling and *galamsey*. Rural-to-urban migration flows due to a lack of economic opportunities in rural areas, put more pressure on amenities and resources (land and social services) in urban areas. Land tenure tensions have been noted in the Greater Accra Region as the number of land-related cases soar, especially in newly developed areas of the region. Youth unemployment could drive a strong emigration trend to Europe and America (through both safe and dangerous routes via Libya to Europe). Youth participation in politics is usually marginal. Even when they participate strongly, there is relatively little government support for youth economic advancement .

### **4.1.4. Widening social inequality**

Ghana's GDP per capita growth averaged about 3.82 percent between 2010 and 2020 and 4.37 percent between 2010 and 2019 (before the pandemic hit the country), indicating a strong performance. There is growing evidence that while income poverty, in general, has been reduced, income distribution has become more unequal (see Figure 4.2). Ghana's most recently recorded Gini index (43.5 in 2016) exceeds the average Gini index score (42.83) recently recorded among lower middle-income African countries. Indeed, income inequality in Ghana is higher than that of Nigeria and Côte d'Ivoire (see Figure 4.3).

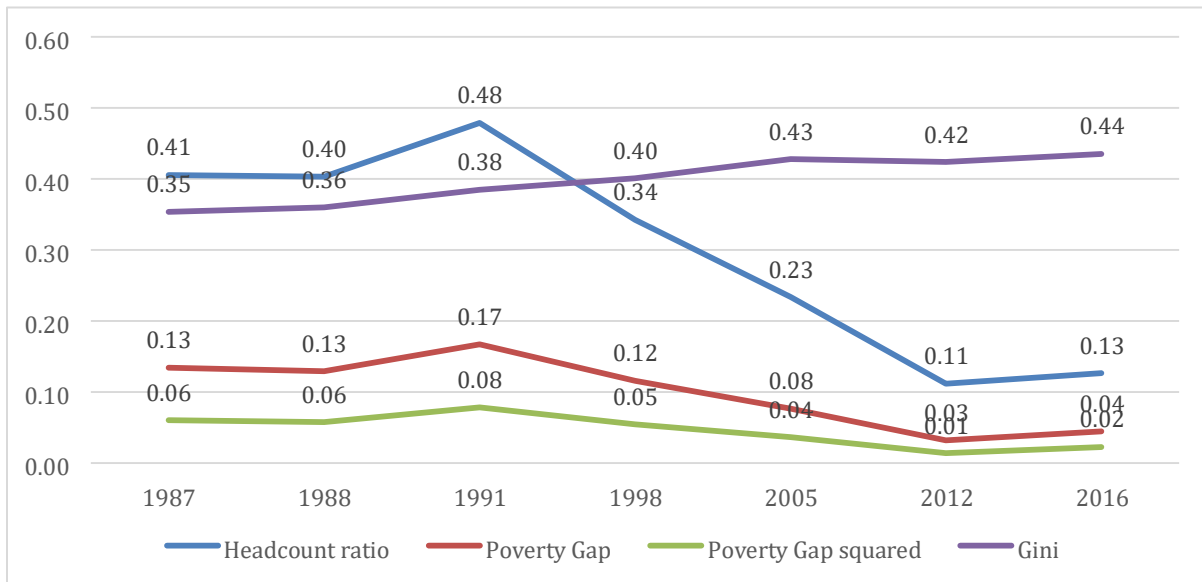
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<sup>10</sup> World Population Statistics. [Accessed November 22, 2021]

<sup>11</sup> World Population Statistics. [Accessed November 22, 2021]

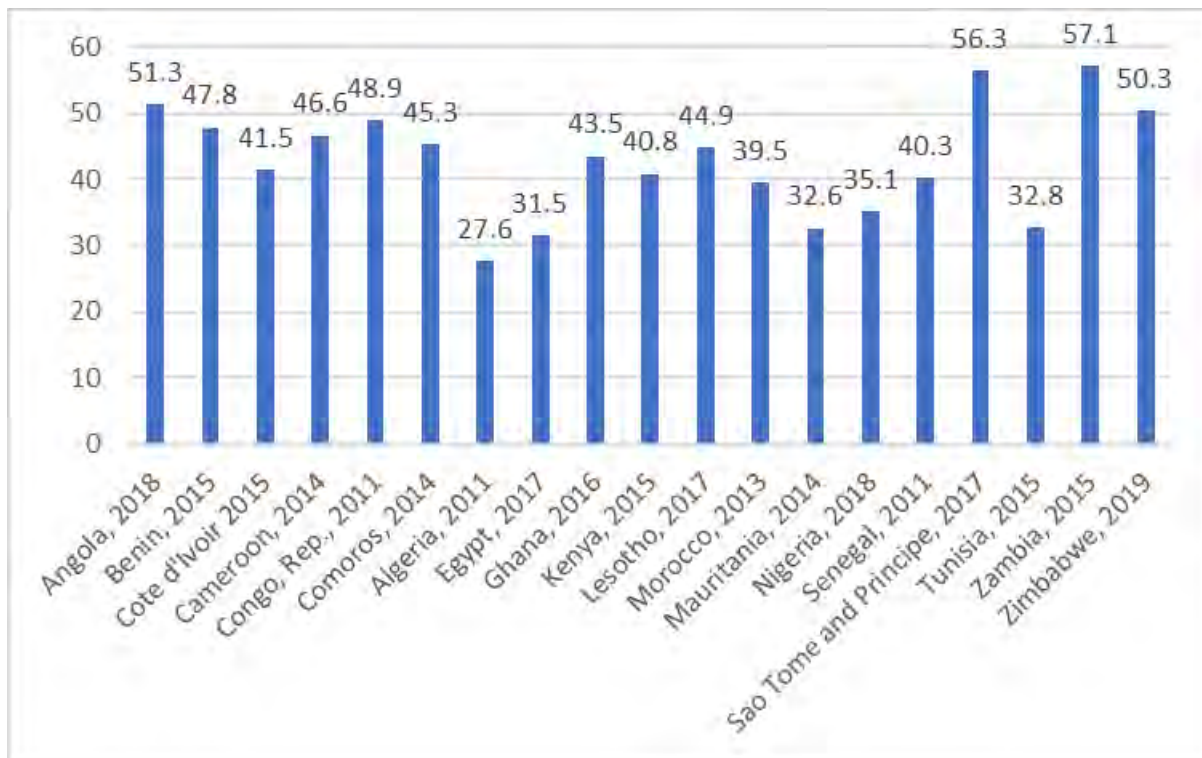
<sup>12</sup> STATISTA. <https://www.statista.com/statistics/447568/average-age-of-the-population-in-ghana/> [Accessed November 22, 2021]

**Figure 4.2. Poverty and inequality, 1987-2016**



Source: POVCALNET Database

**Figure 4.3. Gini Index for lower middle-income African countries**

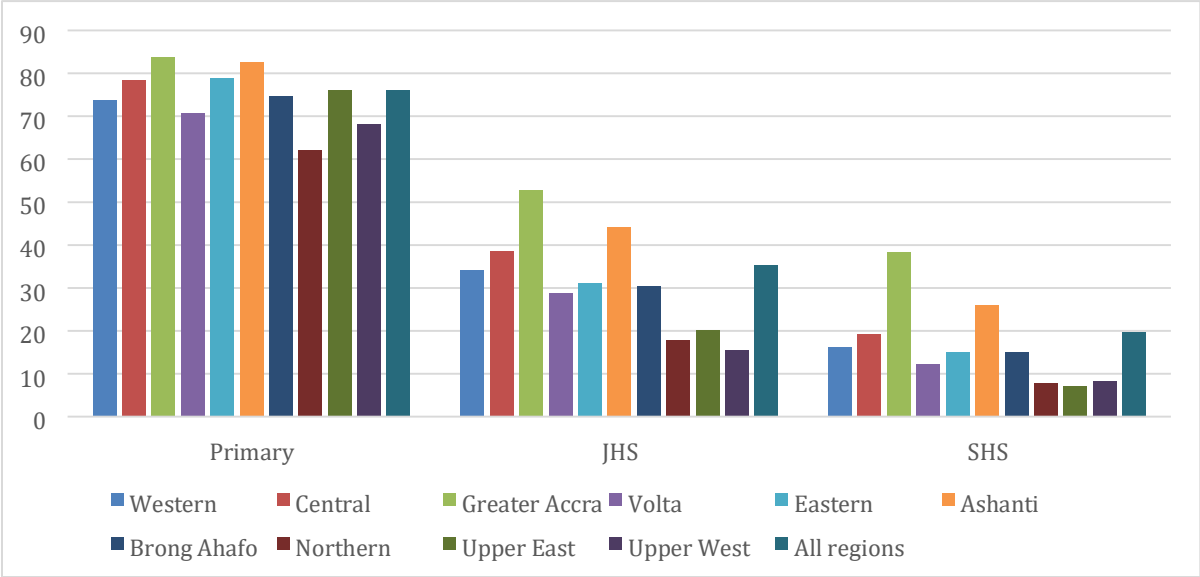


Source: World Bank, World Development Indicators

The important developments of the past three decades that may have contributed to poverty reduction and increased consumption are structural transformation, labor force educational accomplishments, effective urbanization, access to resources and international remittances (Arndt et al., 2016; Molini and Paci, 2015). One of the worrying aspects of this growing income inequality is that it reduces the impact of economic growth on poverty reduction across the country (Coulombe and Wodon, 2007). The poverty reduction experienced in Ghana is quite uneven as the Upper East, Northern and Upper West regions persistently have the highest and most severe rates of poverty and inequality in Ghana, according to a 2016 UNICEF report (Cooke, Hague and McKay, 2016).

The inequality transcends income levels, as the access to and use of services such as education and health remain unequal. While overall gender parity has improved in education, the gap remains substantial at secondary and university levels, according to the 2010 Population and Housing Census statistics. There are 95 girls for every 100 boys in school, and the Gender Parity Index (GPI) at secondary school and university level is 0.88 and 0.71, respectively<sup>13</sup>. Recent evidence per the Inequality Diagnostics for Ghana shows that children in the Greater Accra, Ashanti and Central regions have higher net primary, junior high and senior high school attendance (see Figure 4.4). In contrast, the Upper East, Upper West, Northern and Brong Ahafo regions have the lowest rates. Low school attendance rates have implications for future employability, labor productivity, engagement in illicit activities, security and poverty.

**Figure 4.4 Net school attendance by region**



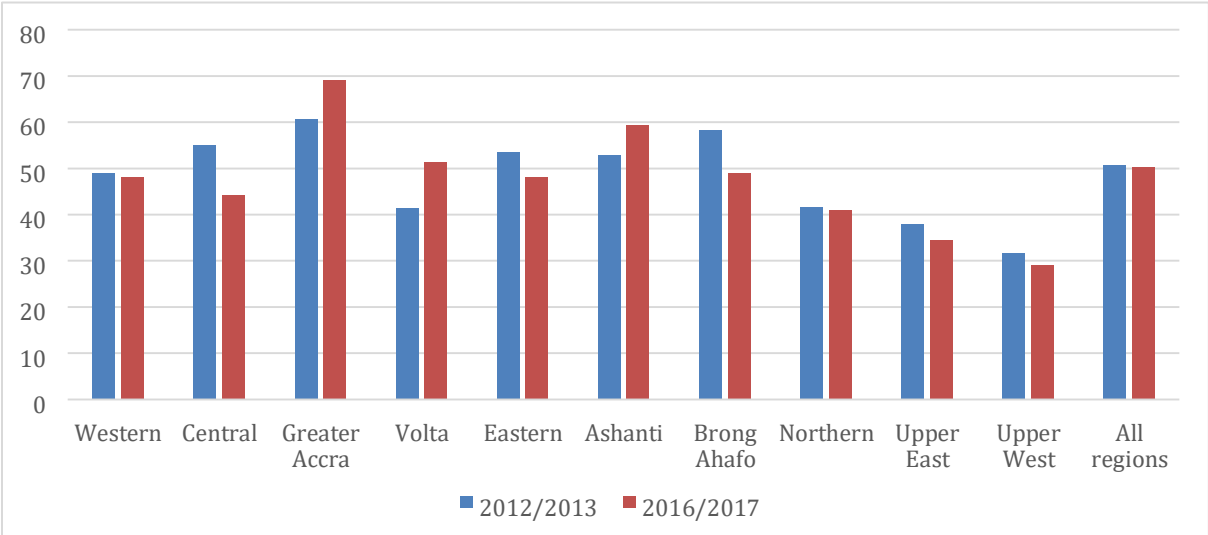
Source: Atta-Ankomah et al., 2020. Data from the Ghana Living Standards Survey, Round 7

<sup>13</sup> Inequalities Country Report-Ghana – <http://africainequalities.org/wp-content/uploads/2014/05/Ghana.pdf> [Accessed November 22, 2021]

Although access to health care has improved somewhat since the National Health Insurance Scheme (NHIS) was introduced, maternal mortality among rural women remains greater than that of their urban counterparts (Apanga and Awoonor-Williams, 2018). Similarly, disparities in mortality among children under the age of 5 have grown. Children from the poorest homes are more than twice as likely to die before their fifth birthday as children from the wealthiest households (Ossei-Assibey, 2014).

Recent evidence from Inequality Diagnostics for Ghana has shown that while medical doctor consultation is high for people in the Greater Accra and Ashanti regions, the three northern regions have the lowest rates of medical doctor consultation (see Figure 4.5). In fact, between 2012/2013 and 2016/2017, all the regions, except Ashanti, Greater Accra and Volta, experienced a reduction in medical doctor consultation. This means that access to healthcare differs by region, with the three northern regions significantly worse off.

**Figure 4.5. Proportion of individuals who consulted a doctor, by region, 2012-2017 (%)**



Source: Atta-Ankomah et al., 2020. Data from Ghana Living Standards Survey, Round 7

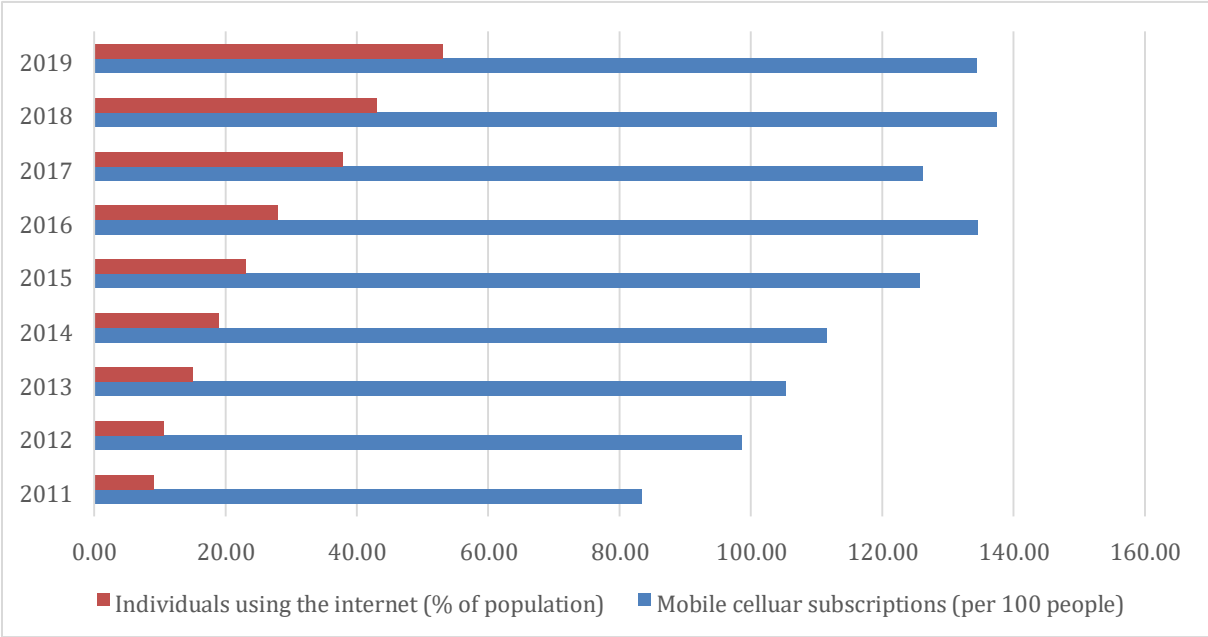
Gendered analysis of other forms of social inequality has revealed that women continue to be under-represented in both the legislature and judicial institutions. Due to limited access to land, lower levels of education, and isolation in rural areas, women in northern Ghana frequently encounter economic difficulties. They are more likely to have low access to land ownership due to patrilineal systems. Furthermore, urban areas benefit from higher levels of investment and infrastructure development. For example, an urban center such as Tamale has seen an increase in population and investment (such as construction of an international airport). Hence the socio-economic divide between urban and rural inhabitants is widening.

Regarding governance, resource distribution remains unequal. In the Northern Region, lack of police presence and judicial resources are evident, while people in Western Region have remarked that they lack adequate knowledge of judicial processes. Besides, the cost of legal services and lack of legal aid systematically exclude the poor and rural dwellers from exercising their legal rights.

**4.1.5. Technological changes**

Development in science, technology and innovation is seen as a key facilitator of the Sustainable Development Goals (SDGs). Technological development cuts across education, energy, agriculture, health, sanitation, industry, among other sectors. Ghana has, in recent times, put in extensive effort in formulating policies to expand access to and use of technology. For instance, the ICT for Accelerated Development Policy (2003) sought to build a knowledge-based society through efficient use of ICT by businesses, individuals and in governance. Furthermore, the ICT in Education Policy and the Health Sector ICT Policy have all complemented efforts to consolidate ICT development at the basic and secondary school levels and in the process of health service delivery. Indeed, mobile connectivity, internet usage and e-commerce patronage have been on an upward trend within the past decade. Internet users have increased from 9 percent in 2011 to over 53 percent of the total Ghanaian population (see Figure 4.6).

**Figure 4.6. Internet usage and mobile connectivity in Ghana, 2011-2019**



Source: World Bank, World Development Indicators



Over the same period, mobile cellular subscriptions have increased from 83 per 100 people to 134 per 100 people. Notably, e-commerce has gained popularity and most notably, mobile money has emerged as the most used platform for financial transactions. The mobile money industry has seen tremendous increase in both its registered and active accounts and registered and active agents (see Table 4.2). The industry has also recorded the highest volume of transactions in recent years.

**Table 4.2. Growth in mobile money**

		19-Dec	20-Dec	21-Jun
Registered mobile money accounts	(million)	32.5	38.5	44.3
Active mobile money accounts	(million)	14.5	17.1	18.3
Registered agents	(thousand)	306	424	512
Active agents	(thousand)	226	328	403
<b>Value comparison</b>				
<b>Total value of mobile money transactions</b>	<b>GH¢</b>	<b>32.8</b>	<b>67.7</b>	<b>89.1</b>
Value of cheques cleared	(billion)	16.9	17	17.9
Value of E-zwich transactions	(million)	763.8	882.8	710.7
Value of Gh-link transactions	(million)	29.9	41.5	33.1
Value of Ghipss Instant Pay transactions	(million)	315.1	1511.1	2518.8

Source: Bank of Ghana

In spite of progress made, some vulnerabilities exist. The International Finance Corporation report<sup>14</sup> on digital skills in sub-Saharan Africa has laid bare the demand and supply mismatch in ICT skills in Ghana. According to the report, the demand for basic and advanced ICT skills in the country far exceeds the supply. This raises some concerns over Ghana's readiness to take advantage of emerging automation and robotics. The implications for job security, employment and underemployment may be dire in a setting where the requisite ICT skills are lacking.

<sup>14</sup> Digital Skills in Sub-Saharan Africa. Spotlight on Ghana. Retrieved from [https://www.ifc.org/wps/wcm/connect/ed6362b3aa34-42ac-ae9f-c739904951b1/Digital+Skills\\_Final\\_WEB\\_5-7-19.pdf?MOD=AJPERES](https://www.ifc.org/wps/wcm/connect/ed6362b3aa34-42ac-ae9f-c739904951b1/Digital+Skills_Final_WEB_5-7-19.pdf?MOD=AJPERES). [Accessed Dec 21, 2021]

An area of vulnerability and immense risk is using the internet to mislead or defraud people, also known as cybercrime. Historically, cybercrime in Ghana has been rudimentary, targeting naïve foreigners through *sakawa* or “419” usually involving credit cards and advance-fee fraud were commonly used in these crimes, which exploited internet users’ vulnerabilities and gullibility. In recent years, individuals and organizations are being targeted by cybercriminals both within and outside Ghana’s borders<sup>15</sup>. Indeed, cybercrime has grown into far more intricate and sophisticated operations, focusing on wealthier victims within and beyond Ghana.

Ghana was recognized as the second top source of cyber fraud and financial scams in Africa by the US Federal Bureau of Investigation (FBI) in a 2013 report<sup>16</sup>. Ghanaian small and medium-sized businesses have been subjected to frequent cyber-attacks since 2010 and Ghanaian banks have recently become targets of hacking (Boateng and Tadayoni, 2010). Worse, many cyber-attacks go unreported because businesses are scared that exposing security vulnerabilities may affect their public image and reduce their earnings (Goldman, 2013). According to a report published by CyberSource Corp (a US payment processor) in 2008, more than half of US merchants who received international orders declined to process orders from Ghana due to fraud concerns<sup>17</sup>.

## **4.2. Risk factors and opportunities: Is Ghana ready for the future?**

In the face of Ghana’s risks and vulnerabilities to the agents of change discussed above, policy precision and effectiveness remain essential. This section discusses the capacity of existing policies related to the agents of change and how they can help overcome the risks and vulnerabilities.

### **4.2.1. Globalization and trade**

Ghana’s trade policies over the years have featured export-led and import-substitution policies (1957-1983), and the trade liberalization policies during the Economic Recovery Programme and Structural Adjustment Programme era where tariff and quota reforms, exchange rate reforms, sectoral trade reforms, among others, were implemented). Recent trade policies have prioritized market expansion by promoting non-traditional commodity exports and forming and consolidating trade partnerships.

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<sup>15</sup> “Workshop on Cybercrime Statistics Opens in Accra”, Ghana National Communications Authority. Retrieved from <https://nca.org.gh/media-and-news/news/the-international-workshop-on-criminal-justice-statistics-on-cybercrime-and-electronic-evidence-opens-in-accra/> [Accessed November 22, 2021]

<sup>16</sup> Internet Crime Report (2013). US Federal Bureau of Investigation. Retrieved from [http://www.ic3.gov/media/annualreport/2013\\_IC3Report.pdf](http://www.ic3.gov/media/annualreport/2013_IC3Report.pdf) [Accessed November 21, 2021]

<sup>17</sup> International eCommerce Presents Hazards for US/Canadian Merchants,” CyberSource, 2009. Available at: [http://www.cybersource.com/about/news\\_and\\_events/view.php?page\\_id=1726](http://www.cybersource.com/about/news_and_events/view.php?page_id=1726) [Accessed Nov 21, 2021]

However, given that the most outstanding trade vulnerability faced by the Ghanaian economy is the dependence on commodity trade which is subject to price and exchange rate vicissitudes, policies that would propel commodity processing and value addition are indisputably necessary. In this regard, the post-2001 private-sector-driven accelerated development strategy focuses on value addition. Ghanaian industry is dominated by MSMEs, which are mostly sited in urban areas and privately owned. The way forward is thus to empower MSMEs to improve their capacity to adopt modern technology, operate efficiently, and improve output quality (to international standards to make them competitive in the competition-driven manufacturing industry (Ackah, Adjasi and Turkson, 2016).

Notably, the African Continental Free Trade Agreement (AfCFTA) offers a wider market for Ghanaian exports without restrictions. To maximize the benefits of trade and globalization, greater emphasis must also be placed on promoting agro-based development to add value to Ghana's export commodities and optimize possible gains from trade agreements, especially the AfCFTA. Another key area that deserves attention is strengthening transport systems and logistics to promote trade efficiency and minimize losses.

#### **4.2.2. Environment**

Ghana has many policies that relate to environmental management, ranging from the Constitution<sup>18</sup> to the establishment of the Environmental Protection Agency (EPA), the National Environment Policy (adopted in 1991) and the National Environmental Action Plan (NEAP). The Strategic Environmental Assessments (SEAs) have also been mandated to address all levels of environmental concerns. If all the relevant bodies carry out their mandates efficiently, environmental and climate issues can be tackled more effectively.

However, the World Bank Country Environmental Analysis (2020) report outlines many gaps in Ghana's environmental management. A noted challenge is inefficient leadership and coordination, which has led to unclear protocols, lack of readiness to deal with emergencies and poor coordination with ministries, departments and agencies. Also, the lack of community-level involvement and benefit-sharing from natural resources hampers resource management efficiency. The report also notes weak institutional structures for environmental management as the existing environmental resource management procedures lack strategic policy direction. Moreover, the Environmental Impact Assessment (EIA) is to some extent underappreciated, resulting in non-compliance with EIA regulations. On that front, more action is required in order to improve environmental resilience.

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<sup>18</sup> Ghana's Constitution enshrines the promotion of a sound environment. It ascribes the duty of ensuring that Ghana's natural resources are used sustainably to both citizens and the government. Article 36(9) proclaims that "the State shall take appropriate steps needed to protect and safeguard the national environment for posterity; and shall seek cooperation with other states and bodies for purposes of protecting the wider international environment for mankind."

### **4.2.3. Population dynamics**

Ghana's first comprehensive population policy was the Population Planning for National Progress and Prosperity<sup>19</sup> (Republic of Ghana, 1969). It was revised in 1994 due to implementation challenges<sup>20</sup>. Even with this new policy, Ghana has fallen short regarding many of the targets<sup>21</sup>. A major barrier to the effectiveness of the population policy is the influence of Ghana's pro-natalist culture. Many Ghanaians avoid or misuse contraceptives. The inability to control the population and the lack of infrastructural expansion implies more pressure on the amenities, tighter competition for employment opportunities, and security challenges. There are, however, opportunities in commerce (relating to essential commodities) as an increasing population is tantamount to an increased demand for basic necessities.

### **4.2.4. Social inequalities**

Currently, there is a very well-developed set of social security programs that go beyond basic health and education services. These include enrolment of the extreme poor and vulnerable into the National Health Insurance Scheme (NHIS) at no cost, per capita grants given to schools to enable them to cover education costs, the Livelihood Empowerment against Poverty (LEAP) which gives cash transfers to the poorest households, the school feeding program, a National Employment and Innovation Program aimed at combating youth unemployment, and free senior high school.

These programs have had varying rates of efficiency. The evidence shows that three-fourths of the LEAP transfer seeps down to people in the two poorest quintiles of the population (Wodon, 2012; Osei-Assibey, 2014). Moreover, the Savannah Accelerated Development Authority (SADA) established the Northern Savannah Development Initiative in 2009 to address north-south disparities by launching a series of coordinated development interventions aimed at creating long-term employment, re-orienting agriculture to boost poor people's access to assets by adding value to essential food and tree crops, as well as investing in improved water resources, drainage, and irrigation for year-round production.

The key challenges, however, relate to the limited scale of some social interventions. For large-scale interventions, funding often becomes a problem as claims and payment for services rendered are often delayed.

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<sup>19</sup> The main aim was to address the rapid population growth rate which was around 2.4% at that time.

<sup>20</sup> The rate of population growth was almost 3% as of the early 1990s, meaning the policy was ineffective. The policy also failed to take epidemiological issues (HIV), environmental issues and demographic issues (the needs of the aged population and persons living with disability) into account.

<sup>21</sup> By the end of 2020, the total fertility rate exceeded the target by 0.9%; infant mortality rate was 37/1,000 live births against a target of 22/1,000 live births (Population Reference Bureau, 2013).

#### **4.2.5. Technology**

Policies that relate to power supply have implications for technological progress. Over the last decade, the National Energy Policy has championed the expansion of Ghana's power generation capacity and sought to strengthen human and institutional resource capacity. The major challenge is the difficulty in attracting funds for investment in power generation. In addition, the Strategic National Energy Plan 2006-2020 discusses, among other things, issues of fuel supply to installed power barges, power generation technologies and the power generation mix (Ghana Energy Commission, 2006).

Despite these policies and strategies, Ghana experienced a prolonged power crisis between 2012 and 2016 which harmed many businesses. There are still intermittent cuts in power supply due to maintenance and new installations. Various experts have noted that erratic power supply is mainly a financial problem. Looking at the current issues with fiscal and budget deficits and the worsening debt sustainability status of the country, more proactivity is required in this regard. Opportunities to trade on virtual platforms could be explored as they tie in with the digital economy agenda.

On December 3, 2018, Ghana ratified the Budapest Convention on Cybercrime, and this was a huge step forward in ensuring that domestic cyber laws are in harmony with what pertains at international level and signalling that Ghana is not a haven for crime. Ghana has also promulgated the Cybersecurity Act, 2020, which also established the Cybersecurity Authority to regulate online operations in Ghana's cybersecurity space. Although the impact of the Cybersecurity Act cannot be assessed in these early days, the ability of the Cybersecurity Authority to conduct effective monitoring of threats outside and inside Ghana and ensuring that standards are adhered to is a big step in proactivity in the technology space.

### **4.3. Ghana's vulnerability and challenges in achieving economic resilience**

#### **4.3.1. Fiscal space**

Ghana has a narrow tax base (partly due to poor capture in the informal sector) and is largely a net importer. In recent times, the inflow of donor funds has been reduced since Ghana attained middle-income status and the pandemic effects. To address vulnerabilities among the agents of change, the government needs to make enough fiscal space and build the capacity to expand fiscal space in future. With limited fiscal space, the government will not be able to embark on projects that require either current lump-sum spending or future payments or entitlements, or both. Therefore, poverty and inequality reduction, technological development, and innovation may be stalled with a narrow fiscal space. Ways for a government to expand fiscal space or budgetary room include raising taxes, reducing low priority expenditure, borrowing resources (from local or foreign lenders), obtaining outside grants, or expanding money supply.

### **4.3.2. Human capital**

Human capital investment (usually in education and health) enhance people's aptitudes, abilities, productivity and well-being. In this regard, the NHIS, free compulsory universal basic education and free SHS programs are steps in the right direction. However, access to health and education remains unequal across the different regions of Ghana (see Figures 4.4 and 4.5). The rural areas are worse off in terms of access to health infrastructure (Apanga and Awoonor-Williams, 2018). In terms of quality of learning at basic school level, the 2016 Ghana National Education Assessment (NEA)<sup>22</sup> found that less than 37 percent of primary school students achieved proficiency levels in mathematics or English language (MOE/GES/NEAU, 2016). Moreover, with the congestion in SHS schools and the double-track solution to relieve this stress, as well as the difference in the quality of care received by private insurance holders, NHIS holders and those who have the means to pay out-of-pocket, it may be said that the gains from social interventions are not being optimized.

Unequal access to educational facilities could reduce the effectiveness of public education, which is an important tool in fighting shocks such as COVID-19. Similarly, unequal access to health facilities creates a situation where only a part of the society can easily access health facilities in times of a health shock, while the other part may be helpless. Ultimately, unequal access to educational and health facilities has implications for labor quality, national productivity and revenue mobilization, all of which are crucial in building a resilient economy.

### **4.3.3. Infrastructure**

Infrastructure such as good road networks, food storage and transport facilities, quality schools and hospitals, improved information and communications technology networks and sustainable energy are required in today's world. Although government spending on all such infrastructure features prominently in national budgets, there remains much more ground to cover. The distribution of infrastructure is biased in favor of urban communities. The urban areas also attract skilled medical personnel and teachers, causing a deficit in the quality of learning and health care in rural communities.

Ghana's roads are in bad condition, with just 49 percent of the entire network being maintained or renovated (Graham et al., 2020). Feeder roads connect a considerable portion of rural villages to major commercial centers, accounting for 62 percent of the overall road network (Graham et al., 2020). However, about 95 percent of feeder roads are unpaved (see Table 4.3). Poor roads affect food production, access to markets, commerce, healthcare demand and delivery, and education, all of which are linked to economic resilience.

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<sup>22</sup> The 2016 NEA survey covered all 10 regions of Ghana, sampling 550 schools and testing 35,996 pupils over the course of three days in July 2016. The sample size was designed to be representative at the national and regional levels.

In addition, power sector infrastructure comprises outmoded distribution and transmission assets that are vulnerable to hydro-related shocks and high maintenance costs. Poor infrastructure also discourages investment inflows and transfers or posting of workers to rural areas, thereby hampering rural development. Thus, poor infrastructure remains a key challenge in improving Ghana’s resilience.

**Table 4.3: Condition of Ghana’s road network**

	Feeder (km)	Urban (km)	Trunk (km)
<b>Paved</b>	1,928	6,004	9,218
<b>Unpaved</b>	40,117	9,458	5,655
<b>Total</b>	42,045	15,462	14,873

*Source: Ministry of Roads and Highways (2019)*

#### **4.3.4. Trade-related challenges**

A major downside of Ghana’s trade is its poor growth impact potential that has been attributed to trade in unprocessed commodities, which are at the mercy of price and exchange rate volatility (Amoasah, 2018). When competing in global markets, commodities from Ghana are likely to be priced out since foreign producers benefit a lot from subsidies, enabling them to sell at lower prices. Moreover, Ghana lacks the productive technologies to compete in international markets due to the intellectual property rights involved (Pattnaik, 2005). Products from Ghana may also fall short of international standards due to the poor capacity of domestic, trade-related infrastructure. In addition, the dominantly informal nature of the business environment in Ghana makes it difficult for the government to protect local firms (Yennu, 2018) adequately. This results in the infiltration and dominance of foreigners.

#### **4.3.5. Informality**

Ghana’s informal sector engaged over 70 percent of total employed persons as of 2017. The sector contributed about 28 percent to GDP between 2014-2019. However, the sector is marked with low-quality employment as less than 12 percent of the workforce are engaged in decent, paid employment. The informal workforce also tends to have basic or no education (81 percent), who are low skilled workers (about 60 percent ) with low labor productivity. Also, most businesses in the sector are micro- or small-sized. The informal sector poses a huge challenge to Ghana’s revenue mobilization efforts. Most firms in the sector do not keep records of their activities and avoid being taxed. Among the few who pay their taxes, there is an increased likelihood of under-declaration of profits, leading to tax evasion. The sector is a major factor in Ghana’s low revenue mobilization. Revenue shortfalls affect the government’s ability to invest in social protection for the poor and vulnerable.

#### **4.3.6. Institutional quality**

The ability of policies to propel and sustain economic growth is linked with the quality of institutions in the country. Functional institutions are needed to enforce law and order, ensure that the people's will prevails, punish offenders of the law, constrain the government's executive arm, and reduce leakages by controlling corruption. Pervasive corruption and the non-enforcement of the law reduce the likelihood that social spending will reach the intended targets (mostly, the poor and vulnerable). Poor institutional quality plays a role in excessive government spending and borrowing, which depletes current and future fiscal space; poor monitoring of government social programs; poor environmental regulation; and inefficiencies in government spending because of poor due diligence, inter alia. The effect of poor institutional quality permeates all the drivers of change and hurts economic growth and resilience.

#### **4.3.7. Financial development**

An effective financial sector is indispensable to efforts to address economic vulnerability and achieve resilience. The financial sector of every economy is expected to provide the necessary resources required to fund the development process and ensure that development goals are met. One of the main challenges faced by Ghana is the inability to develop the financial sector to the level required to support the building of adequate infrastructure for the industrialization agenda and agricultural and rural development. While on the monetary policy front, the Bank of Ghana has maintained a low inflation policy stance and ensured relative stability of the cedi against major foreign currencies and is expected to enable the private sector to flourish, the bank has had to pursue financial sector regulatory reforms since 2017 to build a sound and resilient financial sector that will withstand external shocks.

Despite these reforms and successes in stabilizing process, inadequate credit to the private sector and low levels of financial inclusion remain a challenge in building a resilient economy driven by the private sector. Mindful of these challenges, the government has put in place measures to set up a new development bank to provide financial support for agricultural and industrial transformation. The bank would also absorb the Ghana Incentive-Based Risk-Sharing System for Agricultural Lending (GIRSAL) to scale-up the development of selected agricultural value-chain financing in Ghana, while at the same time restructuring and strengthening the Ghana Infrastructure Investment Fund (GIIF) and the Ghana Export-Import (EXIM) Bank to make them efficient for capital mobilization for infrastructure and the promotion of export and imports respectively.

Clearly the country has recognized that building a resilient economy requires ensuring a well-developed financial sector that supports the availability of long-term finance, facilitates firm growth and the adoption of state-of-the-art technology and innovation in industry as well as agricultural value-chain financing.



## 5. Key lessons and policies for economic transformation and resilience

### 5.1. Lessons and opportunities from COVID-19

Although the COVID-19 pandemic has had some dire consequences for the Ghanaian economy, there are some lessons and opportunities that the country can harness for economic transformation. The first lesson is that it is crucial for Ghana to improve its manufacturing capacity: Ghana has to meet its own commodity needs as external sources diminish. When the pandemic hit, the government relied on local capacity and production to address shortfalls in personal protective equipment (PPEs). For instance, local production of test kits also came in handy at a critical time during the height of the infections. This intervention minimized the adverse effects of the pandemic on key manufacturing firms and provided opportunities for income and employment generation in the country.

The Ghana COVID-19 Private Sector Fund, for instance, provided underprivileged people with 140,000 cooked meals during the partial lock-down. The Fund also aided the provision of 449,770 PPEs to front-line workers at the various National COVID-19 Treatment Centres and sponsored the training of health workers in COVID-19 prevention and treatment protocols. From the Fund, 10,000 test kits were donated to the Noguchi Memorial Institute for Medical Research to sustain sample testing efforts.

The main implication for economic transformation is that the government can rely on local capacity to advance its industrialization agenda. This is an opportunity to embark on a demand-driven production agenda to spearhead an aggressive import-substitution policy that will expand local market opportunities for traders and producers and create employment opportunities for the youth. Leveraging the Ghana Beyond Aid agenda, an import-substitution initiative would also require massive re-orientation to change entrenched mindsets and preferences for imported products. It is critical to continuously engage with key stakeholders to properly understand their needs, address related challenges and provide the needed support.

The second lesson involves the extent to which digitalization enabled firms to prevent production losses when work hours had to be rationed as part of the containment measures. Firms that lost production time were mainly those that did not utilize digitalization procedures. Digital commerce platforms offer a virtual market that is limitless and requires little capital to start and maintain. Many firms created digital work platforms to enable workers to work from home when movement restrictions were imposed. Moreover, meeting platforms such as Zoom, Google Meetings, Hangouts, etc., became popular and offered an efficient and less costly alternative to having meetings. Indeed, virtual streams of education became popular as tertiary institutions embraced and used them for teaching, learning and examination purposes.

Digitalization is mentioned by most stakeholders as being critical for recovery and resilience building after the COVID-19 pandemic. Firms in Ghana cannot survive in the post-COVID era without paying increased attention to digitalization, data capture and automation. The

government has an important role to play in this regard by creating the enabling environment for firms to begin relying on such models of operations. Accompanying this digitization agenda is the need to prioritize technical and digital skills education in tertiary institutions, as these will be critical on the path to digitalization.

The pandemic has emphasized the need to develop a highly resilient health sector. It became apparent that the leading cause of rising mortality during the pandemic waves was the congestion of health facilities. Furthermore, when travel restrictions were in place, getting treatment from abroad, even for non-COVID-related ailments, was not accessible. This demonstrates the need and opportunity to expand health infrastructure. The government has voiced its intention to build new hospitals and renovate some old ones to ensure that there is at least one hospital in every district. It was seen that Ghana can actively contribute to the fight against the pandemic. For instance, the University of Ghana was proactive in sequencing the genomes of SARS-CoV-2 at the Noguchi Memorial Institute for Medical Research<sup>23</sup> and can, perhaps, do more if capacity is enhanced. The lessons should boost health research capacity, improved nurse- and doctor-to-patient ratios and health education in the country.

Another lesson emerging from the COVID-19 pandemic is that sustainable social protection schemes merit more attention. These schemes constituted a major part of the Ghana CARES Obaatanpa Programme that provided temporary reductions in the cost of basic utilities, ensured food security, and aimed to strengthen the health system and support businesses and workers. These measures also helped minimize the loss in economic growth, as evidenced by the faster-than-expected rebound in economic activities following the lockdown. It is important that these measures are appropriately institutionalized to enhance the economy's resilience to shocks.

It is noteworthy that low-income earners and micro- and small-sized firms were the biggest losers in terms of employment, income and productivity due to the COVID-19 pandemic. They were also the most affected by the shutdown in Accra and Kumasi. These findings were made in the Ghana Business Tracker Survey (BTS) organized by the Ghana Statistical Service (in collaboration with UNDP and the World Bank). The key lesson from these findings further supports the need for the country to institutionalize social protection measures to minimize adverse effects of economic or other shocks.

Finally, it is critical that the country builds a strong and effective nationwide public health system that provides a sense of security when pandemics or contagious diseases strike. This is vital for sustaining the labor force that will be required to enhance the country's economic transformation. Drawing on the ACET African Transformation Index, improved human well-being is critical for economic transformation.

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<sup>23</sup> [University of Ghana sequences COVID-19 Genome in Ghana - ARUA](#) [Accessed November 24, 2021]

## 5.2. Measures to enhance inclusive growth

Despite the positive economic growth that the country has enjoyed over the past two decades, what is apparent is that the growth has been jobless. This jobless growth is mostly attributable to the poor performance of the manufacturing sector, lack of inter-sectoral linkages between manufacturing and other sectors as well as low productivity in the agricultural and services sectors. The measures needed to enhance inclusive growth are those that will refocus the country's attention on identifying the supporting sectors that have greater employment potential and are also the highest productivity sectors.

To enhance inclusive growth in Ghana, while relying on promoting agro-processing and light manufacturing, there is a need for a number of measures to be instituted. First, agricultural modernization must be urgently pursued, since it is the foundation for agro-processing and an agro-based industrialization agenda. To that end, recent government policies such as the Planting for Food and Jobs (PFJ), Rearing for Food and Jobs (RFJ) as well as those related to enhancing the irrigation infrastructure are commendable. Second, the critical physical infrastructure needed to support local firms to increase their competitiveness needs to be improved considerably. This includes the road network, telecoms infrastructure, technology as well as access to and cost of electricity and water. Third, measures that promote linkages between the manufacturing and other sectors, particularly agriculture, must be encouraged. This can be facilitated by seeking to add value to the agricultural raw materials that dominate the country's total exports. Finally, it is critical that technological innovation policies are vigorously integrated in the industrialization agenda in order to increase the competitiveness of local firms.

Another option for promoting inclusive growth is to explore alternative development strategies that do not conflict with the current agenda but can facilitate the economic transformation process by promoting inter-sectoral linkages and have high employment potential. Aryeetey, Baffour and Turkson (2021) have identified tourism and agro-processing as two sectors that could potentially address the country's jobless growth issue and raise the competitiveness and productivity of small and medium-sized firms. They suggest that the two sectors have several characteristics that make them unique to Ghana's situation in several respects: (i) there is an improved regulatory environment for both sectors, and this is supported by various public policies to improve related infrastructure and unearth the potential in the two sectors; (ii) both sectors offer critical employment avenues for young people with at least secondary education; (iii) both sectors have a huge export capacity, and this is critical in enhancing competitiveness; (iv) both sectors are labor-intensive, which will help address the country's unemployment challenge; and (v) there has been some effort to address constraints in their value chains.

Another approach to promoting inclusive growth is through skills development. Given the general characteristics of the economy and its predominantly informal nature, inclusive growth requires individuals to improve their skill set to increase their employability and ability to earn

higher wages. As a result, it is critical to prioritize and boost enrolment in technical and vocational education and training (TVET) to support growth in self-employment and entrepreneurship and provide a pathway for young people to find long-term employment. Furthermore, the ability of an enterprise to generate and upgrade output is dependent on its workforce's ability to master new technologies.

Inclusive growth in Ghana also needs to be accompanied by macroeconomic stability. The World Bank has recommended that this should be done by the country adopting a consistently counter-cyclical fiscal policy to stabilize the economy and enhance savings rates (World Bank, 2021). Some of the fiscal measures proposed include reaffirming fiscal anchors, improving debt management, improving transparency in the extractive sector and striking the right balance between efficiency and equity in the tax mix (World Bank, 2021). The World Bank also recommends that the country must review and enhance the framework for environmental taxation to minimize the impact of climate change on households and incentivize more sustainable cocoa farming practices (World Bank, 2021).

Under Ghana Beyond Aid, the government's commitment to rapid growth is to ensure that no one is left behind. Every Ghanaian will be a shareholder in a wealthy Ghana if growth is accompanied by a considerable expansion of job possibilities and citizens are given the tools to take advantage of these opportunities (via expanded access to excellent education and skills training, as well as other programs).

Finally, inclusive growth in Ghana will require addressing social problems such as high poverty and inequality. Although significant progress has been made with poverty reduction more generally, the incidence is still high in the three northern regions and rural areas. Income inequality is similarly high in these regions. Reduce this high incidence of poverty and inequality is critical to ensuring inclusive growth. The expectation is that from a current rate of roughly 23 percent, the predicted poverty rate in 2028 will be under 15 percent (i.e. less than US\$3.20 per day). The Gini Index, which measures inequality, will be around 35, down from 42 today. Prosperity will be widely distributed throughout Ghana's various regions. By 2028, the poorest region's poverty rate shall be no more than three times that of the lowest-poverty zone (compared with over 12 times now).

An initiative such as One District One Factory (1D1F) can be critical in addressing these issues by reducing spatial inequalities in the distribution of firms in the country. So far, there are some 1D1F agro-processing factories that have been set up in the northern part of Ghana and this is expected to offer employment directly to the youth in those regions and indirectly to the farmers who are expected to cultivate the raw materials for production.

Without purposeful and systematic interventions targeted at the underlying structural problems, the expanding social, spatial, and income inequalities found in current development initiatives cannot be addressed. To this end, the government's medium-term socio-economic development measures should include the adoption of special purpose vehicles targeted at

specific communities and segments of society that continue to be left out of economic growth and development. The establishment of the Infrastructure for Poverty Eradication Programme (IPEP), (ii) Northern Development Authority (NDA), (iii) Middle Belt Development Authority (MBA), (iv) Coastal Development Authority (CDA), and (v) Zongo Development Fund are among the interventions that have been implemented under the government's Growing Together Programme and these are important in addressing the problems of poverty and inequality.

### **5.3. Measures to promote economic transformation**

Economic transformation generally requires a gradual shift in resources, including labor, from low-productivity to high-productivity sectors. For this to happen, it will mean targeting specific sectors and implementing a set of policies that reduces business uncertainties and increases the ease of doing business. McMillan, Page and Te Velde (2015) have identified five factors critical in identifying the most promising sectors: (i) high levels and growth of productivity change; (ii) comparative advantage; (iii) GDP and employment effects; (iv) diversification and growth benefits; and (v) private sector interests. Similarly, the ACET African Transformation Index indicators of DEPTH (Diversification, Export competitiveness, Productivity increases, Technological upgrading, and improved Human well-being) provide a useful guide to how promising sectors can be identified and positioned to enhance transformation.

In line with these indications and Ghana's choice of relying on agro-processing and light manufacturing to support its industrialization agenda under the Ghana COVID-19 Alleviation and Revitalization of Enterprises Support (Ghana CARES Obaatanpa) programme, the measures needed to enhance economic transformation are as follows:

First, it is important that existing rigidities and bottlenecks in the supply chain of the agro-processing and light manufacturing sectors are addressed. As part of efforts aimed at bringing about structural transformation, the government should embark on major infrastructure projects especially in the areas of electricity, water, information technology and transport (rail and road) to support the recovery efforts under the Ghana CARES programme. The priorities articulated under Ghana CARES – such as building up the light manufacturing industry, support the establishment of an automotive assembly industry, and support for the textile and garments industry to accelerate job creation – offer bright prospects for Ghana's industrial transformation and industrialization, and will require massive infrastructural development by the government. The prospects for industrialization under the Ghana CARES program will depend on ensuring sustained improvement in the business regulatory environment to improve transparency, modernize legal frameworks, digitize the delivery of public/government services and formalize the economy.

Second, it is important that the country strengthens its comparative advantage by adding value to traditional export products such as cocoa and gold, as well as seeds and fruits, wood products, palm products, aluminum products, fish and to some extent horticulture by moving up their value chains in terms of processing of a good proportion for export. This has

implications for backward and forward linkages between the manufacturing and agricultural sectors. It is also critical in ensuring GDP growth and the generation of employment in the country. More importantly, the private sector has shown significant interest in this regard.

Third, the ability of the private sector to be an effective agent in the structural transformation process is strongly hinged on effective financial services development. The country needs to support the financial sector to increase the availability of long-term finance, facilitate firm growth and the adoption of state-of-the-art technology and innovation in industry. This will require the financial sector adopting technology and digitalization in its processes as well as regulatory institutions taking measures to mitigate financial institution credit risk and easing collateral requirements, especially for small and medium enterprises.

Fourth, Ghana can transform by addressing the myriad longstanding setbacks hindering the manufacturing sector. One possibility is through the encouragement of private investment and leveraging the opportunities offered by the African Continental Free Trade Area (AfCFTA). Under the AfCFTA, most imports from non-African countries will be replaced by imports from African countries. To take advantage of this and structurally transform the Ghanaian economy, the government needs to institute measures such as preventing dumping and ensuring that only safe and wholesome products are permitted on the Ghanaian market. Ghana can impose anti-dumping or countervailing duties where a clear case of dumping is detected. The government must also put in place policies regarding labor unions and environmental protection. These policies must be put in place to ensure that as businesses endeavor to scale up production with low-cost labor, the environment is protected. The government must also ensure that workers are provided with a social safety net in the worst-case scenario where businesses collapse due to the implementation of the AfCFTA. In addition, manufacturing firms in Ghana would have to invest in technology. This would enable them to develop domestic value chains to take advantage of regional markets and the global market.

Fifth, economic transformation in Ghana cannot proceed without the incorporation of technological innovation in manufacturing. In Africa, according to the World Economic Forum, Ghana lags behind countries such as Kenya, Nigeria and South Africa that are pursuing almost similar industrialization strategies. Ghana, therefore, needs to incorporate technological innovation more vigorously in manufacturing to boost the economic transformation process. This must necessarily be accompanied by an increase in the skill set of the youth, the establishment of technologically advanced industrial parks as well as strengthening institutions such as the Council for Scientific and Industrial Research.

Finally, inclusive growth and economic transformation will require a more highly skilled workforce. In addition, if the government wants to manage its public-private partnership programs, highly skilled individuals with project appraisal and cutting-edge financial skills will be required.

#### **5.4. Measures to enhance economic resilience**

One of the main lessons emanating from the COVID-19 pandemic experience in Ghana is the extent to which the entire social protection system needs to be strengthened to make the economy resilient to shocks. The pandemic has shown that solid social protection measures that safeguard the poor and vulnerable must be a key component of collaborative efforts to decrease poverty and ensure economic resilience.

To do this, an all-hands-on-deck strategy is required. As part of efforts to ensure and guarantee the protection, safety, and welfare of the poor and vulnerable in the country, particularly in the event of natural disasters, conflicts, and pandemics, relevant government institutions must be empowered to enhance and scale up the current social protection system. The goal should not only entail relief for vulnerable and underprivileged individuals, but the implementation of a comprehensive Emergency Social Protection Preparedness and Assistance strategy, as stipulated in the Ghana National Social Protection Policy. This approach will lay out clear guidelines to assist poor and vulnerable Ghanaians in the case of an emergency, allowing them to manage and recover from shocks such as the COVID-19 pandemic. This strategy should be properly institutionalized to ensure its sustainability.

Economic resilience can be built by pursuing a sectoral and spatial transformation agenda that involves the transition of economic growth and employment into high-productivity firms and sectors, particularly in manufacturing, agro-processing and tourism. Specific sectors must be targeted by evaluating their strengths and weakness. This needs to be supported by attracting the right foreign direct investment, improving infrastructure, and instituting measures that improve mobility, connectivity, and urban planning. It is important to explore product-based value chains, implement favorable trade policies, attract the FDI to support specific sub-sectors and promote productive linkages between industry, agriculture and services.

Industrialization will require long-term planning, technology transfer, regional planning and spatial development, prudent macroeconomic management, comprehensive debt relief for local firms, technological innovation in industrialization, digital transformation and e-commerce, building infrastructure, sustainable transport, and capacity building.

Finally, it is vital to continue emphasizing that a skilled workforce is a fundamental requirement for structural transformation. In the case of Ghana and given that manufacturing and agro-processing are critical for the country's industrialization agenda, workforce development initiatives must target relevant skills for workers in these sectors. In working towards producing a technologically advanced and innovative workforce, TVET institutions both public and private, need far greater support and incentives in order to accelerate workforce development.

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## Appendices

### Appendix 1: Poverty profile of Ghana, 1991-2016 (%)

	1991	1998	2005	2012	2016
Rural	82.4	81.3	85.8	80.1	83.2
Urban	17.6	18.7	14.2	19.9	16.8

Source: GLSS 3-7

### Appendix 2: GDP growth in the services sector

	2014	2015	2016	2017	2018	2019	2020
Services	5.2	2.9	2.8	3.4	2.7	7.6	1.5
Trade; Repair of Vehicles, household goods	2	0.5	-0.4	8.2	2.8	3.7	-1.1
Hotels and Restaurants	1.5	4.1	2.3	7.6	3.2	6	-34.8
Transport and Storage	5.8	2.6	1.1	8.9	1.1	4.3	3.7
Information and Communication	29.7	11.9	5.6	4.2	13.1	46.5	22.5
Financial and Insurance Activities	21.4	12.9	8	-17.7	-8.2	1.6	5.5
Real Estate	-0.3	3.1	3.2	3.8	-6.5	19.9	12.5
<b>Professional, Administrative and Support Service activities</b>	6.8	1.4	-4.2	2.9	0.3	5.1	-5.9
<b>Public Administration and Defense; Social Security</b>	-3.5	-2.6	8.9	4.2	4.3	3.7	7.3
Education	-0.3	-0.5	2.3	6.3	3.9	9.4	7.8
Health and Social Work	2.7	-4.4	4	14.1	22.6	10.4	8.2
Other Services Activities	1.4	2.7	-0.1	5.3	3.1	2.6	1.1

Source: Budget Statement, 2021

### Appendix 3: Employment in the services sector

	GLSS 7					GLSS 6				
	Male	Female	Urban	Rural	Total	Male	Female	Urban	Rural	All
Wholesale and retail trade	12.6	29.4	32.4	10.0	21.3	10.3	28.0	30.9	8.8	19.5
Transportation and storage	7.1	0.3	4.7	2.4	3.6	7.7	0.3	6.1	1.7	3.8
Accommodation and food service activities	0.8	5.4	4.3	2.0	3.2	0.9	6.7	5.7	2.1	3.9
Information and communication	0.5	0.1	0.6	0.0	0.3	0.6	0.2	0.7	0.0	0.4
Financial and insurance activities	1.4	0.8	1.9	0.4	1.1	0.9	0.5	1.4	0.1	0.7
Real estate activities	0.3	0.0	0.3	0.0	0.2	0.1	0.0	0.1	0.0	0.1
Professional, scientific and technical activities	0.9	0.3	1.0	0.2	0.6	1.3	0.7	1.8	0.3	1.0
Administrative and support service activities	0.8	0.3	0.9	0.3	0.6	1.5	0.5	1.7	0.3	1.0
Public administration and defense	2.5	1.1	3.0	0.5	1.8	1.2	0.4	1.4	0.2	0.8
Education	5.8	4.4	6.8	3.3	5.1	4.4	2.9	5.5	1.9	3.6
Human health and social work activities	1.2	1.7	2.1	0.8	1.5	0.9	1.1	1.7	0.4	1.0
Arts, entertainment and recreation	1.3	0.2	1.1	0.3	0.7	0.8	0.1	0.7	0.2	0.4
Other service activities	3.2	3.2	4.9	1.5	3.2	2.8	4.8	5.9	1.8	3.8
Activities of households as employers	0.2	0.6	0.7	0.2	0.4	0.6	1.1	0.9	0.9	0.9

# **A New Policy Agenda To Build Resilient Economies in Africa in the Post-COVID-19 Era**

Country case study:  
**KENYA**

**Dr. Nicholas Ozor**

**Dr. Julius Gatune**

**Dr. Diana Kayeke Lukalo**

**DRAFT REPORT**

Submitted to the  
African Center for Economic Transformation (ACET)

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not represent the views of ACET, its Board, or its Management.*

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## Acronyms

4IR	4 <sup>th</sup> Industrial Revolution
ACCI	Adaptation to Climate Change and Insurance
ACET	African Center for Economic Transformation
AFCFTA	African Continental Free Trade Area
AIDS	Acquired Immuno-Deficiency Syndrome
ASAL	Arid and Semi-Arid Lands
ATI	Africa Transformation Index
BRI	Belt and Road Initiative
CE	Circular Economy
CIDP	County Integrated Development Plan
COVID-19	Novel coronavirus disease 2019
CRB	Credit Reference Bureau
CRR	Cash Reserve Ratio
CSA	Climate-smart agriculture
DEPTH	Diversification, Export, Productivity, Technological and Human Wellbeing
EAC	East African Community
ERS	Economic Recovery Strategy
ESP	Economic Stimulus Programme
FDI	Foreign Direct Investment
FKE	Federation of Kenyan Exporters
FNS	Food and Nutrition Security
GCR	Global Competitiveness Report
GDP	Gross Domestic Product
GE	Green Economy
GGDC	Groningen Growth and Development Center
GNDI	Gross National Disposable Income
GoK	Government of Kenya
HDR	Human Development Report
HS	Harmonized System
HSNP	Hunger Safety Net Program
ICT	Information and communications technology
IMF	International Monetary Fund
ITC	International Trade Commission
KeNIA	Kenya National Innovation Agency
KEPSA	Kenya Private Sector Alliance
KIHBS	Kenya Integrated Household Budget Survey
KKV	Kazi Kwa Vijana

KNBS	Kenya National Bureau of Statistics
MDAs	Ministries, departments and agencies
MDGs	Millennium Development Goals
MSMEs	Micro, small and medium enterprises
MTPs	Medium-Term Plans
NACOSTI	National Commission for Science, Technology and Innovation
NARC	National Rainbow Coalition
NER	Net enrolment rate
NIS	National Innovation System
NOFBI	National Optic Fiber Backbone Infrastructure
NPLs	Non-Performing Loans
NRF	National Research Foundation
NTBs	Non-Tariff Barriers
OVC	Orphans and Vulnerable Children
PAYE	Pay-as-you-earn
PPP	Public-private partnership
R&D	Research and development
SDGs	Sustainable Development Goals
SEZs	Special Economic Zones
SIB-K	Sustainable Inclusive Business Kenya
SMEs	Small and medium enterprises
SPF	Social Protection Fund
SRA	Strategy for Revitalizing Agriculture
SSA	Sub-Saharan Africa
SSR	Self-Sufficiency Ratio
STEM	Science, technology, engineering and mathematics
STI	Science, technology and innovation
TVET	Technical and vocational education and training
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNIDO	United Nations Industrial Development Organization
VAT	Value-added tax
VNR	Voluntary National Report
WIPO	World Intellectual Property Organization
YEDF	Youth Enterprise Development Fund

## Executive Summary

Kenya has shown remarkable growth over the last two decades, averaging around 5.4 percent annually. This growth was generally supported by a steady macroeconomic environment, favorable weather conditions, sustainable business confidence and public infrastructure development. However, this growth has not been accompanied by positive structural transformation. This study aims to contribute specific recommendations on new policies to build a resilient economy in the post-COVID-19 era in Kenya. The study used both primary and secondary data obtained from key informants and grey literature respectively.

Key findings show that while the agriculture and services sectors continue to be important drivers of growth, growth in the industry sector, and more so, in the manufacturing sub-sector remain virtually constant. Second, exports as a share of GDP have fallen, with manufactured goods constituting only 42 percent of these exports. The weak export performance implies that diversification has not occurred in terms of products and markets, thus, there is huge unexploited potential. Third, overall productivity has declined from 10.5 percent in the 2000-2005 period to -5.7 percent during the 2015-2018 period. Additionally, labor reallocation has seen labor move from low-productivity agriculture to low-productivity services, especially trade services.

The only bright spot is the growth in high-value services particularly information and communications technology (ICT), and financial and business services, though these employ very few people. Fourth, whereas, Kenya is said to perform significantly better on innovation than its current level of development would predict, even dubbed the 'Africa's Silicon Savannah', this remarkable performance is mainly confined to ICT, as only a few Kenyan firms have come up with new products. The innovation ecosystem faces many challenges, including lack of funding for research and development, incentives and missing elements. Finally, though human development indicators, such as life expectancy, poverty index, and number of years of schooling have shown notable progress, the skills gaps (a combination of skills mismatches and shortages) persist. In summary, Kenya's moderate growth as measured by GDP, is not accompanied by **DEPTH** – Diversification, Export competitiveness, Productivity increases, Technological upgrading, and improved Human well-being.

Kenya is facing macroeconomic challenges including low levels of savings and investments as well as high budget deficits and public debt, raising concerns over debt sustainability. External shocks and internal shocks (political violence, terrorist attacks, and frequent droughts aggravated by climate change) have also interrupted the transformation journey. While Kenya has shown significant resilience to external shocks, resilience from internal shocks remains the key challenge. COVID-19 has also brought resilience into sharper focus. The mitigation of the pandemic has impacted many sectors and brought about significant innovations as businesses struggle to weather the turbulence. These innovations have accelerated digitalization, with potential for putting the economy on a new trajectory. It is clear that current development plans, though very ambitious, have failed to deliver as expected. The projected growth target of 10 percent annually is still a mirage, while devolution has seen its disadvantages outweigh its advantages. There remain inefficiencies in the public sector and overall lack of resilience.

A rethink of development strategies is needed to set the economy on a transformative and resilient trajectory. Proposed actions include: driving innovation through resource mobilization; upgrading agriculture and value addition to primary products and further integrating it with the manufacturing

sector; improving productivity in the services sector; upgrading the informal manufacturing sector by better leveraging the new digital technologies; leveraging the African Continental Free Trade Area (AfCFTA) to increase exports of manufactured goods; gearing up for the Fourth Industrial Revolution (4IR) by building the right skills, internet infrastructure, a dynamic innovation system as well as a robust and flexible regulatory environment; and improving resilience by adopting green and circular economy business models ,while reducing poverty and inequality.

## 1. Introduction

Kenya has experienced remarkable growth over the last 20 years averaging about 5.4 percent annually. A steady macroeconomic environment, favorable weather conditions, sustainable business confidence along with public infrastructure development are among the factors that continue to support this robust economic growth (KIPPRA, 2020; KIPPRA, 2019). High performance in the innovation arena (Mutisya, 2018) has seen Kenya produce innovations that have gained international recognition, making the country to be regarded as a notable technology center and the ‘Silicon Valley of Africa’ (World Bank, 2019). Indeed, in the first assessment of transformation success in the wake of Africa’s growth story, Kenya was deemed as performing relatively well compared with other African countries (ACET, 2014)<sup>1</sup>. Kenya also ranks third in sub-Saharan Africa (SSA) in the Global Innovation Index 2021 (WIPO, 2021), indicating its high innovativeness status in the region.

However, Kenya remains a country with many challenges. Food insecurity is a perennial problem: There has been marginal decline in the country’s food self-sufficiency ratio (SSR) from 78.9 percent in 2006 to 75.6 percent in 2016 while the import dependency ratio (IDR) increased from 24.5 percent in 2006 to 28.2 percent in 2016 (KIPPRA, 2017). This underscores the importance of food imports in meeting food self-sufficiency in the country. Poverty and inequality remain a big challenge: in 2015/16, overall poverty stood at 36.1 percent (16.4 million people), hard-core poverty stood at 8.6 percent (3.9 million people) while food poverty stood at 32.0 percent of the population, or 14.5 million people (KNBS, 2018). Unemployment and underemployment remain high because growth has not resulted in job creation. About 1 million young people join the workforce every year. However, of these young people, only about one in five is likely to find a formal job (UNDP, 2017). Kenya’s youth unemployment is creating the dangerous prospect of a ‘lost generation’<sup>2</sup> rather than promising a demographic dividend<sup>3</sup>. Low productivity is a major challenge, mainly due to the dual nature of the economy with a huge informal sector (employing 83 percent of the workers (FKE, 2021) and a small formal sector. The dual and unbalanced structure prevents diffusion of know-how from high-productivity formal firms to low-productivity informal enterprises and activities (World Bank, 2016).

These challenges are reflected in Kenya’s performance in the Africa Transformation Index (ATI). After an initial rise in the ATI during 2000-2005, which is the classic case of growth with DEPTH<sup>4</sup> as economic growth was also strong, Kenya’s ATI has seen a downward trajectory which seems to have accelerated since 2012 to the extent that by 2018 the index was below the value in 2002. This was an almost complete reversal of all gains made. The deterioration in the last few years was in a period that saw somewhat weak recovery in growth. As Figure 1 shows, the deterioration of the index has mainly been driven by low diversification, weak export performance with low and stagnant productivity. There is some technological upgrading and there is steady improvement in human wellbeing.

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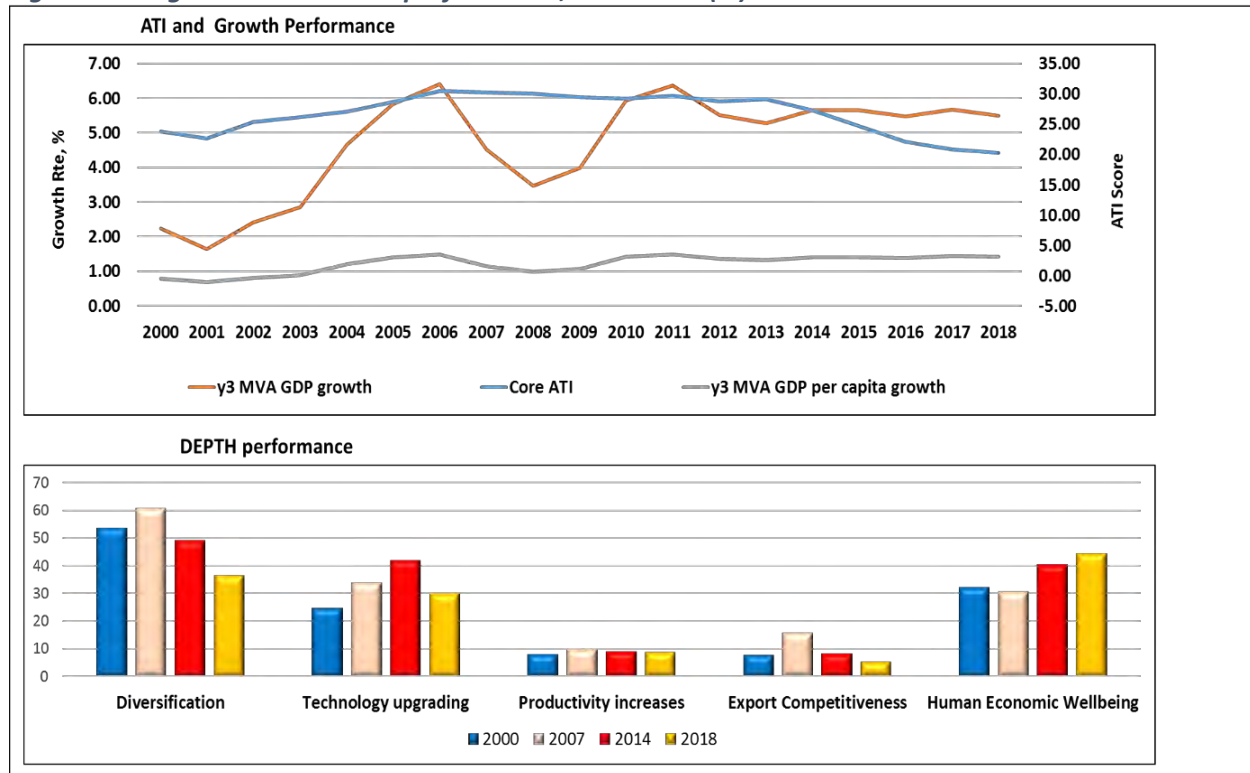
<sup>1</sup> The Africa Transformation Index shows Mauritius, South Africa, Côte d’Ivoire, Senegal, Uganda, Kenya, and Gabon as the top seven transformers in 2010 (see page 32).

<sup>2</sup> The African Development Bank reports that 40 percent of youths joining the ranks of rebel and terror groups cite lack of economic opportunity as the key motivation. Indeed, in Kenya, the Al Shabaab terrorist group has found a fertile recruitment ground among Kenyan youths (Jamah, 2018).

<sup>3</sup> Kenya has about 81 dependents for every 100 working-age adults. Countries that have realized a demographic dividend typically have a dependency ratio of less than 50 for every 100 working-age adults (UNDP, 2017).

<sup>4</sup> ACET’s approach to Africa’s development is that to be successful, development needs to combine growth with **DEPTH**. This means that beyond rapid growth as measured by GDP, African economies need to **Diversify** their production, make their **Exports** competitive, increase the **Productivity** of farms, firms, and government offices, and upgrade the **Technology** they use throughout the economy—all to improve **Human** well-being.

**Figure 1. ATI growth and DEPTH performance, 2000-2018 (%)**



Source: ACET Analysis

Beyond the perennial exposure of the Kenyan economy to drought, political instability, and terrorism, new vulnerabilities have emerged. Climate change and the COVID-19 pandemic are the most pressing. The pandemic is having a profound impact on the economic landscape as it has also accelerated digitalization, especially in e-commerce and the shift to online work. Climate change also points to the need for a complete rethink of perspective even as the Fourth Industrial Revolution (4IR) is changing the economic landscape. A new policy agenda is needed to accelerate the transformation of the economy and make it more resilient. The objectives of this study are therefore to:

1. Examine the transformation efforts, and the factors behind their failure or success;
2. Identify the transformation challenges and opportunities faced with respect to population dynamics, climate change, natural resource stress, technological innovation, and social inequality;
3. Study how the ongoing COVID-19 pandemic aggravates the challenges or expands the opportunities for future economic transformation in the country;
4. Examine policy measures that have been implemented as responses to the COVID-19 crisis; and
5. Explore policies that are consistent with the need for accelerating transformation with a particular focus on innovations that have emerged in Kenya and elsewhere in response to COVID-19.

To achieve the above objectives, data from reviews of Kenya’s economic performance, analysis of secondary data and interviews from key informants were used to obtain deeper insights into the subject matter (see Appendix 1, 2, and 3 on the approaches used).

This report is organized into six sections. **Section One** introduces and presents the objectives of the study. **Section Two** provides a review of Kenya’s economic structure and trends of key economic indicators and the transformation journey. **Section Three** examines the various development plans and how their implementation impacts Kenya’s transformation. **Section Four** explores the impact of the COVID-19 pandemic and the response measures taken. **Section Five** explores the resilience of Kenya’s economy to shocks, while **Section Six** provides some policy recommendations for building a resilient Kenyan economy in a post-COVID-19 era.

## 2. Kenya’s economy: structure and recent trends in key economic indicators

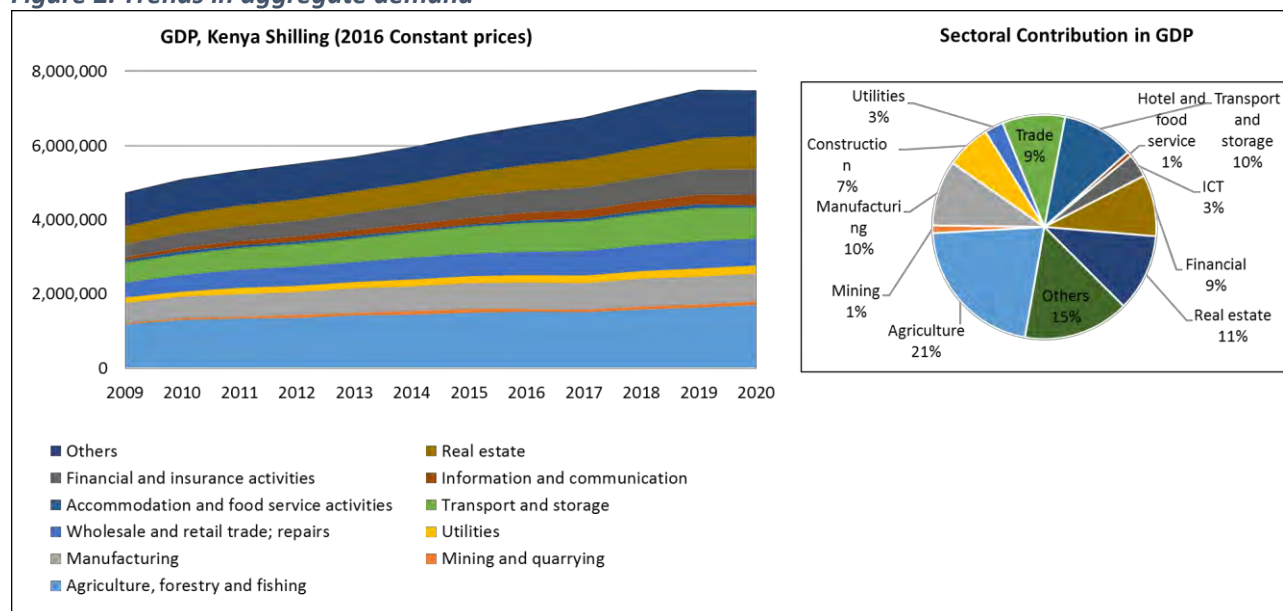
This section gives a snapshot of Kenya’s economy using ACET’s DEPTH framework to analyze recent trends followed by a deep dive for deeper insights on economic transformation challenges and opportunities.

### 2.1. Structure of economy and recent trends

The Kenyan economy has a GDP of about US\$90 billion as of 2020, up from US\$12 billion in 2000. In terms of structure, services is the biggest sector contributing about 50 percent of the GDP. Agriculture contributes 21 percent while industry contributes about 17 percent. Some key observations include:

- The contribution of agriculture to GDP has been declining ,from 24 percent in 2010 to 23 percent in 2015 and to 21 percent in 2020.
- The contribution of manufacturing has remained virtually constant, averaging 10 percent annually. The performance of this sector has stagnated as faces competition from cheap imports while manufactured exports have declined with the growing manufacturing activity in the East Africa Community (EAC) (KIPPRA, 2017).
- The construction sector's contribution to GDP has risen from 4 percent in 2010 to 6 percent in 2020.

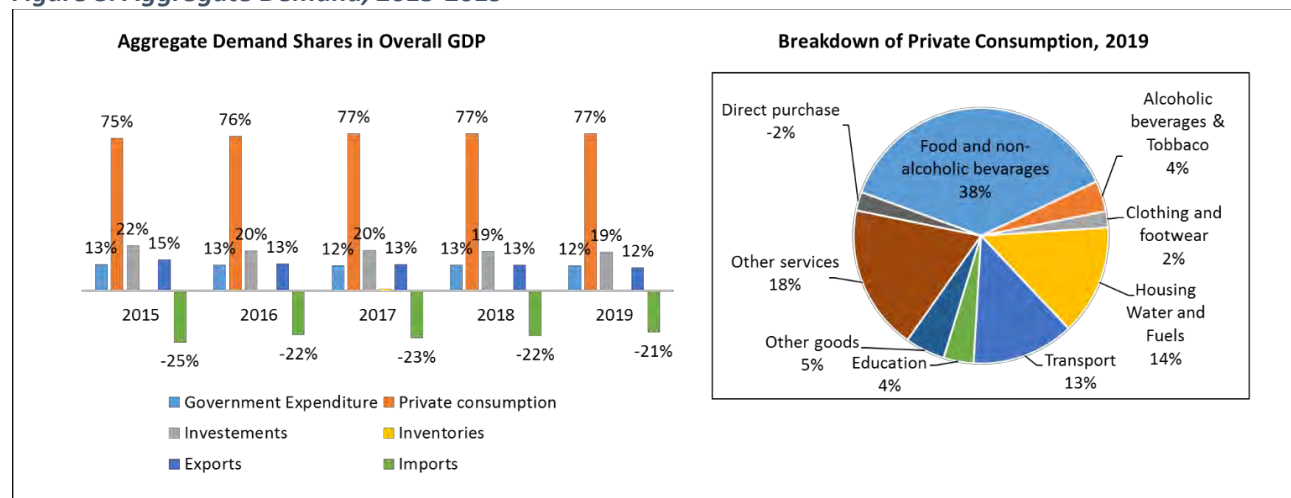
**Figure 2. Trends in aggregate demand**



Source: KNBS Data (Key Informant 2021)

In terms of aggregate demand, the biggest driver of GDP is private consumption, which contributes 77 percent. Government expenditure is about 13 percent while investments are about 20 percent (Figure 3). These shares have been fairly stable in the last 5 years.

**Figure 3. Aggregate Demand, 2015-2019**



Source: KNBS (2021)

### Box 1: Informal Sector<sup>5</sup>

The Kenya Integrated Household Budget Survey (KIHBS) (2015/2016) estimated that Kenya had 11.8 million workers employed in the informal economy. This number increased to 15 million by 2019 or 93 percent of total employment (KNBS, 2020). A survey (FKE, 2021) of 7,409,939 enterprises found that (74 percent) were informal and they had the following characteristics:

- A total of 57.8 percent of the enterprises were owned by females.
- They are largely youth-driven. About 4 percent of the informal economy workers were young (15-34 years) and three-quarters of the surveyed owners of firms are younger than 40 years of age.
- Most of the informal businesses remain small, with no more than one employee.
- They do not provide decent jobs. They have low productivity and pay minimum wages or less. Less than one-fifth of informal enterprises pay social security and health insurance for their workers. About one-third of the respondents engaged in the informal economy due to a lack of any other work (FKE, 2021).
- There is low innovation capability among the micro, small and medium enterprises (MSMEs). According to the survey, 96 percent of the informal microenterprises had neither introduced new products, new marketing methods, nor new production techniques.
- They have low levels of social capital. Close to two-thirds of the owners of informal enterprises do not belong to any trade association.
- Lack of access to finance is the main cause of stagnation. Other key obstacles include lack of markets, high cost of electricity, corruption, limited access to land, and crime.
- Informal enterprises in Kenya obtain their inputs from their counterpart enterprises or individual suppliers.

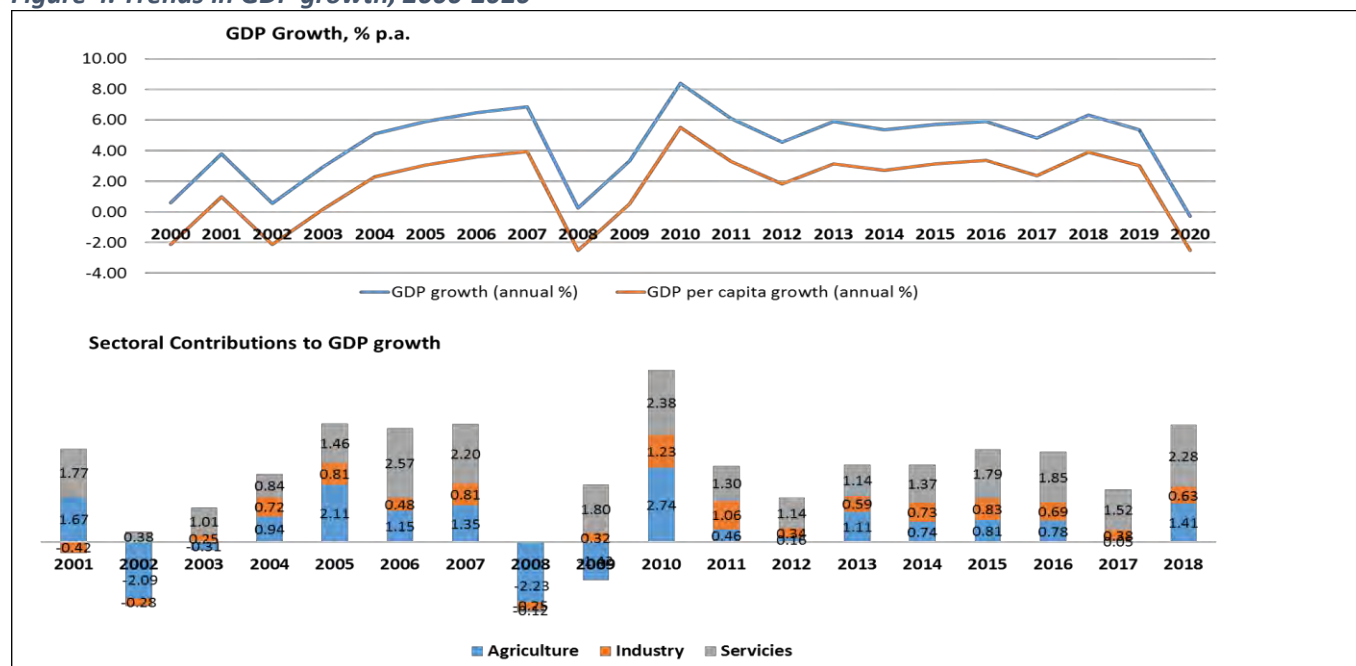
<sup>5</sup>The 'informal sector' as used here emphasizes self-financed, under-capitalized, small-scale, unskilled, labor-intensive activity. An alternative definition is, a 'process of income generation' that is 'unregulated by the institutions of society, in a legal and social environment in which similar activities are regulated' (Pratap and Quintin, 2006)



### 2.1.1. Exploring drivers of growth

Kenya's growth tends to oscillate between 4.0 percent and 6.0 percent with occasional shocks and rebounds as Figure 4 shows. There is only one period of sustained acceleration of growth, between 2002 and 2007. GDP per capita growth follows GDP growth closely. Its average growth rate of 1.8 percent has not been higher than population growth (which has averaged 2.6 percent over the same period).

**Figure 4. Trends in GDP growth, 2000-2020**



Source: Authors' analysis based on data from World Development Indicators (WDI), International Labour Organization (ILO), and Groningen Growth and Development Center (GGDC)

Some observations regarding GDP growth trends include:

- Kenya's growth shows occasional shocks mainly due to climate and political uncertainties.
- Services are the key driver of growth while growth in the industry sector is somewhat in decline.
- Agriculture is still an important driver of growth; however, its contribution shows great variation over the years. This could be due to the effects of climate change, which can be associated with delays in the onset of rains, shorter rainfall periods, and pests and diseases (Gebrechorkos et al., 2019).

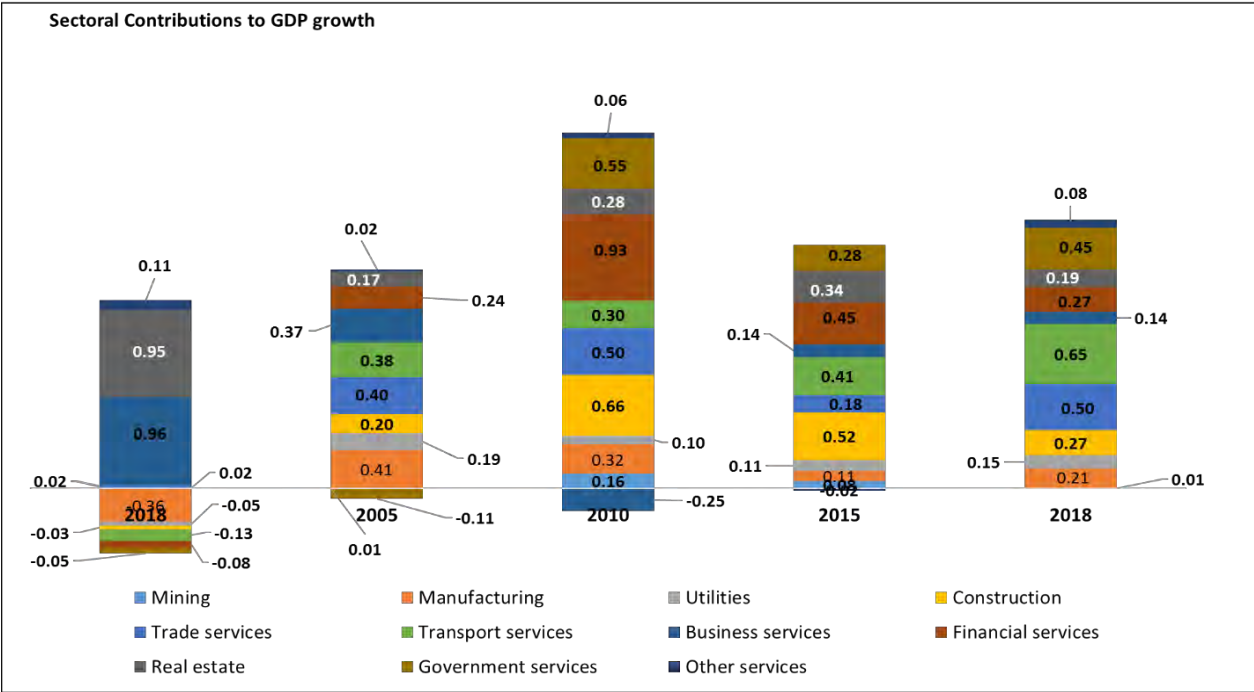
A more granular breakdown of industry and services provides the following observations (see Figure 5, which excludes agriculture for clarity):

- For industry, the contribution of manufacturing to growth is declining, whereas construction is showing dynamism and becoming the key contributor to growth in the sector.

- Transport, financial and government services are the key contributors to growth in the services sector. These sub-sectors tend to be small and mostly formal (though there is a huge informal transport sector). Air travel is a significant sector.
- The real estate services sector is a strong contributor to growth. As observed earlier, investment is driving growth via the construction sector as buildings are a major form of investment.

It should be noted that the expected shift of the key drivers of growth, from agriculture to industry and especially manufacturing, has not occurred. An examination of productivity and employment trends to see how labor reallocation has happened can provide further insights.

Figure 5. Industry and services contribution to GDP growth, 2000-2018



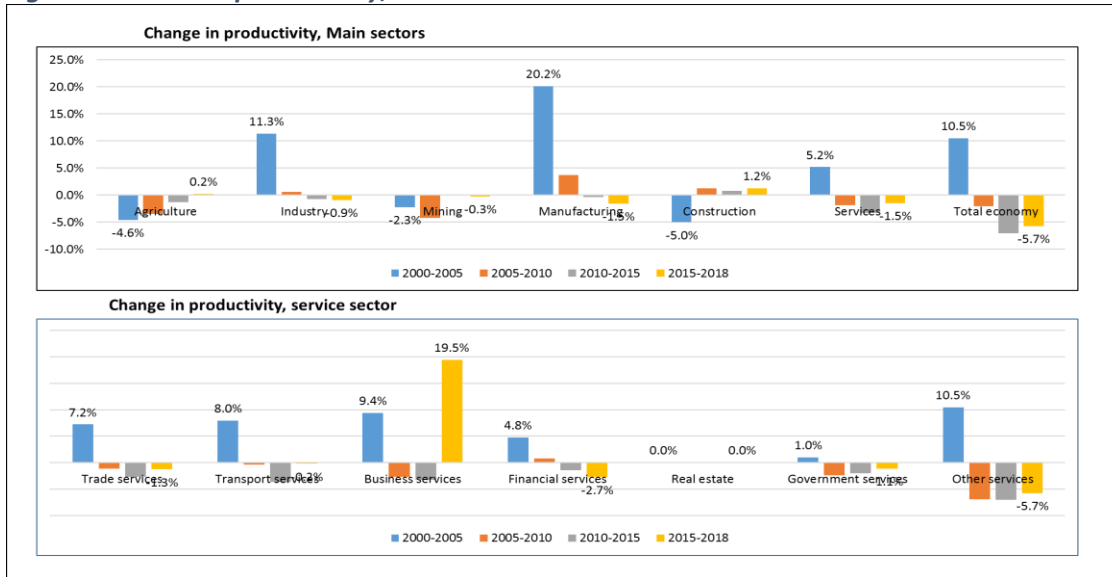
Source: Authors’ analysis based on data from ILO and GGDC

2.1.2. Exploring productivity and labor reallocation

Using data from Groningen Growth and Development Center (de Vries et al., 2021) and a model from McMillian et al. (2017), a deep analysis of the trends in productivity and structural change shows the following results (see Figure 6).

- The productivity of the whole economy has been on the decline. From an annualized growth of 10.5 percent between 2000 and 2005 to a contraction of -5.7 percent in the 2015-2018 period, all the key sectors show a collapse in productivity except for construction, which shows some improvement (though starting from negative growth).
- The only bright spot is business services, which have recently shown some strong growth.

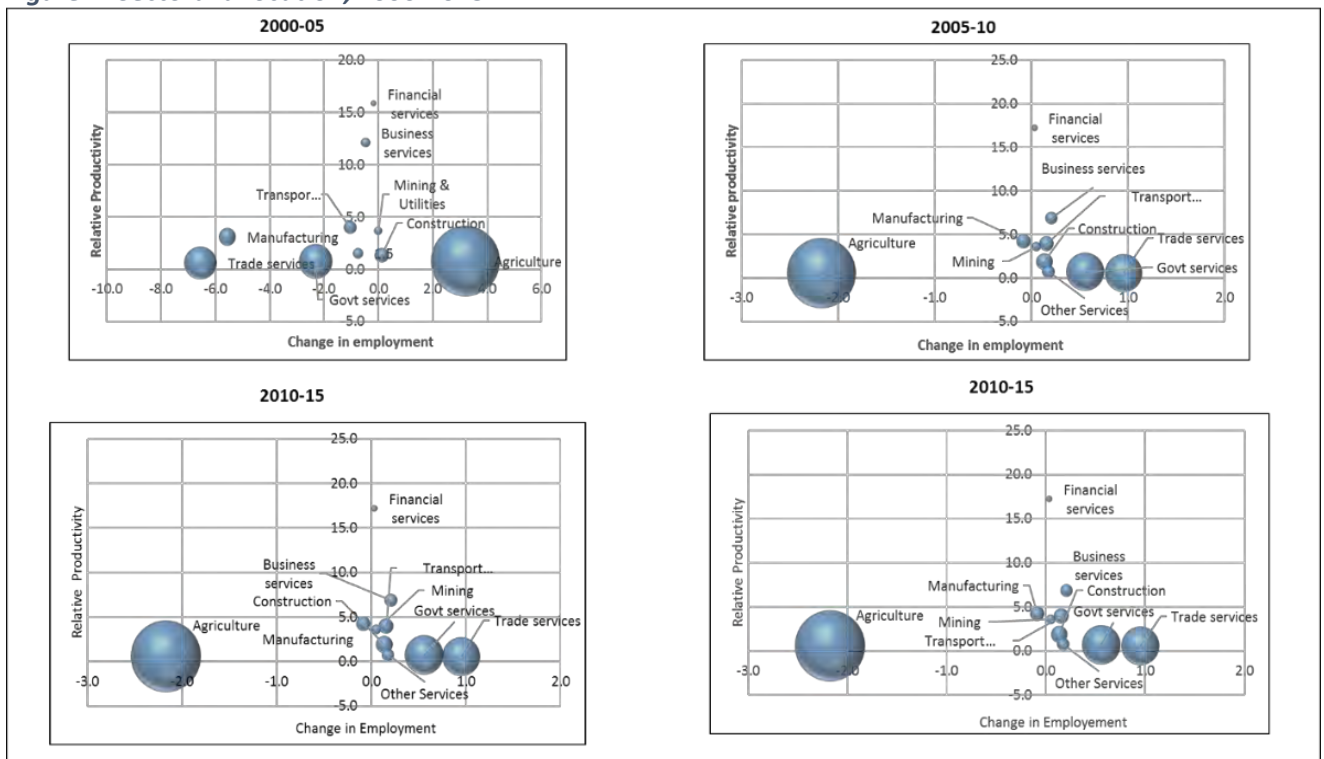
**Figure 6. Trends in productivity, 2000-2018**



Source: Authors' analysis based on data from ILO and GGDC

There has been movement of labor from agriculture to other sectors with the exception of the period 2000-2005. However, much of the movement is to low-productivity services, especially trade services (see Figure 7).

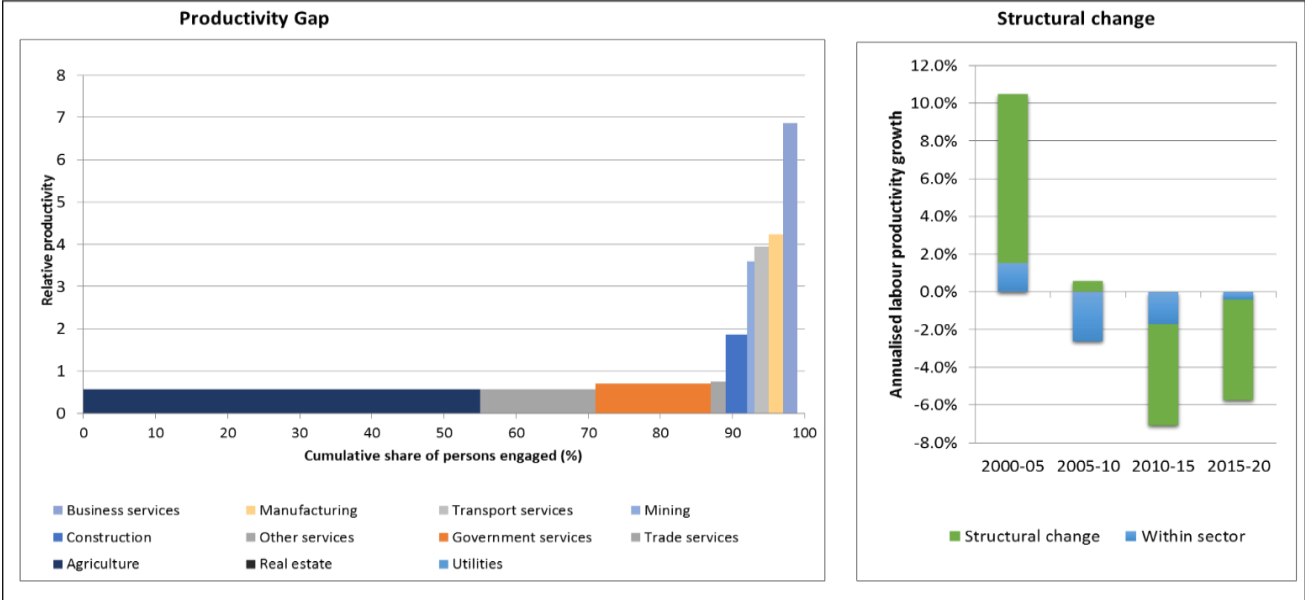
**Figure 7. Sectoral allocation, 2000-2015**



Source: Authors' analysis based on data from ILO and GGDC

Some structural change occurred between 2000 and 2005 (Figure 8) but this has since reversed. This corresponds to the ACET ATI trajectory (Figure 1). Furthermore, there is still a significant productivity gap in the sectors. Some sectors are performing very well in terms of productivity, e.g., financial services and business services. However, these sectors employ very few people. In general, close to 90 percent of working people are in low-productivity sectors. As a result, Kenya’s performance on ATI, especially on productivity gains, has been poor (ACET, 2014)<sup>6</sup>.

**Figure 8. Structural change and productivity gap**



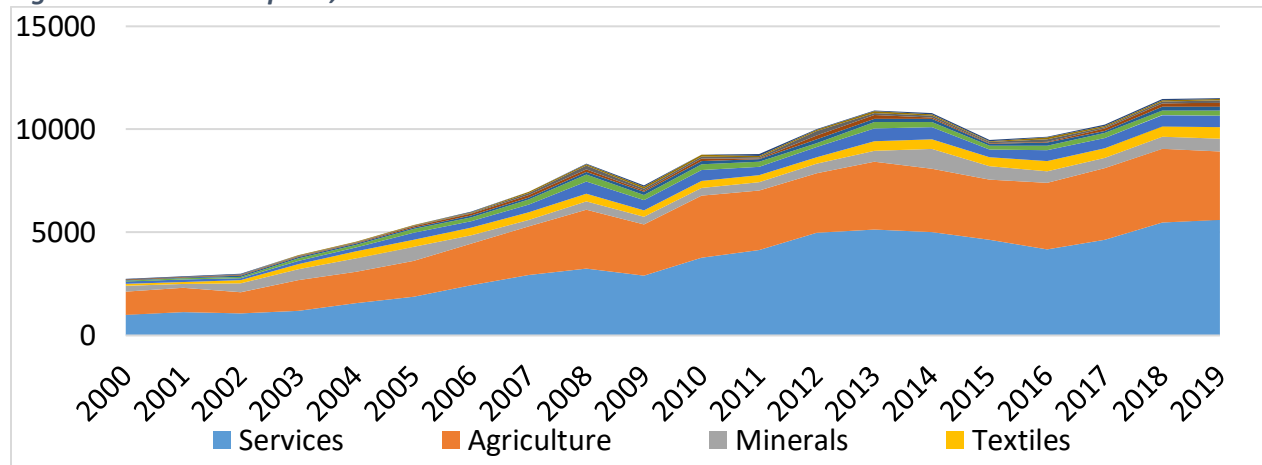
Source: Authors’ analysis based on data from ILO and GGDC

**2.1.3. Exploring diversification and export competitiveness**

Kenya’s performance on the ATI has been deteriorating, especially in terms of diversification and exports. In this section, the trends in exports are discussed using a model developed by McMillan et al. (2017). Figure 9 shows export performance from 2000 to 2019. The trend shows that after a rapid rise from 2000 to around 2013, growth has slowed down significantly and is almost levelling off. Services exports have been rising fast and have overtaken agriculture. The services exports are mainly powered by ICTs and transport.

<sup>6</sup> <http://africantransformation.org/category/the-inde>

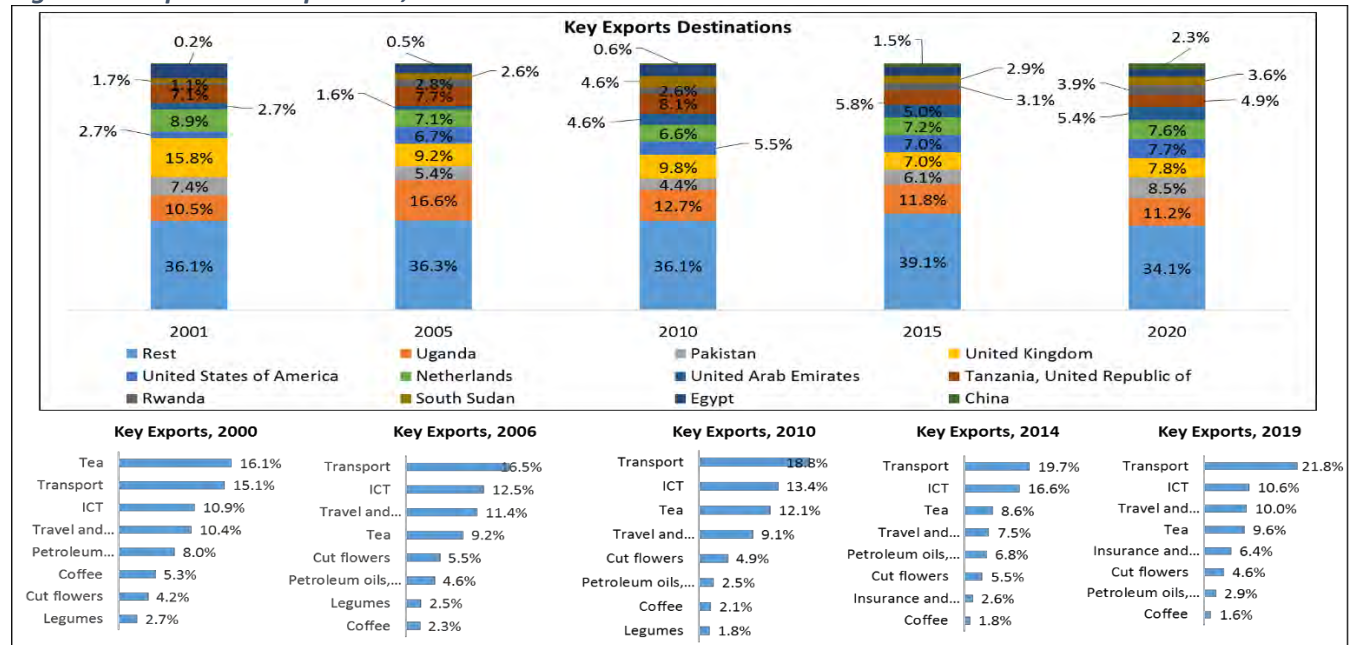
Figure 9. Trends in exports, 2000-2019



Source: Harvard World Atlas <https://atlas.cid.harvard.edu/explore>

A further decomposition of trends (Figure 10) shows that:

Figure 10: Export decomposition, 2001-2020



Source: Authors' analysis based on data from International Trade Center (ITC) and <https://atlas.cid.harvard.edu/explore>

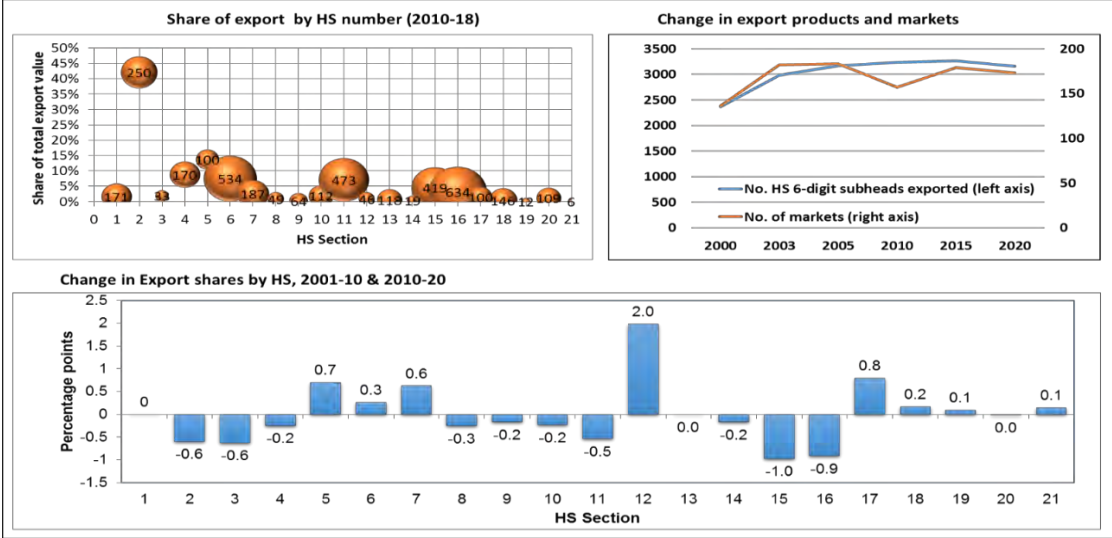
There seems to have been little diversification in terms of both products and partners. The share of top export destinations has largely remained at about two-thirds of total exports. However, there has been some change in trade partners. Uganda continues to be Kenya's most important trading partner, accounting for 11.2 percent of the country's exports, mainly attributed to liberalization of trade under the East Africa Community (EAC) Customs union and common market regimes.

The benefits of regional trade appear to be mixed. Whereas Rwandan imports from Kenya are increasing, Tanzanian imports from Kenya are declining, even though both Kenya and Tanzania are members of the EAC trading bloc. This can be partly explained by the persistence of non-tariff barriers (NTBs) which at times escalate into trade tensions within the EAC.

Pakistan, on one hand, is growing in importance as a trading partner, owing to an increase in Kenyan tea imports. UK and Egypt, on the other hand, are becoming less important export destinations for Kenya with their share of exports declining by almost 50 percent between 2001 and 2020.

A deeper analysis of the export structure using the disaggregation of exports by harmonized system is done using the model developed by McMillan et al. (2017). Figure 11 presents the outcomes of the analysis. It is important to note that although the capacity to export is declining, several other opportunities clearly do exist.

**Figure 11. Export trends using Harmonized System**



Source: Authors’ analysis based on data from ITC

Key observations from Figure 11 include:

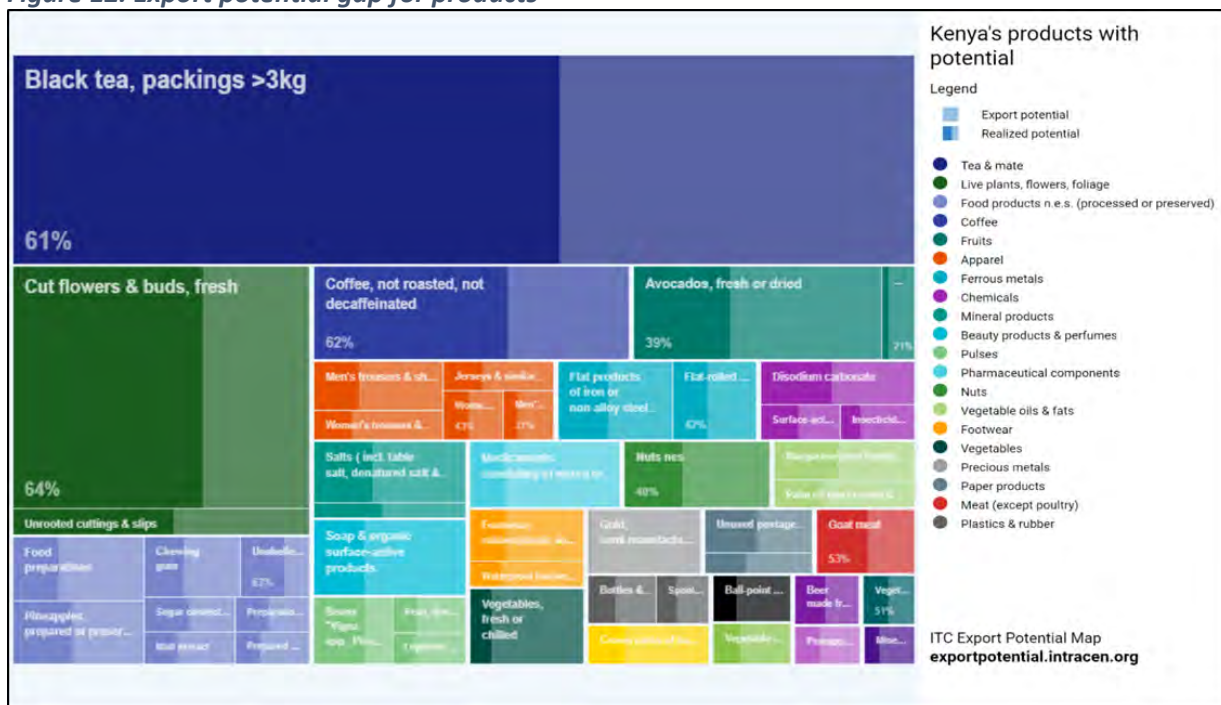
- Kenyan exports are concentrated in a few products. The biggest proportion of exports is described in Chapter 2 (vegetable products) of the harmonized system (HS)<sup>7</sup> classification. Kenya’s key exports in Chapter 2 comprise tea, coffee, and cut flowers. Thus, Kenya carries significant risk as these exports are agricultural hence vulnerable to ongoing effects of climate change in general, and especially to drought.
- The range of products that Kenya exports has largely stagnated after an initial increase. In addition, the number of markets has remained unchanged.

<sup>7</sup> The Harmonized Commodity Description and Coding System (popularly known as the Harmonized System or the HS) is a nomenclature which enables all physical goods moving across borders to be assigned to a class in a uniform manner all over the world. The HS is organized into 21 sections, which are subdivided into 99 chapters. These 99 HS chapters are further divided, with 1,244 headings and 5,224 subheadings. Section and Chapter titles describe broad categories of goods, while headings and subheadings describe products in more detail.

- Some of the HS chapters (e.g., Chapter 16 which covers many products including machinery and mechanical appliances, and electrical equipment) represent a very small share of Kenya's exports. However, it appears that the share of these goods in Kenya's export basket has increased slightly over the years.
- Chapter 11, which covers textiles and apparel, has also increased its share in the export basket. HS Chapter 6 (chemical and allied industry products) covers 586 products, and has also seen an increase in export share.

The export gap for Kenyan products was analyzed with reference to the International Trade Commission (ITC) methodology . The analysis shows that there is huge potential for greater value addition to existing exports. The total untapped potential for the Kenya's exports stands at US\$4.1 billion (ITC). Tea, cut flowers, coffee, and avocados present the biggest untapped opportunities (see Figure 12).

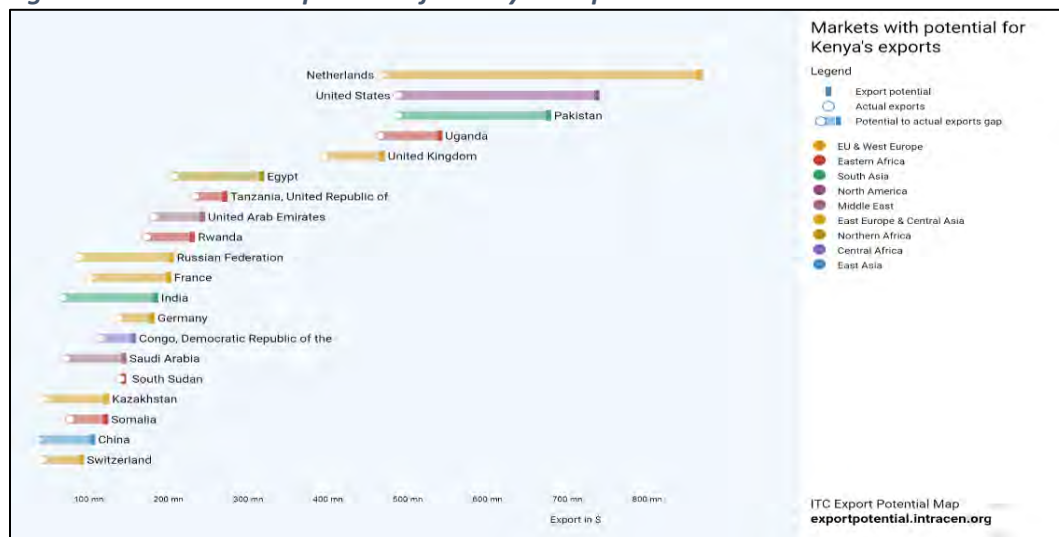
Figure 12. Export potential gap for products



Source: ITC

As noted earlier, markets for Kenyan exports have remained largely unchanged and highly concentrated. The ITC explores whether existing markets are fully tapped as well as the new markets that can be exploited. From Figure 13, it can be observed that the Netherlands, the United States, and Pakistan are the three markets with the greatest potential for growing Kenya's exports.

**Figure 13. Markets with potential for Kenya's exports**



Source: ITC

In terms of value, the United States shows the highest absolute difference between potential and actual exports, leaving room for an additional US\$509.6 million worth of Kenyan exports. Russian Federation, France, and India are three new markets with a lot of potential. Kenya could export more by increasing its product complexity as well as marketing them more aggressively. In summary, Kenya has been unable to diversify its products and markets, although there is tremendous space for improvement in existing markets and products as well as in venturing into new markets.

#### 2.1.4. Exploring technological upgrading

Innovation is key to transformation. At the firm level, which is where innovation occurs, there is strong evidence of a robust, positive relationship between innovation, productivity, and growth (World Bank, 2016). According to the results of the 2017 Global Innovation Index survey, Kenya performed significantly better on innovation than its current level of development would predict (Mutisya, 2018; WIPO, 2018). However, this remarkable performance is mainly confined to Kenya's rising exports of ICT services. Indeed, in the area of ICT and especially fintech, Kenya is perceived as an innovation hub with a global reputation and is fondly being referred to as the Silicon Savannah. Kenya's tech hub has attracted over US\$1 billion in investments and is home to more than 200 startups as well as established firms like IBM, Intel, and Microsoft (Mallonee, 2018, Kola-Oyeneyin, Kuyoro and Olanrewaju, 2020).

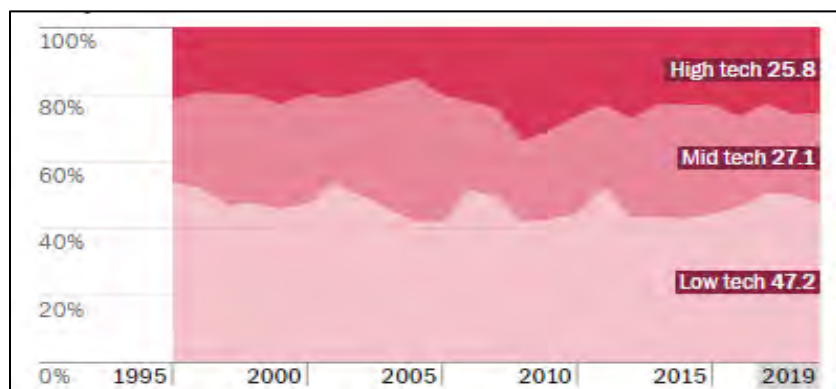


### Box 2. Kenya's M-PESA technology

Kenya's M-PESA mobile platform is the country's most celebrated innovation. M-PESA is the world's largest money transfer service in terms of the volume of cash transacted (Gatehouse, 2012). M-PESA has had a positive impact on the economy:

- Between 2008 and 2014, M-PESA assisted 194,000 families, or 2 percent of Kenyan households, escape poverty by making it easier to weather financial and health crises by increasing savings rates and by allowing users to tap into wider support networks. Further, women in areas where the numbers of M-PESA agents grew were more likely to change occupations from farming to business and retail sales (Suri and Jack, 2016).
- Financial inclusion in Kenya has risen from 26 percent of the population in 2006 to 83 percent in 2018 due to M-PESA (Chitavi, and Hagist, 2018).
- M-PESA has created many jobs. The M-PESA platform has 110,000 agents spread throughout the country (Chitavi, Cohen and Hagist, 2018).
- Beyond money transfer, M-PESA has built many services on the platform including lending, point-of-sale services, and other financial services. It is gradually transforming into a bank.
- The platform encourages other service providers to create M-PESA-based applications, which helps to foster financial innovation. One of the local banks, for example, has developed M-Shwari, a mobile lending application based on M-PESA.
- Banks are also innovating to fend off competition from this now dominant platform. Equitel, owned by Equity Bank, is pushing the boundaries of financial inclusion even further by offering a full suite of banking services on mobile devices. Equitel is a new type of hybrid firm: a telecommunications company born of a bank.

Figure 14. Technology level in manufactured exports, 1995-2019

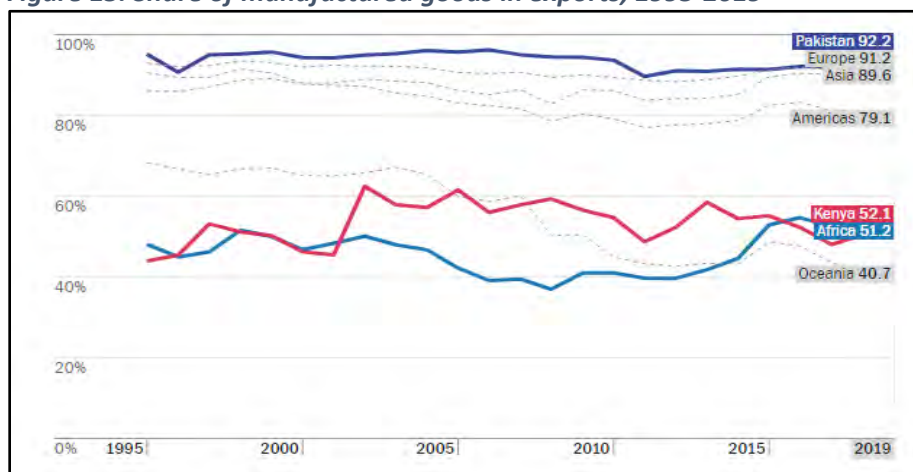


Source: UNIDO (<https://iap.unido.org/data/explore?p=THA&s=CHN>)

The innovation prowess in ICT is not reflected in other sectors. Cirera (2016) finds that only a few Kenyan firms have come up with products that are new to the domestic market. Furthermore, firm spending on research and development (R&D) remains low. This largely explains the poor performance of the manufacturing sector. Kenya has yet to capture the full value of its existing products and export markets mainly due to low product complexity (see Figure 14 above).

Using data from UNIDO<sup>8</sup>, the trend in exports shows that manufactured goods comprise only about half of Kenya's exports (with the top five manufactured exports being food and beverages, chemicals, fuels, apparel, and basic metals). The level of technology in these manufactured exports is also relatively low and has been falling from a high of 65 percent in 2002 to 52.1 percent in 2019 (see Figure 15). This compares poorly with Pakistan which is at the same level of development as Kenya<sup>9</sup> and whose share is 92 percent<sup>10</sup> (though the level of technology is lower than for Kenya manufactured exports). It should be noted that Pakistan's key exports are textiles and apparel, with the United States being the main destination (ITC). As pointed out earlier, Kenya has immense opportunities in this product and market.

**Figure 15. Share of manufactured goods in exports, 1995-2019**



Source: UNIDO (<https://iap.unido.org/data/explore?p=THA&s=CHN>)

### 2.1.5. Exploring human development: trends in education, skills and health

Kenya's population currently stands at 54 million, having risen from about 20 million in 2000. The growth rate has, however, been declining, from about 2.7 percent in 2000 to 2.2 percent in 2020. Kenya is described as a 'young country', with an estimated 64 percent of its population being 19 years old or less while the youth (age 18-34)<sup>11</sup> constitute 29 percent of the population (Ndungu, 2020). Kenya's youth in the 15-24 age bracket, which stands at 20 percent, is one of the highest in the world (Genesys, 2019). This presents both an opportunity (for a demographic dividend) and a threat if enough jobs are not created (Genesys, 2019; AFIDEP, nd).

The urban population has risen from 20 percent of total population in 2000 to 28 percent in 2020. Although the urban population has been rising at a faster rate than the total population, the proportion is much lower than that of comparator countries and is contributing to Kenya's lower-than-potential

<sup>8</sup> (<https://iap.unido.org/data/explore?p=THA&s=CHN>)

<sup>9</sup> The World Bank (2016) classifies Kenya's comparator countries as Pakistan, Vietnam and Cambodia based on the level of development.

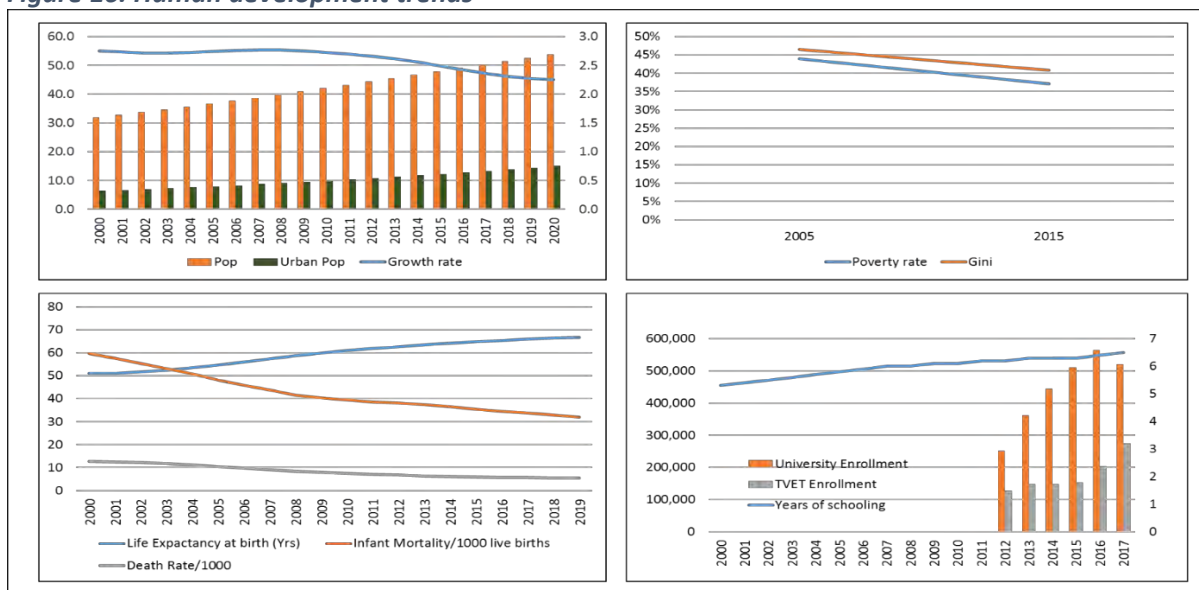
<sup>10</sup> Ironically Pakistan is a major importer of tea (valued at US\$35 million in 2019) while at the same time Pakistan exported close to \$100 million worth of tea (mainly to the Middle East UK and USA). It is probable that Pakistan is leveraging its superior manufacturing and marketing skill to add value to Kenya tea. Also in 2019, Pakistan exported US\$29.8 billion worth of goods while Kenya exported US\$11.5 billion.

<sup>11</sup> According to the Kenyan Constitution of 2010, youth are defined as people aged between 18-34.

growth (World Bank, 2016). Nevertheless, the human development indicators (Figure 16) show a positive trajectory:

- Life expectancy rose from 51 years in 2000 to 67 years in 2020. Infant mortality and the crude death rate have also fallen.
- Using the international poverty line of US\$1.90 (2011 PPP) per day per capita, data from the latest two reliable surveys show that the poverty rate has declined from 44 percent in 2005 to 37 percent in 2015 (World Bank, 2020). According to the World Bank (2020), the international poverty headcount rate is expected to continue declining, but only at a moderate rate to 33.1 percent in 2020 and 32.4 percent in 2021.
- The Gini coefficient has also declined, from 47 percent in 2005 to 41 percent in 2015 (World Bank, 2020).
- The number of years of schooling has risen from 5.3 years to 6.5 years. Enrollment in university and in technical and vocational education and training (TVET) has seen rapid growth.

**Figure 16. Human development trends**



Sources: Authors' analysis based on data from WDI; KNBS (Economic Survey, Various Years); and Barro-Lee (2018) <http://www.barrolee.com/>

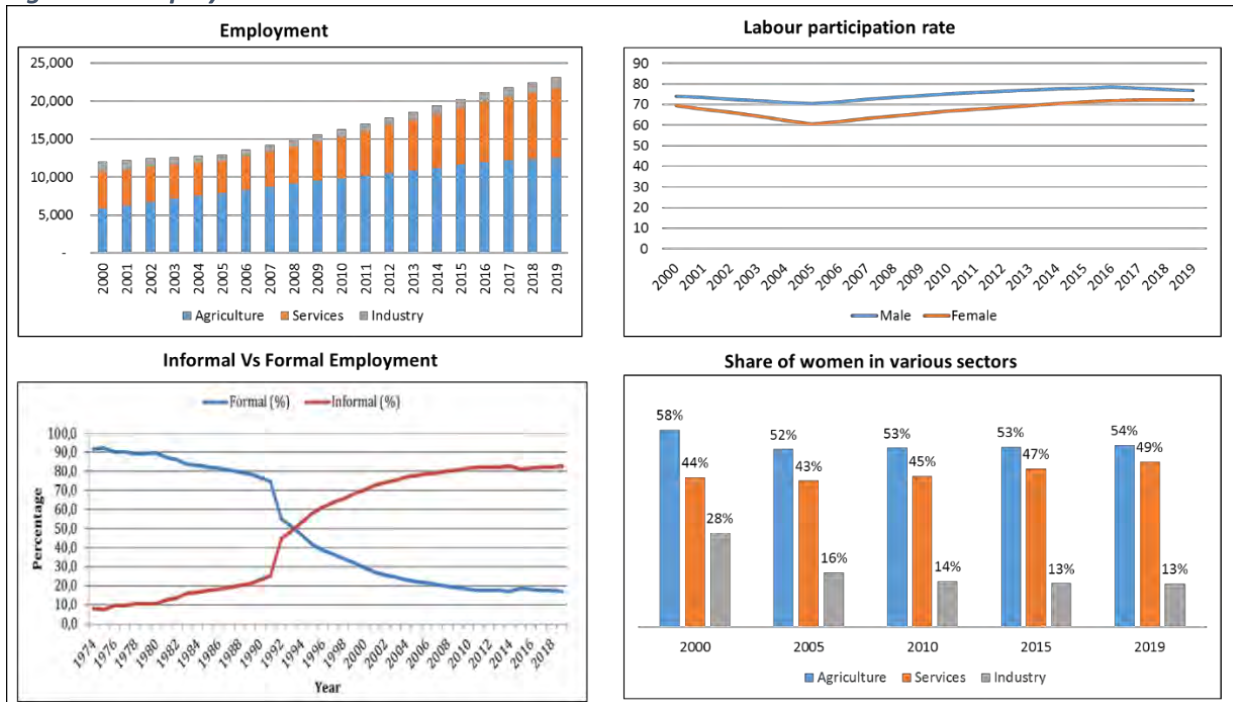
## 2.2. Employment trends

In line with population growth and economic growth, the number of people in employment has grown from about 12 million in 2000 to about 22 million in 2019. Using ILO data, employment trends include the following (see Figure 17):

- The share of people employed in agriculture has risen from 49 percent in 2000 to 54 percent in 2019. The industry share has shrunk (11 to 6 percent) while the share of people employed in services has remained largely the same at 40 percent.
- The labor participation rate has remained high at about 75 percent, though slightly higher for males (77 percent and 72 percent for women).
- Women's share in employment is around 49 percent. However, closer examination shows that:

- Women's share of employment has risen from 44 percent in 2000 to 49 percent in 2019.
- Women are more in agriculture though the share has fallen from 58 percent in 2000 to 54 percent in 2019.
- Women's share in industry is low and has fell from 28 percent in 2000 to 13 percent in 2019.
- In recent years, the informal sector has created the majority of the jobs. According to Omolo (2010), a significant transition occurred in 1992, mainly driven by liberalization and privatization policies implemented at that time.

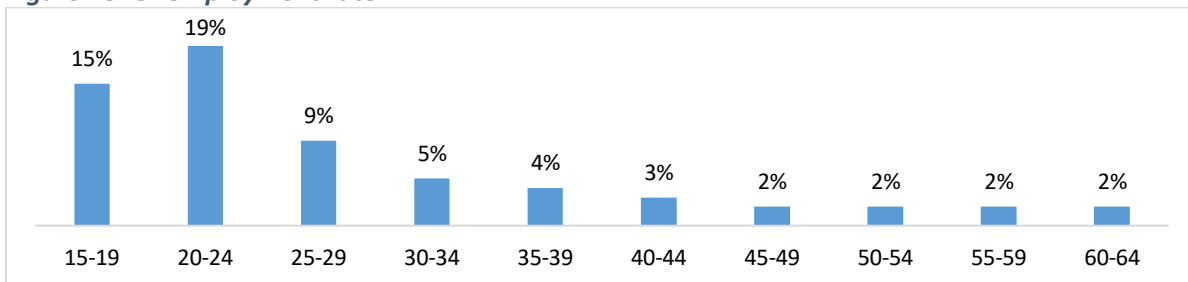
**Figure 17. Employment trends**



Source: Authors' analysis based on data from ILO STAT (<https://ilostat ilo.org/data/>) and FKE report (2021)

Unemployment among the youths remains very high as between 500,000 and 800,000 young Kenyans enter the job market annually (Genesys, 2019).

**Figure 18. Unemployment rate**



Source: KNBS 2018 (cited in Genesys, 2019)

### ***Box 3: Addressing youth unemployment in Kenya***

Youth unemployment is considered a major challenge to reaping the demographic dividend promised by the youth bulge, as well as a threat to stability, as it provides fertile ground for recruitment and radicalization (Jamah, 2018; Fox et al., 2020). The government and development agencies have made major efforts towards solving the youth unemployment problem. These include:

- Establishment of the Youth Enterprise Development Fund (YEDF) to increase economic opportunities.
- Setting up the Ajira Digital (online work program) that aims to increase youth participation in online work thus reducing unemployment (KNBS, 2020).
- Kazi kwa Vijana (KKV): The KKV program is a nation-wide initiative that employs 200,000-300,000 youth who are at risk of hunger and starvation, allowing them to earn a living, purchase food, and other necessities. Those employed in the KKV are engaged in community manual-based small projects.

Government initiatives have been complemented by many projects and initiatives sponsored by development partners and private local as well as international organizations. However, due to a lack of detailed evaluation of youth initiatives, little is known about what works best in promoting youth employment in Kenya (World Bank and Vision 2030, 2014).

Fox et al. (2020) provide a critical perspective on youth initiatives in Africa in general, arguing that the very premise of many youth initiatives is flawed. They argue that the dividend may be overstated and evidence from robust studies linking youth unemployment to violence is lacking. For many years, training and skills development has been the most common response to the youth employment dilemma. However, it is argued that the youth unemployment problem is caused by a lack of demand for labor in the formal labor market rather than by the youth themselves<sup>12</sup>. Africa's youth unemployment problem is a reflection of a more fundamental issue concerning the structure of African economies, which provide far too few opportunities for decent work for people of all ages. Therefore, resources being deployed for youth initiatives could be better deployed to drive structural transformation.

#### **2.2.1. Skills challenge**

Economic transformation is critically dependent on skills. There is significant evidence that skills gaps (a combination of skills mismatches and skills shortages) can negatively affect productivity and growth of wages (Puerta et al., 2018). The lack of an adequately skilled workforce is a growing concern for Kenya. Whereas only 2 percent of services firms identified skills as a major constraint in 2007, by 2013, more than a third of services firms were struggling to find qualified workers (World Bank, 2021).

The skills challenge has its roots in the education system. While significant strides have been made in education, as shown by the increased number of years of schooling, attainment is still low when compared with that of comparator countries (World Bank, 2016). In addition, the quality is also poor. According to a skills survey conducted between 2013 and 2017, the majority of adults with secondary education are functionally illiterate in English (World Bank, 2021). To make matters worse, the rapid rise in university enrollment has occurred at the expense of quality (Chege, 2016; McCowan, 2018). This is

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<sup>12</sup> Many youths report that their skills are not fully utilized in the jobs they do.

also underscored by the fact that less than one-quarter of individuals with a university education are functionally literate in English (World Bank, 2021). As shown in a survey carried out by Puerta et al. (2018), employers believe that the public education system does not produce graduates with practical experience and at the same time graduates from TVET institutes do not have the necessary skills. Employers are also to blame as they are expected to contribute to skills development by training workers. Puerta et al. (2018) find that less than a third of the surveyed firms provide any training to their workers and there is a skills mismatch challenge as workers complain that they are not able to apply what they have learnt at work.

## 2.3. Macroeconomic trends and implications for transformation

Maintaining a stable macroeconomic environment through prudent fiscal and monetary policies is key to structural transformation. Attracting investment by the private sector and providing the requisite infrastructure to facilitate the ease of doing business is vital. This requires resource mobilization to fund government projects on one hand and access to credit for businesses to support investment outlays on the other.

### 2.3.1. Investment trends

For the past 10 years, investments (gross capital formation) have been rising by an annual rate of 6 percent and stood at 20 percent of GDP in 2020 (see Figure 19). This growth has been driven mainly by investments in housing and buildings which account for roughly two-thirds of investment stock. Nonetheless, investment in Kenya continues to be insufficient to support the transformational growth target. The investment level is lower than the 25 percent of GDP benchmark identified by the Commission on Growth and Development (2008). Increasing investment levels necessitates a high level of national savings to allow banks to access funds to lend and provide credit<sup>13</sup> to the private sector. There are challenges in both of these key prerequisites:

- Savings remain low and have shown a general downward trend after rising from a low of 8.4 percent of GDP in 2001 to 16.6 percent of GDP in 2007. Since then, gross savings have fallen to below 10 percent of GDP in 2020<sup>14</sup>. This is far below the target of 26 percent of GDP by 2012/13 and 29 percent of GDP by 2030 for Kenya's transformation set by Kenya Vision 2030. It has been noted that the savings culture has been deteriorating, which has translated to low investments.
- Domestic credit to the private sector has also been constrained. Between 2000 and 2009, it hovered around 25 percent of GDP, after which it rose steadily to 35 percent in 2015. Since then, it has fallen to around 31 percent of the GDP. This is low compared with South Africa where the figure is about 107 percent<sup>15</sup> of GDP. The decline has been attributed to the government capping interest rates, which in turn saw banks reduce lending<sup>16</sup>. Additionally, the capping of interest rates is associated

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<sup>13</sup> Credit availability increases, consumption and investment demand also increase and this raises the level of output and employment but crucially, credit availability enables firms to undertake investments that they would not have undertaken with their own funds (Khamis and Klossifov, 2009).

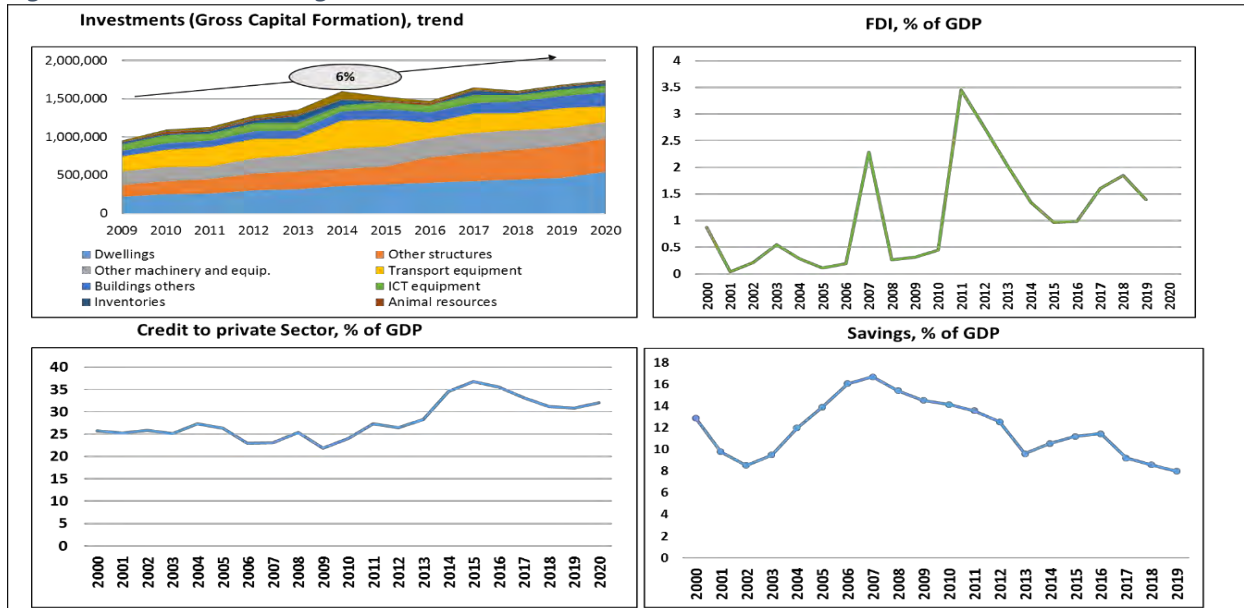
<sup>14</sup> In contrast, Pakistan's savings are above 20 percent of gross national disposable income (GNDI), and Vietnam's are more than 25 percent

<sup>15</sup> [Domestic credit to private sector \(percent of GDP\) | Data \(worldbank.org\)](https://data.worldbank.org/SD/SH.CD)

<sup>16</sup> The three sectors that experienced the highest levels of credit decline are business services (8.57 percent), agriculture (4.76 percent) and manufacturing (3.02 percent) (Kiriga et al., 2020).

with a shortfall in real GDP growth by about 1.1 percent relative to the baseline (pre-capping period) (Kiriga et al., 2020). The diminished liquidity following the large capital outflows and the turmoil in the banking sector which saw three banks being placed under receivership also contributed (Kiriga et al., 2020).

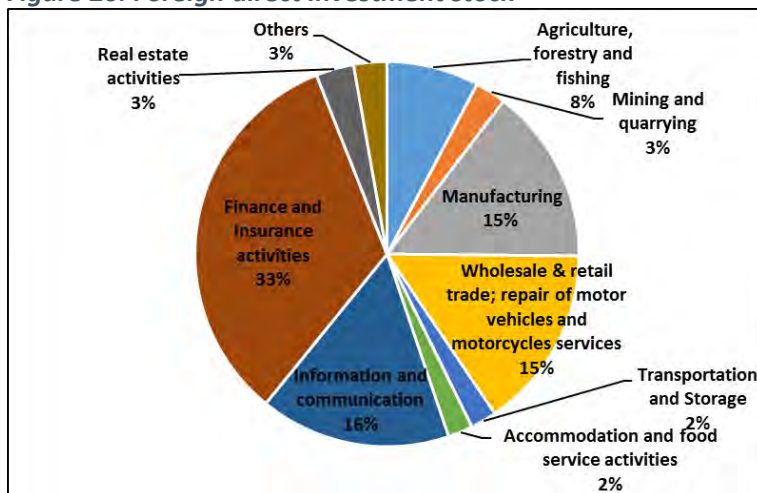
**Figure 19. Trends in savings and investment**



Source: Authors’ analysis based on data from WDI, KNBS and Central Bank of Kenya (CBK)

Foreign direct investment (FDI) has been on the rise but is highly volatile. Current FDI stock stands at about 1.5 percent of GDP. Eighty percent of FDI stock in 2019 (see Figure 20) was in finance and insurance, information and communication, wholesale and retail, and manufacturing activities (33 percent, 16 percent, 15.4 percent and 15 percent respectively) (KNBS, 2020). FDI seems to be attracting investment in more productive parts of the economy except for the trade sector.

**Figure 20. Foreign direct investment stock**

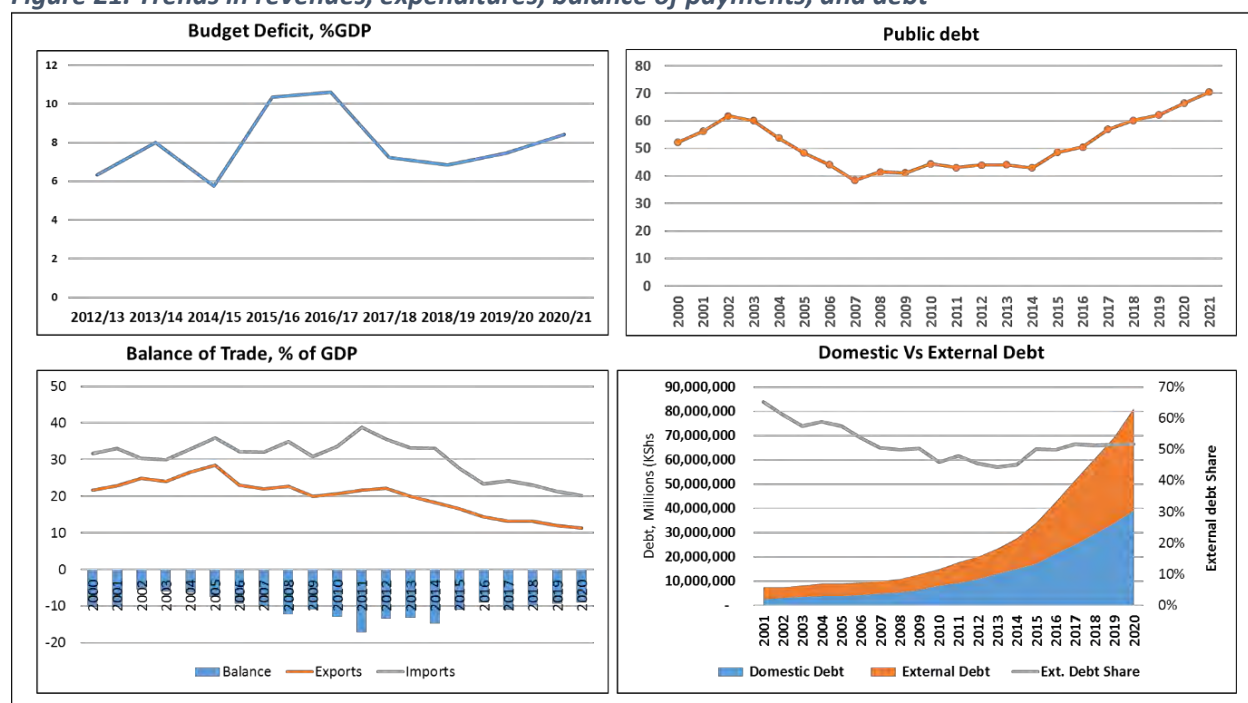


Source: KNBS (Foreign Investment Survey Report 2020)

### 2.3.2. Key fiscal performance (revenue, expenditure, debt)

A review of the government's fiscal performance reveals that revenue collection has been rising at a much higher rate than GDP (13 percent compared with about 6 percent). This implies that the government has been improving its domestic resource mobilization. However, expenditures have been growing faster than revenues resulting in a growing budget deficit, from about 6.2 percent of GDP in 2012 to above 8 percent of GDP in 2020. To finance the shortfall, public debt has risen significantly. Public debt fell from 60 percent of GDP to 40 percent in 2007 and then rose slowly to about 42 percent in 2014 after which it has accelerated to 48.6 percent of GDP at end-2015 and eventually to an estimated 69 percent of GDP at end-2020.

**Figure 21. Trends in revenues, expenditures, balance of payments, and debt**



Source: Authors' analysis based on data from the Kenya National Treasury and CBK

Experts point to the growing risk of debt becoming unsustainable and argue for the need to rein in debt. Another concern was that much of this debt was going into infrastructure projects. Indeed, the government that came to power in 2013 greatly accelerated borrowing to fund ambitious infrastructure projects, the most expensive being the standard gauge railway. This has meant increased international borrowing, especially from China. Kenya is currently spending about 67.0 percent of tax revenues (and 57.0 percent of total revenue) to service public debt (KIPPRA, 2021). The African Development Bank (2019) notes that the rising level of public debt could pose a debt sustainability risk and other experts have called for exploration of options to manage this risk.



#### **Box 4. Reigning in debt in Kenya**

Although Kenya has a Public Financing Act of 2012 regulating the debt ceiling,<sup>17</sup> the law tends to be revised as is convenient (Kariuki, 2021). It was raised 6 to 9 trillion Kenya shillings in 2019 and is poised to be raised again to 13 trillion Kenya shillings (Mutai, 2022). The political economy of Kenya leaves the country at the mercy of the Executive in terms of borrowing. A profligate Executive can easily put the country into debt unsustainability. Some have called for the reigning in of the ability of Parliament to raise the ceiling of debt as it cannot be trusted to check the Executive (Kariuki 2021). Some proposed actions include writing a fixed debt ceiling into the Constitution and adjusting borrowing levels every two years.

While the way forward is not clear, a thorough analysis of the political economy of debt ceiling is needed to understand how debt can be protected from patronage politics that tend to drive procurement and thus borrowing.

Although exports and imports have also been increasing, they have been declining as a share of GDP. Imports have been higher than exports, leading to a significant trade deficit. The deficit grew from around 10 percent of GDP to almost 20 percent of GDP in 2011 and has since fallen back to around 10 percent. The trade deficit can be attributed to several factors including frequent droughts, which means that food imports are becoming more regular, as well as the fact that export performance has been lackluster.

#### **2.4. Status and progress towards main SDGs and targets**

Kenya is committed to the Sustainable Development Goals (SDGs). The Third Medium-Term Plan (2018-2022) of Kenya Vision 2030 is the primary instrument to drive SDG implementation over the five-year period. In 2016, Kenya launched the SDGs implementation process. The first Voluntary National Report (VNR) was presented in 2017. During the period 2017-2019, progress has been made in SDG 1 through poverty reduction measures, SDG 3 – Health, SDG 4 – Education, SDG 6 – Provision of clean water, and SDG 11 on ensuring sustainable cities. GoK (2020) details the key achievements as:

- Under SDG 1, ending poverty, the government continues to implement social protection programs. In 2017/18 and 2018/19, the Older Persons Cash Transfer (OPCT) covered 783,089 and 753,314 beneficiaries respectively.
- The proportion of skilled deliveries of birth increased from 61 percent in the period 2016/17 to 62 percent in 2017/18 and 65 percent in 2018/19. Furthermore, the proportion of pregnant women attending four antenatal clinic visits has oscillated around 50 percent (2018/19), being 48 percent (2017/18), and 52 percent (2016/17).
- In the education sector, net enrolment rates (NER) in primary education have taken an upward trend. The number of pupils enrolled in public primary schools was 8,879,685 in 2016/17, 8,896,932 in 2017/18, and 8,959,719 in 2018/19.
- There was an increase in the proportion of the population with safely managed sanitation services, from 65.7 percent (households) in 2016 to 82.5 percent in 2019.

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<sup>17</sup> The legal basis of Kenya's debt ceiling is stipulated in Section 50(5) of the PFM Act 2012 which states that 'Parliament shall provide for the borrowing entitlements of the national government and county governments and their entities.'

- The proportion of the population with access to electricity rose from 41.5 percent in 2016 to 46 percent in 2018 and 50.4 percent in 2019.<sup>18</sup> The proportion of the population with primary reliance on clean fuels and technology increased from 14.6 percent in 2016 to 19.8 percent in 2018 and 25.4 percent in 2019.
- Kenya took measures to promote sustainable cities and human settlements. The measures included the formulation and review of various policies and legislations, some of which include amendment of the Urban Areas and Cities Act by Parliament in October 2017 and approval of the Sectional Properties Bill 2018 in February 2019 by the Cabinet.
- All sub-national governments adopted and implemented local disaster risk reduction strategies in line with the National Policy for Disaster Management.
- Kenya embarked on afforestation programs where the forest area as a proportion of total land area increased from 7.21 percent in 2016 to 7.28 percent in 2018.

Good progress has been made, but there are still challenges. For example, the number of people living in absolute poverty has increased over the last decade despite the reduction in the national poverty rate from 46.6 percent in 2005/06 to 36.1 percent in 2015/16, underscoring the need for a much higher growth rate. The government (2020) points that the challenge for Kenya was the re-classification of the country as a lower middle-income country in 2014, which made access to loans from international lenders difficult with the reduction of availability of concessional loans from multilateral lenders. This is expected to have serious ramifications for the financing of SDG- related interventions.

## 2.5. Key development challenges facing Kenya

- Kenya's economy has been growing but not in a sustained manner, with frequent shocks tending to reverse gains. The growth rate is well below the potential (Kimenyi et al., 2016). The prospects of meeting the Vision 2030 goal of middle-income economy status are slim. To date, the three medium-term strategies under Vision 2030 have not been able to achieve their goals (see next section)
- Growth is mainly driven by personal consumption of food, housing, and transport expenditures (accounting for two-thirds of personal expenditures). Investments are very low and tend to be driven by investments in real estate.
- The key economic sector is the services sector and it is increasingly driving growth. However, the performance of agriculture remains critical to the economy and especially poverty reduction.
- Debt sustainability is a potential threat. KIPPRA (2021) points that the government needs to consider exploring innovative ways to service public debt and finance the fiscal deficit.
- A sectoral shift in employment has seen people move from low-productivity agriculture to low-productivity services, especially trading. However, the World Bank (2018) points out that for Kenya to make a significant reduction in poverty, there needs to be a shift from agriculture and services to the industrial sector.<sup>19</sup>
- Jobs are being created in the informal sector. This is a problem as a huge informal sector tends to be a drag on the economy due to the low productivity of the sector.
- The population has been growing, though at a declining rate. However, the population is very young, giving the prospect of reaping a demographic dividend. However, the rate of youth unemployment remains high, underscoring the need for transformative growth. Indeed, the huge youth unemployment is becoming a security concern (Jamah, 2018).

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<sup>18</sup>The country has set an ambitious plan to achieve universal access by 2022.

<sup>19</sup> For poverty at US\$ 1.90, the intra-sectoral effect on poverty reduction is around 5 percentage points

- Productivity is falling. At the same time, there remains a huge productivity gap between the sectors employing a large majority and a small segment of high-productivity sectors employing a small minority.
- Export performance has weakened and growth largely flattening. There is no diversification in products and markets. In summary, any structural transformation in the 2000-2005 period has seen a reversal of fortunes.

The observation that Kenya's moderate growth has not been transformative is consistent with the African Development Bank (2019) assessment that the structure of Kenya's economy has been changing but without commensurate change in employment. The AfDB finds that the share of agriculture in GDP has progressively declined to stand at 23.5 percent in 2017 from 29.3 percent in 2000. However, between 2008 and 2017 the employment share of agriculture fell by only 3.4 percent compared with a rise in the employment share of services by 6.61 percent over the same period. Industry on the other hand has witnessed a decline in its employment share by 9.0 percent over the same period, despite the increasing contribution of industry in Kenya's GDP. Further, within the industry, the contribution of manufacturing to GDP has stagnated at 9 percent for over a decade. AfDB (2019) argues that these trends imply that the pace of structural transformation is not in tandem with the changing sectoral share contributions. Beyond growth, the World Bank (2020) points out that there is ample scope for accelerating poverty reduction through greater efforts to reduce inequality through pro-poor growth policies.

### 3. Development policies and economic transformation

From the foregoing discussion, it is clear that Kenya is growing but not transforming. More importantly, growth seems to be flattening out. This observation is reflected in the performance of Kenya in the ACET Africa Transformation Index (ATI) (as shown in Figure 1). Since 2000, the government has pursued three interrelated strategies. The Economic Recovery Strategy for Wealth and Employment Creation (ERS) and the Kenya Vision 2030 are the two most important transformation initiatives in recent years. The devolution and the digital transformation strategies are two complementary strategies.

#### 3.1. Economic Recovery Strategy for Wealth and Employment Creation (ERS) (2003-2007)

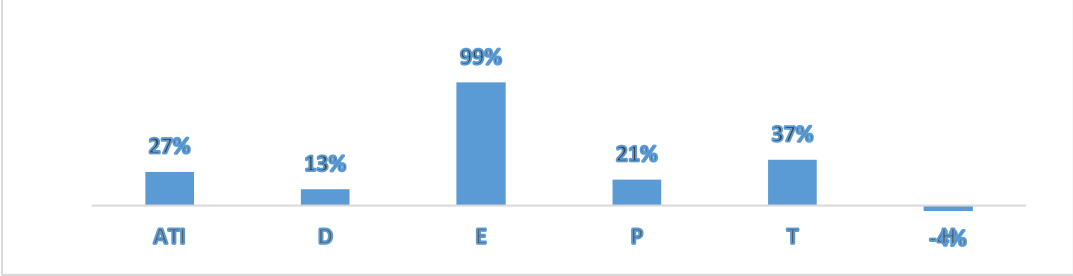
The key objective of the economic recovery strategy of 2003-2007 was to revive an economy that had almost collapsed after many years of stagnation stemming from unsuccessful efforts at reforms and poor governance<sup>20</sup>. Beyond targeting sustained growth, the plan included equity and a social and economic agenda aimed at reducing inequalities, indicating that, to some extent, this was more of a transformation plan than a recovery plan. The key targets included: creating 500,000 jobs annually; reducing the poverty level by at least 5 percentage points; achieving a real GDP growth rate of 7 percent by 2007; containing average annual inflation to below 5 percent; increasing foreign exchange reserves from 2.8 months to 3.5 months of import cover; targeting domestic revenue mobilization to be above 21

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<sup>20</sup> The struggle for democracy had also seen misuse of public resources as the government in power used political patronage to buy support leading to huge scandals and general loss of confidence by business. In terms of impact, per capita income in constant 1982 prices declined from US\$271 in 1990 to US\$239 in 2002 and the number of people living in poverty rose from 48 percent of the population in 1990 to 56 percent of the population in 2001 while growth fell to 1 percent.

percent of GDP and limiting the current account deficit to an average of 6.2 percent of GDP. By 2005/06, the overall deficit was expected to drop to 3.7 percent from 6.2 percent of GDP in 2002/03. In terms of transformation pathways, the key focus of the plan was agriculture, manufacturing, tourism, exports, services, and infrastructure (see Appendix 4).

Figure 22: ERS ATI performance



Source: ACET analysis

The ATI and DEPTH indicators performed well as shown in (Figure 22). Indeed, the ERS strategy was very successful in meeting most of the targets. Key outcomes include: per capita income increased by about 55 percent (from US\$0.408 to over US\$0.630); overall incidence of poverty declined from 56.8 percent to 46 percent; domestic revenue collection reached 21 percent of GDP, and annual bank credit rose from minus 1.7 percent of GDP to about 7 percent of GDP in 2006. All the same, the plan did not achieve some of its targets. Despite massive gains in agriculture, formal employment in the sector grew by only 1 percent. Growth did not translate to decent jobs. The revamping of the railway sector through restructuring and eventually privatizing Kenya Railways through concessions proved to be a monumental failure.

Overall, the ERS has been assessed as the most successful economic recovery plan since Kenya's independence (Kimenyi et al., 2016). Most dimensions of transformation under the DEPTH framework also performed well (see Figure 22) although human well-being fell slightly. This can be explained by the failure of the agricultural sector to create formal jobs. Indeed, Kimenyi et al. (2016) found that in this period of good growth, the employment response was weak. They argued that this can be explained by the fact that growth in this period was driven by efficiency gains.

### 3.2. Kenya Vision 2030

The current transformation policy document is the Kenya Vision 2030 development policy framework which started in 2008. This Vision 2030 seeks to transform Kenya into “a newly-industrializing, middle-income country providing a high quality of life to all its citizens”. The framework seeks to put Kenya on a growth trajectory to 10 percent annually. The key macroeconomic targets to support this include: raising revenue mobilization to 22 percent; raising national savings to 26 percent and eventually to 29 percent; keeping the deficit at less than 5 percent of GDP; raising the level of investment to above 30 percent of GDP; and achieving annual productivity growth of 2.5 percent through the adoption of new technology, improvement in governance and reducing transaction costs to business. The transformation pathways identified agriculture, manufacturing, tourism, wholesale and retail trade, business process outsourcing and financial services (see Appendix 4).

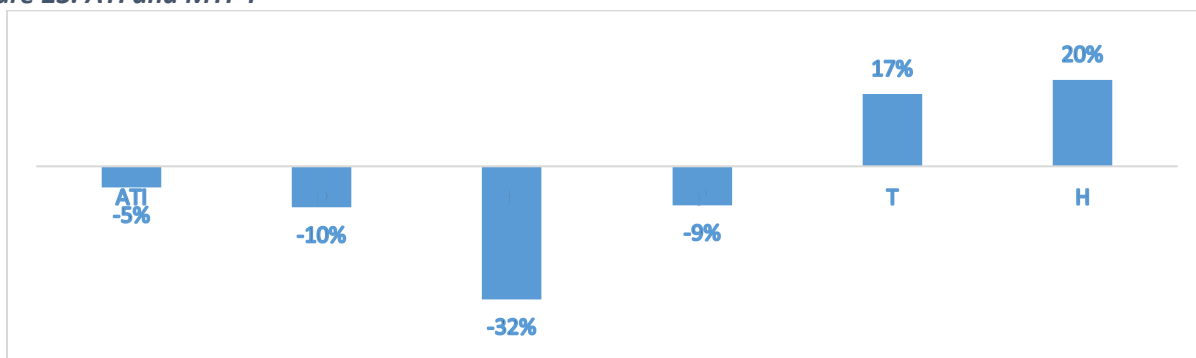
### 3.2.1. Assessment of Vision 2030 performance

Vision 2030 is being implemented in five medium-term plans (MTPs). Three MTPs have been implemented so far.

#### Kenya Vision 2030 – MTP I (2008-2012)

The period saw mixed performance. Growth collapsed from about 7.0 percent in 2008 to almost 0 percent in 2007, rebounded strongly to 8.3 percent in 2010 then declined again to about 4.5 percent. The turbulent growth pattern can be largely explained by the collapse that occurred in 2008 following the 2007 post-election violence that saw widespread destruction of life and property as well as the displacement of people<sup>21</sup>. Peace was brokered only after a power-sharing agreement was reached, leading to the formation of a coalition government that included the opposition in a troubled alliance. Negotiations were also held in this period for a new Constitution that was promulgated in 2010. The period's turmoil was reflected in the ATI index that deteriorated throughout this time. The key dimensions of DEPTH all deteriorated. The biggest drag on transformation was the huge fall in the export index. Diversification and productivity also fell (see Figure 23).

Figure 23. ATI and MTP I



Source: ACET analysis

A review by World Bank (2016) found that while agricultural and industrial output growth slowed following the 2008 election crisis, services proved to be more resilient. It also found that manufacturing had shown declining productivity. The World Bank (2016) noted that between 2009 and 2013, had manufacturing recorded the same productivity growth (of 6.4 percent) as trade and hospitality, GDP in 2013 would have been 1.6 percent higher as trade and hospitality, similar to manufacturing, comprises largely informal employment.

<sup>21</sup> About 1,300 people were killed and nearly 600,000 displaced

### Kenya Vision 2030 – MTP II (2013-2017)

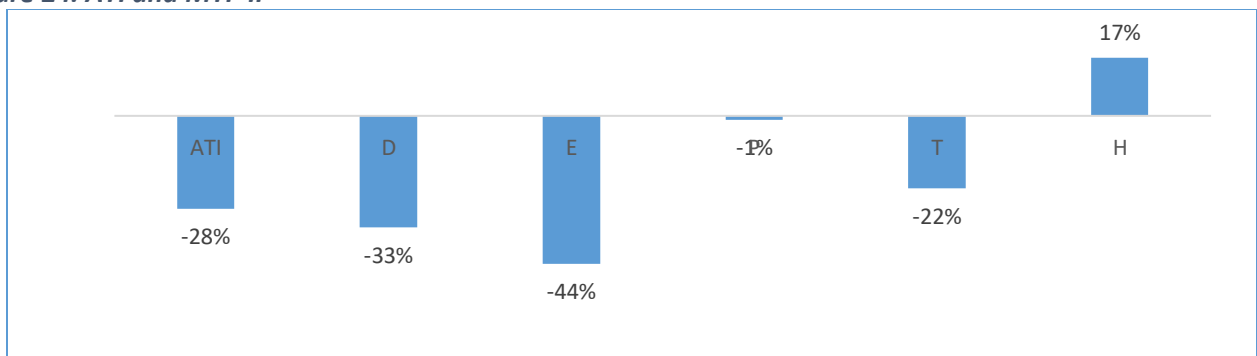
The MTP II sought to continue the implementation of Kenya Vision 2030. The growth targets laid out in MTP II for agriculture, services, and industry were 6.8 percent, 9.4 percent, and 8.6 percent per year, respectively. The key objectives of the plan were: implementing devolution, national unity, and identity; infrastructure development; irrigation and mechanized agriculture; value addition; poverty reduction and social protection; skills development; governance and public financial management reforms; accelerated growth; transformation of the structure of the economy and better quality job creation.

The implementation of MTP II had to contend with many challenges. First, there was political change that saw a new coalition take power. Second, some government devolution was being implemented for the first time. Third, the implementation was further complicated by the fact the President and the Vice-President were being charged at the International Criminal Court for involvement in the 2007 post-election violence. Despite all the above, MTP II saw remarkable growth averaging around 5.6 percent, even though lower than the 10 percent target of Vision 2030. Assessments of MTP II by the AfDB (2019) and World Bank (2018), however, showed mixed results. Some observations include:

- Insecurity, which dampened investment and negatively impacted tourism.
- Growth in the manufacturing sector decelerated to 2.4 percent in 2017 from 3.8 percent in 2016 due to a prolonged electioneering period which dampened business sentiment and weakened trade with neighboring countries. There was also a flood of cheaper imports that depressed growth in the manufacturing sector.
- Challenges in credit access which limited working capital and the ability of firms to expand.
- Droughts impacted exports. Poor agricultural harvests also weakened agribusiness activity.
- Unemployment and inequality remained high.
- Gains were made in several areas, e.g., infrastructure development; financial inclusion; the social sector, notably higher student enrollment, a drop in infant mortality rates, and stronger support for women’s empowerment.
- The implementation of the devolution program progressed, with advances on several fronts, including empowering counties on the delivery of infrastructure and social services such as health and education.

These observations are in line with the MTP II’s lackluster performance on the ATI. Except for the human well-being index, all other indexes fell (see Figure 24).

Figure 24. ATI and MTP II



Source: ACET analysis

### **Kenya Vision 2030 – MTP III (2018-2022)**

MTP III is currently being implemented. The key focus areas of MTP III are: increasing the manufacturing share of GDP from 9.2 percent to 15 percent and agro-processing to at least 50 percent of total agricultural output; providing affordable housing by building 500,000 affordable houses in five years across the country; enhancing food and nutrition security through the construction of large-scale, multi-purpose and smaller dams for irrigation projects, construction of food storage facilities and implementation of high-impact nutrition interventions and other food and nutrition security initiatives; and achieving 100 percent universal health coverage. These four key objectives have been dubbed the "Big Four Agenda".

MTP III is yet to be concluded so a full assessment of transformation cannot be done yet. However, the Big Four Agenda is in place and the World Bank (2018) has made a few observations about its transformation potential. These include:

- Addressing the housing deficit will be good for economic growth, creating jobs, and deepening the financial sector. This could be transformative as a growth engine. For example, in Colombia, it is estimated that 5 additional jobs are added for every US\$10,000 spent on housing construction<sup>22</sup>.
- Given the narrowing of the fiscal space in recent years, advancing the Big Four Agenda calls for the rebuilding of fiscal buffers to safeguard macroeconomic stability as well as create the fiscal space to help drive Big Four areas. Plugging leakages, especially tax exemptions (estimated at some 5 percent of GDP), can play an important role.
- Another potential area for efficiency gains could be in the health sector. Kenya spends double the per capita health spending of its EAC peers yet health outcomes (under-5 mortality, maternal mortality, people living with AIDS, life expectancy) are no better than those of the other EAC countries.
- Yields on government securities need to come down. The most important impediment for borrowing for housing is the lack of long-term funding at affordable rates.

### **3.3. Devolution**

A devolution strategy was also implemented in the wake of the 2010 Constitution that added an extra layer to Vision 2030. Devolution entailed large-scale political, fiscal, and administrative decentralization, with fiscal equalization as a major objective. Significant service delivery functions have been devolved from the central government. Counties are responsible for policy implementation and service delivery in health care, water supply, rural electrification, urban service delivery, trade licensing, transport (county roads), and agriculture. Under the Constitution, county governments are required to draft County Integrated Development Plans (CIDP) to guide development in the counties over five years. The counties have each two CIDPs in place; the first covered the period 2013-2017 while the second covers the period 2018-2022.

From a transformation perspective, devolution can hasten the process. The World Bank (2016) states that the benefits of devolution include the following: (i) public policies tailored to local needs; (ii) better governance and accountability structures; and (iii) more cost-effective approaches to the delivery of services, through peer competition. At the same time, antagonists of devolution argue that devolution

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<sup>22</sup> In India, each housing unit creates 1.5 direct and 8 indirect jobs; in South Africa, each housing unit creates 5.62 jobs.

can undermine growth potentially through: (i) an increased bureaucratic burden; (ii) separation of spending and taxing responsibilities, which can undermine efficiency and lead to arrears; and (iii) newly created subnational governments may face capacity constraints. At the moment the challenges associated with devolution seems to be predominant, as the following observations suggest:

- Counties are not able to execute their expenditure plans fully. Only a third of the budgeted 2.1 percent of GDP on development spending was executed in 2013/14 but this figure improved in the second year of devolution to two-thirds of the budgeted amount due to capacity and governance challenges (World Bank, 2016).
- AfDB (2019) states that the ongoing process of devolution remains weak due to low funding. Further, there is weak tax collection capacity in the counties. County governments are not fully exploiting the main revenue stream available to them—property rates. Political resistance has seen efforts to update valuation rolls thwarted (World Bank, 2016).
- Weak policy alignment between central and county governments could undermine transformation efforts (AfDB, 2019). Some examples include:
  - Ndegwa (2018) notes that the agriculture pillar under the current Big Four Agenda is in jeopardy as some governors have failed to realign their budgets with the national government’s food security agenda.
  - World Bank (2016) observes that those counties have primary responsibility for policies to promote entrepreneurship, but the outcomes since the start of devolution have been discouraging. Counties have introduced new taxes, fees, and charges, creating concern over the potential impact on local-level business costs, especially for small business operators. AfDB (2019) also points to double taxation and the multiplicity of charges and regulations that are increasing the cost of doing business.

Despite the challenges, AfDB (2019) argues that the full benefits of the devolution program will be realized over time as challenges are addressed.

### 3.4. Digitalization strategy

As pointed out earlier, Kenya has been at the forefront of digitalization, as evidenced by the rapid growth in the ICT services sector. The value of the ICT sector expanded by 12.9 percent between 2017 to 2018, owing to the digital economy expansion. Mobile phone penetration reached the 100 percent mark in 2018. Digitalization is critical to achieving Vision 2030 and as such, Kenya’s Digital Economy Framework complements Vision 2030. The framework seeks to assist Kenya to leapfrog and join nations in the high-income world. Digitalization has shown great progress. Key accomplishments include:

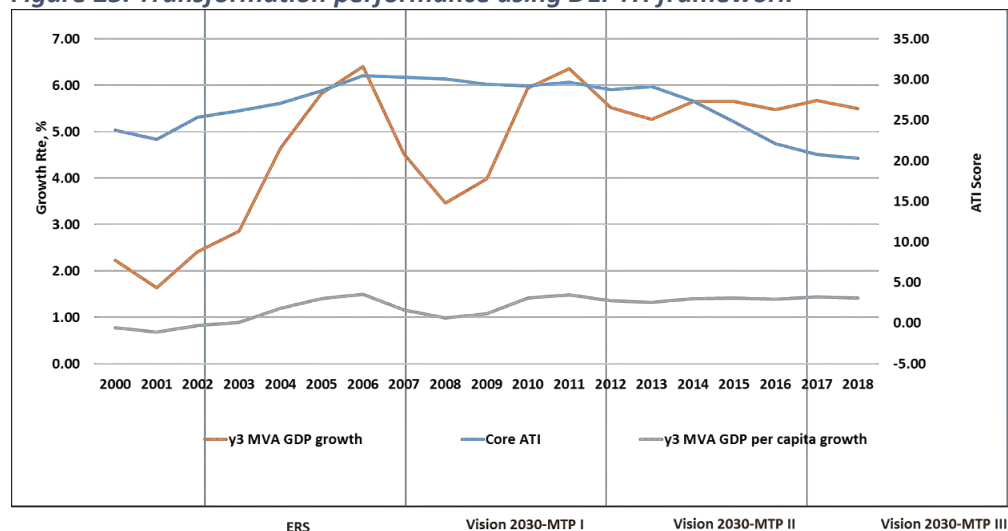
- Kenya’s flagship Government-to-Citizen (G2C) platform is the e-Citizen (<https://www.e-Citizen.go.ke/>). This provides services including business name search and registration; notice of marriage; registration of marriage; driving licenses; land searches and clearances; and passport and visa applications.
- The government has also established *Huduma* centers where citizens without internet access can access digital services. To expedite digitalization, the government has invested over US\$200 million in a National Optic Fiber Backbone Infrastructure (NOFBI), which spans over 9,000 kilometers and connects all 47 counties.
- The government also intends to issue a digital ID to all citizens. The digital IDs will boost trust and will promote the development of other aspects of the digital economy such as digital business and financial services.



- The private sector has also made significant strides. According to a 2016 National ICT Survey, 39 percent of private enterprises engage in e-commerce. The growth of e-commerce has been fostered by the success of mobile money payment platforms like M-PESA.

Digitalization, when done correctly, has great potential to drive transformation. A 1 percent increase in a country’s Global Connectivity Index score correlates to a 2.1 percent increase in competitiveness, a 2.3 percent increase in productivity, and 2.2 percent increase in innovation (GoK, 2019). More importantly, this can support the development of platforms required to help leapfrog.

**Figure 25. Transformation performance using DEPTH framework**



Source: ACET analysis

From the foregoing discussion, it is clear that Kenya has been derailed from its strong transformation trajectory following the implementation of the ERS (2003-2007). Since the economy almost collapsed in the wake of the 2007 post-election violence, the ATI has been on a declining trajectory, primarily due to the diversity and export competitiveness index. Productivity growth has been slow and while technological advancements have shown some dynamism, they have been fairly erratic, with gains followed by losses. The only bright spot seems to be the human well-being index that has been on an upward trajectory after an initial drop.

AfDB (2019) finds that structural transformation has lagged in Kenya while the World Bank (2016) argues that although the economy has become much more dynamic and innovative in the past decade, more work is needed to make such economic trends transformational. It is clear from the analysis that the current development plans are very ambitious but have failed to deliver. Certainly, the projected growth target of 10 percent annually has never been reached; the closest was 2010 when a growth rate of 8.4 percent was recorded. Further, devolution, which has the potential to accelerate transformation, has seen its disadvantages outweigh its advantages. A rethink of the transformation strategy’s approach is required and some of the challenges and untapped opportunities highlighted above are a pointer.

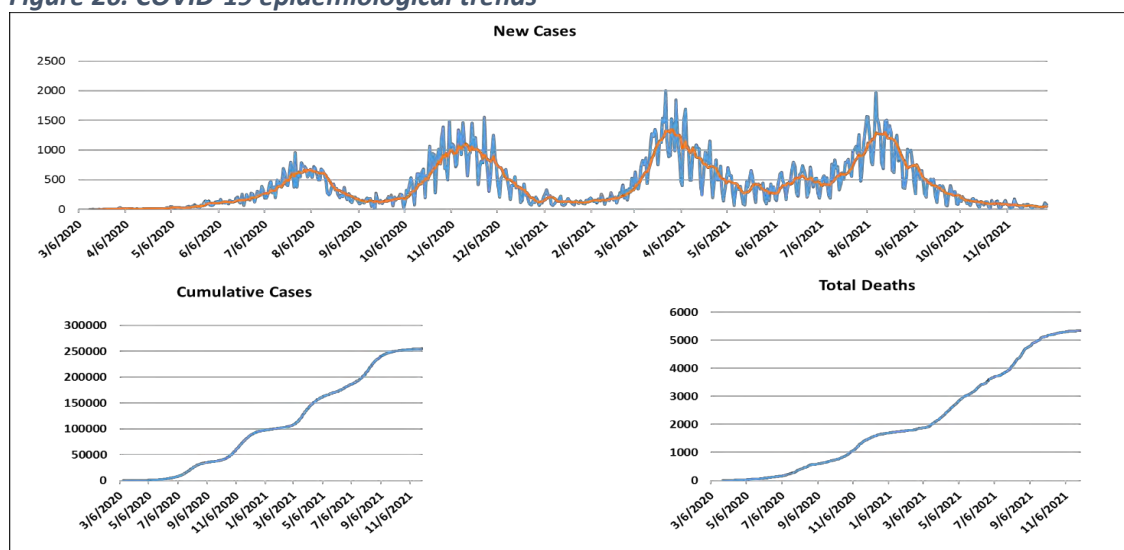
## 4. COVID-19 response and lessons

The novel coronavirus disease (COVID-19) is perhaps the most severe health, social and economic crisis ever experienced by Kenya. Given its global nature and resultant containment measures both domestically and internationally, economic activities in 2020 were slowed down. The global nature of the disease also implies that recovery is much more complicated as it is tied to both global and domestic efforts. Recovering from COVID-19 will require both health and economic responses. The health response revolves around vaccinating people and maintaining vigilance with COVID-19 spread prevention measures. The economic response will revolve around stimulus efforts and developing new strategies. A review of progress on these two fronts follows.

### 4.1. Health impact of COVID-19 and mitigation measures

The key impact of COVID-19 was hospitalization though many deaths were also recorded. Figure 26 shows the evolution of the COVID-19 impact.

**Figure 26. COVID-19 epidemiological trends**



Source: OurWorldInData.org.

By the end of June 2021, over 250,000 infections had been recorded and over 5,000 deaths had occurred in the four waves that hit Kenya. From the onset, the priority was to safeguard lives and the government introduced measures to contain and manage the pandemic. They included: 1) undertaking enhanced public communication campaigns on preventive and hygiene measures; 2) promoting social distancing; 3) enforcing legislation on mandatory wearing of masks at work and in public spaces; 4) testing and contact tracing; 5) setting up isolation centers, and 6) building up the capacity of the health care system. As the pandemic intensified, containment measures were introduced, including 1) a ban on gatherings that led to the closure of schools, churches, recreation facilities, etc.; 2) travel restrictions through the closure of air and land borders; and 3) cessation of movement and curfews. Table 1 details the measures the government has taken.

Table 1: COVID-19 mitigation measures

Measures	Start Date	End Date	Areas of impact
<b>Travel restriction</b>	25/03/2020	01/08/2020	International travel
Closures	15/03/2020	05/06/2020	Schools closed, working from home for public servants and business community, ban of gatherings
Curfew	27/03/2020	20/20/2021	Entire country
Cessation of movement	06/04/2020	07/07/2020	Cessation of movement in and out of the Nairobi Metropolitan Area, Mombasa, and Kwale counties
Dusk 9 pm to 4 am curfew	06/06/2020	20/20/2021	Entire country
Cessation of movement	26/03/2021	6/06/2020	Nairobi, Kajiado, Machakos, Kiambu, and Nakuru. Curfew was revised to commence at 8:00 pm and end at 4:00 am in the zoned area
Vaccination	03/2021	On-going	Countrywide

Source: Various editions, *Daily Nation*, *The Standard Newspaper*, *The Star* newspapers

Since March 2021, the Kenyan government has been implementing a vaccination policy. By mid-December 2021, approximately 9.6 million<sup>23</sup> doses of COVID-19 vaccines had been administered voluntarily. However, following the spike in December 2021 that saw Kenya record a daily positivity rate as high as 29.9 percent, the government has invoked the Public Health Act that gives it sweeping powers to issue directives related to health, especially during a pandemic. As a consequence, by January 2022, people were expected to show proof of vaccination (a Covid-19 Vaccination Certificate) before accessing government services as well as accessing public spaces including national parks, game reserves, bars, hotels, restaurants, and even public transport<sup>24</sup>.

Although the full extent of the impact of Covid-19 is still under assessment by the government and researchers, it is now clear that the pandemic and the containment measures have adversely impacted economic activities in almost all sectors of the economy. In general, these containment measures disrupted the economy by constraining production, marketing, and distribution of goods and services. The disruptions in businesses lowered production while the loss of income, fear of contagion, and heightened uncertainty made people spend less, thus lowering aggregate demand (FKE, 2021). The result is that real GDP was estimated to have contracted by 0.3 percent in 2020 compared with a revised growth rate of 5.0 percent in 2019 (KNBS, 2021). This is the biggest shock that Kenya has experienced in its independence history and was the first recession experienced since 2000 (World Bank, 2021). Some of the key impacts include:

- Kenya’s unemployment rate increased sharply, approximately tripling to a high of about 16 percent in Q3 2020. In addition, many people, especially women, who lost their jobs stopped searching for work. An estimated two million Kenyans went into poverty in 2020, raising the poverty rate by four percentage points (World Bank 2021).

<sup>23</sup> <https://graphics.reuters.com/world-coronavirus-tracker-and-maps/countries-and-territories/kenya/>

<sup>24</sup> <https://www.standardmedia.co.ke/national/article/2001432522/you-will-need-covid-19-vaccination-certificate-to-enter-supermarkets-banks>

- Key sectors of the economy were impacted differently. Some operated almost as usual, some operated at less than full capacity while others were shut down. The most impacted sectors were:
  - Banks: The COVID-19 crisis exacerbated pre-existing asset quality challenges, increasing the volume of non-performing loans (NPLs) to 14.2 percent in April 2021 from 13.1 percent a year earlier. Almost 55 percent of bank loans have been restructured to support borrowers (World Bank, 2020a).
  - Hospitality: A survey of a sample of hotels showed that the occupancy dropped from a pre-pandemic level of 65 percent in February 2020 to 6 percent in May 2020, with 35 percent of hotels closed. While 98 percent of hotels were still closed by March 2021, average bed occupancy improved to a still low 27 percent (World Bank, 2020a).
  - Household business: Between February and June 2020, almost a third of household-run businesses ceased operating and average revenue from household-run businesses decreased by almost 50 percent (World Bank, 2020a).
  - The NSE 20 share index went down by 29.6 percent and remained essentially unchanged (at 1872) as of the end of May 2021. This weakness is in sharp contrast to the recovery of many global stock markets.
- The impact on the informal economy was much greater, unlike the formal sector, as the informal economy has low adaptation capacity. For example, the majority of informal economy enterprises have neither adopted nor integrated technology in their operations. It is estimated that the informal economy has lost more than 1.1 million jobs due to COVID-19, with wholesale, retail trade, hotels, and restaurants bearing the greatest brunt (FKE, 2021).
- International and regional trade were also impacted as border measures led to traffic delays.
  - Transport companies reduced fleet operations due to uncertainty surrounding movement restrictions<sup>25</sup>. The delays due to unclear procedures and contested measures have at times created huge backups at the borders. This saw overall traffic fall, from 250 trucks per day being cleared to enter Kenya from Tanzania to only 50 trucks per day<sup>26</sup>.
  - Closure of international travel disrupted airfreight as many passenger flights also carry cargo. The Kenya Flower Council notes that sales fell below 35 percent of what was expected<sup>27</sup>. As a result, around 10,000 casual workers were laid off and about 50 percent of permanent workers were given compulsory annual leave<sup>28</sup>.

While one can argue that there will be recovery once the crisis subsides, there are likely to be long-lasting impact for some. The World Bank (2021) argues that the long disruption of academic activities has caused significant learning losses, particularly for students from disadvantaged backgrounds, endangering future productivity gains and potential benefits from a demographic transition. Furthermore, while part of the increase in poverty is likely to be transitory, there is a risk that some households will be left behind as the recovery takes place.

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<sup>25</sup>The police are said to traditionally harass truck drivers and, in the uncertainty surrounding COVID-19-related rules, police have been filmed beating up truck drivers for flimsy reasons. Trucking logistics firm Kobo360 has parked 30 percent of its fleet.

<https://www.standardmedia.co.ke/article/2001366114/driver-seen-in-video-being-clobbered-by-police-speaks-out>

<https://www.weforum.org/agenda/2020/04/africa-coronavirus-covid19-imports-exports-food-supply-chains>

<sup>26</sup> <https://www.theeastafrican.co.ke/news/ea/Kenya-truck-drivers-protest-Uganda-border-rules/4552908-5536468-jdjkvz/index.html>

<sup>27</sup> <https://www.standardmedia.co.ke/article/2001369109/COVID-19-kenya-sends-300-bouquets-of-flowers-to-uk-in-solidarity>

<sup>28</sup> <https://news.trust.org/item/20200411032043-83609/>

## 4.2. COVID-19 economic stimulus measures

The slowdown in economic activities also negatively impacted the performance of other key macroeconomic variables. To cushion the economy, the government introduced fiscal, monetary, and social insurance policy measures aimed at moderating the social and economic impact of COVID-19. Additionally, a stimulus package was introduced, aimed at supporting sectors that were worst hit by the pandemic as well as create lost jobs.

### Support measures

In March 2020, the government implemented a range of fiscal measures in the context of the Tax Amendment Act, 2020, and Finance Act, 2020. They included:

- Exempting those earning KSh. 24,000 and below from paying income tax.
- Reducing Pay As You Earn (PAYE) capping from 30 percent to 25 percent.
- Lowering value-added tax (VAT) from 16 percent to 14 percent and reducing the turnover tax from 3 percent to 1 percent.
- Boosting the Social Protection Fund (SPF) by KSh. 10 billion.
- Ordering immediate payment of verified pending bills by ministries, departments and agencies (MDAs);
- Suspending the blacklisting of small businesses and corporate bodies by the Credit Reference Bureau.
- Lowering the central bank rate from 8.25 percent to 7.25 percent, reducing the cash reserve ratio from 5.25 percent to 4.25 percent, and encouraging commercial banks to negotiate appropriate loan scheduling with individual borrowers.

### Stimulus measures

In May 2020, an eight-point Economic Stimulus Programme (ESP) was rolled out to cushion citizens and businesses from the effects of the pandemic, protect livelihoods and stimulate the economy. The ESP focused on:

- Rehabilitation of access roads, footbridges, and other public infrastructure through public works programs using local labor and construction materials.
- Hiring an additional 10,000 teachers, and 1,000 information and communications technology (ICT) interns to support digital learning, and acquisition of 250,000 locally made desks.
- Supporting SMEs through the allocation of KSh. 10 billion to fast-track payment of outstanding VAT refunds and other pending bills, and an additional KSh. 3 billion given as seed capital for SME Credit Guarantee Scheme;
- Hiring an additional 5,000 health workers and expansion of bed capacity in public hospitals.
- Targeted supply of farm inputs to 200,000 small scale farmers and KSh 1.5 billion to assist cut flower and other horticulture producers to access international markets.
- Support the tourism sector through the renovation of facilities, employment of community scouts, and support to community conservancies.
- Greening the environment, which targeted employment of 270,000 young people at a daily wage of KSh. 455 under the Kazi Mtaani program.
- Supporting the manufacturing sector under the "Buy Kenya Build Kenya" initiative.

As a result of these measures, total government expenditure was expected to increase to 25.9 percent of GDP (World Bank, 2021)

### Private sector measures

Government relief is also being supplemented by the private sector and civil society. A public-private partnership has seen the establishment of the COVID-19 Emergency Relief Fund to collect donations from the private sector, NGOs, and individuals<sup>29</sup>. Additionally, mobile apps have been developed to facilitate the donation of food packages from donors and notify beneficiaries about designated collection points, which include small kiosks, thus bringing informal retailers online<sup>30</sup>.

Initiatives were also launched to distribute cash, as the key challenge is loss of income rather than lack of food. For example, the *Shikilia* initiative aimed to give US\$30 per month to families in Kibera and Mathare slums for three months<sup>31</sup>. The private sector also took measures to mitigate the COVID-19 impact. Many firms implemented social distancing and sanitizing measures as required by law. Beyond that many innovated as they sought to continue the business, most commonly by moving operations online.

In many sectors, especially in processed foods value chains, innovations in business models have seen greater integration of the informal sector in the formal sector. For example, increased online orders have seen the motorcycle become the key last-mile connector. Their business has increased considerably (Gatune et al., forthcoming). Another example is the collaboration between Twiga Foods, which distributes foods for many small farmers (about 17,000) directly to informal food retailers (known as *mama mboga*), and Jumia which is the biggest e-commerce platform in Africa. Under the arrangement, Jumia sold bundles of Twiga's fresh produce on its e-commerce website. Jumia's delivery fleet picked up orders from Twiga's sorting and distribution centers and then completed the last mile of contactless delivery<sup>32</sup>.

Even the informal sector was forced to think outside the box and leverage the internet for new ideas. For instance, two roadside artisans used this approach to design a multipurpose bench (Mireri, 2020). They used social media to showcase their design which eventually went viral, leading to a flood of orders. Ultimately, the artisans made additional investments in production and recruited more employees to assist in fulfilling orders (Osanjo, 2020). Thus, the slowdown in the artisans' business due to the COVID-19 pandemic led them to think innovatively to remain afloat.

The key things that the private sector accomplished that are likely to have important implications for economic transformation include:

- They hastened the adoption of digitalization: While many companies were adopting digitalization, the need to have staff work from home hastened the adoption. Even public schools made efforts to move to online learning.
- They brought the informal and formal sector together.

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<sup>29</sup> <https://www.nation.co.ke/kenya/business/COVID-19-safaricom-pledges-sh200m-286144>

<sup>30</sup> <https://www.capitalfm.co.ke/business/2020/04/centum-subsiadiary-develops-zero-contact-COVID-19-food-distribution-app/>

<sup>31</sup> <https://www.givedirectly.org/COVID-19/kenya/>

<sup>32</sup> <https://techcrunch.com/2020/04/28/goldman-backed-ventures-jumia-and-twiga-partner-on-produce-in-kenya/>

- They demystified innovation: the fact the local actors could quickly come up with ventilators showed a new perspective on innovative capacity. But perhaps what is more interesting is that in the face of a slowdown in business, informal manufacturers also leveraged the internet to find new ideas.

### 4.3. Impact of COVID-19 policy measures

The COVID-19 stimulus measures had positive impact. According to the World Bank (2021):

- The financial sector’s performance grew by 5.3 percent in Q3 of 2020. This was supported by continued credit growth due to the CBK’s actions to ease monetary and liquidity conditions.
- The ICT sector grew by 7.3 percent benefitting from government measures to facilitate digital money transfers, increased use of digital services, increased demand for internet data and more e-commerce.
- Growth in the construction sub-sector rose to 8.6 percent in Q3 of 2020 compared to 6.6 percent in the same period in 2019, supported by government spending on infrastructure.

The shift to digitalization was accelerated. KNBS (2021) points out that the total mobile money transfers grew by 20 percent in 2020, one of the largest increments recorded in the last five years. Furthermore, the value of mobile commerce transactions grew by 35.0 percent, driven by preferences for cashless transactions in the wake of COVID-19 and the reduction of mobile money transfer tariffs.

### 4.4. Lessons learned

UNIDO (2020) sees the emergence of a “new normal” in the post-pandemic world that will increasingly be driven by advanced technologies and their applications for inclusive and sustainable industrial development. Indeed, the COVID-19 pandemic has disrupted business-as-usual and spawned many innovations as organizations and society in general sought to continue functioning. The innovations are not necessarily new; many were already in place, but the pandemic accelerated their uptake, e.g. Zoom.<sup>33</sup> Examples of COVID-19 innovations and impacts include:

- **Unleashing new industries:** In Kenya, a locally made ventilator, PUMUAISHI 2.0<sup>34</sup> was showcased. There are plans to start mass production for local use as well as for export markets.
- **Innovative philanthropy:** Mobile apps being developed to collect food packages at designated collection points. Potential donors go to the application’s dashboard and generate the list of individuals they have identified as needy and assign collection points, whether large-scale supermarkets or small-scale kiosks<sup>35</sup>.
- **Easing regional trade:** To reduce border crossing delays, the EAC has developed the EAC COVID-19 Test Certificate to facilitate a common approach to certifying the results of those tested for COVID-19. The system generates COVID-19 certificates for tested drivers and crew members and are to be

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<sup>33</sup> For example, Zoom which saw Zoom meeting participants grew from 10 million in December 2019 to 300 million as of April 2020 as many people have transitioned to working and socializing from home. The biggest loser from the shift was the airline industry, as travel fell sharply, revenues shrank by over 60 percent and are not likely to recover<sup>33</sup>. As of May 2020, Zoom was valued at more than the combined value of the seven biggest airlines (Ghosh, 2020)

<sup>34</sup> <https://kam.co.ke/kam-automotive-sector-to-supply-ventilators-to-combat-COVID-19/>

<sup>35</sup> <https://www.capitalfm.co.ke/business/2020/04/centum-subsiary-develops-zero-contact-COVID-19-food-distribution-app/>

shared with all respective stakeholders both at accredited testing points and border crossing points allowing the certificate holder to travel in the region freely<sup>36</sup>.

Other relevant innovations from elsewhere include:

- **Leapfrogging infrastructure:** Drones are being deployed to overcome infrastructure challenges. In South Africa, drones are used to educate people in remote communities about COVID-19<sup>37</sup>. In Ghana, drones are used to deliver test samples from remote areas to the testing centers in the city<sup>38</sup>.
- **Peer-to-peer humanitarian aid:** In Ethiopia, local home-to-home (peer-to-peer) food suppliers have emerged during the closure period (MSM, 2020). This approach can be leveraged using technology developed to create peer-to-peer food supply programs. Homes that have food can be paired with homes that have no food and donations channeled through this type of relief. This will lower logistics costs and help boost communities by putting money into the community directly. It is likely the same money that can be used to employ vulnerable persons due to the stimulus impact of these arrangements.
- **Jumpstarting inclusive public-private partnership – PPP E-Commerce Platforms:** In Indonesia, new delivery cooperation was set up between the Ministry of Agriculture and the Indonesian motorbike delivery app *Gojek* to provide remote shopping services for communities, with the ministry covering the delivery costs. This successful collaboration was extended between the ministry and other business partners such as retail giants, farmer's markets, and supermarkets in providing many facilities where consumers can place an order, and have it delivered to their doorstep. Local governments have also enabled the community to order goods from the traditional/wet markets via their smart city apps. (MSM, 2020a).
- **New business models:** Tourism in Indonesia is an important component of the Indonesian economy, which due to the pandemic came to a standstill. Hotels were empty and to keep money coming in, they came up with the idea of offering self-isolation packages with a bag full of items that would make you feel as if you were being pampered in a hotel, but staying at home (MSM, 2020).

The potential for COVID-19 to unleash a new wave of innovation in Kenya is supported by the observation that human innovations tend not to happen in comfort zones but in relation to adversity. Some experts point out that Kenya can progress greatly if it can fast-track its participation in the Fourth Industrial Revolution (4IR) in the wake of COVID-19.

Meanwhile, the pandemic impacted people differently, with those in the informal economy impacted more. As the new normal takes shape, the already high level of inequality may be widened. An analysis by FSD (2021) points to the following:

- Job losses in the formal sector will not necessarily be recovered, leading to growing numbers of Kenyans shifting to informal and 'gig' economic activity.
- Low-income Kenyans will face heightened social and economic insecurity, including food insecurity for the poorest and most vulnerable populations. At the same time, there will be a thinning layer of upper and upper middle-income Kenyans able to retain jobs and business activity in areas that will show stronger ability to recover.

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<sup>36</sup> Can be tested if found to have signs COVID -19, on screening at check points using the screening tool <https://eac.int/press-releases/147-health/1736-eac-partner-states-adopt-the-eac-regional-electronic-cargo-and-drivers-tracking-system>

<sup>37</sup> <https://www.voanews.com/COVID-19-pandemic/drones-spread-word-about-COVID-19-rural-south-africa>

<sup>38</sup> <https://www.voanews.com/COVID-19-pandemic/ghana-drones-help-combat-COVID-19>



- While remittances have remained somewhat resilient, only 4 percent of adults (1 million adults) receive international remittances but these are not translating into a stimulus or safety net for low-income households.

More crucially the digital transformation driven by COVID-19 is likely to lead to inequality. The examples of Jumia and Twiga have the downside effect of cutting out *Mama Mboga*: pre-COVID-19, Twiga Foods distributed foods produced by many small farmers directly to informal food retailers (*mama mboga*). By selling the produce to consumers directly via the Jumia platform, the *mama mboga* retailers are essentially marginalized, with their livelihoods at risk. Further FSD (2021) finds that a significant increase in internet usage was observed in higher-income groups, but lower-income groups were more likely to reduce usage due to economic constraints. Yet the internet has become an essential tool for working. This underscores the need to think carefully about the issue of inclusion.

#### **Box 5. Women and COVID-19**

FSD (2021) argues that women were more impacted by the COVID-19 pandemic and at the same time were positioned to benefit less from the stimulus measures put in place to protect livelihoods. Women were impacted more because of the high informality of their economic activities: 60.7 percent of unlicensed establishments are solely female-owned and therefore more economically vulnerable. Women have a lower and more liquid asset base that is also under more household consumption pressure which means women were more likely to take a wealth hit during the pandemic. There was a period when informal finance groups were unable to meet and make decisions due to social distancing rules; women are the majority participants in informal groups. Furthermore, the stimulus package had less impact on women mainly because women's businesses are largely informal. These businesses are mostly outside the tax net and therefore could not benefit from tax incentives. There was also a limited impact from the reduction in interest rates because only 5 percent of informal businesses get financing.

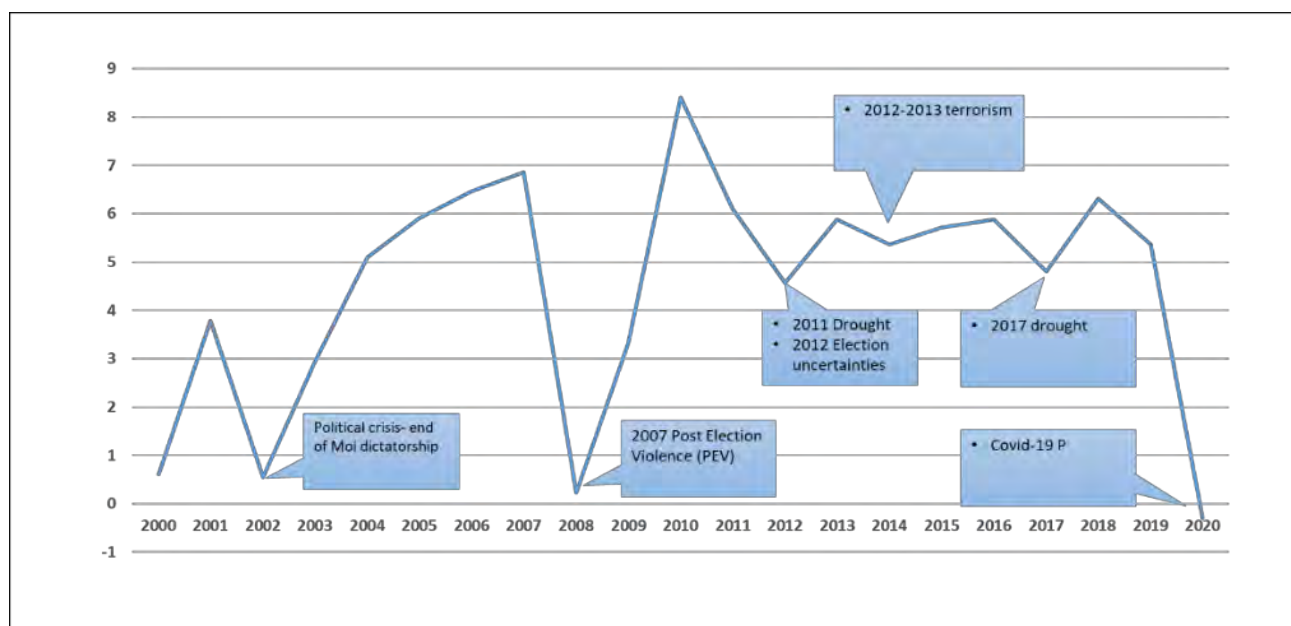
## **5. Economic resilience**

Kenya's economy is prone to both domestic and external shocks. In their analysis of vulnerabilities between 2001- 2014, Kimenyi et al. (2016) note that the remarkable growth observed from 2001 to 2007 collapsed in 2008 when the growth rate declined from 7.0 percent to 0.23 percent as a result of the post-election violence, drought, and the global financial crisis. Following counter-cyclical demand management policies and favorable weather conditions that improved agricultural performance, growth subsequently picked up to 3.31 percent in 2009 and 8.41 percent in 2010. However, due to a surge in global food and oil prices as well as a drought in the country, growth declined to 6.12 percent in 2011, to 4.45 percent in 2012, then rose to 5.74 percent in 2013, and was 5.30 percent in 2014. Figure 27 shows growth rates and domestic shocks experienced recently.

Similarly, in its assessment of Kenya's economy, the World Bank (2016) notes that Kenya's economic growth has exhibited higher volatility than that of its peers since 2003. Moreover, growth volatility increased after 2008. The sources of volatility have been domestic and exogenous (through trade or global commodity prices). The World Bank (2016) contends that much of the volatility has been domestically driven, and domestic shocks typically have longer effects than exogenous shocks. These shocks point to difficulties in sustaining the growth that is key to transformation. Indeed, since

independence, Kenya has never sustained a growth trend for more than five years (World Bank, 2016). Kimenyi et al. (2016) conclude that due to this volatility, the country has been operating below its potential. Discussing the nature of the shocks helps to get a better understanding of the potential impact and what can be done to improve the economy's resilience to shocks.

**Figure 27. Kenya's recent domestic growth shocks**



Source: Authors' Analysis

## 5.1. External shocks

Disentangling the impact of global and local shocks can be challenging. For instance, the 2008 global financial crisis struck just as Kenya was recovering from 2007 post-election violence and was also experiencing a drought episode. Mwega (2010) examines this period and highlights from the analysis include:

- The production of tea, Kenya's main export declined. This was ascribed to bad weather, failure to use fertilizer owing to its high cost, as well as labor displacement in tea-growing areas following post-election violence. However, export earnings rose to US\$0.503 billion, up from US\$0.451 billion in 2008, owing to higher tea prices.
- In 2009, the horticultural industry suffered a 35 percent drop in flower exports, and more than half of the flower exporters were on the verge of closing down as the global economic crisis and climate change wreaked havoc on export markets.
- Within this period, remittances increased from US\$573.6 million in 2007 to US\$611.2 million in 2008 representing 2.7 percent of GDP in 2008<sup>39</sup>.

<sup>39</sup> Similarly, during the current COVID-19 crisis, remittances increased rather than decreased as expected. Remittances rose to a record high of US\$3,094 million in 2020, from US\$2,796 million in 2019, an increase of 10.7 percent (FSD, 2021)

- The banks' net financial position declined and then remained flat, as bank assets fell due to slow growth in loans as the credit position tightened. Banks reported a slowdown in profits in the first half of 2009. Nonetheless, IMF (2009) argues that the banking sector weathered the crisis quite well.
- Though aid from traditional donor countries fell, this was compensated by China which had been ramping up its aid to Kenya.
- The Nairobi Stock Exchange index declined by 46 percent in the previous year.

This episode lends credence to the argument that in Kenya, it is domestic shocks that are crucial. Given that the global financial crisis came after Kenya's worst domestic crisis, yet GDP recovered in 2009 and then declined, is testimony. All the same, capital flight remains a key threat. Kimenyi et al. (2016) state that the high overall current account deficit is mainly financed (more than 50 percent) by short-term net capital inflows. This is a major source of potential vulnerability for the economy and financial stability. The ease with which these inflows can be reversed raises the risk of a 'sudden stop' or reversals as market sentiment shifts, causing a flight away from domestic assets (O'Connell et al., 2010). This has been observed during the current Covid-19 pandemic.

## 5.2. Domestic shocks

Domestic shocks can be caused by political violence, terrorism, or natural disasters.

### 5.2.1. Political violence

Since the introduction of multi-party politics in 1992, Kenya has experienced sporadic violence during election cycles (Kimenyi and Ndung'u, 2005). The 2007 post-election violence is so far the most devastating event in post-independence history. Beyond the potential for violence, the long electioneering period creates huge uncertainties that impact the economy. For example, the World Bank (2018) notes that manufactured export volumes and re-exports from neighboring countries contracted on account of disrupted trade logistics arising from the prolonged election cycle of 2017. The AfDB (2019) also notes that any continued political impasse implies a certain risk of political instability, which may have an impact on the Bank program for Kenya.

Collier et al. (2010) argue that the events that followed the 2007 general election left a difficult legacy by exacerbating inter-ethnic mistrust and lack of confidence in the rule of law, which can be expected to have detrimental economic effects. The new Constitution has somewhat ameliorated the situation and Kenya has since seen two fairly peaceful elections. However, challenges remain, as elections are still highly contentious. Undeniably, in the 2017 election, the losing candidate conducted a swearing-in ceremony for himself (a treasonous act by itself) and the country went into political instability before finally the sitting government reconciled with the opposition leader under the so-called "handshake" deal<sup>40</sup>. Constitutional reforms will not suffice to resolve this issue as political violence is also tied to economic outcomes. Kimenyi et al. (2016) argue that poverty and inequality at individual and regional levels remain high and pose threats not only to sustained growth but also to stability. Indeed, Alert (2021) points out that economic marginalization and high levels of inequality are frequently instrumentalized by conflict actors. Economic transformation that brings shared prosperity seems to be the answer.

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<sup>40</sup> [Letter from Africa: The handshake that left millions of Kenyans confused - BBC News](#)

## 5.2.2. Terrorism

Terrorism has a long history in Kenya. The first international terrorist attack was carried out in 1981 with the bombing of the Norfolk Hotel in Nairobi, which killed 20 people and injured close to 100. In 1998, the country suffered its worst attack to date when 213 people were killed and more than 4,000 injured after al-Qaeda fighters bombed the US Embassy in Nairobi (Gathara, 2021). Since then, terrorist attacks in Kenya have intensified with the most recent attack happening in 2019 (See Table 2).

**Table 2. Recent terrorism incidents**

Incident date	Description	Fatalities
January 15-16, 2019	Dusit hotel attack	15 killed
October 10, 2018	Mandera attack	2 killed
April 2, 2015	Garissa University	15 killed, 65 injured
November 22, 2014	Mandera	28 killed
June 16, 2014	Lamu	27 Killed
May 16, 2014	Nairobi	10 killed
September 22, 2014	Nairobi	67 Killed, 175 injured

Source: Authors' compilation from various sources US (2019), media articles and [http://www.xinhuanet.com/english/2019-01/16/c\\_137748188.htm](http://www.xinhuanet.com/english/2019-01/16/c_137748188.htm)

Beyond human lives lost and injuries inflicted, the attacks have a significant impact on the economy. Tourism, a major sector, is usually the most impacted. Buigut and Amendah (2015) found that a 1 percent increase in fatalities decreases the arrivals of tourists by about 0.132 percent. Between 2012 and 2015, the country experienced an 11.9 percent decline in tourism earnings (UNDP, 2017).

The impact of terrorism is, however, more subtle than natural disasters for example. UNDP (2017) points that the impact of these has been mostly felt on infrastructure, physical and human capital, productivity, and economic growth. Terror attacks and threats have also disrupted household spending and livelihoods, increased uncertainty in the investment climate and dissuaded FDI<sup>41</sup> and led to a reallocation of resources from growth-enhancing investment to spending designed to increase national security. For example, the government has over recent years significantly increased spending on the security sector to over US\$1.3 billion per year compared to US\$0.6 billion for the health sector. Indeed, one of the long-term objective of terrorism is to bring down economies.

It is worth noting that terror threats are closely related to economic performance. UNDP (2017) argues that high levels of multidimensional inequalities (socio-economic and political inequalities), high poverty levels, and high youth unemployment are the key drivers of terrorist attacks and violent extremism. Like political violence, an economic transformation that brings shared prosperity seems to be the answer to the terrorist challenge.

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<sup>41</sup> Kinyanjui (2014) finds that the presence of terrorist risk corresponds to a decline in net FDI of 14 percent of GDP. One example of forgone FDI was the re-routing of the Uganda oil pipeline from Lamu port in Kenya to Tanga port in Tanzania (Kakonge, 2020).

### 5.2.3. Climate shocks

Kenya is largely an arid and semi-arid country with only 20 percent of the land not classified as arid and semi-arid lands (ASAL). And with only 2.0 percent of Kenya's cultivable land under irrigation, agricultural output is highly rain-dependent, making Kenya very vulnerable to drought. Given the key role agriculture plays in the economy, drought is a major shock to growth. Indeed, in its assessment, the World Bank (2018) indicates that the slowdown in growth in 2017 can largely be attributed to drought. The contribution of the agricultural sector to GDP growth in 2017 dropped from a historical average of about 1.2 percentage points to just 0.2 percentage points for the first three quarters. Climate change is already showing impact with delays in the onset of rains and shorter rainfall periods (Gebrechorkos et al., 2019). Indeed, experts in Kenya observe that not only are the traditional climate change shocks such as droughts becoming more severe but other effects such as floods are also increasingly becoming major shocks.

### 5.2.4. Pests

Pests invasions are also important shocks to the economy. Two recent invasions – fall army worms and desert locusts – caused significant damage. Another perennial pest challenge is the *guelea* bird. Food security of Kenya is directly tied to this bird that has made farmers abandon the traditional grains of sorghum and millet, which are best suited for Kenya's agro-ecological conditions (ACET, 2015). The need for early warning systems and building capacity to manage these invasions bears renewed emphasis, as shown by successful engagement of the youth in managing the locust invasion (FAO, 2021).

## 5.3. Economic resilience

As seen above, the Kenyan economy suffers shocks but tends to recover after 1-2 years. Thus, the World Bank (2021) expects the economy to recover and gradually return to growth of above 5 percent in 2022-2023. To determine the resilience of Kenya to drought, USAID (Funk et al., 2018) finds that despite three severe consecutive droughts, US food aid expenditure for Kenya in 2017 were 51 percent and 40 percent of the expenditure during the last two severe crises (in 2011 and 2009 respectively). Further, despite a more severe agricultural shock, maize prices normalized more quickly in 2017 than in 2011. They argue that these findings suggest that Kenya was substantially more resilient to these types of climatic shocks in 2017 than it was in 2011.

This seems to suggest that the economy is quite resilient. However, the fact that the economy has been unable to get back to the trajectory of 2002-2007 suggests that its resilience is not strong enough. The growth rate seems to be oscillating around 5.4 percent since 2011. Many Kenyans are vulnerable mainly due to low incomes. Gubbins (2020) finds that savings seem to increase resilience while borrowing seems to worsen resilience, and more so if the borrowing is related to health expenditure<sup>42</sup>. These findings underscore the need for financial inclusion and the importance of health insurance. However, sustainable financial resilience will come from a transformation of the economy that leads to decent jobs and social safety nets.

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<sup>42</sup> A 2016 survey found that 12 percent of households had at least one member of household hospitalized and 15 percent of the cases incurred out-of-pocket expenditure equivalent to one year of household income.

## 5.4. Implications for transformation and resilience

The foregoing discussion emphasizes the importance of transforming economies while also making them resilient. Action will be needed on various fronts and appropriate economic and social policies will be the foundations for achieving this. Paying attention to the political economy of transformation and resilience policies is important as the success of any policy is dependent on the political environment of the day. We will explore the policy frameworks required to achieve these objectives.

## 5.5. Economic policies

Resilience will come from having an economic transformation agenda responsive to changing environments or shocks. The need to mitigate the impact of climate change has seen the adoption of various strategies including climate-smart agriculture (CSA)<sup>43</sup> to reduce risk to agriculture; shifting to a green economy (GE) to reduce dependence on fossil fuels and a carbon-driven economy; and shifting toward a circular economy (CE) to minimize consumption by improving efficiency and finding ways to re-use waste<sup>44</sup>. All these approaches have been embraced by Kenya, which has a national CSA strategy and also a GE strategy. The CE agenda is mainly driven by development partners and civil society. When properly implemented, these strategies can support Kenya to be more resilient to drought and the impact of the global shift on oil prices (which also impacts agriculture through fertilizer imports). Given the onset of the Fourth Industrial Revolution (4IR), which is being hastened by COVID-19, all economic strategies will need to be supported by a digitalization strategy (see Appendix 5). Some highlights of these resilience strategies follow.

### 5.5.1. Climate-smart agriculture (CSA)

CSA seeks to: 1) improve efficiency in the use of resources; 2) direct action to conserve, protect and enhance natural resources and thus, enhance the resilience of people, communities, and ecosystems<sup>45</sup>; 3) complement other strategies targeting climate change<sup>46</sup>; and 4) promote public-private partnerships in driving CSA (GoK, 2017). Two key initiatives that can benefit from this kind of partnership is developing an early warning system to improve preparedness and also promote index-based insurance. Already, index-based crop and livestock insurance is sold in Kenya, mostly through NGOs<sup>47</sup>, farmers' unions, and seed companies to their members and customers. However, these are pilot products as the regulatory authority has allowed them to be sold without the existence of the necessary regulatory framework. These products may need to be redesigned once the formal regulations and product approval guidance come into force and this could result in additional costs (GoK, 2015).

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<sup>43</sup> CSA “sustainably increases productivity, enhances resilience, reduces/removes greenhouse gas emissions, and enhances the achievement of national food security and development goals”, according to the UN Food and Agriculture Organisation (FAO, 2010).

<sup>44</sup> Circular economy requires companies to look at all aspects of their business and value chain in line with the circular Rethink, Redesign, Reduce, Reuse, Repair, Refurbish, Remanufacture and Recycle approach.

<sup>45</sup> It will do this through capacity building in CSA practices, research and innovation.

<sup>46</sup> Such as the National Climate Change Action Plan (2013-2017) and the Agriculture Sector Development Strategy (2010-2020)

<sup>47</sup> One Acre Fund has implemented such a program in Kenya.

### **Box 6. Index-based insurance**

Crop insurance is a key tool for resilience, especially for farmers. However, they can be costly as the cost of assessing yield losses is considerable for small farmers. They are also particularly prone to moral hazard<sup>48</sup>. With weather index insurance, 1) farmers are indemnified after poor weather (the costs of their inputs are refunded); 2) the contract's premium rate is typically based on publicly available information (mainly weather data) thus avoiding adverse selection problems; 3) the need to individually verify claims is eliminated thus reducing transactions costs; and 4) information requirements are simpler and exhibit greater uniformity and transparency of contract, thus are easier to reinsure.

These features of index-based insurance can substantially reduce its cost relative to conventional crop insurance, making it more affordable. Some studies on the impact of weather index insurance find that insured farmers made riskier, but potentially more profitable, choices. They shifted their production toward cash crops and invested in inputs such as fertilizer (J-PAL, CEGA and ATAI, 2016). However, the development of index-based insurance faces several challenges, including low financial literacy and awareness, lack of data, limited supply of suitable insurance products for different segments of farmers, (mostly) negative profitability of agricultural insurers, and weak consumer protection (GIZ, 2014). J-PAL, CEGA, and ATAI (2016) note that while self-sustaining markets for weather index insurance have not emerged, some possibilities are improving index quality, providing subsidized insurance, selling insurance to institutions, and exploring other risk-mitigating technologies such as irrigation and stress-tolerant crops.

### **5.5.2: Green economy (GE)**

The GE strategy is motivated by the fact that 40 percent of Kenya's GDP and 70 percent of jobs depend on natural resources<sup>49</sup>, which are threatened by climate change. It thus aims to shift the economy towards sustainable production and consumption. The key thrust of the strategy includes:

- Promoting sustainable infrastructure by engaging in sustainable mobility, increasing the share of renewables in the energy mix, and promoting sustainable buildings.
- Building resilience by promoting livelihood diversification and indigenous knowledge and enhancing disaster risk management measures.
- Sustainable natural resource management by promoting local content and value addition, valuing ecosystems services, expanding opportunities in aquatic and marine resources and promoting sustainable land management.
- Promoting resource efficiency by increasing energy and water efficiency as well as managing waste as a resource.
- Social inclusion and sustainable livelihoods by mainstreaming green economy in education, accelerating creation of green jobs, promoting green innovation and commercialization, and reducing environmental health risk (GoK, 2016).

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<sup>48</sup> Moral hazard is the incentive for individuals insured against risk to engage in riskier behavior than they would if they were fully exposed to risk. In this case, having insurance that pays when yields are low reduces the incentive for a farmer to exert his or her maximum effort to achieve the highest yield possible (Miranda and Mulangu, 2016).

<sup>49</sup> In the agriculture, fishing, forestry, mining, energy, tourism and water supply sectors.

Modelling done by UNEP shows that under a green economy scenario, real per capita income in Kenya is expected to nearly double by 2030, outpacing income growth under the business-as-usual scenario. However, the prices of goods and services, costs of operations and technology and choices could create different welfare costs and benefits for different segments of the population in the short term. This requires careful attention, and “social protection floors” are needed to ensure a smooth and just transition (UNEP, 2014). The development of the Power Africa strategy by USAID has also seen a plethora of angel investors put up solar mini-grids that power villages and small towns in rural Kenya. M-KOPA has developed an innovative business model where it installs the equipment needed for solar systems and customers just pay for the service using M-PESA mobile money platform.

### 5.5.3. Circular economy (CE)

There is no government circular economy strategy although there are many laws on the environment that can drive the reuse of waste or use of recyclable materials (e.g., the 2017 ban on single-use plastic bags). The private sector is largely taking the lead. For instance, the Sustainable Inclusive Business Kenya (SIB-K) under the Kenya Private Sector Alliance (KEPSA) hosts an annual circular economy conference, bringing together stakeholders to champion the shift to a sustainable economy in the country. Companies taking leadership roles include: 1) Oserian, a flower farm with no organic waste; 2) PETCO Kenya, which is setting up a recycling center for plastic; 3) WEEE center, which is collecting and refurbishing electronics; and 4) T3, which is recycling PET to fabric (SIB, EKoN, KEPSA, The RockGroup, 2021). The understanding of CE remains narrow, with a focus on waste recycling. However, the government is introducing new regulations that will develop CE. For example, the Extended Producer Responsibility (EPR) legislation, which was presented in February 2021, is currently undergoing revisions by various industries before incorporation into the law. This legislation will require industries to take back their post-consumption material and reuse, refurbish, remanufacture or recycle them.

A forward-looking assessment (Karcher et al., 2020) analyzing the impact of implementing a (limited) set of circular economy actions between now and 2030, finds that circular measures could lead to an increase in economic activity and create additional jobs. The key findings include: 1) a 0.5 percent increase of GDP; 2) an improvement in the trade balance through a reduction of imports worth €284 million and an increase in exports worth €34 million; 3) food loss reduction across the agricultural value chain; and 4) 46,000 additional jobs would be created compared to business as usual. The largest employment increases are found to occur in the agriculture and the construction sector.

More needs to be done to create awareness, build skills and the infrastructure to enable the shift to CE. Innovation in technologies and business models will be key. The government can hasten this through mandates as well as provide the right incentives rather than focusing solely on regulations imposed by environmental legislation. Also, given that recycling is a significant sector of the informal economy supporting many urban poor (SIB, EKoN, KEPSA, The RockGroup, 2021), there is a need for inclusive models that incorporate their informal business value chains. Indeed, Karcher et al., (2020) contend that if CE is done in the right way, increased activities in waste collection and recycling could strengthen the economic position of (informal) waste workers, and providing more capacity building and training can ensure that more informal sector workers will also benefit from the CE transition.

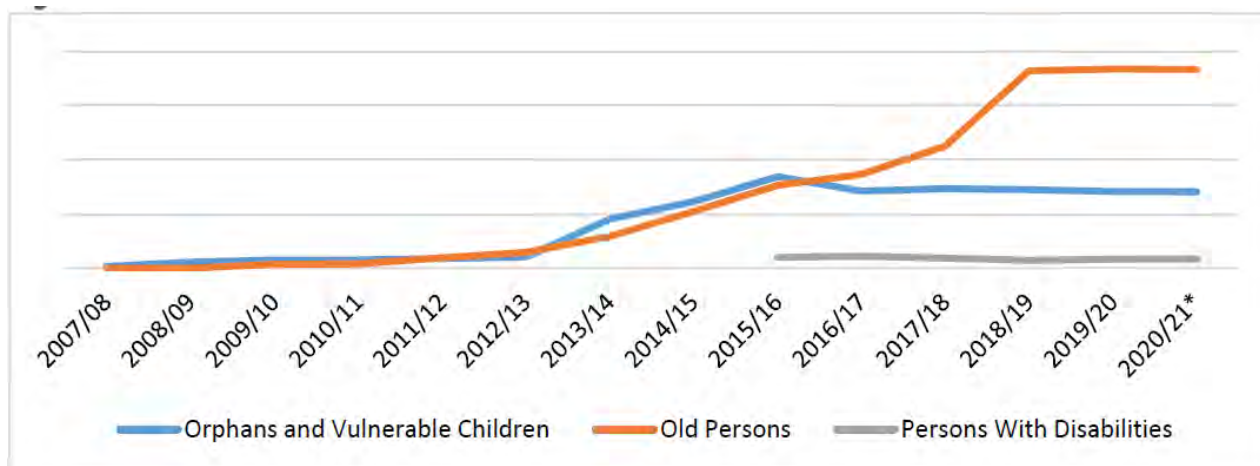
### 5.5.4. Social protection policies

Beyond economic policies, resilience is also supported by social policies to improve the capacity of the most vulnerable to cope with shocks. Kenya has a social protection policy that seeks to ensure that all



Kenyans live in dignity and exploit their human capabilities for their own social and economic development. The policy has three components: social assistance, social security, and social health insurance. Social assistance aims to provide minimum income protection (a ‘safety net’) for particularly poor and vulnerable people. The key actions targeted currently are cash transfer for orphans and vulnerable children, older persons, and persons with severe disabilities. Figure 28 shows the amount of monies disbursed so far. Since 2018, about KSh26 billion (US230 million) are disbursed annually. Development partners and NGOs are also complementing government social protection efforts. For example, seven NGOs, the Kenyan government, the European Union, and the Danish and German governments are working together to implement a ‘Safety Net’ program targeting Kenya’s millions of informal workers who have borne the brunt of the COVID-19 pandemic (Oxfam, 2020).

**Figure 28. Social protection disbursements**



Source: KNBS (Economic Survey; various years)

**Box 7. Combining social protection and index insurance**

The Hunger Safety Net Program (HSNP), sponsored by the government and the United Kingdom’s Department for International Development, sought to provide reliable monthly cash transfers of approximately US\$15 to households that live in extreme poverty in northern Kenya. However, it was realized that it was unlikely that the cash transfers would by themselves generate sustainable poverty reduction since droughts and other major shocks in northern Kenya can drive households into extreme poverty and make it difficult for them to escape once they are destitute. Thus, insurance was added as a component, to: (i) stem the downward spiral of vulnerable households by providing indemnity payments after a shock; (ii) stabilize pathways out of poverty through asset accumulation; and (iii) crowd-in finance for investment and growth.

HSNP+ has piloted an index insurance contract based on data routinely collected through satellite imaging. A predicted livestock mortality index based on vegetative cover indices was used as the basis for index insurance. National insurance companies and international reinsurance companies have shown high initial interest in this new product.

Source: [Policy Brief: Altering Poverty Dynamics with Index Insurance in Northern Kenya | Feed the Future Innovation Lab for Markets, Risk and Resilience \(ucdavis.edu\)](#)

### 5.5.5. Summary of resilience policies

A key observation is that there is a significant overlap between circular economy and green economy, and they both emphasize social protection measures. While CSA is just a subset of GE and CE, the GE and CE are transformation strategies and need to be fully integrated with the larger Vision 2030. The CE and GE are coordinated by the Ministry of Environment while they should be located in the Ministry of Planning. The informal sector has already been doing CE and the formalizing of this sector may see informal workers lose out if measures are not taken to integrate them. Business model innovations are crucial to making these new models work.

## 6. Key lessons and policy recommendations for economic transformation and resilience

The overall assessment shows that while Kenya is yet to transform, the prospects have worsened. Reversing the trend and getting back on the path of transformation will not only require addressing perennial challenges and vulnerabilities but also shocks such as COVID-19 and future pandemics and climate change. Drawing from the foregoing analyses and desk studies, the following subsection highlights key challenges facing Kenya's transformation efforts, draws lessons learnt and proffers policy recommendations.

### 6.1. Key challenges to Kenya's transformation

The foregoing discussion and desk studies point to the following challenges

- Services are behind the acceleration of growth in Kenya. This can be attributed to the expansion in modern services such as financial intermediation and mobile communications, and also innovations<sup>50</sup>. All the same, modern services account for only a marginal share of employment<sup>51</sup> (World Bank, 2016).
- Growth is not translated to good jobs. Some explanations include:
  - Although formal jobs are in high-growth and high-productivity sectors, the job-creating potential of these sectors is relatively low. The four sectors with the highest productivity growth between 2009 and 2013 accounted for only 7 percent of total employment.
  - The formal sector is not innovating and growing. The low employment elasticity in the formal sector means that it is most probably just capturing efficiency gains. Microdata from companies listed on the Nairobi Stock Exchange confirm this. Sales (of those companies that publish data on employment) rose by 56 percent between 2009 and 2013, while employment increased by only 22 percent (World Bank, 2016).
  - About 90 percent of labor market entrants end up in the informal economy or *jua kali*, in trade, hospitality, or manufacturing, and many of them are underemployed. Their activities are characterized by low productivity, low earnings, and stunted growth potential. The huge informal sector is a drag to transformation.

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<sup>50</sup> For example, the M-PESA (mobile money) system stimulated demand for traditional services such as trade and created more than 40,000 jobs for people who work as M-PESA retail agents and also sell other products and services.

<sup>51</sup> For example, although financial services and communications recorded one the fastest employment growth rates (7 percent per year between 2009 and 2013), fewer than 10,000 jobs were added per year, with most job seekers ending up in low-productivity, informal activities.

- Though labor reallocation is happening, it is occurring at a sluggish pace so that the contribution of agriculture in Kenya's GDP and the share of workers employed in the agriculture sector as a percentage of total employment remains high (AfDB, 2019). More worryingly, labor shifts are happening in the wrong direction, such that between 2009 and 2013, inter-sectoral shifts made a negative contribution to productivity. Labor was moving from agriculture to sectors with low productivity, such as informal trade and hospitality (World Bank, 2016).
- Weak export performance: Kenya's growth has been mainly anchored on strong domestic demand (public and private consumption). The role of external demand is declining. Kenya continues to rely on a small set of exports that tend to be of low technology, and the share of manufactured goods in exports is low.
- Kenya's production capabilities (its economic complexity) are lower than those of its peers. Kenya's capabilities are diversified, but mostly in low complexity goods such as tea or coffee, and they have not been increasing in recent years. The reasons for this likely lie in high production costs. Wages in Kenya are much higher than in peer countries at a similar level of development. Transport, energy, and land costs, which account for half of total production costs excluding raw materials and labor, are also likely to be higher than in competitor economies (World Bank, 2016).
- Limited productivity growth: The ability of Kenya to sustain high growth rates is severely constrained by weak factor productivity. Total labor productivity growth mainly comes from within-sector productivity changes, suggesting that the country needs to improve between-sector labor reallocation towards high value-added sectors to achieve sustained long-term growth. The dispersion in firm productivity within the same manufacturing subsector is high, which means firms are not catching up with their successful peers (World Bank 2016).

Five root causes of Kenya's transformation challenges can be identified: the dual nature of the economy, weak business environment, inefficiencies, weak innovation system, and lack of resilience.

- Dual nature of the economy: This prevents spillovers of technologies between the formal and informal sector.
- Inefficiencies: Public spending is inefficient and not growth-enhancing. Kenya's education budget, at over 6 percent of GDP, is larger than in any of the peer countries which deliver better results while spending less. For example, Vietnam spends less on education (6.2 percent of GDP) than Kenya (6.5 percent of GDP), but Vietnamese 15-year-old students are among the best in the world (World Bank 2016). Similarly, Kenya spends double the per capita health spending of EAC peers but with no better outcomes (World Bank, 2018). The inefficiencies can be attributed to corruption and weak implementation capacity.
- Weak business environment: By one estimate, Kenya's factory floor productivity could be close to China's but when one accounts for costs such as transport, regulations, and taxes, Kenyan firms lose some 40 percent of their productivity advantage (Guiseppe, 2009). The most recent Global Competitiveness Report lists the most pertinent competitive challenges facing Kenyan firms to be: corruption, tax rates, access to finance, government bureaucracy, inadequate infrastructure, labor costs, regulations, and taxes.
- Innovation: Innovation is the critical element in the accumulation of production capabilities and is at the heart of transformation. Challenges plaguing Kenya's innovation systems include:
  - The lack of independence of the innovation institutions: Mutisya (2018) notes that the Kenya National Innovation Agency (KeNIA), National Research Fund (NRF) and National Commission for Science, Technology and Innovation (NACOSTI) are still operating under the Ministry of Education and are subject to bureaucratic red tape.

- The missing element in NIS: Cirera (2016) points that only certain programs for supporting technology transfer or intellectual property rights exist, although these tend to be small and mainly focused on providing relevant information to firms. Other types of innovation instruments, such as R&D tax incentives, have yet to be developed. Cirera (2016) thus describes the STI institutional framework in Kenya as an embryonic policy framework. This sentiment is shared by Ndemo (2015).
- Underfunding: In the fiscal year 2016/17, the government spent the equivalent of 0.05 percent of its GDP on research, science, technology, and innovation (Mutisya, 2018). This is way below the 2 percent of GDP target set in the Science, Technology and Innovation Act of 2013. Ndemo (2015) also points out that R&D is often not guaranteed, and the little that is allocated to research institutions is spent on recurrent expenditure.
- A mismatch between supply and demand: Only one in four undergraduates studies a science, technology, engineering, and mathematics (STEM) course.
- Regulation: Kenya has shown a very uneven approach to regulation. For example, the success of M-PESA can be attributed to fairly lax regulation that allowed innovation. In contrast, bitcoin, another financial innovation based on 4IR technologies, has not been welcomed. Since 2015, the central bank has been hostile to bitcoin and other forms of virtual digital currency, terming them as unsafe and risky. (Patel, 2018).
- Lack of resilience: Kenya remains vulnerable to both external and domestic shocks although domestic shocks tend to be more debilitating. The key driver is a political economy that is rooted in the patrimonial system and has created inequalities and grievances that manifest in political violence and disillusioned youths getting radicalized.

#### ***Box 8. Political economy and transformation***

Policy should be informed by evidence but many times politics can trump evidence. Political agendas tend to be short term while transformation agendas tend to be long term. The change of a regime can see one transformation agenda abandoned and another one adopted (Gatune et al., 2021). The role of politics in entrenching policy inconsistency is a major challenge, especially in the agriculture sector. This is best illustrated by the case of the Strategy for Revitalizing Agriculture (Poulton and Kanyinga, 2014).

SRA was set up in March 2004 by the National Rainbow Coalition (NARC) government that came to power at the end of 2002. The SRA proposed a radical reform of the role of the state within the sector that sought to benefit all producers while also creating greater space for the private sector to expand its services, most notably in output marketing, but also input supply and financial services. This did not happen, despite the priority that the government attached to agricultural recovery and the support the SRA received from Kenya's international development partners. Eight years later, almost no progress had been made. Indeed, in 2010, the SRA (originally intended to continue until 2014) was superseded by the Agricultural Sector Development Strategy 2010-2020 (ASDS). Poulton and Kanyinga (2014) point that the SRA experience highlights both the potential and the limitations of competitive party politics in promoting reform. They argue that in the SRA case, radical reform of Kenya's state organizations required collective action on the part of many ministers, representing different ethno-regional groups. Unfortunately, the NARC government began to unravel soon after attaining power and such collective action became impossible. The political competition then reverted to its past pattern of patronage politics, in which control of state organizations is critical. Hopefully, some positive results occur, such the recent conviction of a sitting MP and his co-defendants in a maize scandal, with huge fines imposed<sup>52</sup>.

<sup>52</sup> The MP and partners were fined Kshs1 billion in addition or face 52 in years in jail  
<https://www.standardmedia.co.ke/nairobi/article/2001376568/mp-loses-seat-to-pay-sh1b-or-52-years-in-jail>

## 6.2. Policy recommendations

From the foregoing discussion, some policy recommendations to put Kenya on a resilient and transformative growth trajectory are discussed below.

### 6.2.1. Innovations in resource mobilization

Investment levels remain low compared with those in benchmark countries (20 percent against 25 percent). This is because the savings rate is low. Improving saving rates will require greater innovations in financial inclusion and the development of savings products that especially target the diaspora (such as diaspora bonds)<sup>53</sup>. Securitization of remittances could be used to raise short- and medium-term financing by African banks. Kayode and Spio-Garbrah (2012) argue that tapping migration wealth could be an effective means of funding development.

### 6.2.2. Upgrading agriculture and value addition to primary products

Agriculture remains the biggest driver of poverty reduction and inequality. Kenya's transformation prospects are largely tied to agricultural performance. The key challenges facing the sector, as articulated in the Agriculture Sector Transformation and Growth Strategy (GoK, 2019) include low production and productivity; inadequate budgetary allocations; reduced effectiveness of extension services; low absorption of modern technology; limited capital, and lack of access to affordable credit; pre- and post-harvest crop losses; heavy livestock losses to diseases and pests; low and declining soil fertility; lack of a coherent land policy; inadequate infrastructure (for water storage and crop storage and processing facilities); and inadequate market and marketing infrastructure.

Nevertheless, increasing the value-added of agricultural produce (through higher crop yields and quality, better packaging, or further processing) would boost productivity in the sector and raise farmers' incomes (World Bank, 2018). Indeed, agriculture and manufacturing should be seen as two sides of the same coin. Much of agriculture is in food processing. Thus, improving agricultural productivity will directly feed into improving the productivity of manufacturing by boosting agro-processing. It should also be noted that transport services can also grow as growth in agro-processing will create demand for transport services through logistics and storage needs. This report has already shown that transport services have high productivity. Similarly, urbanization is a crucial part of this equation as it stimulates demand for higher-value and processed foods. Therefore, accelerating urbanization will lead to increased demand for the manufacturing sector.

It is important to halt diet shifts toward easy temperate crops, particularly the rice and wheat that are currently among the major imports. The shift is driven by urbanization, rising incomes, and also the media (ACET, 2015). This has not only seen an upsurge in easy-to-prepare-foods but also foods that are seen as 'modern'. The effect is that traditional foods, especially millets and sorghum, have lost their place at the dining table. Yet they are not only more nutritious but also well adapted to the agroecology of Kenya – which is 80 percent ASAL – and vital in climate change adaptation. Failure of traditional grains can partly be attributed to neglect in R&D. Not only has yield remained low but also product development has been kept at a minimum (ACET, 2015). Increasing support for traditional grains can

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<sup>53</sup> Diaspora bonds are issued by the country to its own diaspora to tap into their assets in the destination country, as an alternative to borrowing from the international capital market, multilateral finance institutions or bilaterally from governments. The practice goes back to 1930s China and Japan and was later followed by Israel and India in the 1950s. [Diaspora Bonds in an African Context | African Development Bank - Building today, a better Africa tomorrow \(afdb.org\)](#)

boost food security as well as exports, as these grains are now regarded as superfoods (*Time* magazine, 2014)<sup>54</sup>. Agriculture and agro-processing can be boosted by bringing close to 20 percent of idle farmland to use, as the land is mainly owned by the urban middle class. These farms can, however, be brought into production with the introduction of farm services such as Farmworks<sup>55</sup>. As these farms are more likely to be commercial and specialized, they can assist the agro-processing sector to grow as they can guarantee consistency in quantity and quality as well as lower prices (due to higher yields<sup>56</sup>). Leveraging internet platforms to provide even more services and support as well as connecting farmers to markets and finance sources, can result in the creation of a one-stop-shop for farmers (see Dijk et al., 2021).

### 6.2.3. Improve the productivity of the services sector

Services is the biggest sector and labor is moving into it from agriculture. The sector tends to be dominated by low-productivity informal firms while there are a few high-productivity areas, especially business services. Thus, a two-pronged strategy is needed. First, firms should be incentivized to increase their range of high-quality service businesses, the so-called 'industries without smokestacks' (Page et al., 2020). The adoption of the 'servitization' model where firms, especially equipment manufacturers, provide a service, e.g., machine-hours rather than a product.<sup>57</sup> This is one way to promote the shift towards the circular economy. This model can boost agriculture by selling inputs as a service, which can increase mechanization and usage of high-quality inputs as farmers need not make capital investments to transition to a high input-high output model.

The other approach is to leverage emerging platforms to 'formalize' the informal services sector. By bringing taxis on a platform, firms like Uber are already formalizing the informal taxi sector. These platforms' true potential, however, will be unleashed if their structures are improved such that they can be used not only to post or find jobs but also to offer other services and opportunities for upgrading that are typically unavailable to informal workers owing to the nature of their business. When developing the next-generation platforms that target the informal sector, Gatune et al. (2019) propose the incorporation of the following features:

- **Embedding a trust system:** When a trust system is embedded into a platform, clients are relieved of the need to establish a personal relationship with the service provider. The platform can vet service providers and monitor them through a rating system and other means. Similarly, service providers do not require personal referrals to obtain work, as the platform acts as their referral system.
- **Upskilling and quality incentives:** Clients should be able to rate service providers to ensure that good and reliable service providers acquire more work and can charge a premium. Such a system improves the quality of services being provided and may incentivize service providers to upgrade their skills. For example, a carpenter who has merely completed apprentice training can obtain certification from a TVET institution to demonstrate his or her ability to deliver higher quality work.

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<sup>54</sup> Ethiopia has had to ban exports of *teff* (a type of millet) as demand has risen so much that Ethiopia is worried about the impact on food security.

<sup>55</sup> [FarmWorks – Feeding Africa, Building Communities](#)

<sup>56</sup> Commercial farms tend to have higher yields than smallholder farms. For example, large scale coffee farms yield are 10 times higher than small scale farms

<sup>57</sup> Already a mining equipment producer in South Africa has developed an 'intelligent' machine which can provide real-time data on such aspects as production, machine availability and loading capability, and the hours of use on the machine, though the deployment of these services has been hampered by lack of infrastructure (5G) and skills (Lorenz and Mbula-Kraemer, 2020). Equipment producers are best placed to monitor and interpret data from their machines.

- **Greater specialization:** As platforms may bring together a large number of clients and service providers, they can more effectively match buyers and providers, thereby providing opportunities for greater specialization (another form of upskilling). This can further boost productivity.
- **Provision of worker services:** By bringing together many small service providers and freelancers, platforms provide an opportunity for informal workers to gain access to a variety of services associated with formal employment, e.g., health insurance, social security, etc. Providers of human resource services (including the government) can use these platforms to provide services targeted specifically at informal workers. This decreases the vulnerability of informal workers.
- **Franchising opportunity:** Platforms can also function as franchise systems, facilitating investment in monitoring systems as well as shared systems, thereby further improving the informal sector's quality and productivity.

#### 6.2.4. Upgrade informal manufacturing

Informal manufacturing is a significant sector but has low productivity. To upgrade the sector, several approaches can be used. UNIDO (Gatune, forthcoming) proposes the following strategies:

##### **Better linkage between formal and informal sectors**

The dual nature of economies prevents low-productivity firms from learning and catching up with high-productivity firms through the diffusion of know-how. New business models that link the formal and informal sectors can bridge the gap between the two sectors and facilitate the transfer of knowledge and skills and thus help improve the productivity of the informal sector. One approach is hybrid processing. For example, rural-based artisanal food processors with expertise in resolving supply challenges (because they are farmers) can be linked with urban-based formal SME processors with expertise in business development and marketing (Gatune, 2018). In this regard, 4IR can provide the necessary tools to allow SMEs to assist artisanal processors to achieve certain standards. This can be achieved through remote quality assurance systems, web-based training, and support, etc.

##### **Simple automation interfaces**

Using small low-cost computers such as the Pi (see Box 6), Internet of Things (IoT) systems with integrated data acquisition and communication solutions can be manufactured at a low cost. These devices can benefit small and medium enterprises (SMEs) and informal sector actors. Woo-Kyun et al. (2020) demonstrate how an off-the-shelf Raspberry Pi (computer board), a Pi camera, and algorithms based on open-source solutions can be connected to a sewing machine to film and use image processing to detect faults during the sewing process. The IoT system raises an alarm when a defect is detected. This example illustrates the potential of adopting cost-effective Industry 4.0 solutions to improve quality at the SME and micro-enterprise levels. Better integration of the informal sector, as well as R&D, offer tremendous potential to upgrade the quality of goods manufactured in the informal sector.

##### **Box 9. Raspberry Pi**

The Raspberry Pi is a low-cost computer that allows users to control electronic components for physical computing and to explore the Internet of Things (IoT). The Raspberry Pi Foundation aims to place the power of computing and digital making in the hands of people across the globe. The cost of the Raspberry Pi has always been under US\$100 (the average price is around US\$35). The Pi Zero only costs US\$5. The Foundation also provides outreach and education programs to increase people's access to computing and digital making.

Source: [What is a Raspberry Pi? | Opensource.com](https://www.raspberrypi.org/faq/what-is-a-raspberry-pi/)

### **Support innovation and market access**

The potential of Industry 4.0 to provide information and develop new markets for informal manufacturers is huge. Using internet tools, artisans can find designs that they would not otherwise have access to, or they can even crowdsource designs. A crafts worker who wants to produce multipurpose furniture can download designs from the internet.

### **Shared services**

Spaces where artisans can access sophisticated machinery help them improve quality. For example, the Kwame Nkrumah University of Science and Technology (KNUST) in Ghana established a formal foundry and runs workshops in areas inhabited by artisans to help them improve their products (Gatune, 2016). 4IR technologies provide an opportunity for roadside artisans and crafts workers to upgrade the quality of their products, access more tools, and implement a suitable business model. For example, shared 3D printing services can assist artisans to build more complex components, allowing them to expand the range of their products. In order to leverage young graduates to support upgrading and formalization, an innovative approach being proposed by Apprentice Job Work Africa (AJW Africa)<sup>58</sup> is to attach a trio of youths (with backgrounds in a technical field, business, and law) to an informal sector enterprise and support it to grow. This has the double advantage of supporting the existing informal business to grow and formalize and providing the youths with the needed experience to become consultants and entrepreneurs in the future. Once the firm grows, it can also provide jobs for the youths.

### **6.2.5. Leveraging the creative sector**

Kenya appears to be struggling to bring creative and cultural industries into the mainstream as part of the transformation process. Studies conducted on the creative industry sector in other countries have shown that they can be a transformative sector. However, in Kenya the resources in the creative industry are yet to be exploited as a driver towards transformation. Some approaches to capture its potential include (i) using the new digital tools to hasten growth in the sector (see Appendix 5); (ii) a policy targeting this sector as transformative and providing relevant support; and (iii) building on grassroots movements in music, e.g. *homeboyz Entertainment*, Sauti Sol; homegrown festivals, e.g. *koroga* festivals; the budding film industry (e.g. Riverwood films). Actions include funding activities and building public-private partnerships.

### **6.2.6. Using AFCFTA to increase exports of manufactured goods**

The African Continental Free Trade Area (AFCFTA) provides opportunities for increased market access for Kenyan firms beyond the traditional East Africa market, especially for manufactured goods. These markets need to be carefully explored to support the resurgence of manufacturing in Kenya. Indeed, Kenya can use it to position itself as a gateway to Africa. Being an important node for China's Belt and Road initiative (BRI) positions Kenya to serve as a manufacturing hub for China and other investors keen on entering the huge AFCFTA market. Exporting to AFCFTA will allow Kenya to build capabilities to capture the full value of the export potential of its current exports and markets. Over time, this will facilitate moving to production of more complex export products, especially in HS Chapter 11 (Textile and textile articles) and Chapter 6 products (chemicals and allied products) of the AfCFTA.

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<sup>58</sup> See <https://www.ajwafrica.org>



### 6.2.7. Fast-forwarding 4IR and digitalization

COVID-19 is fast-forwarding the Fourth Industrial Revolution (4IR) as ICT is being deployed in innovative ways. While 4IR provides many opportunities for driving transformation (see Appendix 5), it is crucial that the development of platform economies be locally driven and that the platforms be as open as feasible. The Indonesian example demonstrates how one should steer this. In Indonesia, the government has been the driver as well as a catalyst by subsidizing delivery costs, thus allowing regular shops, farmers' markets, and motorbikes to be part of the online marketplace. This is critical as online marketplaces tend to be owned by huge technology companies, e.g., Amazon and Uber, which are not accountable, and as a result of their monopoly power, they start capturing significant value over time (Scheiber, 2014). Leveraging 4IR will require increased preparedness, paying attention to building the right skills, internet infrastructure, a dynamic innovation system, and a robust and flexible regulatory environment (ACET, 2018).

### 6.2.8. Skills development and matching

The World Bank's Skills survey (STEP) found that over 50 percent of employers rely on informal channels to recruit workers (Puerta et al., 2018). Employment platforms that can better match workers and jobs are needed.

### 6.2.9. Improving Entrepreneurship

Experts have observed that Kenyans should have an entrepreneurial mindset to enable sustainable growth in all sectors of the economy. One pathway is for research institutions to develop ideas for entrepreneurship growth and provide sustainable solutions that will positively affect the economy.

### 6.2.10. Improving resilience

The climate-smart agriculture (CSA), green economy, and circular economy strategies provide resilient pathways to transformation and are steered by the environment and agriculture ministries. However, there is a need to rethink the placement and possibly relocate them to the planning ministry to fully integrate them into Vision 2030, the overarching development strategy.

### 6.2.11. Governance and national values

Good governance and national values are prerequisites for Kenya's economic transformation. While national values and principles of governance are enshrined in Kenya's 2010 Constitution, and there is a strong legal framework, there is still poor performance in terms of patriotism and integrity. Some approaches to achieving this include greater efforts by civil society and the media to see that these aspects of the Constitution are implemented. This involves greater engagement with the public to raise awareness. Also, greater engagement with relevant public bodies that provide oversight, like the Ombudsman's Office, can help in this regard. Some gallant individuals like Omkiya Omtata have taken up this challenge using personal resources and have made significant strides (Odhiambo, 2019). Identifying and supporting such public-minded individuals can help. One way is to establish a grassroots like gofundme<sup>59</sup> campaign.

In relation to governance at national level, AfDB (2019) proposes including deliberate initiatives targeted at community reconciliation to deal with cyclical election-related violence, particularly in pre-election

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<sup>59</sup> <https://www.gofundme.org/>

periods of campaigning. Besides climate risks, most of the socio-political risks are closely linked to governance. The patronage system of politics drives corruption, favors exclusion leading to inequality, and most importantly, distorts policy, preventing even the best-crafted transformation policy from fruition due to only partial implementation. Addressing these issues requires paying greater attention to political economy analysis to better understand how to promote evidence-based policymaking.

### **6.3. Priorities and the way forward**

In general, stakeholders agreed with the policy recommendations proposed. However, they pointed to the need to prioritize. Improving productivity and formalizing business was seen as a key priority. It turns out that these are two sides of the same coin. Part of the reason productivity is low is because of the huge informal sector and the lack of linkages between formal and informal sector to allow diffusion of knowhow. So formalizing businesses can kill two birds with one stone. The question then is which is the best pathway to formalization? The traditional formalization method of having business registered and adhering to all regulations and keeping books and also upgrading employee skills is one way, and this is an ongoing effort.

However, alternative formalization through building platforms that bring the informal sector on one platform seems to be the way forward. The platform makes it easy to create linkages with the formal sector thus facilitating the flow of knowledge and thus upgrading. They can also be leveraged to provide many of the services needed to upgrade, e.g. training. Crucially, platforms using automated data on businesses and business transactions have already been formalized in terms of records. The government and its agencies can easily work with the platform to extend and complete the formalization process. However, the initial objective should be to use the platform to provide support rather than leverage the platform to regulate and tax. This should be a gradual process to allow platforms to grow and the informal sector to gain confidence. Indeed, the government should subsidize the growth of indigenous platforms to ensure the benefits captured are retained locally.

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## Appendix 1. Transformation pathways

### Economic Recovery Strategy for Wealth and Employment Creation (ERS)

- **Agriculture:** The sector was expected to grow by an average of 3.1 percent annually from increased support including strengthening extension services, access to credit, and reforming institutional structures. At the same time, the agricultural sector share of GDP was expected to decline from 24.0 percent in 2002 to 22.2 percent in 2007
- **Manufacturing:** The sector was projected to grow at an annual average rate of 8.6 percent compared with 1.2 percent in 2002 and its share in GDP to rise from 13 percent in 2002 to 15.7 percent in 2007 driven mainly by higher capacity utilization and reduced costs of production. Formalization of micro, small and medium enterprises (MSMEs) would continue, along with a focus on garment manufacturing to take advantage of the US market through the African Growth and Opportunity Act (AGOA).
- **Tourism:** Increased funding for marketing, upgrading the tourist police force to make it more effective and diversification of markets, both in terms of geographical distribution and customer base. The sector was expected to grow at an annual average of 5.4 percent.
- **Export:** Develop an export strategy with focus on the measures required to ensure diversification of export markets and reduce vulnerability to unilateral decisions over trade in the export markets.
- **Services:** The information and communications technology (ICT) sector was expected to contribute significantly to overall growth, increasing by annual average rate of 5 percent. Much potential was seen in ICT as other sectors begin to adopt IT solutions and management techniques. Financial sector reforms would be introduced to reduce the interest rate spread.
- **Infrastructure:** This sector was expected to lead in reviving the economy with building and construction projected to grow annually by 16.7 percent on average and the share of GDP rising from 2.3 percent in 2002 to 4.2 percent in 2007.

### Vision 2030

The transformation pathways identified are:

- **Agriculture:** The aim is to add value through innovation and more commercially oriented agricultural system. Specific actions include: (i) Transforming key institutions in agriculture and livestock; (ii) Increasing productivity; (iii) Introducing land use policies for better utilization of high- and medium-potential lands; (iv) Developing more irrigable areas; and (v) Improving market access for our smallholders through better supply chain management.
- **Manufacturing:** Objective is to have a robust, diversified, and competitive manufacturing sector through: (i) Restructuring key local industries that use local raw materials but are currently uncompetitive (e.g., sugar and paper manufacturing); (ii) Exploiting opportunities in value addition to local agricultural produce; (iii) Adding value to intermediate imports and capturing the “last step” of value addition (e.g., in metals and plastics).

- Tourism: The proposed strategies include: (i) aggressively developing Kenya's coast by establishing resort cities in two key locations; (ii) achieving higher tourist revenue yield by increasing the quality of service and charges in country's premium safari parks, and by improving facilities in all under-utilized parks; (iii) creating new high value niche products (e.g. cultural, eco-sports and water-based tourism); (iv) attracting high-end international hotel chains; and (v) investing in new conference facilities to boost business tourism.
- Wholesale and retail trade: The aim is to raise earnings by giving the large informal sector opportunities to transform itself into a part of the formal sector that is efficient, multi-tiered, diversified in product range and innovative. The proposed actions include: (i) training and credit (ii) improving efficiency by reducing the number of players between the producer and the consumer; (iii) creating formal market outlets for small-scale operators; (iv) encouraging more investment in retail trade; (v) developing an outreach program to expand retail trade
- Business process outsourcing (BPO); the aim is to make Kenya the top off-shoring destination in Africa making BPO the sector of choice for employment for youth and young professionals. The key actions envisioned include: (i) attracting at least five major leading information technology (IT) suppliers, and at least ten large multinational companies and global BPO players to the country; and (ii) strengthening at least five local players to become local champions through stand-alone operations or joint ventures
- Financial services: The objective is to create a vibrant and globally competitive financial sector and also become a regional financial services center. The action proposed include: (i) Undertaking legal and institutional reforms to make Kenya more competitive as a financial center and also facilitate the consolidation of small banks in Kenya to larger and stronger ones; (ii) introduction of credit referencing in the country; (iii) streamlining informal finance and Savings and Credit Co-operative Organizations, as well as micro-finance institutions; (iv) deepening financial markets by raising institutional capital through pension funds, expanding bond and equity markets, as well as tapping international sources of capital.

## Appendix 2. Potential applications of 4IR in driving transformation

Transformation Strategy	4IR technology					
	AI/Machine Learning	Internet of Things (IoT)	Big Data/Data Science	3D Printing	Blockchain Technologies	Net Impact on competitiveness
Agricultural transformation	Application in breeding to speed varietal selection; Intelligent robots are reducing inputs applications by over 90 percent	Use of drones for crop monitoring; Internet-enabled irrigation systems	Telephone farming; E-extension Inputs-as-service business models; Big Data for credit scoring	Locally fabricated agricultural machines	Food traceability system for international trade	Very high: Agriculture has many potential entry points and little downside in terms of job losses
Modernized services	Driverless cars will reduce jobs in transportation Many potential applications, e.g. credit scoring using non-standard data	M-Kopa selling solar power as utility/service through internet-enabled cookers and solar panels	Shared economy, e.g. Airbnb; Financial inclusion, e.g. micro-insurance; E-commerce e.g. Jumia, iRoko	Toll/contract manufacturing; Community workshops	Numerous trust-based applications (land registries, contracting) Cryptocurrency based transactions	Very high: This sector is already very dynamic. An e-commerce company, M-PESA, valued at US\$1 billion, is the biggest money transfer service in the world
Local content	Potential for development of sophisticated machine-learning algorithms for interpretation and/or exploration data	Drone-based services, e.g. facilities inspection, mapping etc.	Geological data mining may create new opportunities	Locally manufactured parts; Scope for small-scale, flexible production		High to moderate: Much potential here but will require much support to build new capabilities, especially in AI, data science and 3D printing

Export-led manufacturing	Advanced robots will kill cheap labor advantage		Will enable fine-grained market segmentation and kill mass markets	Will kill the factory manufacturing model		Very low This will not be a viable strategy in the 4IR world
Infrastructure	Smart metering and smart grid technologies	Alternative infrastructure, e.g. drones	Smart cities and other tools to help optimize infrastructure	On-site manufacture of the part		
Creative industries	New tools		Platforms for distribution	Ability to convert designs to products		Very high: products highly amenable to digitalization
Tourism	New tools to showcase, e.g. virtual reality		Better targeting of marketing efforts; New platforms, e.g. Airbnb expanding tourism potential			High: 4IR can help create new experiences and improve service delivery
The overall impact of 4IR technology	Will kill traditional paths to industrialisation		The most dynamic of 4IR technology for Africa; Potential to create many jobs	Presents a great opportunity for leapfrogging into manufacturing	Potential to formalize the huge informal sector	

Source: ACET, 2018

# **A New Policy Agenda To Build Resilient Economies in Africa in the Post-COVID-19 Era**

Country case study:  
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**DRAFT REPORT**

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# 1. Introduction

## 1.1. Purpose of the country study

This study aims to contribute to country-specific policy recommendations for the formulation of a New Policy Agenda to guide the discussions at the 2022 Tokyo International Conference on African Development (TICAD8) meeting between co-organizers (Japan, African Union Commission, United Nations Office of the Special Adviser on Africa, United Nations Development Programme and World Bank) and African governments.

The study is based on government strategies, plans, and reports as well as reports and research of international agencies such as the World Bank, African Development Bank, International Monetary Fund, Organisation for Economic Cooperation and Development, and UN agencies, as well as academic research papers. The government documents include the National Development Strategy, Social and Economic Plan, State Budget, Fiscal Medium-Term Framework, COVID-19 response and expenditure reports, and poverty assessment reports.

The key research question is: "***What does it take to make economies resilient in Africa in the post-COVID-19 era?***" This question will be directly answered in Part 4 (Conclusions and recommendations), based on the analysis that follows.

## 1.2. Analytical approach

The Growth with DEPTH Framework (ACET, 2021) is taken as the main analytical reference in this country case study. DEPTH stands for: Diversification, Export competitiveness, Productivity increases, Technological upgrading, and Human economic well-being.

The Growth with DEPTH approach builds on, and is consistent with the structural analysis of economic development that focuses mainly on (i) changes in sector contributions to total economy output or value added through the emergence of new activities and products; (ii) changes in the proportions of factors (e.g., labor) employed in the various sectors of the economy; and (iii) decomposition of economy-wide productivity growth (mainly contributions of labor) into a component that captures the effect of changes in the sectoral shares of factors and a component that captures within-sector factor productivity growth.

Economic transformation emerges as a core operational concept in the context of the ACET's Growth with DEPTH framework. Thus, "Economic transformation is now the consensus paradigm for Africa's development". (ACET *African Transformation Report*, 2014)

In practice, economic transformation results from a complex dynamic process through shifts of labor and other resources from low- to high-productivity sectors (structural change or structural transformation) and raising within-sector productivity growth (Herrendorf, Rogerson and Valentinyi, 2014; McMillan, Rodrik and Sepulveda, 2017; McMillan and Rodrik, 2011; Schlogl and Sumner, 2020).



The above-mentioned changes and shifts among or within sectors will be assessed as part of the effort to build a resilient and sustainable economy in Mozambique, based on endogenous growth and institutions that guarantee the growth of effective and sustainable resilience.

### **1.3. Methodology**

This research has been undertaken by combining the theory and methods of structural analysis with the economy theory on the role of institutions in generating different and often contradictory types of economic growth. The study discusses how Mozambique can promote economic transformation for a sustainable recovery from COVID-19 while building resilience against future shocks. Among the broad aspects of resilience, the study will focus on economic (macro and micro) resilience, that is, the ability of the economy to minimize the impact of exogenous shocks on economic assets and welfare (Hallegatte, 2014).

Based on the data analysis and review of existing literature on economic transformation and resilience, mainly with focus in Mozambique, the study seeks to identify the main sources of vulnerabilities and the key sectors for Mozambique's sustainable economic transformation process. This will allow the formulation of policy recommendations for sustainable economic transformation which recognize that they will not be panacea for all the resilience challenges. The policies will also be grounded on ACET's approach to Africa's development, aiming to combine the Growth with DEPTH framework adapted to Mozambique's challenges with the three main vectors of resilience, namely the ability to recover quickly from a shock, the ability to withstand a shock, and the ability to avoid the shock (Briguglio, Cordina, Bugeja and Farrugia, 2006).

### **1.4. Report structure**

This country case study is organized in four parts:

- Part 1 includes the purpose of the country study, analytical approach and methodology and report structure.
- Part 2 deals with the economic situation in the first two decades of the 21<sup>st</sup> century, challenges of Mozambique's vulnerability and fragility and development policy issues.
- Part 3 addresses the challenges of building a resilient economy and how the COVID-19 response and lessons can trigger policies and actions for a more inclusive and effective economic transformation.
- Part 4 summarizes the main conclusions, key lessons, and recommendations.

## 2. Economic transformation: 2000-2021

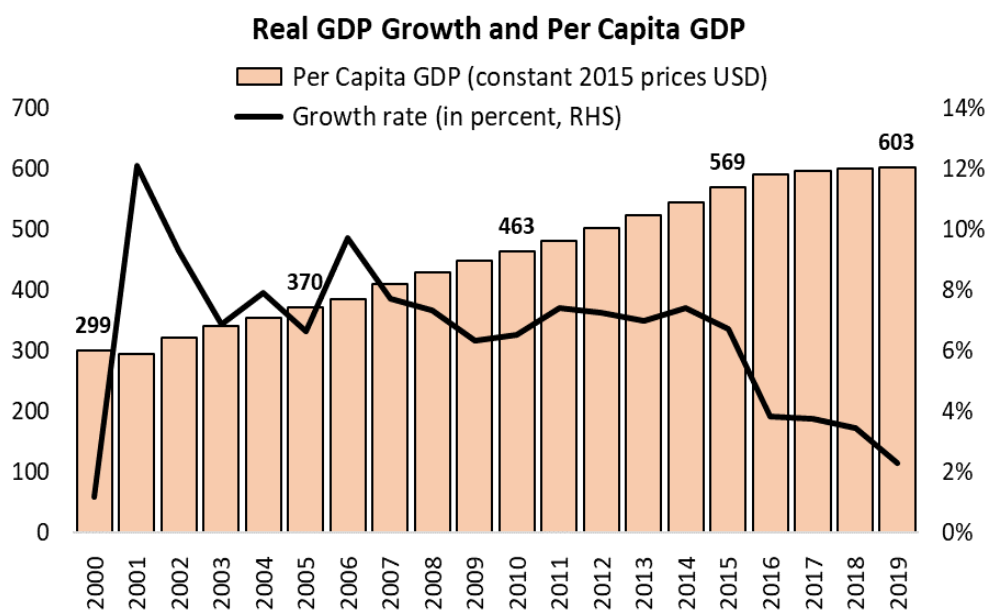
### 2.1. Trends and dynamics of growth and structural transformation in Mozambique

Shortly after gaining independence in 1975, Mozambique became embroiled in a prolonged civil war marked by severe economic decline. And after a disastrous experiment with socialist development strategy amidst a civil war, Mozambique embarked on market-friendly reforms with the help of the IMF and World Bank which successfully set the country on a path of economic recovery.

The country witnessed a steady growth rate averaging 7 percent per year, becoming one of the world's fastest growing economies. At the end of the commodity super cycle, however, the economy entered a macroeconomic crisis which, coupled with other shocks including the recurrent droughts and pest infestations, corruption scandals and the COVID-19 pandemic, led to a significant deceleration of economic growth to about 3 percent per year over the last five years (Figure 1). In 2020, GDP growth declined to 1.23 percent as a result of incessant declines in value addition in strategic sectors of the economy, except agriculture where growth reached 3.5 percent.

There was also sustained growth (Figure 1) in per capita GDP (at constant 2015 US dollars) averaging 4 percent per year in line with the average economic growth rate of 7 percent per year which remained higher than population growth of about 3 percent per year.

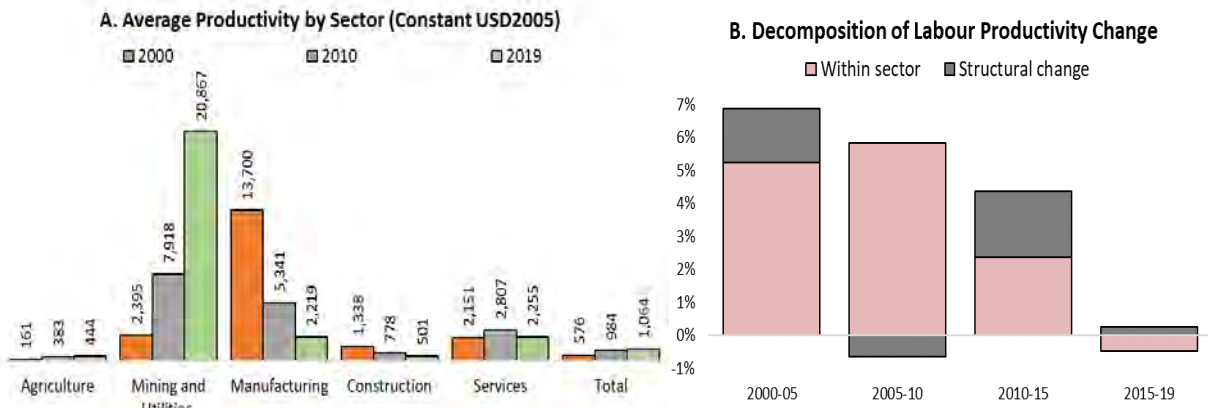
**Figure 1. Growth of gross domestic product (GDP)**



This growth accelerations over the last two decades were driven by high inflows of foreign aid and foreign direct investment (FDI) and productivity in the megaprojects. Prior to 2016<sup>1</sup>, inflows of foreign aid played an important role in financing health, education, and infrastructure as well as supporting institutional reforms which were important for the steady economic growth (Cardoso, 2010; Jones, 2006; Jones and Tarp, 2015; Magaia, 2019; Ramadhan, Jian and Pacific, 2016).

Productivity growth reflects mainly FDI inflows to the mining and energy sector megaprojects<sup>2</sup> (Figure 35 in Annex 1), which, according to the IMF (2011), contributed about 2 to 4 percentage points per annum in the years of their initial production and a share of about 10 percent of GDP and 50 percent to 75 percent of exports.

**Figure 2: Productivity growth within and between sectors, 2000-2019**

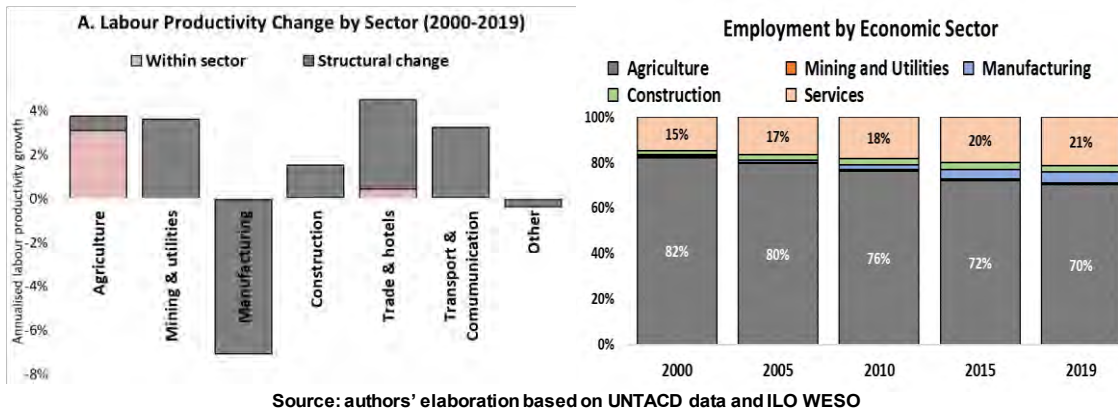


Source: authors' elaboration based on UNTACD data and ILO WESO

The improvement in productivity has been driven by the agriculture sector and by the reallocation of employment from agriculture to high-productivity sectors, including the mining and services sectors (Figure 2B) which are, respectively, 57 and 6 times more productive than agriculture. As a result, the contribution of services to economic growth increased from 43 percent in 2000 to 59 percent in 2019 while the contribution of agriculture declined from 25 percent to 10 percent (Figure 4A).

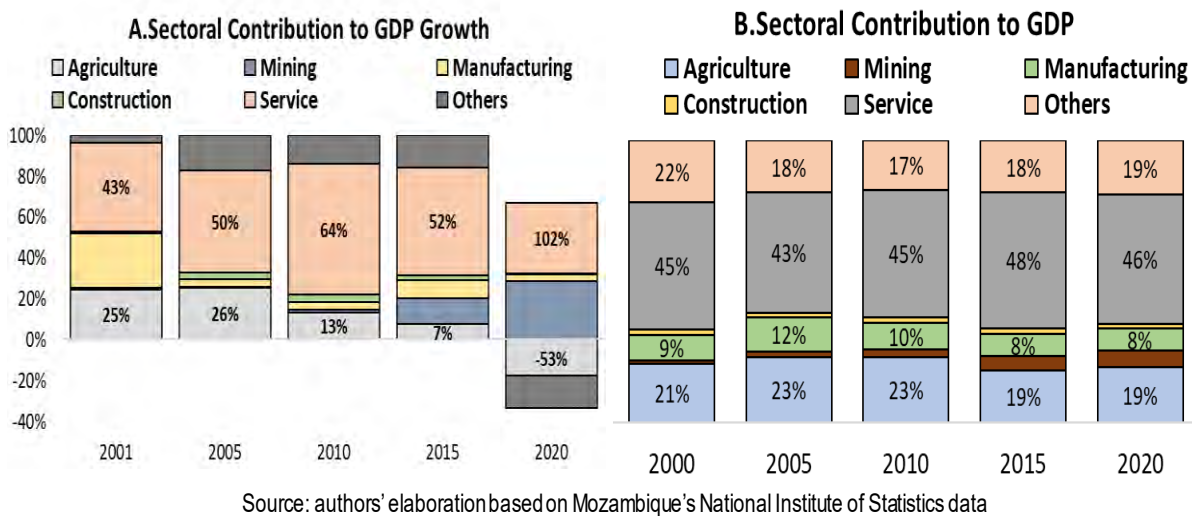
<sup>1</sup> In 2016, all donors withdrew budget support to Mozambique after the discovery of undisclosed debts, leading to macroeconomic difficulties.  
<sup>2</sup> Mainly Mozal, Vale (CVRD), Sasol, Kenmare, Rio Tinto, Beacon Hill.

**Figure 3: Employment is shifting from agriculture to services**



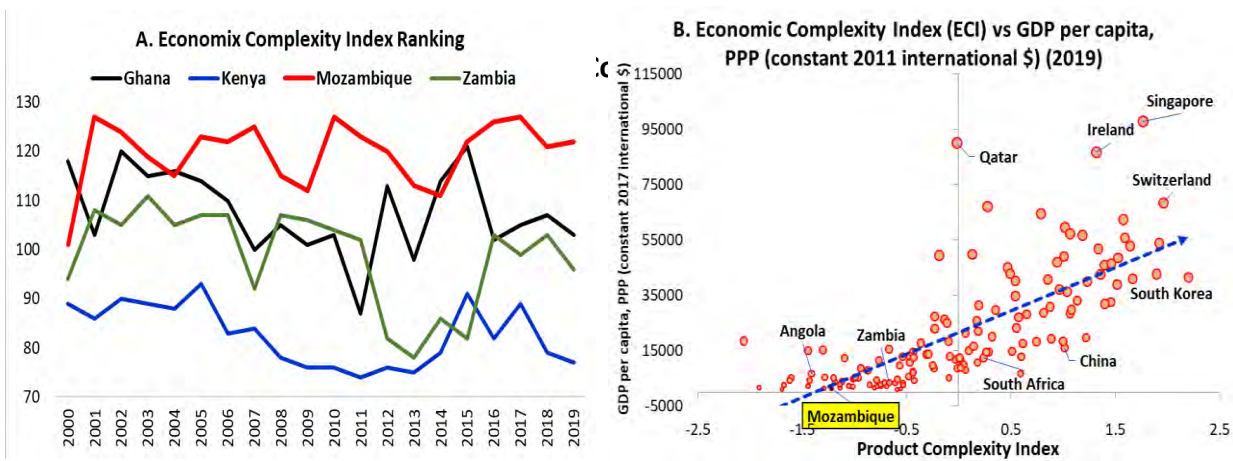
However, growth performance did not lead to significant economic transformation. The production structure in 2020 was like in the 2000s, with production and exports concentrated in a few agricultural and mineral products (Figure 4B and Figure 34 in Annex 1). This is consistent with the assertion by Rodrik (2014, p. 3) that economic transformation cannot be sustained through production of a limited or fixed set of goods. It requires diversifying the productive and export structure through creation of new and more sophisticated products while building capacity, creating more high-productivity industries, and shifting the production factors from low to higher productivity sectors.

**Figure 4: Services contribution to growth, 2000-2020**



Due to low product diversity and sophistication, Mozambique’s relative economic complexity index ranking falling from 101<sup>st</sup> in 2000 to 122<sup>nd</sup> in 2019 (out of 131 economies) (Figure 5A). Figure 5B depicts a positive relationship between economic complexity and economic growth; that is, countries with a complex product portfolio tend to sustain high long-run growth rates through their ability to add more products given their current capabilities.

Figure 5B also shows that Mozambique is at the bottom of both GDP per capita and economic complexity, meaning that to move from the actual quadrant to high income and complex economy quadrant, it will require a lot of effort given the high distance between the current production structure (less complex) and a fair or neutral sophisticated production level<sup>3</sup>. Mozambique’s position below the trend line suggests that the current level of per capita GDP is below the ideal, considering its actual potential to achieve higher growth rates (Sørensen, Estmann, Sarmento and Rand, 2020).



Source: authors’ elaboration based on Harvard Growth Lab and Penn World Table 10.0

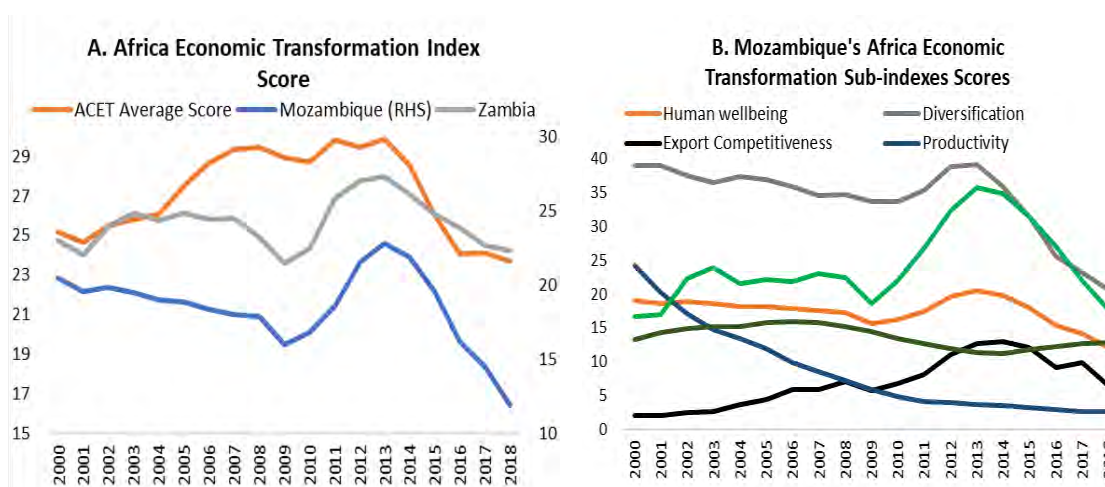
## 2.2. Assessment of the Mozambique’s economic transformation

Mozambique’s score on the African Transformation Index (ATI) has been declining steadily since 2014 and in 2018 fell below its 2000s decade levels (Figure 6A). This is in line with the trend of the economic complexity index (Figure 5A), suggesting that progress towards economic has fallen back in the last two decades. The reversal was driven by deterioration in the sub-components of the transformation index including diversification, export competitiveness, productivity, technology, and human well-being. Relative to other African countries, Mozambique’s ranking moved from 14<sup>th</sup> (out of 33 countries) in 2000 to 27<sup>th</sup> in 2018 on the index<sup>4</sup>.

<sup>3</sup> Products with null complexity index. Mozambique’s current complexity index is -1.25.

<sup>4</sup> <https://acetforafrica.org/programs/refining-the-african-transformation-index/>

**Figure 6: Mozambique's economic transformation deteriorated in all dimensions**



Source: African Center of Economic Transformation

Beyond good macroeconomic reforms and a better business environment, the ACET’s 2014 African Transformation Report (ATR) states that economic transformation requires countries improving the five elements of the Growth with DEPTH framework.

### 2.2.1. Diversification

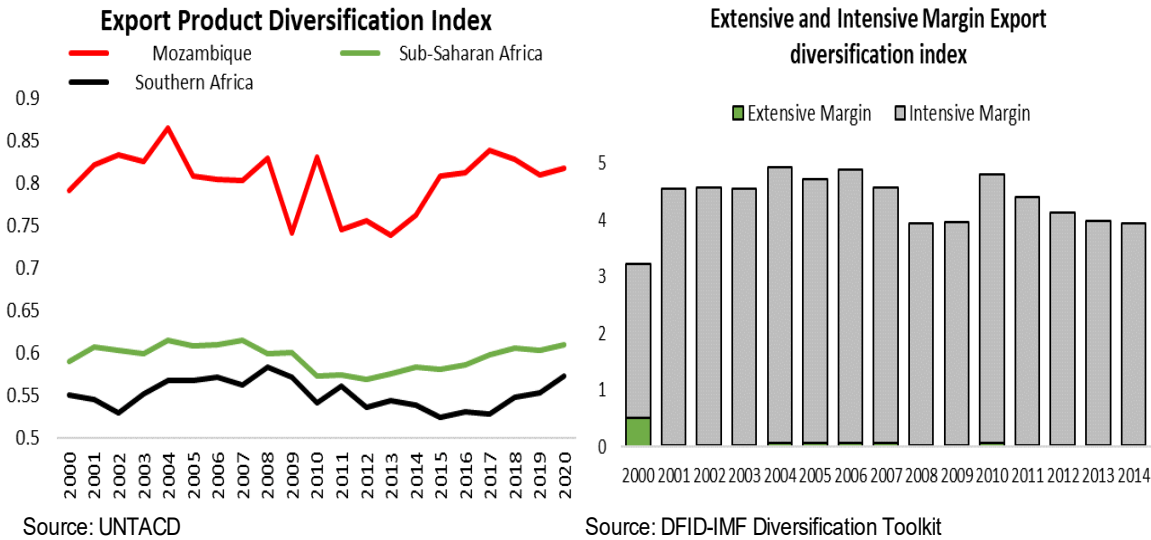
As discussed previously, Mozambique’s production and exports are less diversified and remain concentrated in a few agricultural and mining products. Figure 7 shows the export diversification index and the extensive and intensive margin index of export diversification for Mozambique and its peer countries. This shows how Mozambique’s export structure differs from the world pattern; the change (increase or decrease) in the number of export products or trading partners; and the shares of export products or trading partners. Lower (higher) values of both extensive and intensive margin (export diversification) indexes suggest higher export diversification. The index (Figure 7A) suggests that Mozambique’s export diversification improved only slightly in the last two decades, which confirms the high concentration in only a few products.

The extensive margin index trend suggests that export volumes are becoming less concentrated in fewer products hence the exports basket and the intensive margin index suggests that Mozambique has increased its export partners (Figure A2 and A3 in Annex 1). The number of exported products increased from 869 in 2000 to 1,568 in 2018 and Mozambique’s trading partners increased from 73 in 2000 to 126 in 2018<sup>5</sup>(Figure A3 in Annex 1). This suggests that Mozambique’s export growth and diversification have been sustained by expanding trading partners rather than products.

<sup>5</sup> Based on HS 6-digit level products ( <https://wits.worldbank.org/>)

Figure 34 (Annex 1) shows that the stagnation of export diversification in Mozambique is the result of the product mix which remains highly concentrated on natural resource-based products traded without any or with little value added. The same Figure 34 also shows that in the last two decades, exports were concentrated in agriculture, minerals and metals, having only shifted their respective shares from 43 percent, 19 percent, 19 percent in 2000 to 43 percent, 17 percent and 16 percent in 2019 while the product concentration shifted from shrimps (18 percent), aluminum (18 percent), electrical energy (13 percent), cashew nuts (5 percent) in 2000 to coal (22 percent), aluminum (13 percent), transport (11 percent), petroleum gas (6 percent), and electrical energy (5 percent).

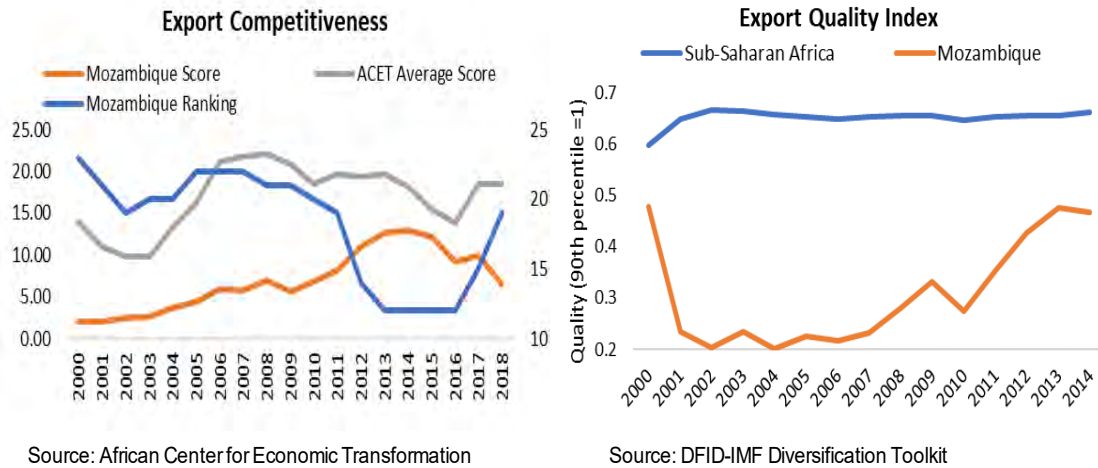
**Figure 7: Export diversification in terms of products and partners**



**2.2.2. Export competitiveness**

Mozambique’s export competitiveness and quality witnessed a significant improvement between 2000 and 2018, with ATI scores and ranking moving, respectively, from 2 and 23 (out of 33 countries) in 2000 to 12.2 and 12 in 2018 (Figure 8). However, export performance was interrupted in 2016 due to the economic crisis, caused mainly by the so-called hidden debt scandals, leading to donor suspension of budget support which aggravated existing difficulties. In 2018, Mozambique’s export competitiveness ranking and score reached, respectively, 19 and 6.5 in 2018, higher than 2000s levels.

**Figure 8: Export’s competitiveness improved, partially driven by quality improvement**



Despite competitiveness and quality improvement, Mozambique’s exports remain unsophisticated, with at least 85 percent concentrated in primary and resource-based products with lower technological intensity. In 2020, the share of exports with some technological intensity was less than 5 percent of overall exports (Figure 9A). In 2019, the top 10 export products accounted for about 77 percent of exports but all of them had product complexity indexes (PCI)<sup>6</sup> below zero. This suggests that at least 77 percent of exports are of insignificant complexity (Figure 9B) hence, despite being the major drivers of exports, they contribute negatively to Mozambique’s product complexity. Mozambique’s most complex exports, as per PCI, are the railway and tramway track material of iron or steel, wind musical instruments, aluminum powders and flakes, fluorides and complex fluorine salts which contribute jointly to less than 1 percent of overall exports. This confirms that export improvement has focused on partner diversification rather than product diversification or sophistication.

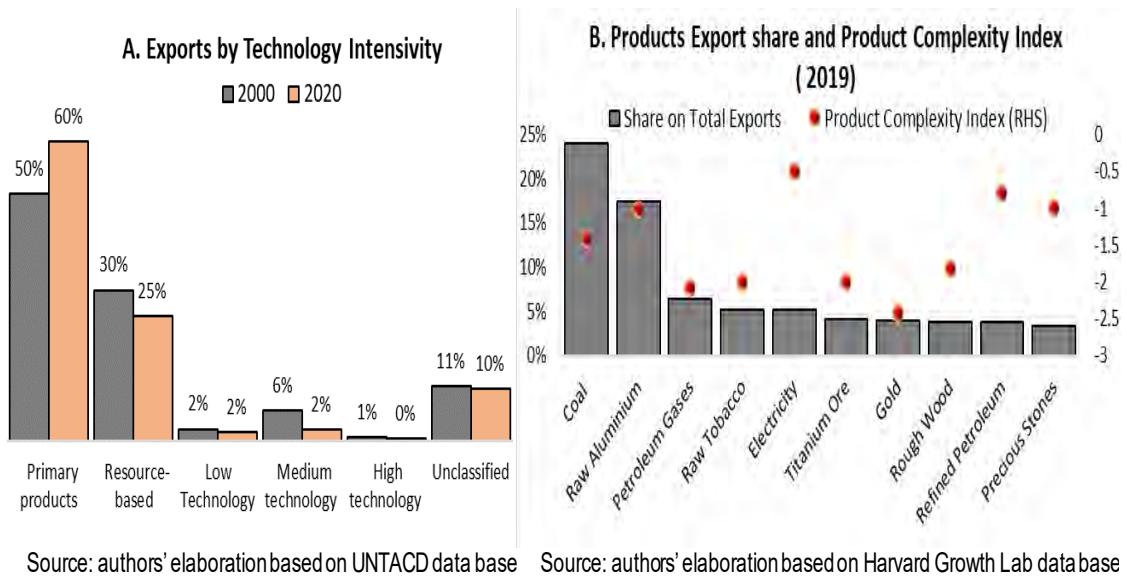
Mozambican products, although below its SADC peers, have been gradually gaining global market share, rising from 0.006 percent in 2000 to 0.02 percent in 2020 (Figure A2-A in Annex 1) driven mainly by the supply-side “push” factors<sup>7</sup> while the demand-side pull factors<sup>8</sup> contributed negatively (Figure 35-B in Annex 1).

<sup>6</sup>PCI ranks the diversity and sophistication of the know-how required to produce a product. The lower the index, the lower the product sophistication.

<sup>8</sup> Push factors describe a country’s own supply-side capacity to expand export market shares, assuming equal market and sectoral export composition across all countries. Pull factors relate to increased sectoral specialization and demand in export markets.



**Figure 9: Exports remain unsophisticated**



Decomposing the push factors in terms of prices and volume, Figure 35-B (in Annex 1) shows that change in export market share was driven mainly by price growth while quantity growth had a low contribution. Relative to the pull factor effect, the results suggest that geographical specialization had a null effect while sectoral specialization<sup>9</sup> made a negative contribution to export performance (Harvard Growth Lab, 2021), implying that Mozambique specialized in low-growth products or on products with below-average global demand. Specifically, the null geographical effects are driven by reduction of quantity and prices in the Euro zone, which were compensated for by increases in prices and quantities in sub-Saharan Africa, South Asia, and China. The negative specialization effect was driven by the decline of prices of metals and minerals where the total contribution of exports reached 69 percent in 2019, reinforcing the need for Mozambique to diversify its exports.

Industrial policy theorists suggest that countries should diversify by moving into nearby and related products or into those that require similar knowhow to build on existing capacities while balancing with the need to move into more complex products to sustain the diversification process (Harvard Growth Lab, 2021).

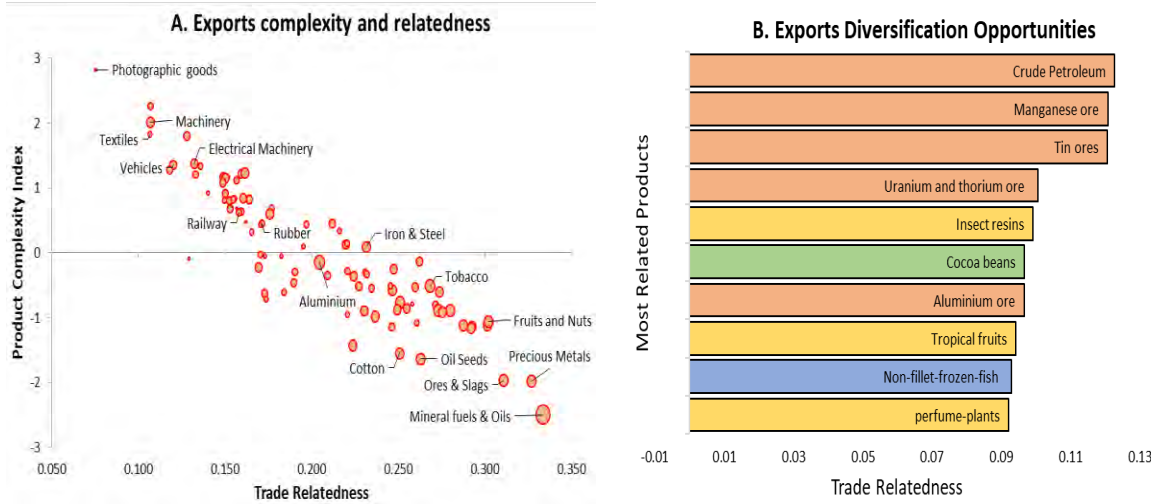
Figure 10A shows the trade-offs between the probability (closeness) that Mozambique can increase its exports in a product (relatedness) and the degree of complexity that it can add to this product. The negative correlation between complexity and relatedness suggests that the current know-how or capabilities embodied in current Mozambique's exports (mainly minerals and agriculture) are less complex requiring low know-how which cannot be employed on the

<sup>9</sup> A geographical pull factor captures the ability of a country selling in the right market (including the domestic market). A sectoral pull factor captures the ability of a country specializing in the right sectors, generally, with above-average world growth.

production and diversification into complex products. Thus, the process of diversification should be gradual, starting from the “low hanging fruit” products, that is, those related to but more complex than current products while more know-how is acquired to gradually move into more complex products.

Given current capabilities, the relatedness index (Figure 10B) suggests that the top 10 product export opportunities (HS6 products) to improve diversification in Mozambique include crude petroleum, manganese ore, tin ore, uranium and thorium ore, and insect resins. However, due to its favorable coastal location and abundant natural resources, Mozambique can diversify further into transportation services to serve landlocked countries and boost tourism while tapping opportunities in high-productivity agricultural products such as cotton, cashew nuts and bananas (Box 1).

**Figure 10: Mozambique's current exports require low capabilities, so the diversification potential is likely on less complex products**

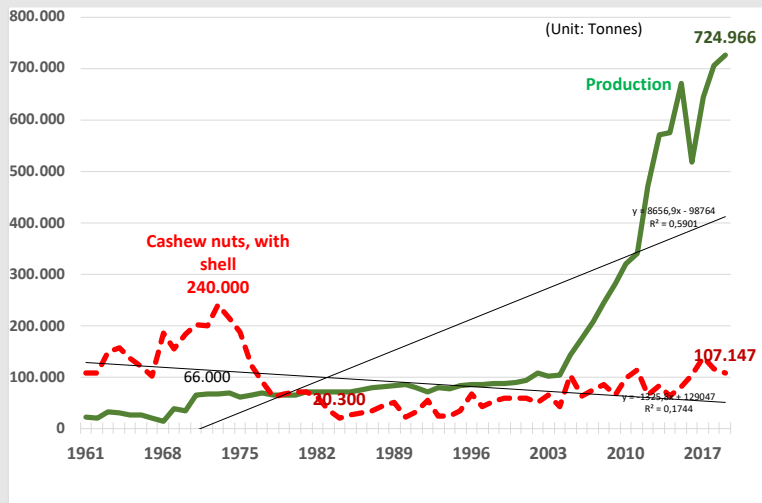


Source: authors' calculations based on trade data from OEC <https://oec.world/en>

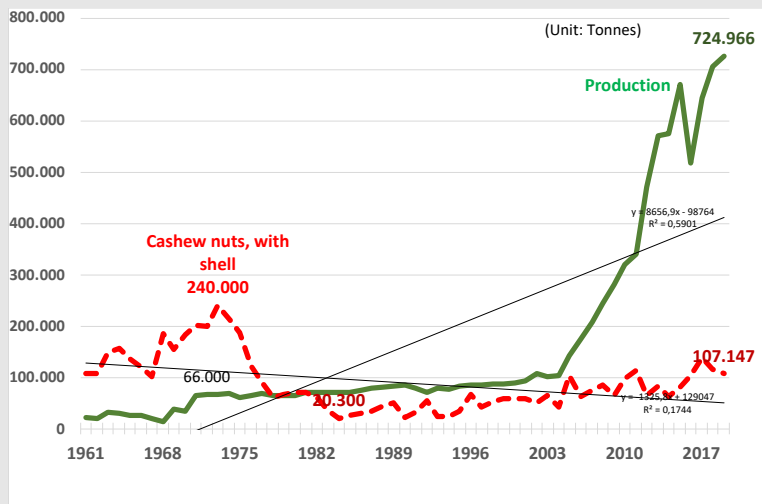
### BOX 1: Opposite trends in agricultural products: a matter of luck?

Figure 11 and Figure 12 illustrate two opposite trends in the rural economy, namely the trends of production in quantity and value of two historical agriculture products: cashew nut and banana. Such trends are illuminating for what they indicate when reforms and the partnership between producers and the state go either right or wrong.

**Figure 11. Opposite trends of bananas and cashew nuts, 1960-2019 (tonnes)**



**Figure 12. Opposite trends of bananas and cashew nuts, 1960-2019 (tonnes)**



Cashew was described by Newitt (1995) as one of the most successful stories in the emergence of a modern Mozambican market economy. Cashew was generally a peasant crop, and rapidly became a major source of peasant income in the second half of the 20<sup>th</sup> century. Until the mid-20<sup>th</sup> century, cashew developed as an export entirely outside the mercantilist planning of the Portuguese administration, but after the 1960s it turned into a leading agricultural product together with cotton and sugar.

In the 1970s, cashew nut production and export reached a peak of around 240.000 tones (1973), making Mozambique the world's leading producer and exporter. However, by time of independence, when conditions appeared to favor the peasant economy, such a development was cut short due to concentration of investment in collective farms at the expense of the peasant (Newitt, 1995).

In the first decade of independence, several reasons contributed to the sharp drop in cashew nut production and exports, including the civil war during the 1980s, changes in export policy, market liberalization, general difficulties linked to the intensification of production systems based on small cashew farms across the country, as well as the rapid expansion of production in competing countries (Große-Rüschkamp and Seelige, 2010).

In the late 1980s, the state change its approach to favor the market economy, supported by the Bretton Woods institutions to implement a Program for Economic Rehabilitation (PRE). In the 1990s the World Bank demanded liberalization of the market and export of cashew nuts and the privatization of the state enterprise Caju de Moçambique, E.E. The ensuing controversy caught the attention of international analysts, including the economist Dani Rodrik, who co-authored a paper entitled “When Economic Reform Goes Wrong: Cashew in Mozambique” (Mcmillan et al., 2002).

A different story is depicted by Figure 12, regarding the production of banana, which was expected to reach annual production of around 800,000 tons in 2021, an unprecedented milestone in its production. The boost was due to the start of operations of another production unit in Maputo Province, owned by the company Bananalândia Lda, which occupies an area of 900 hectares, employing a thousand workers. This is one of 22 banana-producing companies in Maputo Province, with 80 percent of production exported to neighbouring countries such as South Africa, Botswana and eSwatini. Current production of bananas in Maputo Province is about 249,829 tons, in an area of 5,141 hectares, of which 4,719 hectares are being exploited by private commercial companies and the rest by small households. Fruit production contributes about 3.9 percent to the value of total agricultural production in Maputo Province. This sector is one of the major sources of direct employment in the agricultural sector, with an average of 1.3 workers/ha, which means around 6,100 direct and 11,000 indirect jobs, totaling 17,100 workers. In 2021, the country is expected to export more than 160,000 tonnes worth US\$40 million. This would maintain Mozambique as one of the largest exporters and eventually, throughout the current decade, as one of the world's references in the production of bananas.

### **2.2.3. Productivity and technology**

Productivity is a paramount vector for economic transformation as it sustains long-term economic growth by enabling the economy to produce more or new goods and services from existing resources and technology, which results in a more diversified and complex economy. Mozambique's productivity as measured by the productivity index has deteriorated in the past two decades, with its ranking declining from 11<sup>th</sup> position in 2000 to the 28<sup>th</sup> in 2018 (Figure 36A in Annex 1). The deterioration of productivity was reinforced by the decline of technology upgrading to its 2000s level (Figure 36B Annex 1), hence contributing to reversals for livelihoods as lower productivity is related to lower incomes. This might explain the deterioration in the Human well-being index to levels of the 2000s (Figure 36C). Lower productivity and technology upgrading are driven mainly by the reduced degree of absorption of new technology associated with lack of specific skills, low levels of innovation, weakness in protecting intellectual property rights, and reduced private sector investment in R&D (Cruz, Guambe, Marrengula, and Ubisse, 2016).

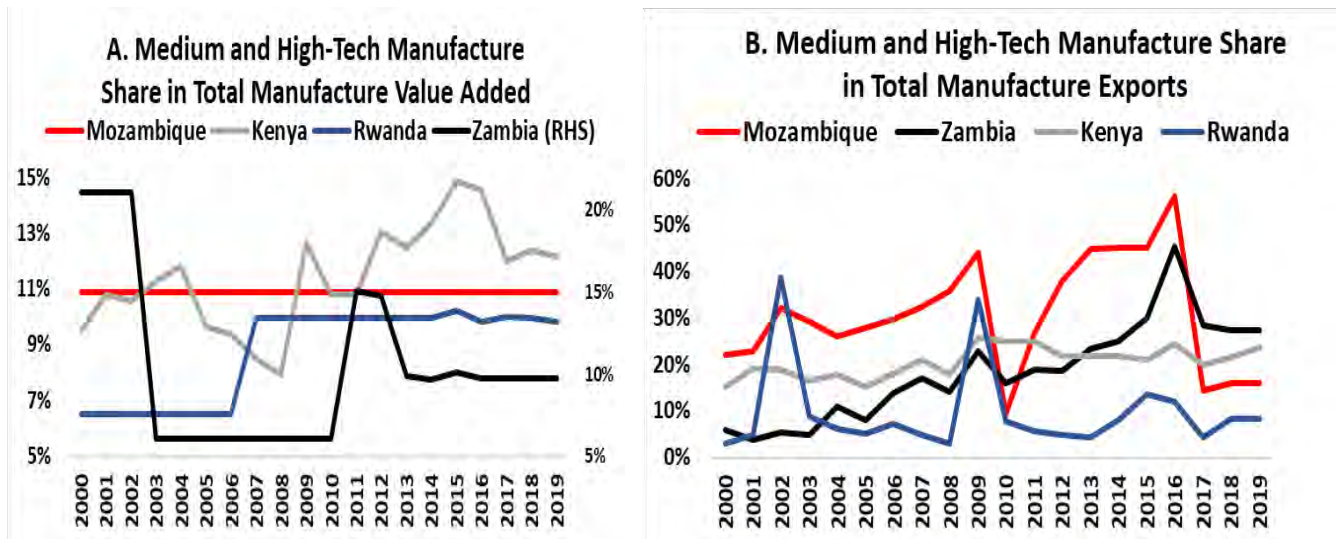
Despite the improvement in agriculture productivity driven by the within-sector improvements (Figure 37D in Annex 1), the manufacturing sector's productivity deteriorated in the period 2005-2019, driven mainly by the negative contribution of structural change. This suggests that the movement of labor or other production factors from less productive sectors, including agriculture, to manufacturing was not accompanied by investments in productive capacities including investments in capital, education, skills and/or removal of binding constraints for manufacturing development (within-sector productivity improvement).

A similar trend is being experienced by the services sector. Figure 37A (in Annex 1) shows that while within-sector productivity improvement remained relatively stable, the productivity induced by structural change moved from 3.3 percent in 2000-2005 to 3.2 percent during 2005-2010, then 2.1 percent during 2010-2015 and contribute negatively during 2015-2019. This implies that, as in manufacturing, the movement of labor from agriculture to services is not accompanied by improvement in the within-sector productive capacities, leading to decreasing or negative marginal productivity of new workers, thus contributing to the decline of average productivity in both sectors (Figures 37B and 37C in Annex 1). On the other hand, increasing productivity in the agriculture sector (Figure 37D in Annex 1) suggests that the labor leaving the agriculture had negative marginal productivity. However, the gains of productivity in agriculture are less than the proportional losses in the manufacturing and services sectors because the former's productivity is about 5-6 times lower than the latter.

Technology and innovation are among the main sources of permanent improvement in productivity as they enable long-lasting improvement in the ability of existing production factors to produce more and newer and sophisticated goods and services. Thus, the stagnation of within-sector productivity and the decline of overall productivity in services and manufacturing, as shown previously, are more likely a reflection of lower investment in new

capabilities, mainly technology. Mozambique’s technology intensity on products and exported products has stagnated in the past two decades. with the share of medium- and high-technology manufacturing value in overall manufacturing value remaining at 11 percent throughout the period (Figure 13A) and the share of medium- and high-technology manufactured exports in total manufactured exports declining from 22 percent in 2000 to 16 percent in 2019 (Figure 13B). This confirms that the decline of the share of manufacturing in overall GDP is driven by lack of investment in within-sector productive capacity.

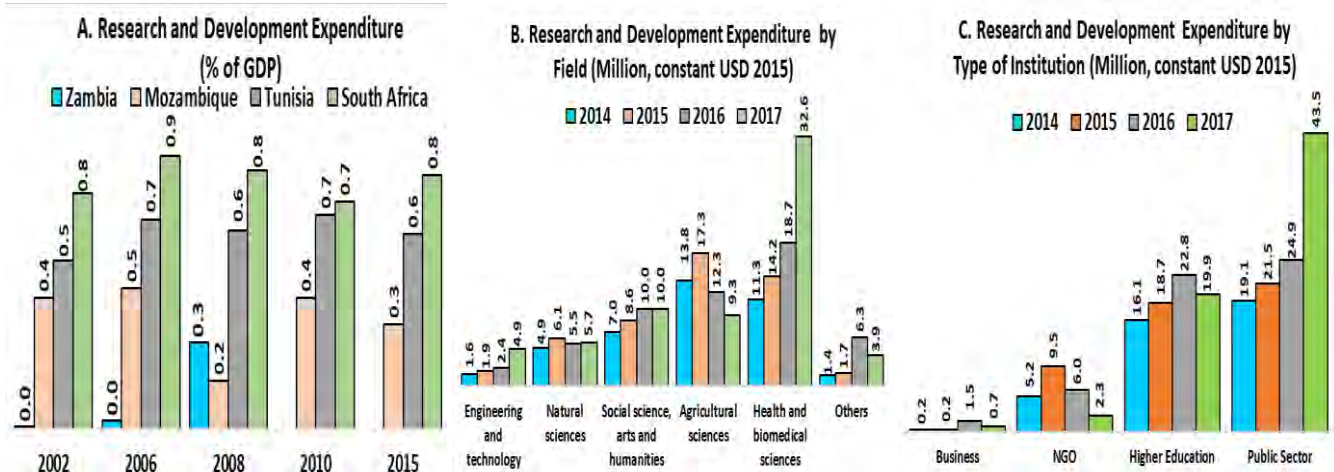
**Figure 13. Technology-based manufactures and exports stagnated**



Source: authors' elaboration based on UNIDO's Database

Lower technology intensity in production and exports is driven partly by the lower spending on research and development (R&D), which remains below peer country average and below the 1 percent of GDP target set by the 2024 African Science, Technology, and Innovation Strategy. Figure 14B indicates that most R&D funding has been allocated to health and biomedical sciences, While the engineering and technology field receives the lowest expenditure share, the proportion has been increasing gradually. The high level of health and biomedical science research is related to the fact that is mainly financed by the public sector, which is the major financing source of R&D while the low level of engineering and technology R&D is explained by the fact that most of it is financed by private business and higher education institutions which provide relatively lower financing. Lower private sector investment in R&D explains the stagnation of within-sector productivity in the manufacturing and services sectors, which is also reinforced by the fact that business sophistication is Mozambique’s weakest pillar on the global innovation index.

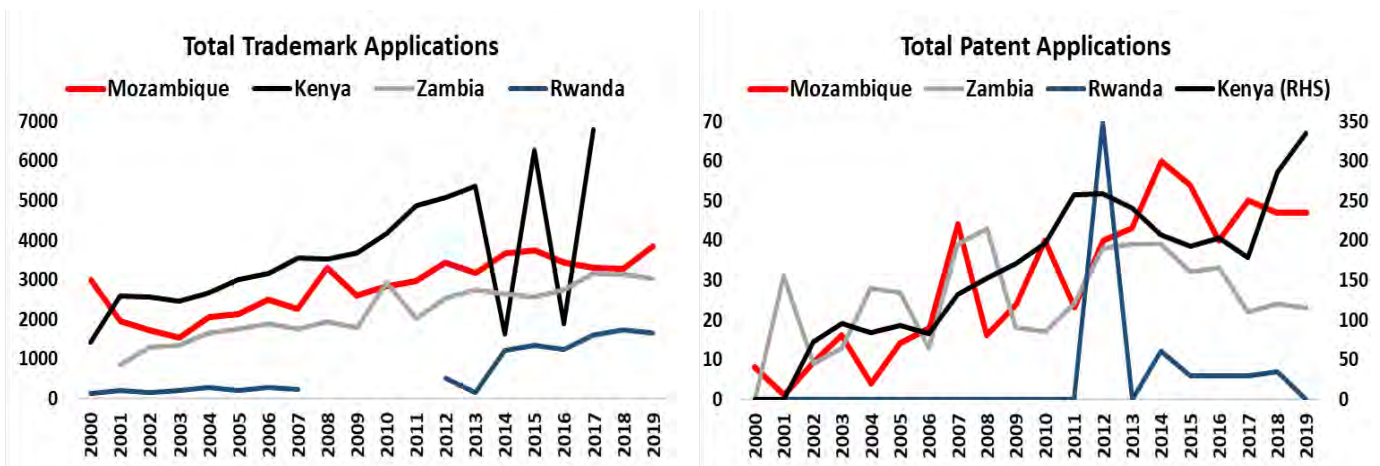
**Figure 14. Research and development in engineering and technology is the least funded and private business is the lowest financing source**



Source: authors' elaboration based on World Bank's Data base and Mozambique's Ministry of Science and Technology

Mozambique has been registering gradual improvement in technology and innovation activities, having performed above its peer low-income and sub-Saharan African countries mainly in two categories, namely Human capital and technological research, and with exception of 2013 and 2021, it has been recognized as an innovation achiever. Figure 15 shows that Mozambique's innovation activities, as measured by the total trademarks and patent applications, has been growing while remaining in the median of peer countries. However, Mozambique's relative innovation performance as measured by the Global Innovation Index ranking deteriorated from 110<sup>th</sup> in 2012 to 122<sup>nd</sup> position in 2021.

**Figure 15: Mozambique's innovation activities have been growing**



Source: authors' elaboration based on World Intellectual Property Organization (WIPO) database

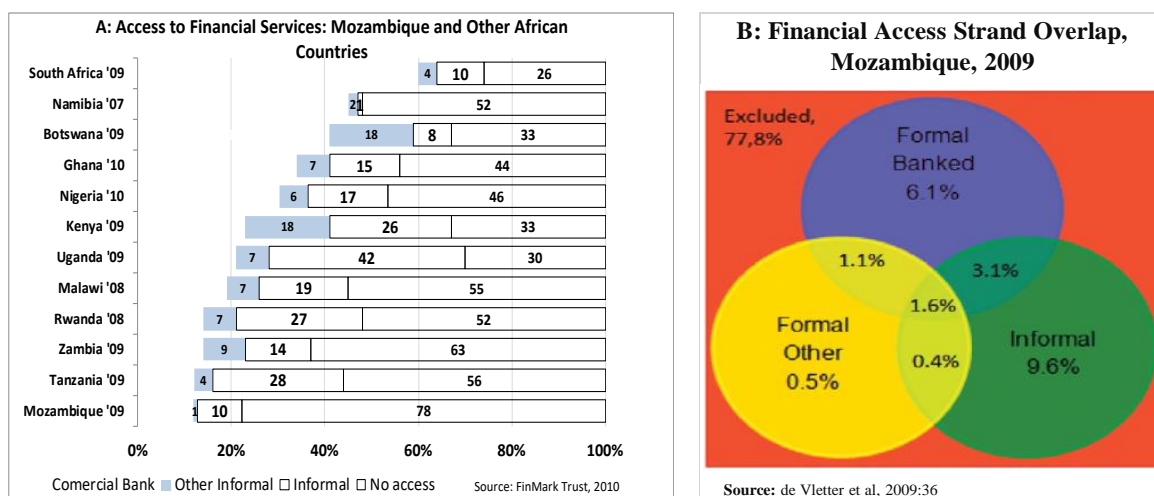
Table 2 (in Annex 1) reports firm innovation activities by sector and type of innovation. About 79 percent of firms are involved in innovation activity, mainly organizational and process innovation. Among firms in real estate, electricity and gas, and the financial sector, most engaged in innovation activity. Product innovation is undertaken mostly by electricity and gas, transportation, information and communications technology while real estate, electricity and gas, and the financial sector are the most involved in process innovation. According to the Ministry of Technology, Higher and Technical Vocational Education (MCTESTP, 2018), 45.6 percent of firms introduced an innovation to their market, while 27.7 percent of firms introduced an innovation new to themselves.

### 2.2.4. Financial transformation: access to modern financial services

Financial inclusion can be viewed through the usage of formal versus informal financial services for the adult population, between urban and rural areas, or in terms of how people earn their income. Based on the FINSCOPE Survey series, a nationally representative picture of financial inclusion in Mozambique has been provided consistently (see Figure 16 for 2009, and Figure 17 for 2014 and 2019 FMT, 2020; Vletter, Lauchande and Infante, 2009).

The state of financial inclusion in 2019 showed improvement on many fronts since 2014. Financial exclusion has been reduced to 46 percent in 2019 from 60 percent in 2014 (Figures 16B and Figure 17). This represents about 2.3 million adults that have been brought into the fold of financial inclusion, representing an increase of 14 percentage points. Financial exclusion among rural and female adults also fell by 9 percentage points and 14 percentage points respectively. The main driver of this decrease is attributed to mobile money.

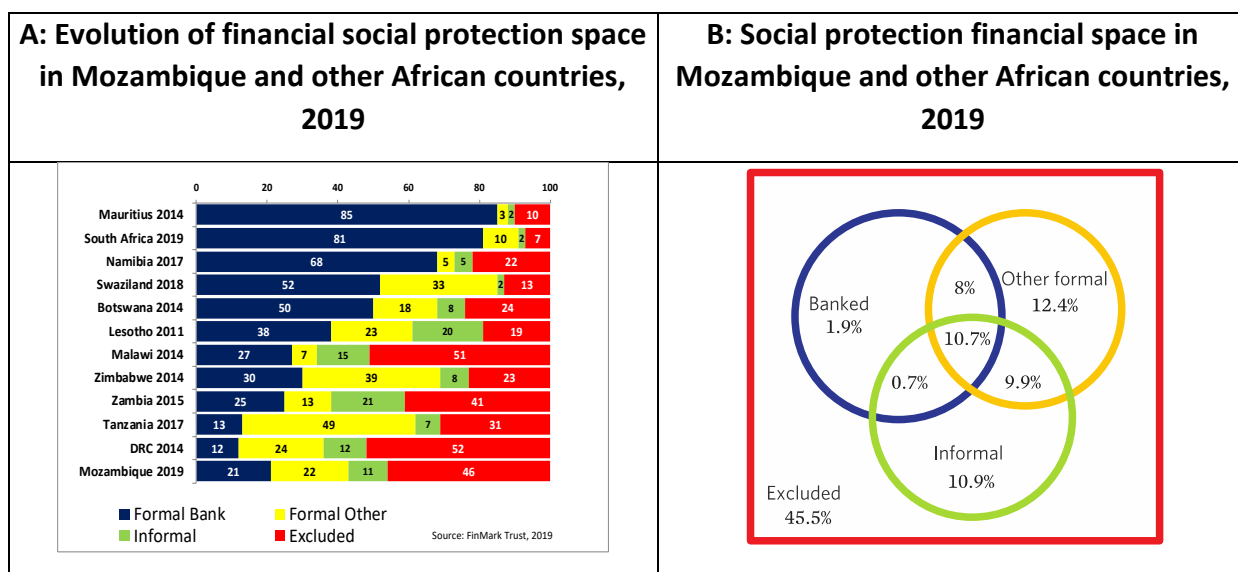
**Figure 16. Financial transformation in Mozambique and other African countries in 2009**





The financial access strand (FAS) data show a slight decline, from 16 percent in 2014 to 11 percent in 2019 of adults relying only on informal mechanisms, and who do not have, or use, any formal financial products or services to manage their finances (Figures 16A and 17A). About 22 percent of adults have, or use, other formal financial products or services but are not banked (up from 4 percent in 2014). Mobile money providers are playing a significant role in reaching the unbanked population. However, while 21 percent of adult Mozambicans are banked, they may also use other formal non-bank or informal financial products or services.

**Figure 17: Financial transformation in Mozambique and other African countries in 2019**



Differences in financial access are influenced by location and infrastructural differences between urban and rural areas. The urban-rural financial inclusion gap continues to widen in favor of the urban population as the gap increased from 26 percent in 2014 to 39 percent in 2019. About 79 percent of adults in urban areas are financially included compared with only 40 percent in rural areas. Financial inclusion among urban dwellers is largely driven by usage of bank products as well as mobile money. Among rural households, uptake of mobile money and informal products has been reducing the financial exclusion gap while bank access is increasing steadily in absolute numbers but appears stagnant in proportion to the overall rural population.

### 2.2.5. Human Well-being: Mozambique, the lowest among the SADC countries

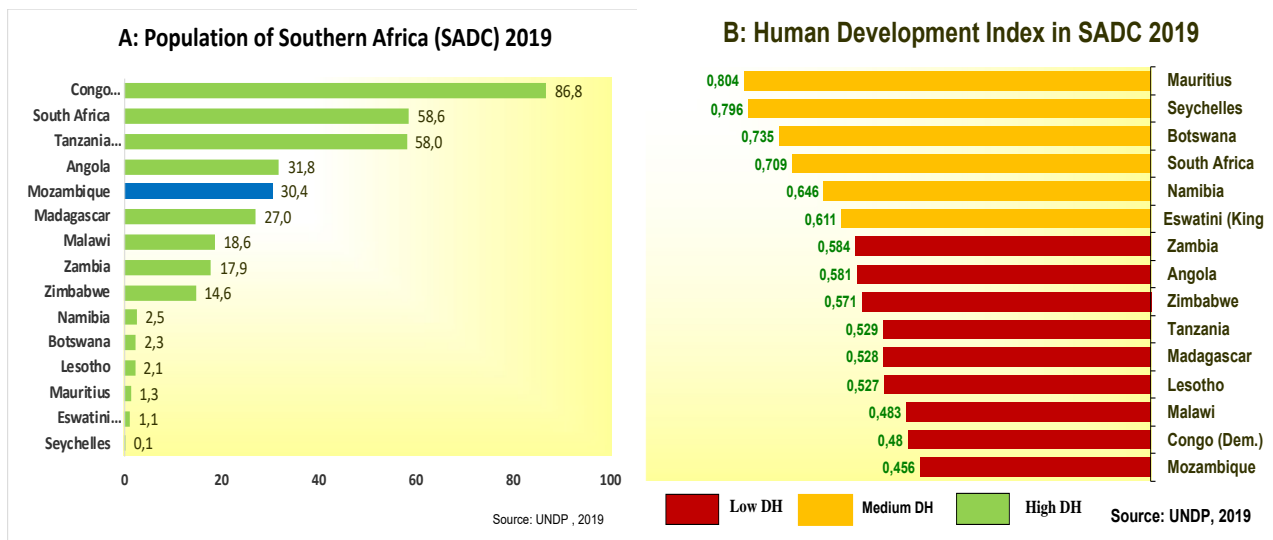
Over the past 20 years, one of the widely used measures of global human development is the Human Development Index (HDI) originated by the United Nations Development Programme. This is a method of measuring human well-being around the world. The HDI as a composite

index, comprising the aggregate effect of proxies for three key dimensions of human development: life expectancy at birth, education (mean years of schooling completed and expected years of schooling upon entering the education system), and per capita income as proxy of standard of living.

Despite the significant political, social, and economic transformations that Mozambique has undergone since independence in 1975, both the structure and the composition of the population has been resiliently unaffected or somewhat indifferent to economic transformation. Figures 18 and 19 show Mozambique’s Human Development Index (HDI) ranking compared to those of other SADC countries in 2019. While Mozambique is one of the four most populated SADC countries (Figures 18B and 19 ), its HDI has been recurrently ranked last among the 14 SADC countries (UNDP, 2021). The pattern of progress improvement of Mozambique’s human development over the past three decades has not been strong enough to place the country in a better position than the other SADC 14 countries.

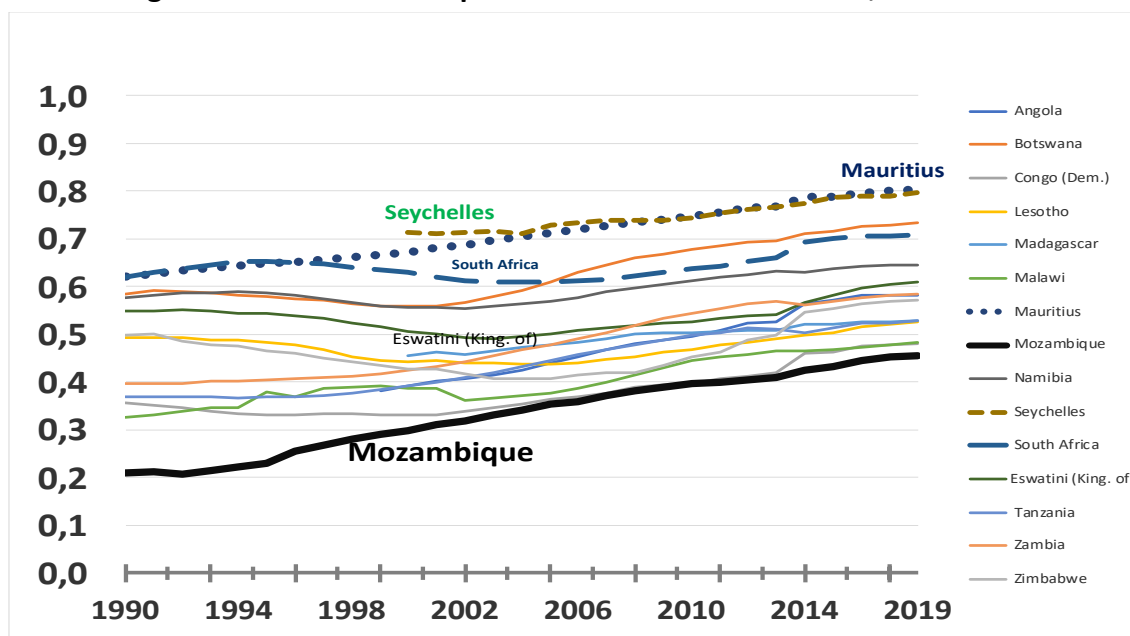
Estimates of Mozambican population growth provided by the UN Population Division (UN, 2019) predict that it will surpass 40 million people at the end of the current decade, and reach 65 million in the middle of the present century. The most recent INE (2020a) projections of Mozambican population show some numerical differences, due to methodological differences, with a forecast about 39 million for 2030 and 60 million for 2050.<sup>10</sup>

**Figure 18: Population and Human Development in Southern Africa (SADC), 2019**



<sup>10</sup> INE’s provides one single variant, instead of the nine variants made available by the UM. INE’s population projections are numerically close to the UN instant substitution variant and more conservative than the "median" variant used in Figure 24.

**Figure 19: Human Development Index in SADC countries, 1990-2019**



Mozambique’s population growth has accelerated in terms of rates of reproduction. The latest duplications took about 30 to 25 years, corresponding to an annual growth rate very close to 3 (Francisco, 2021b; Maddison, 2006). The Mozambican birth rate remains slightly above 40 per thousand, whereas worldwide it had fallen to less than 20 births per 1,000 inhabitants. In other words, over the past seven decades, the demographic transition gap between Mozambique and the world rose from 28 percent to 52 percent. The consequences of the demographic dynamics and patterns are substantial.

One of the potential positive implications of demographic transition is the so-called “demographic dividend”, which refers to the boost that economic growth can receive from changes in the age structure of a country’s population. Such changes accompany a country’s demographic transition, where mortality rates fall, followed by natality rates, but in the case Mozambique, none of them has so far reduced significantly enough to foster such a benefit (Arnaldo and Hansine, 2015; Banco Mundial, 2017; Canning, Raja and Yazbeck, n.d.; Eastwood and Lipton, 2011; Groth and May (eds.), 2017).

Another important and closely related issue is the transition associated with a pattern known as the “quantity-quality trade-off” (Becker, Cinnirella and Woessmann, 2010; Fernihough, 2011; Varvarigos, 2013). This is the trade-off of investing in the quantity of children (the total fertility rate remains around five children per woman) versus investing in the quality of children.

The rate of growth of cohorts of children and youth and public sector responses in terms of meeting basic needs in education, health and employment are notable in the context of Asian countries such as Malaysia and South Korea. Some lower middle-income countries in Africa

today had demographic and economic indicators back in the 1950s similar to such Asian countries and to the indicators for Mozambique today (Table 3, Annex 1). The great difference in development outcomes in Asia and Africa show the remarkable challenges Mozambique faces in order to achieve similar outcomes to that of Malaysia for example (Francisco, Nhamtumbo and Norte, 2018).

In a government study on the need for Mozambique to take advantage of the demographic dividend, the MEF recognized that it would be possible to make the most of the demographic dividend only if appropriate policies are implemented that make the most efficient and effective use of the progressive characteristics of the population and the economy (Zulu et al., 2015); Francisco et al., 2018).

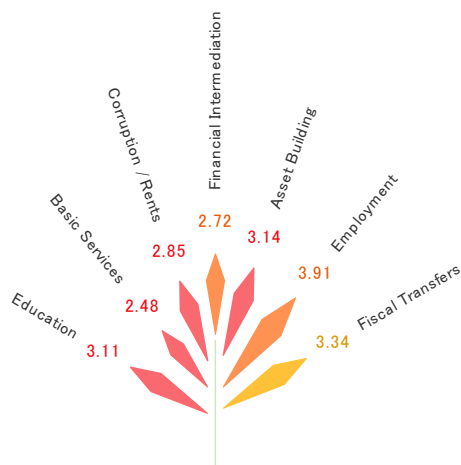
The likelihood of an economic dividend fostered by demographic transition in sub-Saharan African countries like Mozambique is expected to be well below that of Asia, arising more from falling dependency ratios than lower natural increase and could be pushed by accelerating the fertility decline or by employing a larger workforce productively. Besides any dividend from transition, low savings rates in much of Africa (unlike in Asia) mean that, given likely natural increase, current consumption per person is unsustainable because it depletes capital per person (Eastwood and Lipton, 2011). This issue provides a good bridge to two major vulnerability factors that simultaneously can hold the key to building sustainable resilience in the future: agriculture and domestic savings.

## BOX 2: How inclusive has growth been in Mozambique?

As Lledós (2014) shows in an IMF publication entitled *Mozambique Rising*, despite high levels of economic growth in Mozambique, growth has not been as pro-poor as in other successful countries and has become less pro-poor over time. The growth incidence curve for Mozambique indicates that growth was not strikingly pro-poor over most of the first decade of the current century and it has remained so in the past decade. Mozambique's growth's pro-poor (Figure 1A and 1B). Growth has not been accompanied by economic diversification nor even translated into substantial structural transformation (Figure 2).

The Inclusive Development Index (IDI) in the 2017 World Economic Forum report was calculated by giving equal weight to three pillars – growth, inclusion, and inter-generational equity – as well as 12 indicators. Of all 12 key performance indicators (KPI), median household income correlates most closely with overall performance on the seven PII pillars (0.89). For Mozambique, the trend of the overall IDI was -9,3 percent and the four relevant indicators of inclusion show mixed results: Net Income Gini Trend 1.9; Poverty Trend -4.5 percent; Wealth Gini Trend 13.4; and Median Income Trend \$0.3.

### Mozambique Low Income



### Inclusive Growth and Development Index (IDI)

	Value	Rank	Trend
<b>Overall 1-7 (best)</b>	2.79	78 / 79	-9.3 % ▼

### National Key Performance Indicators

	Value	Rank	Trend
<b>Growth and Development 1-7 (best)</b>	2.53	68 / 79	+ 5.4 % ▲
<b>GDP per capita \$</b>	510	75 / 79	+ 4.1 % ▲
<b>Labor productivity \$</b>	3,003	75 / 79	+ 5 % ▲
<b>Healthy life expectancy years</b>	49.6	75 / 79	+ 2.9 ▲
<b>Employment %</b>	65.1	25 / 79	-0.4 ▼
<b>Inclusion 1-7 (best)</b>	2.06	75 / 79	-19.6 % ▼
<b>Net income inequality Gini</b>	42.7	57 / 79	+ 1.9 ▲
<b>Poverty rate %</b>	87.5	72 / 79	-4.5 ▼
<b>Wealth inequality Gini</b>	83.5	65 / 79	+ 13.4 ▲
<b>Median income \$/day (PPP) per capita</b>	1.4	70 / 79	+ 0.3 ▲
<b>Intergenerational Equity 1-7 (best)</b>	3.78	73 / 79	-11.4 % ▼
<b>Adjusted net savings* % GNI</b>	8.7	45 / 79	+ 4.6 ▲
<b>Carbon intensity of GDP KtCO2/\$bn GDP</b>	38.8	12 / 79	+ 3.4 ▲
<b>Public debt % GDP</b>	86	74 / 79	+ 48 ▲
<b>Dependency ratio % working age population</b>	94.8	75 / 79	-2 ▼

Sources: (WEF, 2017)

### 3. Building a resilient economy

Economic resilience is understood as the ability of an economy to withstand shocks, as well as to recover from them quickly and strongly. This is closely related to issues of sustainability of both growth and transformation, as reversals have been observed on both aspects of economic development. Among African countries, progress towards resilience has been found most challenging.

In a world where shocks and crises are becoming more frequent, as Seth and Ragab assert (2021), the imperative for countries to build resilience and protect themselves from development reversals has become all the more urgent. Economic vulnerability, or economic fragility, is usually approached from both the macroeconomic and microeconomic perspectives. While the microeconomic perspective focuses on the impact of shocks on the well-being of individual households, the macroeconomic perspective focuses on the impact of these shocks on economic growth.

Similarly, economic fragility is understood as an imbalance between the strains and challenges (internal and external) faced by a state and society and their ability to manage them.<sup>11</sup> Vulnerability and fragility have multiple manifestations that span a wide range of situations, from mild or transitional instability to prolonged and violent conflict. Therefore resilience is a measure of the ability to manage such strains, or even gain from them through effective institutions, processes and capacities that build legitimacy and societal cohesion (AFDB, 2014; Briguglio, 2014; Seth and Ragab, 2021). Similarly, antifragility, a relatively new concept, means going beyond robustness and resilience, in the sense of not merely withstanding a shock but actually improving because of it (Taleb, 2012).

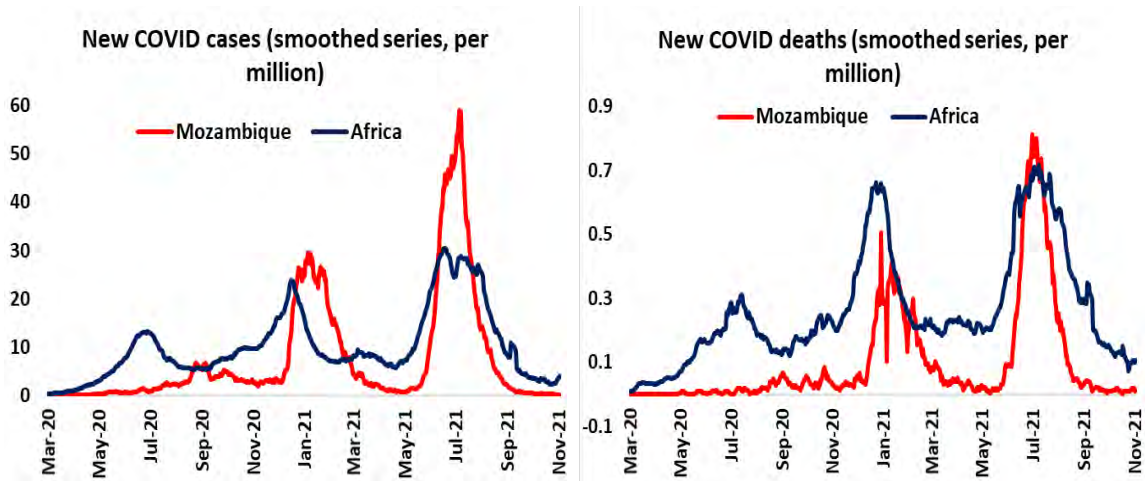
#### 3.1. COVID-19 development, impact and response

The coronavirus pandemic (COVID–19) struck while Mozambique was recovering from the 2016 macroeconomic “hidden debt” crisis and lower commodity prices and from the 2019 Idai and Kenneth cyclones which led to economic deceleration. Mozambique reported its first COVID case on 22 March 2020 and reached its first wave peak in September 2020, with the second peak much higher in February 2021, and third and highest peak in July 2021. As a result of the containment measures adopted by the government, the positivity rate declined significantly in September 2021, remaining below 2 percent since then (Figure 20).

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<sup>11</sup> This approach to fragility follows the African Development Bank (AfDB) approach, which considers fragility as a risk inherent in the development process itself that comes about when pressures become too great for national institutions and political processes to manage.

**Figure 20: COVID-19 positivity and fatality rates have declined considerably**

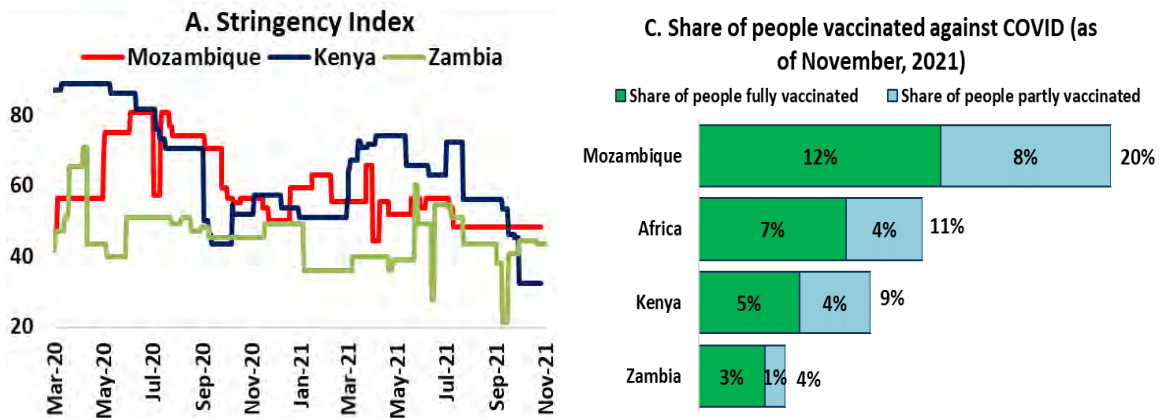


Source: Our world in data ([www.ourworldindata.org/coronavirus](http://www.ourworldindata.org/coronavirus))

To contain the spread of the COVID-19, the government took several containment measures including the shutdown of schools, universities, cultural centers, religious services, and beaches, limitations on gatherings and mobility, and a curfew. It also introduced a mass vaccination program. The stringency index (Figure 21A) suggests that the containment measures were more restrictive in the first wave and low in the third although the last was more deadly against the backdrop of the need for balanced relaxation of pandemic containment measures along with the need to revive economic activity amid the gradual vaccination process. Mozambique plans to vaccinate 54.6 percent of population (16.8 million people) by 2021 of which 20 percent of the population through the COVAX mechanism and 35 percent through direct acquisition. However, as of 30 November 2021, only 12 percent of the population (22 percent of the target population) had been vaccinated, suggesting that it was less likely that Mozambique could reach the target proportion in 2021.

**Figure 21: Government measures and mass vaccination campaign**

The pandemic has significantly impacted the Mozambican economy through the reduction of

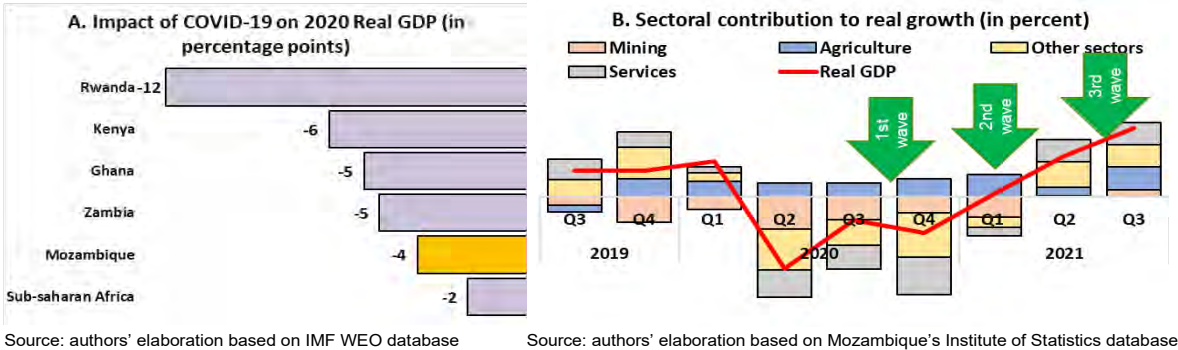


Source: Our World in Data ([www.ourworldindata.org](http://www.ourworldindata.org))

economic activity due to lockdowns and restrictions of mobility, reduction of domestic and external demand for goods and services mainly related to tourism, hotels, and restaurants. This is amid heightened risks and uncertainties and disruptions of global supply chains which impacted exports and imports. Due to the pandemic, Mozambique witnessed its first economic contraction in nearly three decades with GDP contracting by 1.3 percent, below the 2.2 percent pre-pandemic forecast. This indicates that the pandemic contributed to the contraction by 4 percentage points, in line with other research estimations (Betho et al., 2021; CTA, 2020).

The most impacted sectors were hotels and restaurants (16 percentage points), trade (14 percentage points), transportation (10 percentage points) and mining (6 percentage points) (Betho et al., 2021). The agriculture sector was the least affected, having grown even at the height of the pandemic due to its weak linkages with the market and because most of it is produced in rural areas, which were least affected by the pandemic. The economy is now recovering, with GDP growing in the first three quarters of 2021 driven by the relaxation of COVID-19 measures.

**Figure 22: COVID-19 contributed to the decline of Mozambique's GDP by 4 percentage points**



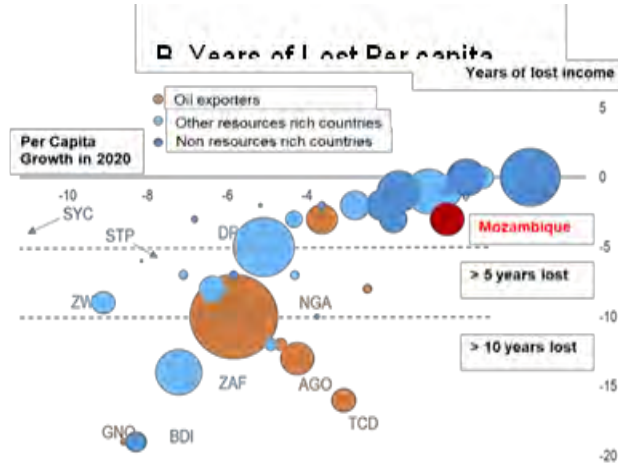
Before the COVID-19, Mozambique needed to grow by an average 17 percent per year to end extreme poverty by 2030 (UNCTAD, 2021), below the IMF's pre-COVID and post-COVID annual average forecast of 8.1 percent and 8.4 percent, respectively. COVID-19 reduced the medium-term (2021-2030) growth forecast by about 0.3 percentage points and according to the IMF (2020b), this will set back about two or three years of cumulative growth (Figure 23).



**Figure 23: COVID-19 will set back two or three years of cumulative growth**



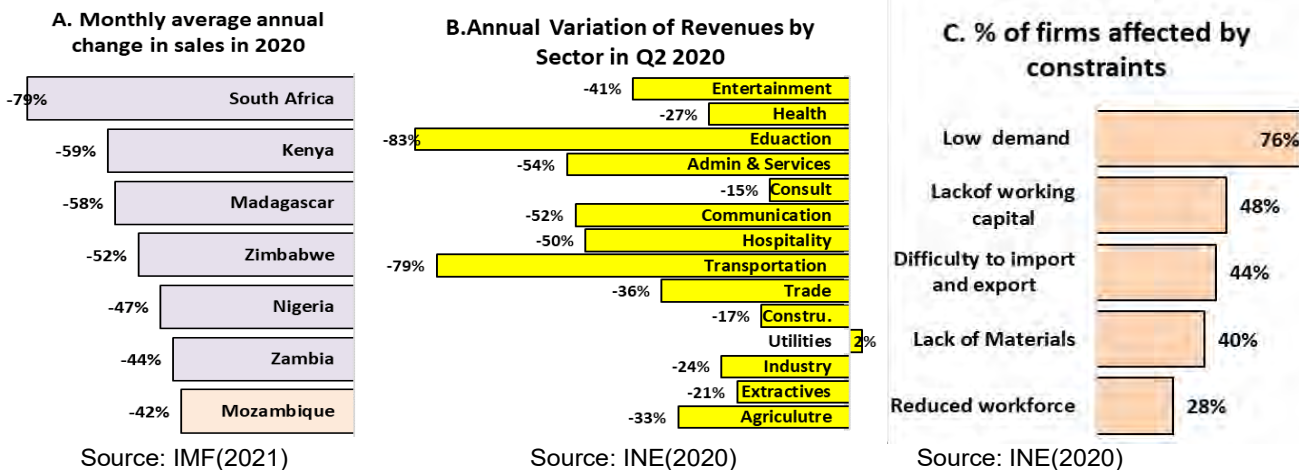
Source: authors' elaboration based on IMF-WEO database



Source: IMF(2020)

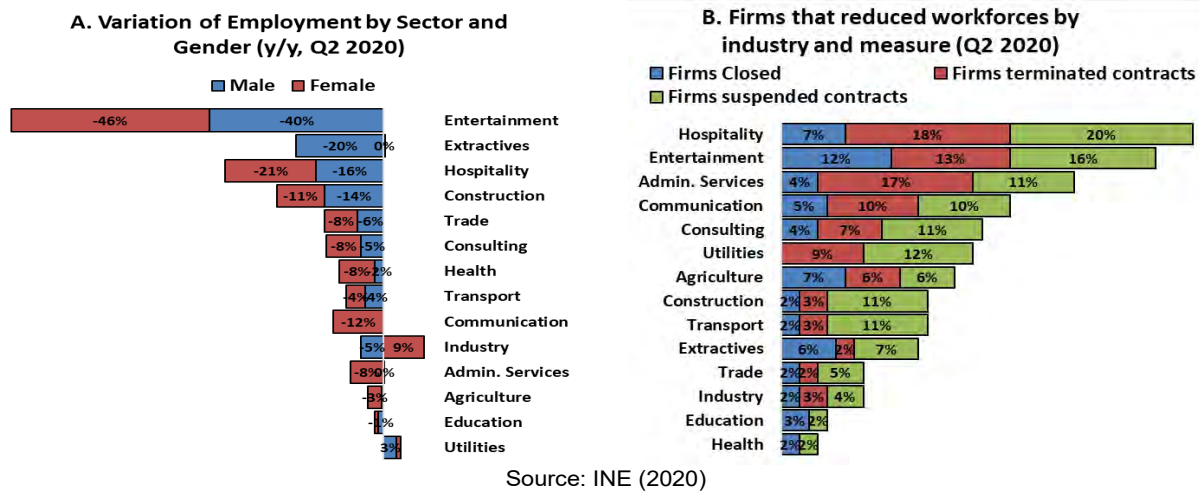
The reduction in domestic and external demand as well as the containment measures have impacted the private sector through lower revenues, leading to layoffs and worsening the already precarious livelihoods of many Mozambicans. According to INE (2020b), 90.4 percent of companies were affected by the pandemic, which led to a reduction of business volume for small (49 percent), medium (22 percent), and large (22 percent) companies in the first half of 2020. Education and transportation had the highest losses, with revenues declining by 83 percent and 79 percent, respectively (Figure 24B).

**Figure 24: The COVID-19 pandemic affected about 90.4% of companies**



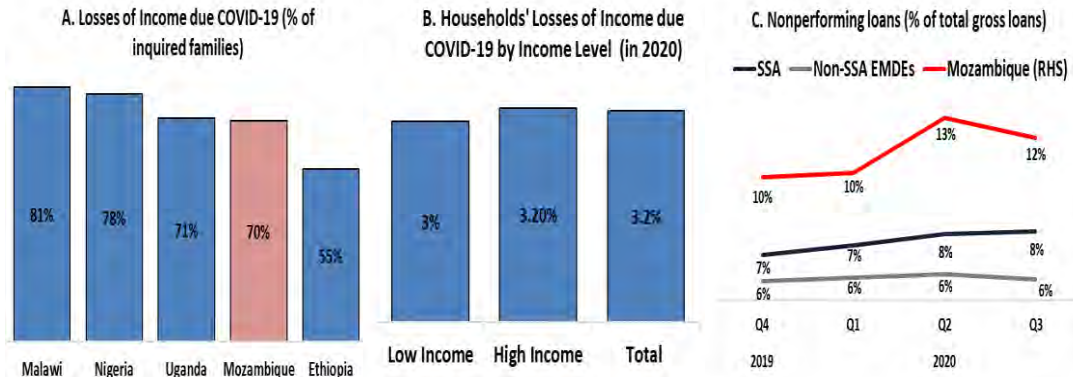
The decline in revenues was mainly due to the lack of demand (Figure 27C), which led firms to shut down and terminate working contracts with employees. According to INE (2020b), employment declined by 5.9 percent in Q2 2020 due to COVID-19, with more women losing jobs (-7 percent) than men (-5.5 percent) (Figure 25A). The major layoffs occurred in the entertainment sector (43 percent), followed by mining (18.2 percent), hospitality (17.6 percent) and construction (13.4 percent) while the education and agriculture sectors had the lowest layoff rate and the utilities sector increased employment (Figure 25B).

**Figure 25: Hospitality and entertainment firms had the major layoffs**



According to the IMF (2021), about 70 percent of Mozambican households reported that they had lost income during the first wave of the pandemic due to the stringent containment measures. As a result, economic activity and firm-level business volume declined, leading to job cuts. With low business volume and income, firms and households faced difficulties in servicing debts. As a result, during the first wave of the pandemic, non-performing loans as a proportion of total gross loans increased from 10 percent (pre-pandemic levels) to 13 percent. However, supported by the central bank's measures including the restructuring of loans, non-performing loans returned to pre-pandemic levels reaching 10 percent in October 2021, which is still high compared to its peer countries (Figure 26).

**Figure 26: The decline of firm business volume and household loss of income contributed to increase of non-performing loans**



Source: IMF (2021)

### 3.2. Addressing vulnerability through resilience: post-COVID-19 transformative potential

To build a resilient economy, it is crucial, first, to realize whether what is lacking is a better understanding on the part of leaders and change agents of how systemic transformations can be implemented, or there are other constraints to actions potentially able to make modernization and progress-oriented transformations unfeasible and unsustainable. There are political and administrative actions that, instead of strengthening the resilience of entrepreneurial economic agents, can intentionally or unintentionally reinforce the resilience of economic actors dependent on a passive and precarious resilience to the adversities of nature, as happens with the family subsistence economy. In this context, the role of the government and public policy is crucial to establish an adequate institutional environment for transformation.

The COVID-19 pandemic is expected to reverse the gains made towards achieving the Sustainable Development Goals. The IMF (2020b) estimates that COVID-19 alone will set back about two or three years of cumulative growth and gains in reducing poverty. The poverty rate fell from 60.3 percent in 2002 to 48.4 percent in 2015, but according to Castigo (2021) estimates the pandemic increased it by 4.4 percent in 2020. Adding other shocks and policy responses, poverty is estimated to have risen to 48.82 percent. Furthermore, the pandemic is likely to have reinforced the increasing income inequality – the Gini coefficient rose from 42 percent in 2002 to 56 percent in 2015. According to Castigo (2021), COVID-19 is estimated to have increased inequality by 0.8 percent, which, adding to other shocks and policy responses, increased inequality to 53.96 percent in 2020.

The pandemic is expected to reverse the gains in human capital development and livelihoods that were already under stress due to conflicts and the recurrent climate shocks that eroded the already fragile health and education infrastructure. Both health and education infrastructure are still recovering from destruction caused by cyclones and conflicts. The health indicators achieved encouraging gains in the last decade, with the maternal mortality ratio declining by 46.6 percent between 2000 and 2015 and the child mortality rate by 57.6 percent between 2000 and 2017.

Since 2000, there has been enormous progress in education, with the expected length of school attendance of a Mozambican pupil tripling from 3.7 to 9.7 years in the last 20 years. The number of children having started school doubled, with about 90 percent of pupils starting comprehensive school in 2017. The COVID-19 containment measures, including the suspension of face-to-face classes is expected to reverse the progress achieved by decreasing the probability of children returning to school after the pandemic and increasing the risk of childhood labor and early child marriage. In the long run, further distortions in the labor market are likely to threaten the quality of women's employment. The online learning system will lead to unequal access to education, with children in less endowed households expected to fall substantially behind in educational access and quality, which will in turn affect their labor market prospects. This will set back the efforts made to reduce the gender gap and inequality in education.

To minimize the impact of the pandemic on the economy and to households and the private sector, the government implemented a combination of fiscal and monetary policies, some of which are discussed below.

#### **A. Measures to support the private sector**

##### *Fiscal measures:*

- Waiver of corporate income tax “per account” due in three instalments during 2020 for small firms (turnover lower than MZN 2.5 million);
- VAT credit compensation with other taxes owed until 31 December 2020;
- Customs facilitation for COVID-19 treatment and prevention products;
- 10 percent reduction of electricity tariffs;
- Subsidized credit line to MSMEs amounting to US\$23.2 million;
- Forgiveness of social contribution fines and reduction of interest rates for payments due.

##### *Monetary and financial measures:*

- Reduction of reserve requirements coefficient by 150 basis points for both foreign currency and domestic currency deposits (to 11.5 percent and 34.5 percent respectively);
- Introduction of a US\$500 million credit line for banks;

- Waiver for constitution of additional provisions for restructured credit and specific provision on foreign currency loans.

## **B. Measures to support households**

### *Fiscal measures:*

- Expansion of beneficiaries of social protection programs from 592,179 to 1,695,004 households and cash transfers to the poorest households (US\$44.3 million);
- Mobilization of funds to finance COVID-19-related expenditures including health (prevention and treatment) (US\$112.2 million);
- Temporary and well-targeted tax exemptions to support families and the health sector (VAT and import tariff exemptions on medicines, and medical equipment);
- Exemption/reduction of utilities service fees.

### *Monetary and financial measures:*

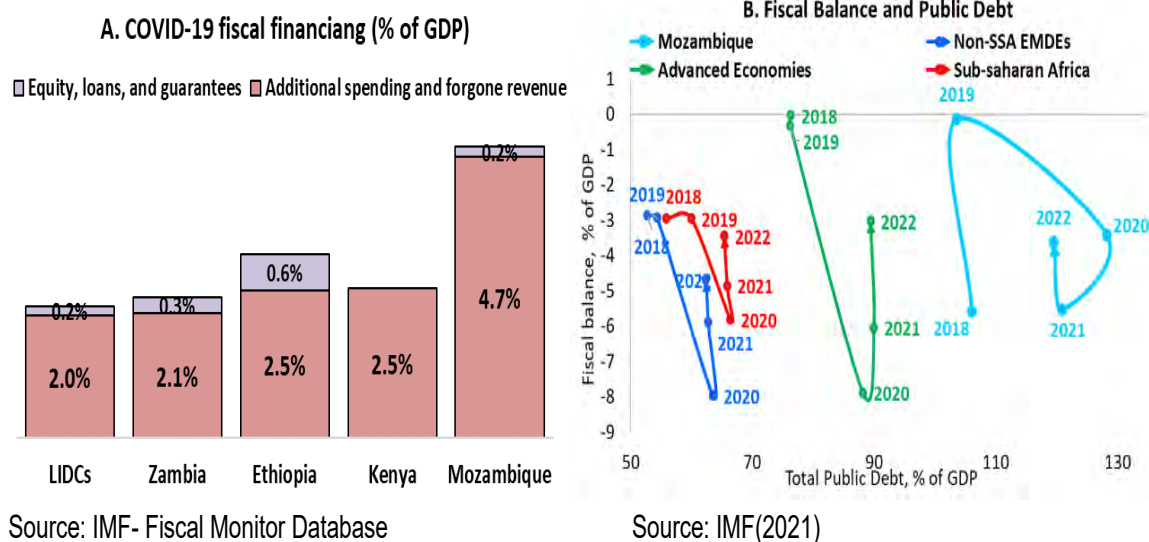
- Suspension of mobile money commission fees and increase in mobile money transaction limits for three months.

The fiscal and financial stimulus related to the pandemic have added considerable pressures to the already vulnerable and constrained fiscal framework, with public debt in distress. Fiscal responses to the pandemic included the direct financing or forgone revenues that cost Mozambique 4.9 percent of GDP up to June 2021, a high level compared to its peer countries (Figure 27A) leading to an increase of fiscal deficit from 0.15 percent of GDP in 2019 to 3.4 percent in 2020 and the debt from 104 percent of GDP in 2019 to 128 percent in 2020 (Figure 27B).

It is worth noting that Mozambique's public debt has raised serious concern among international monitoring agencies and investors, due to its past trajectory of distress and unsustainability. Recently, the Administrative Tribunal (2021) addressed this issue on its yearly Report on the General State Accounts, and concluded that the external debt remains unsustainable, and the country continues to have a high risk of indebtedness while being restricted from contracting new credits. (TA, 2021).

Meanwhile, the IMF (2020a) assesses Mozambique's debt as being in distress but possible sustainable in future because future borrowing and government credit guarantees reflect state participation in the sizable liquified natural gas (LNG) development. Albeit with some delay, the IMF is confident that the LNG megaprojects will proceed. The ratio of external public debt service to fiscal revenues would drop below the prudent threshold temporarily in 2020 but would again breach the threshold until 2030.

**Figure 27: COVID-19 increased fiscal pressures**



Mozambique faced multiple challenges in responding to the COVID-19 pandemic due to the already stretched and weak health systems, compounded by the recent destruction of health centers by cyclones and insurgency. The country’s ability to respond to the pandemic was additionally strained in terms of human and financial resources due to the ongoing deployment to respond to droughts, conflicts, cyclones, and floods. In addition, most of the population do not have access to ICT, which would allow schools to continue operating during the lockdowns, spread awareness and facilitate cash transfers for the most vulnerable population. On the other hand, the predominance of informal activity and “hand-to-mouth” consumers required the government to balance carefully the need for containment measures and their impact on economic activity and social well-being.

Almost all the above measures have expired, and the stringency has been eased to balance the need to contain the spread of the pandemic and its impact on the economy. All the adopted measures were transitory and intended to alleviate immediate pressures generated by COVID-19, so they did not address the structural challenges of economic transformation and resilience. Post-pandemic Mozambique needs to implement structural policies to address the sources of vulnerability and build a more resilient economy through, among other components, the following policies:

- Accelerate structural reforms to diversify the productive base.** Mozambique’s concentration on mineral commodities production and export exposes it to global business cycles, that is, to the fluctuation of commodity prices and global demand and this vulnerability will increase as Mozambique moves into production of LNG starting in 2022. This will require efforts to increase productivity in non-extractive sectors and

address business environment constraints. These efforts include investing in human capital to build a workforce with the skills for engineering, manufacturing and construction, and investing in infrastructure to increase the productivity of the private sector. Given Mozambique's economic structure, which is dominated by agriculture both in terms of production and employment, and the relatively low digital penetration, sectors such as agro-processing, digital technologies and services will also be crucial in boosting productivity and promoting transformation but due to their peculiarities, they require government support to make them competitive.

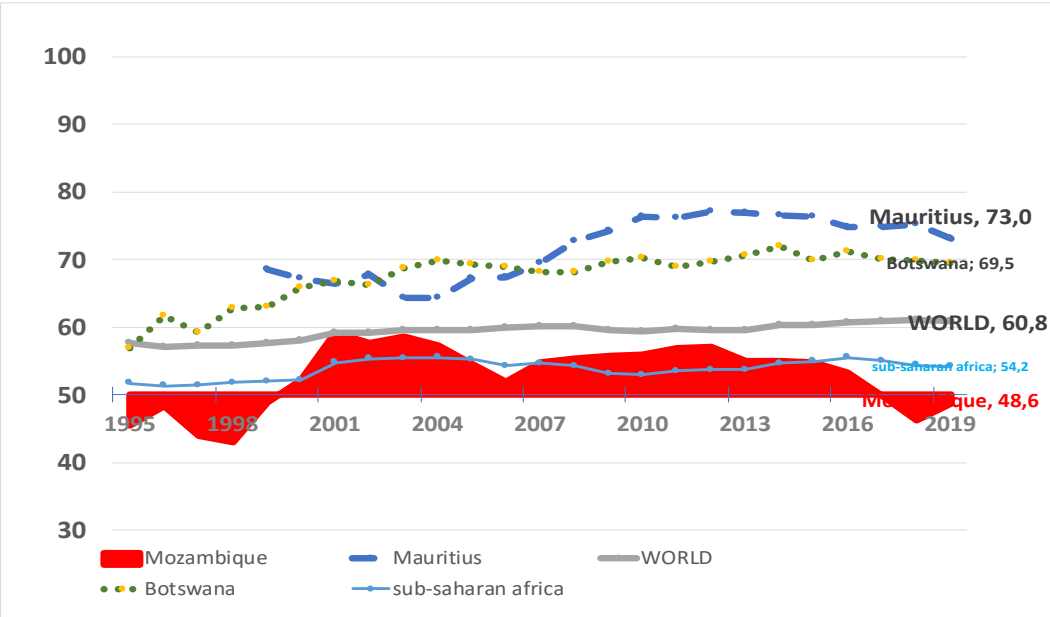
- **Invest in resilient infrastructure.** According to Eckstein et al. (2021), Mozambique was the fifth most impacted by climate shocks in the last two decades, with losses amounting to 1.33 percent of GDP per year. In this regard, Mozambique needs to invest in climate-resilient infrastructure and improve crisis preparedness and response capacity in different sectors mainly agriculture and fisheries which are the source of livelihood for more than 75 percent of population. The pandemic exposed the already existing vulnerabilities, mainly in the health and education sectors. The health sector was put to the test during the height of the pandemic and the education sector was unable to adjust smoothly to online studies due to weak coverage and access to digital infrastructure for most of the population.
- **Invest in digital transformation.** Digital infrastructure remains limited in Mozambique. According to the World Bank (2019), broadband penetration was low at 17.5 percent in 2017, of which mobile broadband has been increasing substantially but is constrained by huge internet fees. Digitalization has the potential to boost economic transformation by stimulating productivity, reducing transaction costs and asymmetric market information, better and wider access to public and private goods and services. The Mozambican government has created the National eGovernment Institute to coordinate the digitalization of government services.

### 3.3. Mozambique's need for inclusive economic freedom

Mozambique's 2019 economic freedom score was 51.6, making its economy the 153rd freest in the 2021 *Index* (The Heritage Foundation, 2021). Its overall score has increased by 1.1 points, primarily because of an improvement in fiscal health. Mozambique is ranked 36th among 47 countries in the sub-Saharan Africa region, and its overall score is below the regional and world averages (Figure 28). According to a recent Heritage Foundation report, Mozambique's economy has been persistently near the bottom of the mostly unfree category. The primary problem is weak rule of law, which reflects inadequate protection of property rights, a non-transparent judicial system, and a failure to fight corruption. These shortcomings are almost insurmountable obstacles to development.

To promote a resilient economic transformation, both the state and society (including private enterprises and civil society) need to find ways of reforming political and economic institutions, with the objective of controlling and eventually replacing the highly speculative national environment. This requires inclusive institutions that are attractive to productive investment in the broad sense, such as countries like Botswana and Mauritius (Figure 28).

**Figure 28: Economic Freedom Index:  
Mozambique, Mauritius, Botswana, Sub-Sahara Africa and the world**



**BOX 3: Agriculture: modernization versus demodernization**

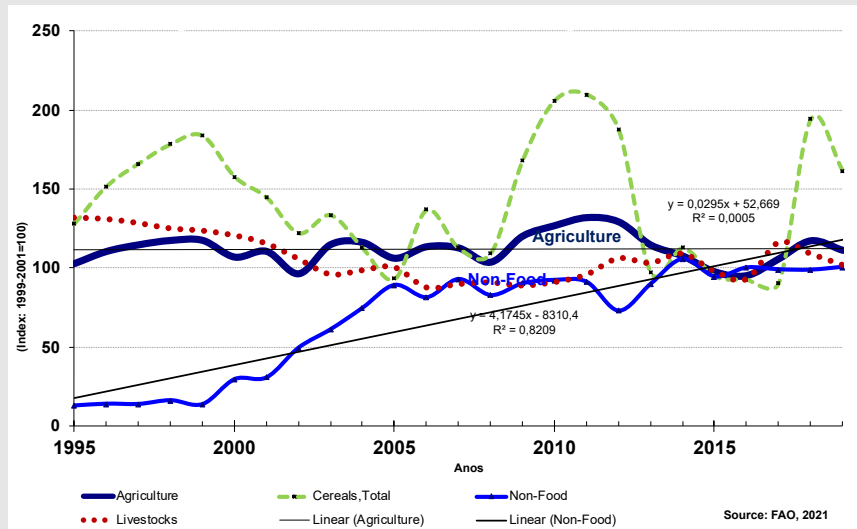
Comparing modernization vis-à-vis demodernization, the latter understood as the regressive process to the sustainable process, contrary to progress sustained by modern knowledge, illustrates the modernizing dynamics at the productive, technological, institutional, cultural and civilizational levels of Mozambican society. The unusual concept of “demodernization” is used here in line with the analytical operationality it has had in the critical inquiry about changes in post-Soviet Russia and other ex-communist bloc countries (Francisco, 2021a; Rabkin and Minakov, 2018). Figure 29 compares trends of agricultural, food and non-food production indices in the past 25 years.

What were the dynamics of modernization vis-à-vis demodernization in the past 20 years? On the modernization side, by 2012, the global motor vehicle fleet grew at an average rate of 3.6 percent per year, against 2.4 percent growth for the total population and 1.7 percent growth of the rural population. Among the four types of vehicles, the motorcycle fleet increased 14 times compared to 1972; the fleet of heavy vehicles increased eight times and that of light vehicles

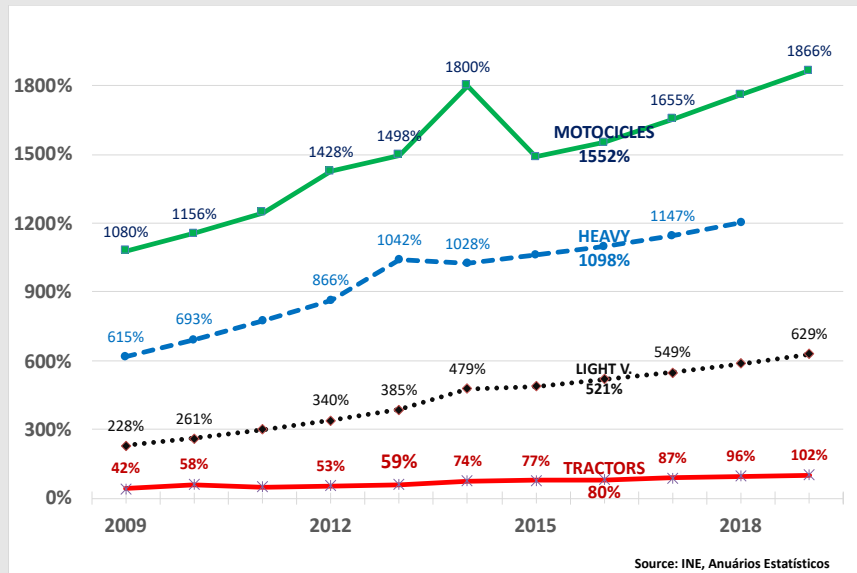


tripled (Figure 30). 4. On demodernization, until 2012 the tractor fleet contracted by a negative annual average of -1.6 percent), which explains why by 2010-2011 it was around 50 percent of the fleet recorded in 1972.<sup>12</sup>

**Figure 29: Evolution of gross production of agriculture, cereals, non-food and livestock per capita, Mozambique 1995-2019**



**Figure 30: Evolution of the vehicle fleet, Mozambique, 2009-2019**



<sup>12</sup> In 1972, Mozambique reached an average of 12 motorized road vehicles per thousand inhabitants - the ratio between the total number of vehicles and the total number of inhabitants multiplied by 1,000 (Figure 30).

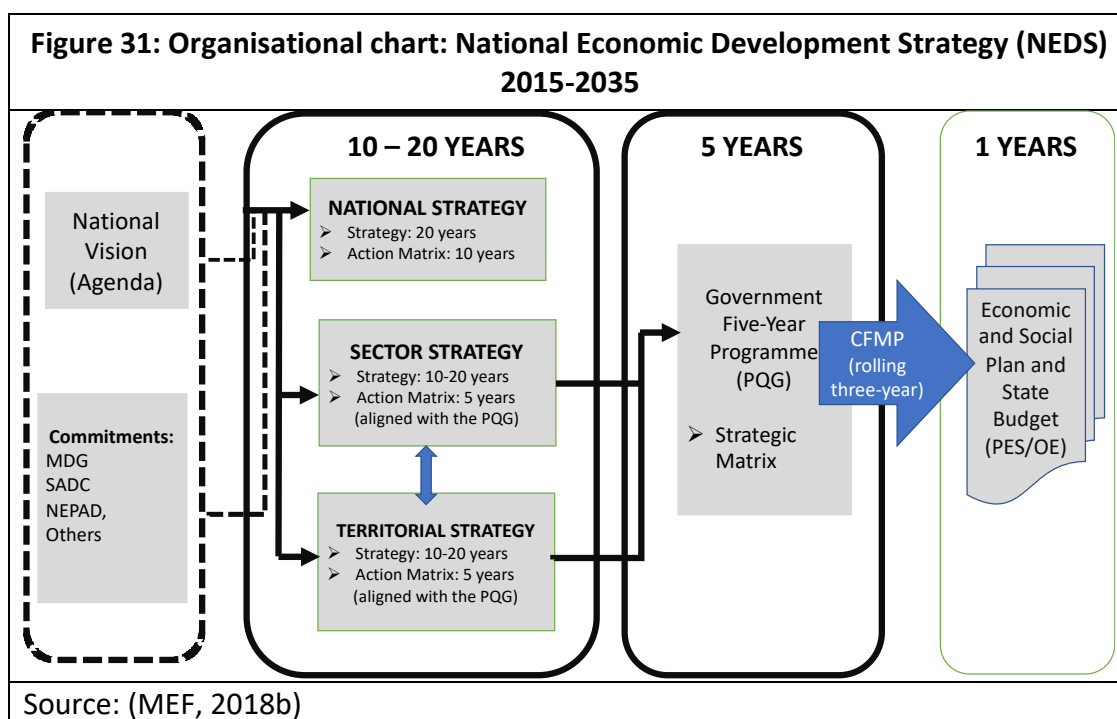
### 3.4. Better strategic thinking and development planning

The ACET Growth with DEPTH framework leads to an analysis that goes beyond the consideration of trends and patterns to a critical assessment of the relevant analytical frameworks used in official programmatic documents. These include key documents under the institutional framework set by the Constitution and other legislation, main programmatic strategies and policies such as Mid-Term Fiscal Scenarios and the National Strategies (CM, 2007; MEF, 2018a; MPD, 2012), as well as independent academic research and analyses (Cunguara, Fagilde, Garrett and Uaiene, 2012; Hodges and Tibana, 2005; James, Arndt and Kenneth R. Simler, 2005; MEF, 2018a; Orre and Rønning, 2017; Ross, 2014; TA, 2021; Tibana, 2019).

The brief characterization of national plans and sectoral strategies and policies over the last two decades are addressed in this section, focusing on aspects associated with the structural change addressed in the previous sections and how to respond in futures to strengthen resilience.

#### 3.4.1. National and sectoral strategies for economic transformation

Key government documents (e.g., National Development Strategy 2015-2035, Five-Year Plan 2019-2024) establish its long-, medium- and short-term development policies (Figure 31). Such documents contain explicit and broad statements on the desired improvement of livelihoods of the population through structural transformation of the economy, and the expansion and diversification of national production (GdM, 2013, 2014, 2020).



The government strategy is implemented through the 5-Year Government Programs (PQGs). The PQG goals for 2020-2024 are:

- The maintenance of peace, democracy, and national unity
- Inclusive and sustainable growth
- Social and economic stability
- Boosting productivity and competitiveness of the economy
- Climate change
- Job creation
- Promotion of entrepreneurship and technological innovation
- Good Governance and decentralization

The short-term macro-economic development plan is based on documents such as the Medium-Term Fiscal Scenarios (MTFS) (MEF, 2018a, 2018a, 2019, 2021). These documents are the objects of independent analyses and monitoring. For instance, the Observatório do Meio Rural (OMR) commissioned an independent analysis of the 2019-2021 Medium-term Fiscal Scenario (Tibana, 2019). This analysis provides a good example of the dialogue in civil society aimed at monitoring and making the governance accountable to the citizens beyond the parliamentary forum.

Tibana (2019) points out the limited coverage of the variables in the government's MTFS 2019-21, concluding that the strategy set out would not lead to the necessary fiscal adjustment for reasons such as the lack of quantification of the fiscal effect of the announced adjustment measures. Moreover, Tibana (2019), adds that 30 years after joining the International Monetary Fund and receiving technical assistance in the analysis and management of public finances, both from this organization and from other cooperation partners, the most recent government analyses of the content of the CFMP 2019-21 shows a worrying deterioration in the quality of public finance management in the country.

### ***3.4.2. More planning for the market and less market planning is crucial***

Current strategic thinking and planning have moved a long way from the formerly explicit and highly ideological approach to the economy and the overall society to an apparently pragmatic but covertly ideological alternative. What has been retained from the former model is far from irrelevant because important issues regarding intolerance, totalitarianism, political centralism, public sector corruption, lack of transparency and citizens' disempowerment remain inadequately addressed.

The National Development Strategy (2015-2035) and Five-Year Program (2020-2024) place the structural transformation and diversification of the economy's productive base through industrialization as the means to improve economic competitiveness and raise the living conditions of the population.

To attain such efficiency and boost the potential of Mozambique's industry, amid the declining productivity and share of manufacturing value added, the government launched a National Industrialization Program (PRONAI, 2021-2030). The PRONAI intends to increase the share of manufacturing value added in GDP from 8 percent in 2020 to 14 percent in 2030, substitute about 15 percent of imports by 2030 and create 215,000 direct jobs.

Previous industrialization programs were hindered mainly by implementation inefficiency, dependence on imported raw materials, a deficit of support infrastructure, low productivity and technology upgrading due to low absorption of new technology associated with the persisting skills gap, low levels of innovation, weakness in protecting intellectual property rights, and reduced private sector investment in R&D (PRONAI, 2021-2030; Cruz, Guambe, Marrengula, and Ubisse, 2016). Tackling those challenges will be crucial for the success of the industrialization program. However, the program is not clear on how those challenges will be tackled.

Balchin et al. (2017) state that the country is struggling to find the right long-term approach to development, which they attribute to the lack of an integrated agenda for development and economic transformation. A multitude of different sectoral strategies have been developed, many of which are not sufficiently informed by a deep knowledge of conditions on the ground. The multitude and the lack of coordination and integration of sectoral development plans make policy making and implementation challenging. Thus, the industrialization program cannot alone transform the economy and generate the necessary jobs by establishing clear linkages with other sectors including agriculture, construction, and utilities. There is also a feeling that planning and discussions concerning Mozambique's development over the next 20-25 years are too closely linked to budgets, which does not allow for visionary thinking on Mozambique's future development.

From that view, Balchin et al. (2017) moved on to say that, "A key question for Mozambique is how to proceed", to which they provided the following answer: "Answering this entails a discussion of what development model Mozambique can follow. A range of transformation models could be used as examples." Indeed, the authors briefly sketch four main models of economic transformation, identify country examples, and consider the possible implications for Mozambique.

Balchin et al. (2017: 41) correctly attribute the ambiguities shown in the existing economic transformation to binding constraints – both general and sector-specific – related to economic, governance and institutional issues. Moreover, current policies – including the industrial strategy, employment policy and five-year plan – are shown to be insufficient on their own to kickstart manufacturing and higher value-added activities in other sectors, transform the economy and create jobs.

Yet, reducing the need to find the right long-term approach for Mozambique's economic development to a discussion of what development model can be followed seems rather

simplistic, limited and even misleading in terms of the major strategic developmental challenges the country is facing nowadays. The simplistic issue refers to the serious problems concerning the dialogue between the political and administrative centralizing and decentralizing tendencies and very often tensions. Centralization has usually meant not only close political control from the dominant political party but also the hard and difficult attempts at economic integration and intra-regional articulation and reduction of asymmetries.

Balchin et al. (2017) make passing reference to centralized economic planning, acknowledging that in the period between 1975 and 1986, that model was the key to any future structural transformation of the economy. This decision-making policy and practice was later replaced by a softer and more anodyne stance, without nonetheless relinquishing the intrusive and interventionist state which continued to control key public assets and resources (Frelimo, 1977, 2012).

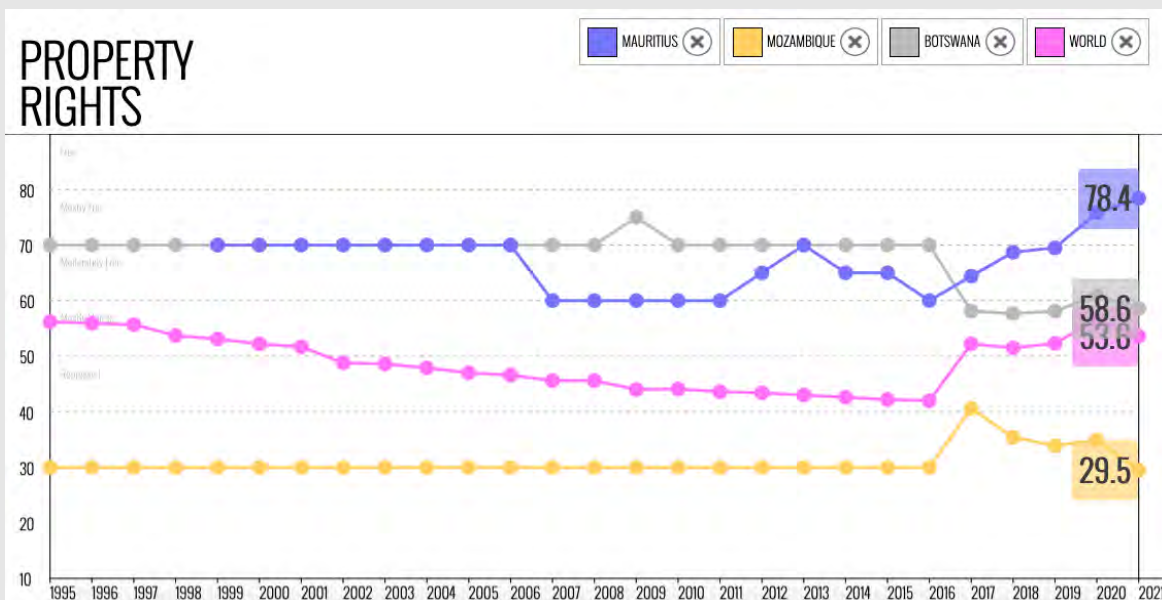
More important than identifying and agreeing on a development model is the need for the country's political and economic leadership to get rid of the perverse intellectual and political pretension of planning the market, instead of recognizing that what is needed is planning, in fact strong planning for the market. By perverse intellectual and political pretension, is meant the rejection (implicit or explicit) of the market economy, in favor of a centralized planning system, more or less masked as liberalizing, but which in the end preserves the substantial content of the old "democratic centralism". It maintains a set of state and party interventionist practices, controlling public companies, manipulating the general budget, and indulging in various extra-legal practices to circumvent budget discipline.

The Mozambican state and government have continued to set policy over a large range of issues and are expected to provide the basic legal and financial infrastructure in which the markets need to operate. They have maintained, and in some cases should have ensured stronger public and individual security and social order. It is here that effective, extensive, and inclusive economic transformation requires an increasing search for ways of expanding and achieving state aims through regulation rather than intrusive and controlling intervention in the decision-making and functioning of private and family businesses, as well as citizens' economic freedom. A political leadership and governance system that allocates to the state the task of making markets work better, rather than replacing or controlling or even second-guessing them, will certainly contribute much more to a healthy institutional environment that allows real business owners to identify models most suitable for positive economic transformation in Mozambique.

#### BOX 4: Are property rights promoting resilient economic transformation?

Figure 32 compares Mozambique’s property rights ranking with those of Botswana, Mauritius and the world average, making it clear that Mozambicans do not need to go far in the to find good alternatives (Freedom House, 2021; The Heritage Foundation, 2021). According to the Index of Economic Freedom, Mozambique’s economy has been recurrently near the bottom of the “mostly unfree” category and greater economic freedom is just a dream for most of its citizens. The primary problem is weak rule of law, which reflects inadequate protection of property rights, a non-transparent judicial system, and a failure to fight corruption.

Figure 32: Property rights in Mozambique, Botswana, Sub-Saharan Africa and the world



The Property Rights Index is a *de jure* index, meaning that it focused on the written law, which may not always coincide with what occurs in practice. In spite of the efforts to move towards a liberal market economy, some of the key socialist tenets of the 1975 Constitution were kept both in the 1990 Constitution and the versions of the constitutional texts adopted up to now (AR, 2018).

The most relevant principle, about the institutional fabric that leads to either exclusive or inclusive economic growth, concerns the stubborn insistence of the dominant political power on maintaining an absolute monopoly over land ownership, while reducing citizens and communities to mere precarious tenants of the state. “Land may not be sold, mortgaged, or otherwise encumbered or alienated”, according to Article 46 of the 1990 Constitution.

The current National Land Policy review reaffirms the position that all land must continue to be owned by the state and cannot be sold, divested, mortgaged or subject to attachment. In practice, however, this rule is hardly observed, both by citizens, state officials and administrative entities. There are big land deals involving, very often, public bureaucrats and politicians, especially district officials and district administrators. Mozambican citizens continue to lack secure property rights, which reduces their confidence to undertake entrepreneurial activity, save their income, and make long-term plans because they fear for the safety of their income, savings, and property (both real and intellectual).

The implications for economic transformation of loose and unclear property rights are multiple, such as: a) discouraging domestic savings, both individual and entrepreneurial; b) constraining the accumulation of capital for production and investment; c) precarious title such as the so-called DUAT (right of use and benefit) leads to locking the value and wealth embodied in land properties and real estate, constraining the use of available natural resources for economic purposes, and withholding collateral for investment financing; d) The weak protection of property rights fosters the so-called “tragedy of the commons” and “tragedy of the anti-commons”, two phenomena associated with the degradation and unbalanced exploitation of property held by communities and for which no one is accountable (Filipe, Ferreira and Coelho, 2008; Hardin, 1968; Ostrom, Burger, Field, Norgaard and Policansky, 1999).

### ***3.4.3. Reducing vulnerability through domestic resource mobilization***

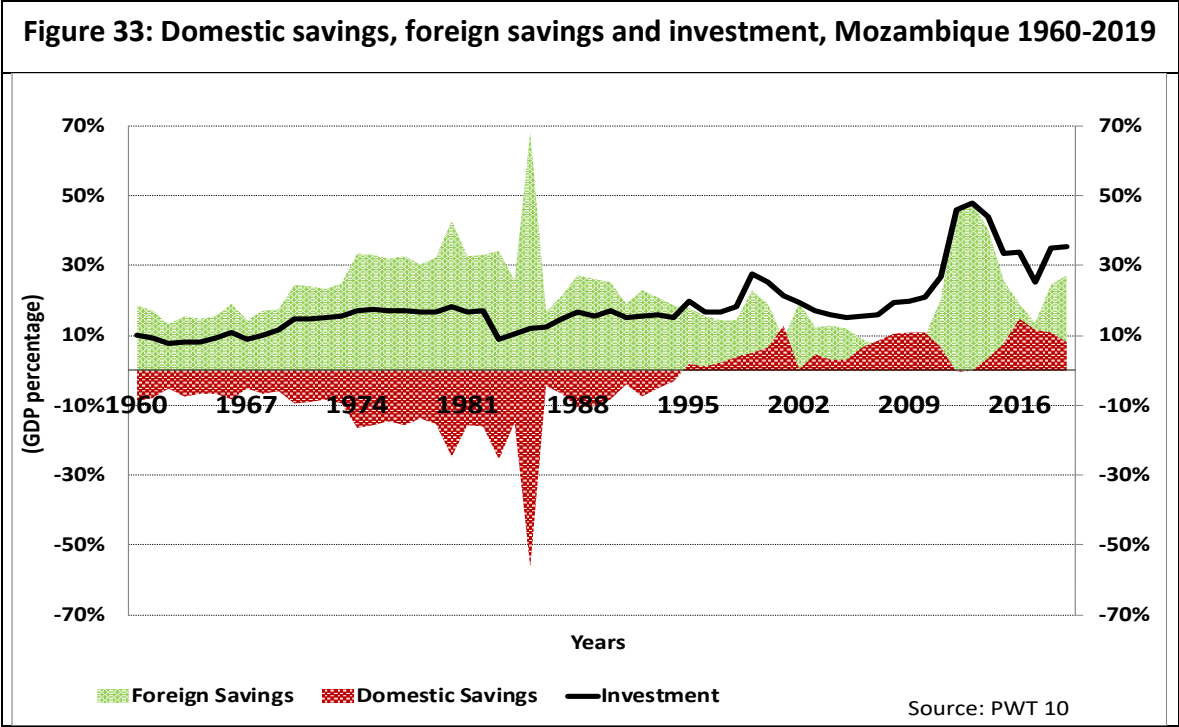
The literature provides extensive evidence on the long-term correlation between savings and economic growth and the fact that domestic savings have a positive impact on short- and long-term economic growth. However, in Mozambique, the attempt to place the issue of domestic savings among the main strategic priorities are countered by a resistance motivated by anxiety related to expanded consumption and the enormous availability of foreign savings in a better position to immediately foster high economic growth.

However, the increasing attention paid to economic resilience, as a way to withstand or bounce back from the negative effects of vulnerability caused by domestic and external shocks, is leading to a reconsideration of the role of domestic savings as a proxy for economic resilience (Briguglio, Cordina, Farrugia and Vella, 2009; Kocaman and Güzel, n.d.; Kubacki, Siemieniako and Brennan, 2020; Seth and Ragab, 2021).

This view of resilience is informed by the context of natural disasters. Since natural disasters impact economic growth by destroying the physical stock of capital, an economy’s resilience is determined by a country’s ability to mobilize its “own available funds” to replenish its capital stock. In national accounts, the net savings rate (both private and public) is used as the indicator of resilience since savings represent the maximum resources available for investment.

The results show a high correlation between the two measures of resilience; this correlation is attributed to the fact that both are also strongly correlated with GDP per capita (Briguglio, 2014; Seth and Ragab, 2021).

Figure 33 shows that in the long run, Mozambican society has consumed more than it has produced, but after 1995, domestic saving began showing positive signs. This has been fostered by the economic liberalization reforms introduced in the previous decade, following the introduction in 1987 of the Economic Rehabilitation Programme, supported by the IMF and World Bank as well as a wide variety of international partners.



The very low domestic saving propensity is consistent with the subsistence economy. However, in a world of open economies and dominated by economies with high savings surpluses, it would be unwise to refuse to take the most advantage of the immense foreign savings available on the international market, made available to those who lack sufficient savings to finance the investment required for the expansion of the national economy.

The need to place domestic savings at the core of economic transformation priorities derives mainly from basic requirements associated with domestic sustainability and resilience. There is little doubt that economic growth can be much faster if based on foreign savings, namely FDI, but also on other financing forms of productive application, such as: project lending, aid, donations, and grants (Adams, 2009; Aghion, Comin and Howitt, 2006; Eisner, 1995; Francisco and Siúta, 2015).



If domestic saving matters for developing countries as much as it mattered earlier for now developed and emergent countries, it is puzzling if not paradoxical that domestic savings do not emerge among the leading priorities of economic transformation and strategic policy reforms. On this, it is encouraging that ACET 2014 ATR with Depth acknowledges that with a domestic savings rate of around 13-14 percent, “big chunks of the rising investment have been financed by external aid”. Hence, the ACET 2014 Report adds: “Africa’s large savings-investment gap is not sustainable.” (ACET, 2014, p. 26). Indeed, besides sustainability, domestic savings need to be taken into consideration to address economic vulnerability and state fragility as part of the key drivers to build economic resilience.

## 4. Conclusions and takeaways

### 4.1. Toward a resilient economy

To make a resilient economy Mozambique in the post-COVID-19 era, the Mozambican state and society need to invest their best efforts in order to overcome the main causes of vulnerability and fragility. The study suggests that despite lagging behind its peer countries, Mozambique witnessed some economic transformation in some areas in the first two decades of the 21st century, such as:

- **Improvement of export competitiveness**, driven by improvement of export quality and gradual gain of market share driven mainly by supply-side “push” factors in the last decade and demand-side “pull” factors in the last two decades, that is, by the supply-side capacity to expand export market share, and increased demand in export markets. (Appendix Figure 38).
- **Productivity has improved** by the reallocation of employment from agriculture to high-productivity sectors, including the mining and services sectors.
- **Innovation activities have been improving**. In terms of technology and innovation activities, Mozambique remains above its peer countries mainly on two pillars, human capital and research, along with infrastructure. With exception of 2013 and 2021, the country has been recognized as an innovation achiever.
- **Financial inclusion by 2019 had improved on many fronts since 2014**. Financial exclusion has fallen from 78 percent in 2009 to 60 percent in 2014 and 46 percent in 2019, representing in absolute numbers about 2.3 million adults brought into the fold of financial inclusion, an increase of 14 percentage points. Mobile money is seen as the main driver of these gains.
- **Human well-being has improved**. Although at a relatively slower pace and lagging behind its peers, Mozambique has been experiencing consistent improvement in human well-being. The poverty rate fell from 60.3 percent in 2002 to 48.4 percent in 2015 but income inequality increased from 42 percent in 2002 to 56 percent in 2015.

However, economic transformation remained stalled in many areas, with indicators such as:

- **Stagnation of economic complexity.** Despite the recent growth in movement of labor from agriculture into manufacturing and services, there has not been a diversification into higher productivity and more sophisticated manufacturing and services.
- **Signs of deindustrialization** and stagnation of manufacturing's share of value addition in the economy, including the share of medium- and high-technology manufactures. This is mainly due to the deterioration of productivity, related to the decreasing or stagnating technological content of Mozambican products and exports in the past two decades.
- **Unsustainable improvement in productivity.** The shift of labor from agriculture (a less productive sector) to manufacturing and services (more productive sectors) has not been accompanied by investments in building productive capacities, particularly investments in technology upgrading, education, skills and, health.
- **Stagnation of export structure** over the last 20 years, notably the share of services and manufacturing in overall exports. In the same period, the export diversification index also indicates stagnation, remaining below its 2000s levels.

Among many economic transformation challenges and opportunities faced by Mozambique, the study calls particular attention to the following:

- **Mozambique's economic growth has barely been able to offset population growth.** This is due to incipient and slow demographic transition, which turns the lack of change in population structure and the high population growth rate into a burden rather than a benefit for economic growth. Similarly, the economic strategy has not fostered the needed changes in the rural economy, meaning that compensating only for population growth implies that economic and social development remains stagnant.
- **The development of the private sector has been hindered by several factors, such as low access to finance,** the unfriendly regulatory and administrative environment, the unclear and conflicting management of land tenure and other weaknesses related to low-skilled workforce, lack of depth in delivery capacity and gaps in quality standards.
- **COVID-19 has aggravated the challenges but has also expanded the opportunities for economic transformation.** A key issue concerns the low private domestic savings accumulation as a proxy for family and entrepreneurial capacity to face external and internal shocks and adversities. Economic transformation can hardly be achieved if domestic private capital formation fostered by external private investment is not increasingly endogenized by the national economy.
- **None of the policy measures implemented as responses to the pandemic** are consistent with the need to accelerate transformation. All the adopted measures were transitory and intended to alleviate immediate pressures generated by the pandemic, so they did not address the structural challenges for transformation and resilience. Therefore, in the post-pandemic period, Mozambique needs to implement structural policies to address current sources of vulnerability and build a more resilient economy.

## 4.2. Recommendations for a new policy agenda to build resilience

Table 5 summarizes the key areas for systemic intervention that can shift behavior in the longer term into main sections: policy, finance, business, and citizens. From each sector a comprehensive set options and proposals can be outlined around three key criteria that identify the most promising policies:

- **Relevance:** their relevance in the Mozambican context.
- **COVID-19 suitability:** the extent to which they can support a sustainable economic recovery from COVID-19.
- **Transformative potential:** the impact they have on driving long-term systemic change.

<b>Policy</b>	<b>Finance</b>	<b>Business</b>	<b>Citizens</b>
<p><b>Multidimensional indicators, monitoring capacity, and legal frameworks:</b> ensure political decision-making addresses population growth, financial inclusion, environmental vulnerability and human well-being with equal weight on the economic aspects.</p> <p><b>Fiscal policy and growth independence:</b> increase the space for fiscal interventions for key economic vulnerabilities, support a more balanced green and just transition and place the high and very concentrated economic growth into the wider context of informality and relative stagnation of most of the rural economy.</p>	<p><b>Mandates and legal interpretations:</b> include demographic, environmental, financial inclusion and social objectives in the targets of public institutions, such as the central bank and private banks, as well as formal and informal financial actors.</p> <p><b>Sufficiency:</b> limit the total level of consumption.</p> <p><b>Metrics for the long-term:</b> integrate demographic and environmental categories and extend the time horizon in risk assessments.</p> <p><b>Make sure that the Sovereign Fund that is expected to be created</b> has an explicit orientation to foster private capital formation</p>	<p><b>Shifting profitability:</b> internalize the costs of demographic and environmental damage.</p> <p><b>Sustainable investment and innovation:</b> shift investment and technology from resource-intensive activities to those that are more labour intensive.</p> <p><b>Non-financial disclosure, reporting and accountability:</b> include demographic and environmental objectives in business reporting standards.</p> <p><b>Sustainable business models:</b> Support business models that address vulnerability and focus on sustainability and well-being and create a level</p>	<p><b>Sustainable consumption alternatives:</b> shift from unsustainable to sustainable consumption and promote a culture of savings, not just in the restricted sense of bank savings but in the productive sense of building individual and family resilience to face unexpected events through adequate safety-nets.</p> <p><b>Affordability and fairness:</b> promote an institutional environment that facilitates rather than constrains individual initiative and innovation, aiming to reduce inequality and exclusion, as well as ensuring that all people are capable of meeting their basic needs and of</p>

<p><b>Limiting power and empowerment for change:</b> reduce economic, demographic and democratic power imbalances and the fragility of local institutions.</p> <p><b>Update the legal and institutional setting,</b> starting from the economic regulations to the needs of a market economy more friendly to productive activities rather than speculative investment.</p> <p><b>Address the unbalanced nexus of the formal versus informal economy</b> by making the formal environment more inclusive.</p>	<p>and domestic savings of households and private enterprises.</p> <p><b>Modernize existing fiscal rules and mechanisms.</b></p>	<p>playing field.</p> <p><b>Promote an effective and relevant blue economy</b> aiming to make the best use of the extensive ocean and coast available.</p>	<p>participating socially.</p> <p><b>Promote more inclusive social protection,</b> through mechanisms that take into consideration the informal nature of the labor force and the very limited basis of existing formal revenue mechanisms.</p> <p><b>Promote digitalization for its potential to boost economic transformation,</b> stimulate productivity, reduce transaction costs and market asymmetric information, with better and wider access to public and private goods and services</p>
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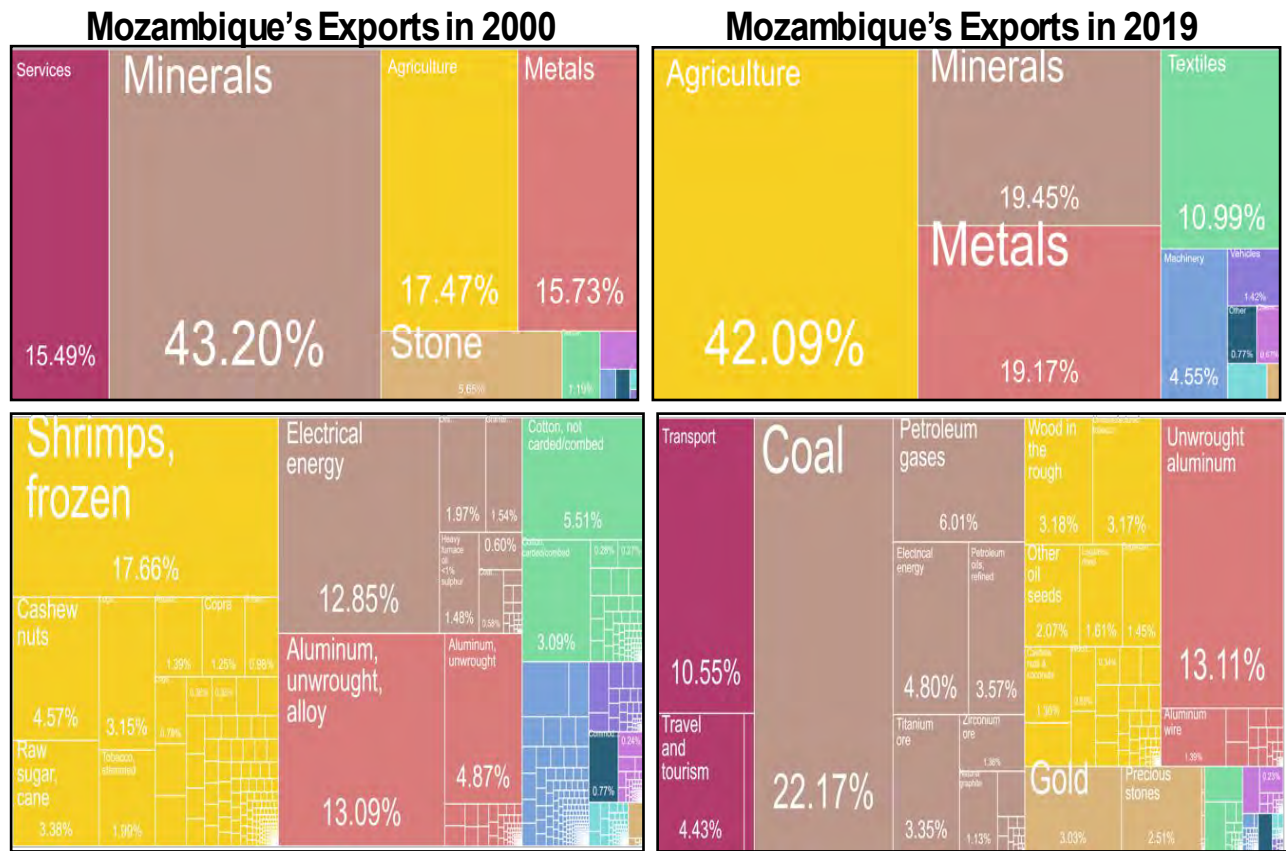
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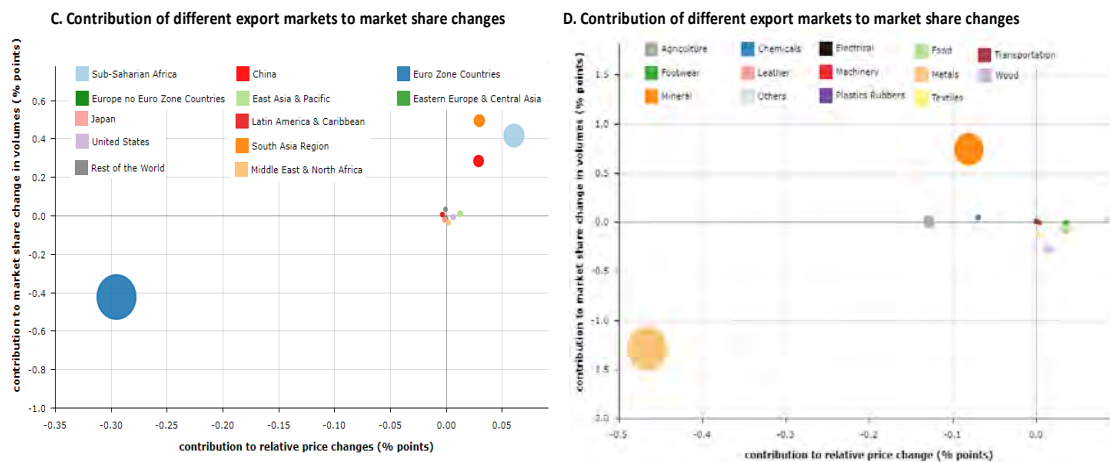
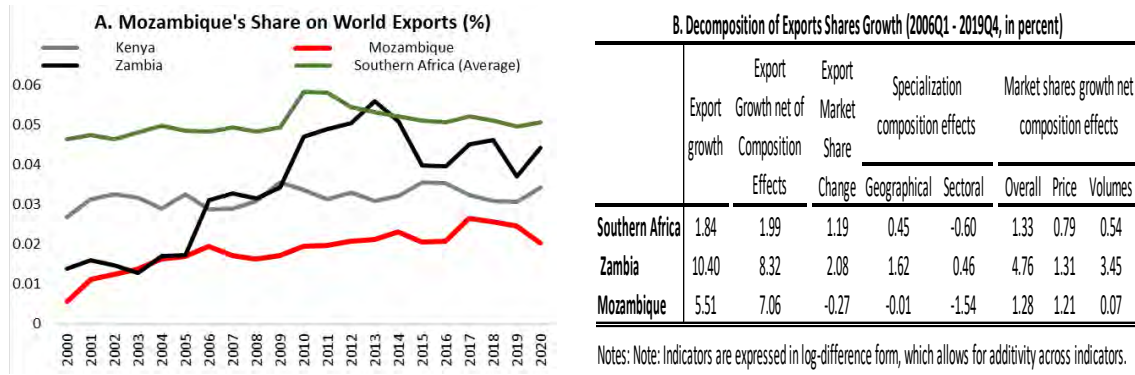
## Appendix 1. Additional figures and tables

Figure 34: Mozambique exports



Source: Harvard Growth Lab

**Figure 35: Mozambique's share of world exports has been increasingly driven by push factors**

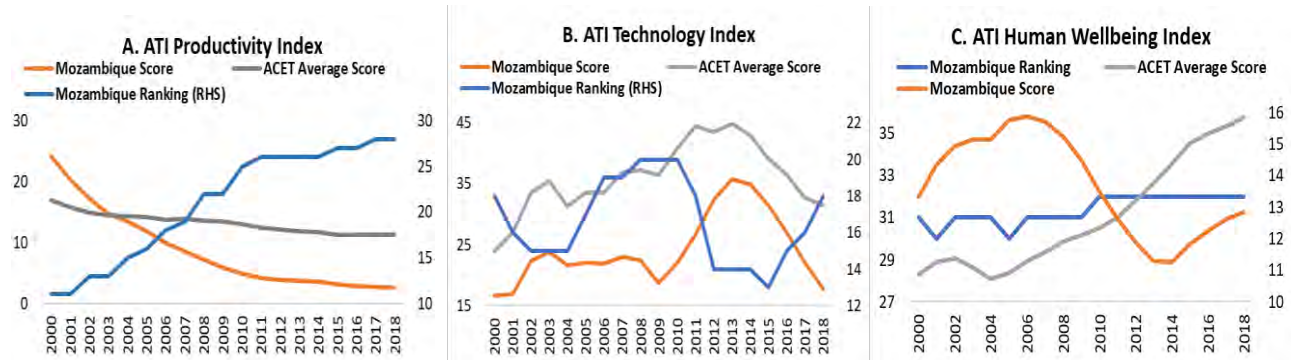


Source: World Bank Measuring Export Competitiveness Database

**Figure 36: Mozambique's trading partners have been increasing while the number of exported products stagnated**



**Figure 37: Mozambique's productivity, technology and human well-being scores have been deteriorating**

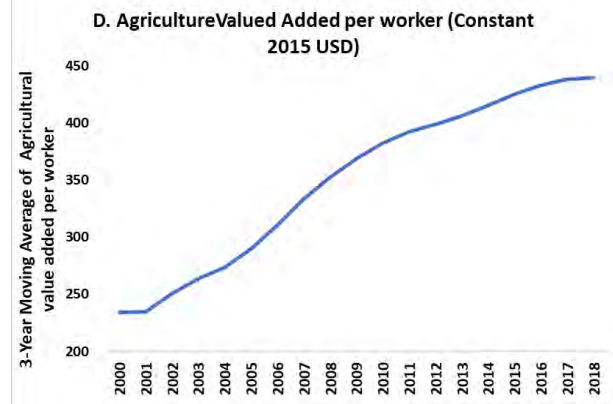
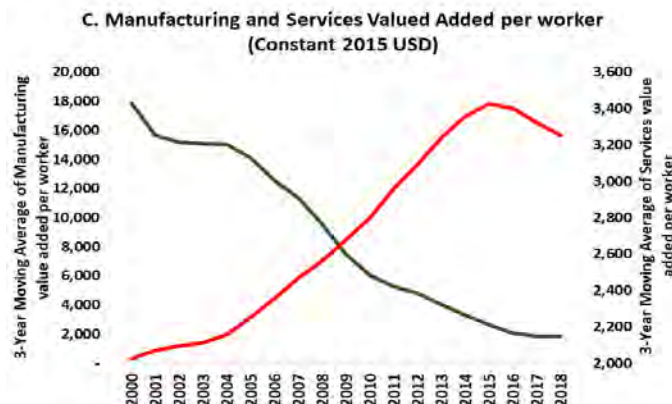
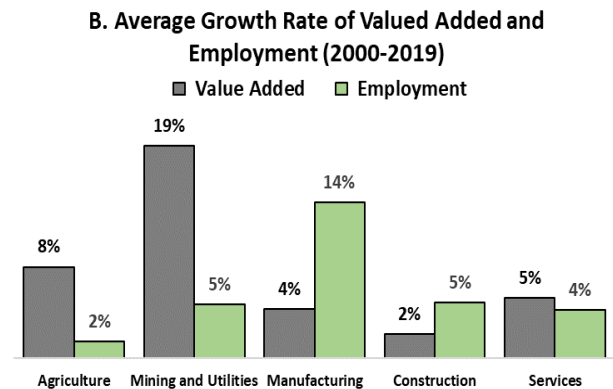


Source: authors' elaboration based on African Center for Economic Transformation Database

**Figure 38: Productivity declined in manufacturing and decelerated in services**

**A. Decomposition of Aggregate Labor Productivity Growth**

	Agriculture	Mining & utilities	Manufacturing	Construction	Services	Total
<b>2000-05 (Total)</b>	5.75%	8.21%	2.34%	-0.57%	3.85%	6.88%
Within sector	4.7%	0.0%	0.0%	0.0%	0.6%	5.3%
Structural change	1.0%	8.2%	2.3%	-0.6%	3.3%	1.6%
<b>2005-10 (Total)</b>	6.1%	1.5%	-12.6%	7.9%	3.8%	5.2%
Within sector	4.8%	0.0%	-0.1%	0.2%	0.6%	5.8%
Structural change	1.2%	1.5%	-12.5%	7.8%	3.2%	-0.7%
<b>2010-15 (Total)</b>	2.1%	3.8%	-11.5%	0.9%	2.6%	4.4%
Within sector	1.6%	0.0%	-0.2%	0.0%	0.5%	2.4%
Structural change	0.5%	3.7%	-11.3%	0.9%	2.1%	2.0%
<b>2015-19 (Total)</b>	0.6%	0.6%	-5.4%	-2.7%	-1.4%	-0.2%
Within sector	0.4%	0.0%	-0.2%	-0.1%	-0.3%	-0.5%
Structural change	0.2%	0.6%	-5.1%	-2.6%	-1.1%	0.3%
<b>2000-19 (Total)</b>	3.8%	3.6%	-7.1%	1.5%	2.4%	4.2%
Within sector	3.1%	0.0%	0.0%	0.0%	0.4%	3.6%
Structural change	0.7%	3.6%	-7.0%	1.5%	2.0%	0.7%



Source: authors' elaboration based on UNTACD and ILO-WESO Database

**Table 1: Share of firms, by economic activity and type of innovation (%)**

Share of Firms by Economic Activity and type of Innovation (in percent)					
Economic Activity	Overall Inovation	Product inovation	Process inovation	Organization al inovation	Marketing inovation
Agriculture, forestry and fisheries	33	0	33	33	0
Manufacturing	80	70	70	65	45
Information and comunication technology	85	77	69	69	46
Professional, Scientific and Technical	25	0	25	25	0
Human health and social work	60	40	60	40	20
Water, sewerage and waste management	67	33	67	67	0
Financial sector	91	67	76	76	57
Real estates	100	0	100	0	0
Wholesale and retail trade, and repairing services	77	46	46	77	39
Electricity, gas, steam and air conditioning	100	80	100	80	60
Construction	83	50	75	75	17
Hotels and Tourism	67	67	56	56	44
Administrative and suport services	67	33	33	67	33
transportation and storage	89	78	67	78	22
<b>Total</b>	<b>79</b>	<b>59</b>	<b>65</b>	<b>67</b>	<b>39</b>

Source: Ministry of Science and Technology (2018)

**Table 2: Comparison of trends in economic and demographic indicators, Mozambique and Malaysia**

Indicator	1960		2011		2019	
	Malaysia	Moz	Malaysia	Moz	Malaysia	Moz
GDP per capita	299	290*	10.399	594	11.414	504
Total fertility rate	6,0	6,6	2,0	5,9	1.98	5.1 $\Psi$ (4.8)
Under five mortality rates	85	337	8	100.4	8.6	74.2
Net enrolment ratio, secondary education (% of secondary school-age population)	35	-	66	17,3	72.2	19.3
Gross enrolment ratio, tertiary institutions (% of tertiary school-age population)	4	0,2 $\ddagger$	36	4,9	43	7.3

Sources: UN World Population Prospects, 2012; World Bank; INE Mozambique, 2014; Malaysian Population and Family Survey, 2004; PRB 2014 World Population Data Sheet; IDS Mozambique, 2011 (\*The GDP per capita in Mozambique refers to 1980;  $\ddagger$  Gross enrolment rate in secondary education in Mozambique from 1971);  $\Psi$ INE figure and WB in (); 2021 Word Bank Data.

# **A New Policy Agenda To Build Resilient Economies in Africa in the Post-COVID-19 Era**

Country Case Study:  
**RWANDA**

**Institute of Policy Analysis and Research**  
(IPAR-Rwanda)

**DRAFT REPORT**

Submitted to the  
African Center for Economic Transformation (ACET)

**April 2022**

*This report was prepared by a team of country researchers under contract with ACET.  
The analyses and opinions expressed in this report are those of the authors and do  
not represent the views of ACET, its Board, or its Management.*



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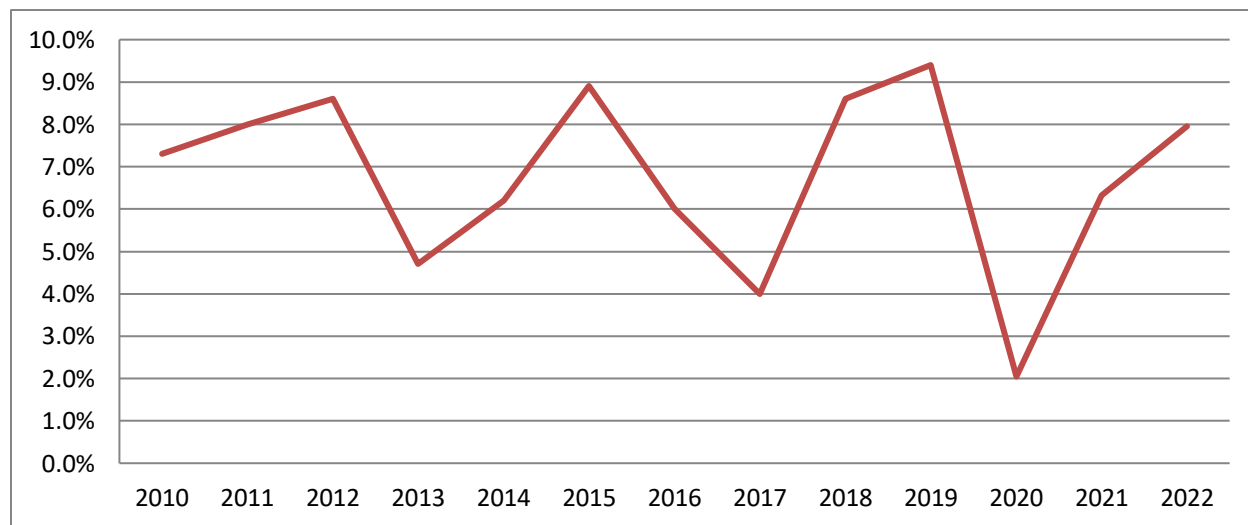
# Chapter 1: Introduction

## 1.1. Trends in Rwanda's economic development

During the decade spanning 2010 to 2019, Rwanda's economic growth has been remarkable, with average annual GDP growth rates of 7.5% prior to the start of the COVID-19 pandemic (See Figure 1). In addition, GDP per capita rose from US\$229 in 2000 to US\$773 in 2018. However, due to the COVID-19 pandemic, aggregate GDP in 2020 declined by 3.4 percent<sup>1</sup>. The pandemic depressed economic performance through induced demand and supply shocks, adding to the impact of adverse weather conditions on agricultural production. The 2020 economic decline cut across all economic sectors. During the 2020/21 financial year, real GDP started to recover, rising to 4.4 percent from 2.3 percent in the 2019/2020 financial year. In addition, headline inflation was maintained within the National Bank of Rwanda (NBR) inflation benchmark band of 2 percent to 8 percent in 2020/21 despite COVID-19 shocks.

This economic recovery has been helped by supportive fiscal and monetary policy measures in addition to easing COVID-19 containment measures (National Bank of Rwanda, 2021)<sup>2</sup> The NBR maintained an accommodative monetary policy stance by keeping the central bank rate at 4.5 percent throughout the year to further support the financing of the economy. In addition, it allowed lending institutions to restructure loan contracts of borrowers affected by COVID-19, especially those in the hospitality industry, transport, commercial real estate, and education sectors, as well as in the associated value chains. These and other measures helped to ensure that there was adequate liquidity in the economy and eased the cost of borrowing for both corporate companies and individuals.<sup>3</sup>

Figure 1. Real GDP growth, 2010-2022 (%)



Source: Macroeconomic Framework Public Dataset, MINECOFIN, 2020.

<sup>1</sup> IMF Data Mapper, October 2021 - <https://www.imf.org/en/Countries/RWA>

<sup>2</sup> National Bank of Rwanda Monetary and Financial Stability Statement, March 2020

<sup>3</sup> National Bank of Rwanda Annual Report for 2020/2021; <https://www.bnr.rw/news-publications/publications/annual-reports/>

## 1.2. Fiscal performance

As the economy has grown, the country's revenue as a percentage of GDP has improved, from 6 percent in 2000 to 24 in 2019. However, the positive growth rate in revenue has been outstripped by the growth in total expenditure, up from about 6 percent of GDP in 2000 to about 32 percent of GDP in 2019. This has led to growth in the overall deficit and public debt in the form of grants and borrowing. Prior to COVID 19, Rwanda's trade deficit rose from Rwf 133 billion in 2010/11 to Rwf 492 billion in 2018/19. However, the COVID-19 pandemic led to an upward spike in COVID-19 containment expenditure and a decline in government revenues which increased Rwanda's fiscal deficit to Rwf1,226 billion. This deficit is projected to remain at over Rwf 900 billion in the short term as the economy recovers from the pandemic (Table 1). The current account deficit is projected at about 11 percent of GDP in 2021 and is expected to narrow over the medium term, financed by FDI and concessional loans.

Although Rwanda's medium-term outlook is positive, there is some uncertainty about the prospects of sustaining economic recovery and resilience. Pandemic scars such as school disruptions, learning losses, protracted unemployment, and rising poverty, especially among women, if not addressed, risk reversing the economic and social gains hard won over the last two decades (IMF, 2021).

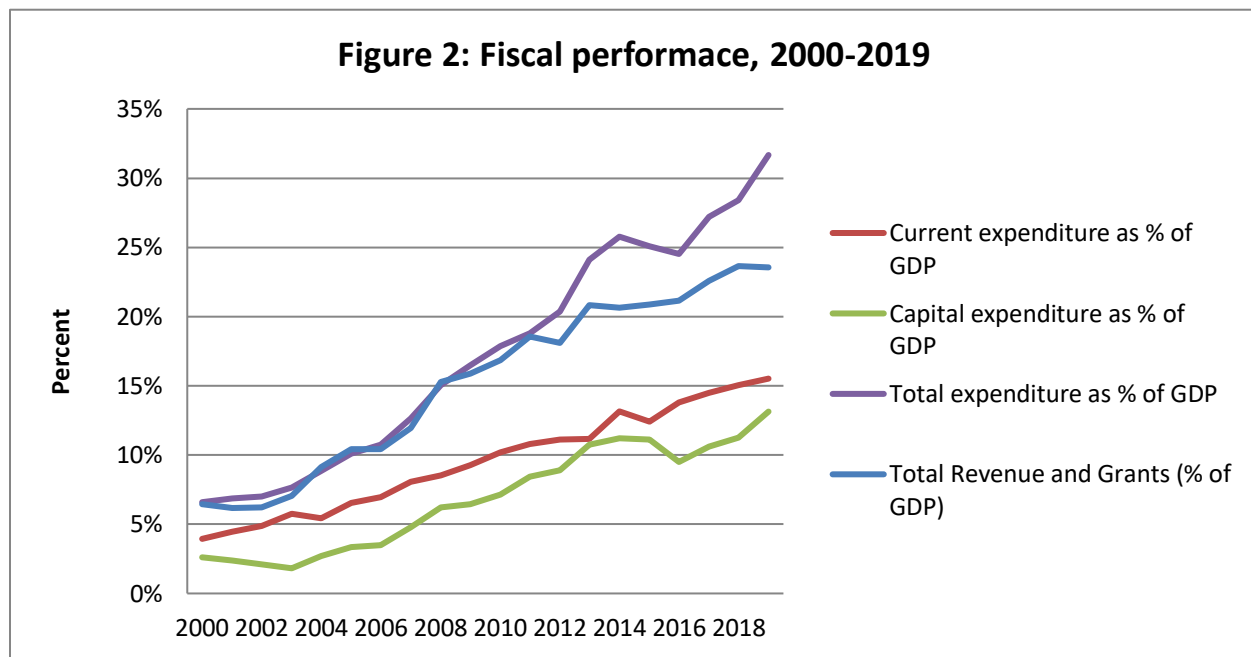
Table 1. Fiscal performance, 2010 to 2022

Year	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
Revenue and grants	863	1,049	1,101	1,339	1,419	1,540	1,616	1,820	2,065	2,082	2,172	2,386	2,714
Total revenue	484	592	736	864	1003	1166	1286	1462	1670	1650	1679	1862	2129
Total grants	379	457	365	474	416	374	330	359	395	432	492	524	585
Total expenditure and net lending	984	1,098	1,336	1,543	1,721	1,736	1,943	2,188	2,612	3,253	3,110	3,259	3,556
Current expenditure	527	614	634	780	835	927	1070	1177	1344	1558	1670	1779	1932
Capital expenditure	439	483	565	712	770	721	760	850	1072	1295	1140	1237	1361
<b>Overall deficit (cash basis)</b>													
Including grants	-133	-63	-243	-220	-297	-224	-347	-392	-492	-1226	-974	-912	-882
Excluding grants	-512	-520	-608	-694	-713	-597	-677	-751	-886	-1,658	-1,466	-1,436	-1,466

Rwanda's Fiscal Consolidation Strategy (FCS) has continued to aim at achieving fiscal and debt sustainability relative to the East African Community macroeconomic convergence criteria. In addition, the FCS has sought to reduce the external current account deficit and the country's reliance on external financing, as well as to improve prioritization and efficiency of public expenditure. The government has also continued with fiscal consolidation in order to safeguard external and macroeconomic stability, while supporting growth. Therefore, the tight fiscal policy stance (evidenced by the slowdown in capital spending) is likely to continue due to the lower level of external project grants available to Rwanda, as well as the need to gradually reduce the overall deficit toward EAC convergence criteria (National Bank

of Rwanda, 2019). Given that capital spending is very important for changing the structure of the economy, a decrease in capital spending may limit the pace of economic transformation, more so, in an environment where external financing is limited in a COVID-19 recovery context.

Figure 2. Fiscal performance, 2000-2019



Source: Macroeconomic Framework Public Dataset, MINECOFIN, 2020.

Rwanda’s public and publicly-guaranteed<sup>4</sup> external debt-to-GDP ratio increased by 33 percentage points over the last six years, driven by borrowing to meet not only the development needs envisaged in the National Strategy for Transformation (NST), but also from the robust COVID-19 response. Out of the NST came the construction of the Kigali Convention Centre (KCC), completed in 2016, the expansion of the national airline, Rwanda-Air (now completed), and the construction of a new airport in the Bugesera district. These developments contributed to public and publicly guaranteed external debt increasing by 21.7 percentage points in the five years preceding the COVID-19 crisis. At the same time, the increase in the fiscal deficit due to revenue shortfalls and a scaling up in spending to address the COVID-19 crisis led to sharp debt increase in 2020 by an additional 11.3 percentage points. As a result, external PPG debt has risen from 22.6 percent of GDP in 2014 to 55.6 percent in 2020 (IMF, 2021). The current debt-to-GDP ratio of 55.6 percent is slightly above the debt sustainability threshold of 50 percent but can be accommodated within the prevailing context of a COVID-19 recovery period.

<sup>4</sup> Public and publicly guaranteed debt comprises long-term external obligations of public debtors, including the government, public corporations, state-owned enterprises, development banks and other mixed enterprises.

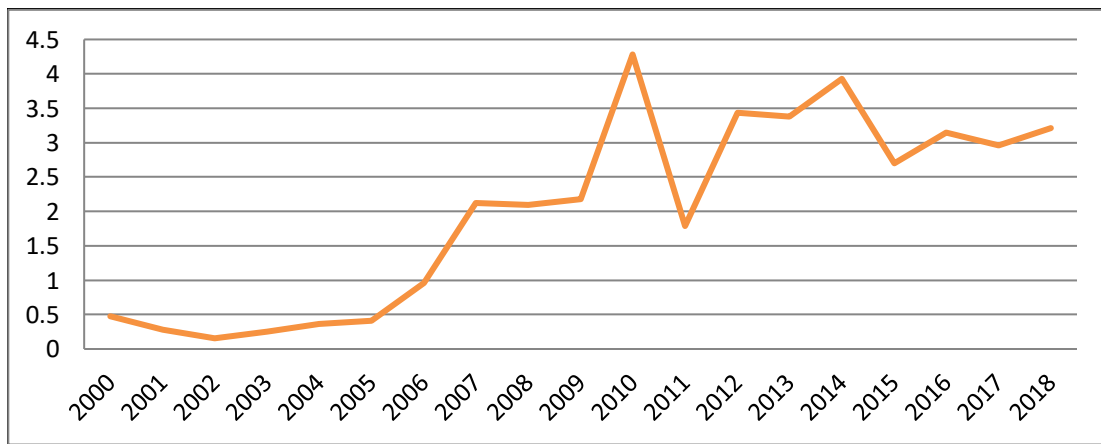
Figure 3. Debt-to-GDP ratio, 2009-2020 (%)



### 1.3: Foreign direct investment

As a share of GDP, net flows of investment into Rwanda increased steadily from about half of GDP in 2000 to about twice GDP in 2007-2008. Thereafter, net FDI inflows into Rwanda stagnated at over twice the annual GDP, probably because of the uncertainty arising from the global financial crisis. After 2009, net FDI inflows shot up to four times the GDP, but later plunged in 2011. After 2011, net FDI inflows recovered and fluctuated around three times the GDP until 2018. From a low base of about half of GDP in 2000, net FDI inflows grew to three times the GDP in 2018 (World Bank, 2020). This growth is a result of initiatives implemented by the Rwanda Development Board (RDB) to attract FDI and is also due to policies such as doing-business reforms, which have promoted Rwanda as a favourable investment destination. According to the 2019 World Bank Doing Business Indicators report, Rwanda was ranked the 29<sup>th</sup> easiest place to do business in the world.

Figure 4. FDI net inflows as a proportion of GDP, 2000-2018 (%)



Source: World Bank, World Development Indicators, 2020

According to Table 2, the sectors that consistently attracted the most FDI between 2012 and 2018 were ICT, financial services, tourism and the wholesale and retail trade. Key sectors that did not attract

adequate FDI during this period include education and agriculture. Within agriculture, more investments are needed in the agro-processing sub-sector in order to add value to agricultural produce and create more jobs. Rwanda's investments in ICT as an enabler are one of the driving factors behind the emerging economic transformation as they have led to significant growth in productivity in the services sector. These gains in the services sector have been driven mainly by Rwanda's policy of streamlining ICT within all sectors, including e-health, e-government and the *Irembo* platforms for accessing and paying for government services.

Rwanda's ambition is to become an ICT hub in the region and the government has made significant investments in ICT infrastructure, leading to 52 percent internet penetration by 2018. Coverage by high-speed broadband infrastructure has now reached large parts of the country. A state-of-the-art cybersecurity facility has been operationalized to protect business and government systems from cyber-attacks. The number of electronic services has increased significantly, fuelled by disruptive advancements in electronic financial services, including Tap and Go which have improved efficiency in the public transport sector (Rwanda ICT policy, 2015).

Table 2: FDI inflows into Rwanda, by sector, 2012-2018

	2012		2013		2014		2015		2016		2017		2018
	FDI inflows (USD million)	Percentage of FDI inflows, by sector	FDI inflows ((USD million)	Percent	FDI inflows ((USD million)	Percent	FDI inflows (USD million)	Percent	FDI inflows (USD million)	Percent	FDI inflows (USD million)	Percent	FDI inflows (USD million)
Administrative and support service activities	0.3	0.1%	0.0	0.0%	0.2	0.1%		0.0%	0.6	0.2%	1.4	0%	0.1
<b>Agriculture</b>	<b>10.7</b>	<b>4.2%</b>	<b>20.5</b>	<b>8.0%</b>	<b>8.7</b>	<b>1.9%</b>	<b>17.3</b>	<b>4.6%</b>	<b>5.5</b>	<b>1.6%</b>	<b>15.5</b>	<b>4%</b>	<b>15.5</b>
Construction	1.0	0.4%	2.4	0.9%	1.5	0.3%	22.0	5.8%	7.4	2.2%	1.5	0%	2.1
Education	0.0	0.0%	1.2	0.5%	2.6	0.6%	2.5	0.7%	0.0	0.0%	1.5	0%	1.5
Electricity, gas, steam	0.2	0.1%	0.3	0.1%	0.0	0.0%	76.1	20.0%	21.9	6.4%	45.8	13%	144.1
<b>Financial and insurance activities</b>	<b>22.3</b>	<b>8.7%</b>	<b>38.0</b>	<b>14.7%</b>	<b>68.8</b>	<b>15.0%</b>	<b>57.9</b>	<b>15.2%</b>	<b>70.3</b>	<b>20.5%</b>	<b>36.0</b>	<b>10%</b>	<b>72.1</b>
Human health and social work activities	0.6	0.2%		0.0%		0.0%	0.6	0.2%	1.3	0.4%	2.2	1%	0.1
<b>ICT</b>	<b>167.3</b>	<b>65.6%</b>	<b>20.5</b>	<b>7.9%</b>	<b>116.2</b>	<b>25.3%</b>	<b>76.7</b>	<b>20.2%</b>	<b>113.1</b>	<b>33.1%</b>	<b>50.2</b>	<b>14%</b>	<b>81.1</b>
<b>Manufacturing</b>	<b>34.9</b>	<b>13.7%</b>	<b>64.0</b>	<b>24.8%</b>	<b>21.2</b>	<b>4.6%</b>	<b>14.5</b>	<b>3.8%</b>	<b>41.1</b>	<b>12.0%</b>	<b>106.9</b>	<b>30%</b>	<b>28.1</b>
Mining	0.1	0.0%	99.3	38.5%	136.2	29.7%	7.1	1.9%	6.7	2.0%	4.3	1%	2.1
Other service activities	1.9	0.8%	0.4	0.1%	0.2	0.0%	0.3	0.1%	0.5	0.2%	-0.3	0%	0.1
Professional, scientific and technical activities		0.0%	0.0	0.0%	2.0	0.4%	1.0	0.3%	0.4	0.1%	0.7	0%	4.1
Real estate activities		0.0%	0.3	0.1%		0.0%	7.7	2.0%	11.0	3.2%	8.0	2%	0.1
<b>Tourism</b>	<b>1.7</b>	<b>0.7%</b>	<b>2.0</b>	<b>0.8%</b>	<b>71.8</b>	<b>15.6%</b>	<b>66.9</b>	<b>17.6%</b>	<b>4.4</b>	<b>1.3%</b>	<b>37.4</b>	<b>11%</b>	<b>2.1</b>
Transportation and storage	5.8	2.3%	1.0	0.4%	-0.1	0.0%	3.2	0.8%	0.5	0.2%	3.2	1%	8.1
Water supply		0.0%	0.0	0.0%		0.0%	0.0	0.0%	0.0	0.0%	0.0	0%	0.1
<b>Wholesale and retail trade</b>	<b>8.1</b>	<b>3.2%</b>	<b>7.9</b>	<b>3.1%</b>	<b>29.6</b>	<b>6.4%</b>	<b>26.0</b>	<b>6.9%</b>	<b>57.4</b>	<b>16.8%</b>	<b>42.0</b>	<b>12%</b>	<b>15.1</b>



TOTAL	255.0	100%	257.6	100.0%	458.9	100.0%	379.8	100.0%	342.3	100.0%	356.4	100%	381.0
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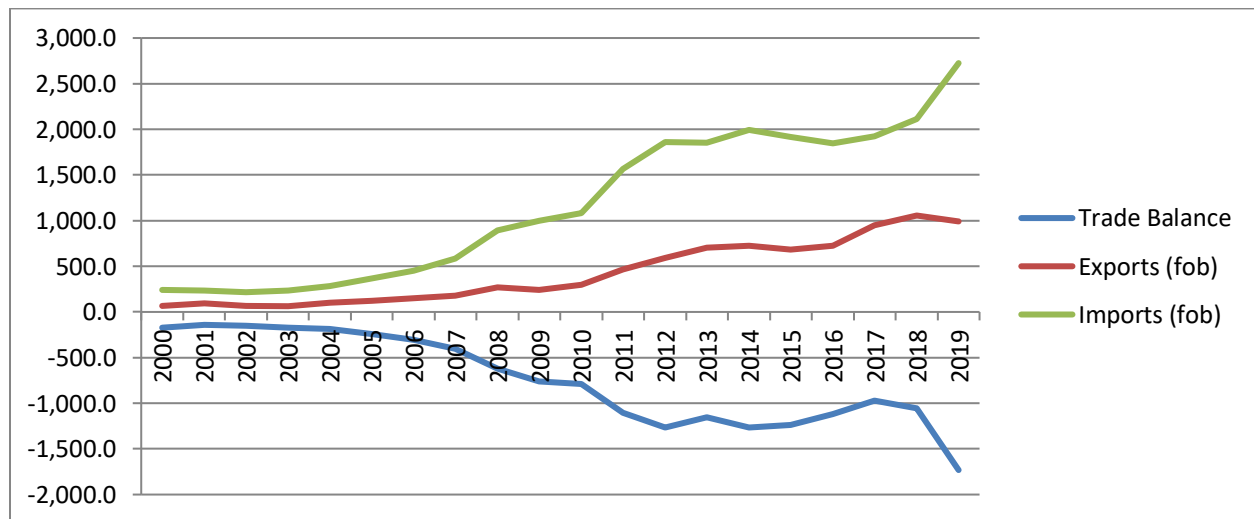
Source: NISR, Foreign Private Capital Census Report 2019

There have been fluctuations in FDI inflows by sector, as well as in sectoral shares between 2012 and 2018. While ICT and manufacturing were the most attractive sectors in 2012, accounting for 65 percent and 14 percent respectively of all FDI inflows, financial and insurance activities had the most steady and rising share of FDI, from 8.7 percent in 2012 to 20.5 percent in 2016, rising to second position from third. In 2013 and 2014 tourism received a sizable share of FDI, at 16 percent and 18 percent, respectively.

### 1.4. Trade

Rwanda’s exports increased significantly from US\$69 million in 2000 to US\$993.5 million by 2019 a result of the efforts by the government to address the trade deficit. However, imports have experienced a bigger increase, from USD238.3 million to 2,725.2 million USD within the same time frame. This has led to an increase in the trade deficit from US\$169 million in 2000 to US\$1309 million in 2016, falling to US\$861 million in 2017. From 2017 to 2019/2020 the trade deficit surged to a level of US\$1,731.65 million. The 2020 deficit was on the account of the surge in imports of gold for processing coupled with increased demand for consumer goods, following the government initiative to provide food to vulnerable people during the lockdown period. To counter the growing trade deficit, the government has implemented policies including the National Exports Strategy (NES) and the “Made in Rwanda” policy that was implemented to recapture the domestic market by promoting locally made goods and services.

Figure 5. Trends in exports, imports and trade balance, 2000-2019 (US\$ million)



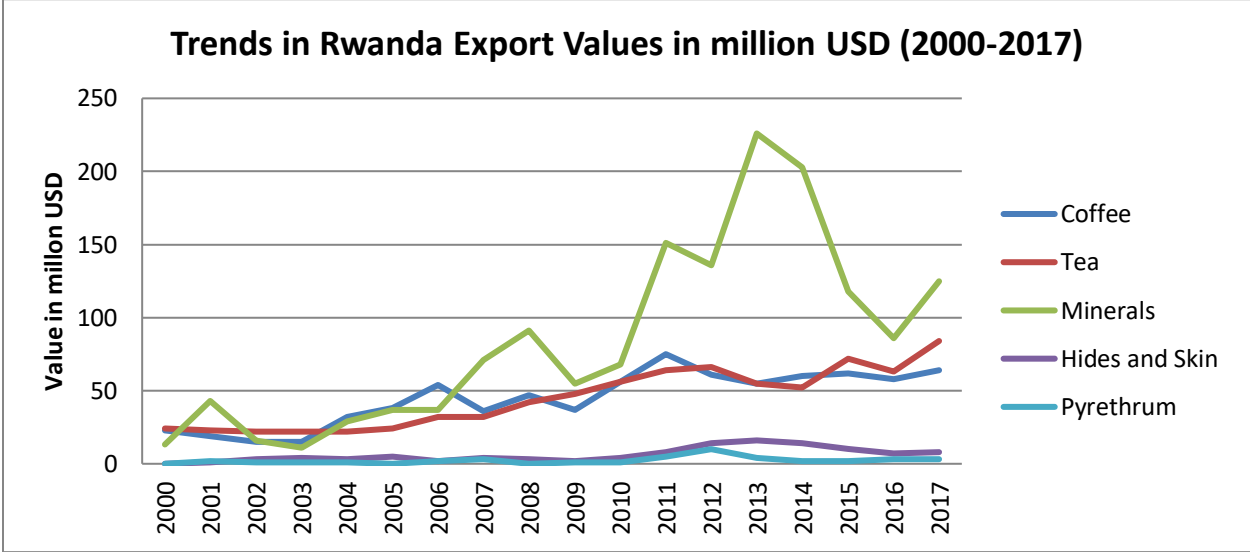
Source: Authors’ calculations from Rwanda Updated Macroeconomic Framework database, 2020

Although exports have been somewhat diversified over time, Rwanda’s main exports are traditional primary products including coffee, tea, cassiterite, coltan, hides and skins and pyrethrum. The composition of the main exports makes the country vulnerable to price variations and climate change.

For instance, coffee export revenue increased to US\$75 million in 2011 only to fall to US\$64 million in 2017, despite an increase in volume, a feature that has characterized other primary products.

To address the challenges, the government has invested tourism and turned it into the major export revenue earner over the past decade.

Figure 6. Trends in export values, 2000-2017 (US\$ million)



### 1.5. Monetary policy developments

**Interest rates:** Although interest rates have been stable, lending rates are still high, averaging about 17 percent over the past 10 years. In order to rectify this problem, the National Bank of Rwanda (NBR) has maintained an accommodative monetary policy stance in order to support continued financing of the economy by the banking sector. For example, the NBR reduced its policy rate (key repo rate – KRR) from 6.25 percent in December 2016 to 6.0 percent in June 2017 and 5.5 percent in December 2017. Interest rates have generally been stable over the year, which partly explains the stable macroeconomic environment the economy has experienced. Over the past 10 years, the key repo rate has ranged between 6.7 percent and 5.5 percent, with a recent decline to 5.71 percent as the central bank endeavors to reduce the cost of capital for the private sector.

Table 3. Evolution of interest rates, 2009-2018 (%)

	2009– 2010	2010– 2011	2011– 2012	2012– 2013	2013– 2014	2014– 2015	2015– 2016	2016– 2017	2017– 2018
Key repo rate	6.5	6.25	6	6	5.5	5.5	5.5	6.35	5.71
Discount rate	10.5	10.25	10	10	9.5	9.5	9.5	10.35	9.71
Repo rate	3.62	4.99	4.42	4.11	4.21	3.98	4.38	4.8	4.19
T-bill rate	7.29	9.42	8.78	7.42	7.07	6.27	5.92	8.79	6.88
Interbank rate	5.93	6.1	6.4	5.76	5.85	5.24	5.58	6.38	5.71
Deposit rate	7.94	7.84	7.92	7.86	8.7	8.23	8.33	7.83	7.82
Lending rate	16.95	16.85	16.76	17.33	17.19	17.08	17.3	17.25	17.15
Spread	9.01	9.01	8.84	9.47	8.49	8.85	8.98	9.42	9.33
Real deposit rate	2.4	0.11	3.15	4.1	8.03	7.38	5.45	1	5.54

Source: National Bank of Rwanda Annual Reports

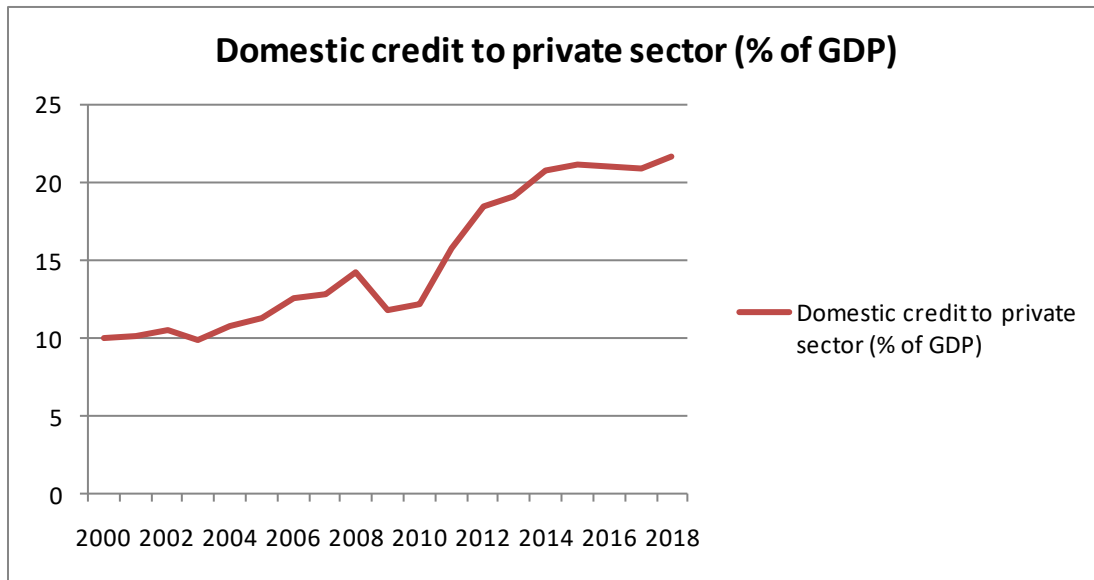
Despite the stable interest rates, the lending rate has remained significantly high at approximately 17 percent, making the cost of capital for the private sector high and an impediment to private sector growth and investment. This is one of the critical challenges the government must address if private sector investment is to grow and, equally, remain sustainable. Table 3 shows that the spread between the interest charged on bank loans to the public and the interest paid on bank deposits has remained high, averaging about 9 percent over the past 18 years. Commercial banks claim that the low savings rate in Rwanda pushes them to acquire capital from foreign sources at higher cost, which then translates into higher lending rates and subsequently a large spread.

In order to rectify this problem, the National Bank of Rwanda has maintained an accommodative monetary policy, reducing the policy rate to 5 percent in May 2019 from 5.5 percent. This is intended to translate into lower interest rates charged on loans and subsequently to narrow the spread (NBR, 2019). During the peak of the COVID-19 pandemic in 2020, the National Bank of Rwanda maintained its repo rate at 4.5 percent to further support financing for the economy. In addition, the National Bank of Rwanda implemented financial literacy programmes among the public to raise awareness of the benefits of savings. Finally, the NBR has been pushing for more use of digital payment methods (such as online payments and e-wallets, such as tap-and-go for city commuters) to promote a cashless economy, thereby increasing the amount of credit available to the private sector.

### **Credit to the private sector**

As the economy has expanded over the years, domestic credit to the private sector has grown from 10 percent in 2000 to 21 percent in 2018. The trend has not been all positive, as the economy contracted in 2009. In the last few years it has fluctuated between 19 and 21 percent.

Figure 7. Domestic credit to the private sector, 2000–2018 (% of GDP)



Source: National Bank of Rwanda Annual Reports, 2018

In absolute terms, the main sectors absorbing the new loans include public works and buildings, commerce, restaurants and hotels, transport, warehousing and communications, and manufacturing, while mining has received the least loans. As a proportion of total new authorized loans to the private sector, commerce, restaurants and hotels have dominated private sector credit, averaging about 40 percent, followed by public works and buildings, which averaged about 24 percent over the past 20 years. This is in line with the high growth experienced in the service and construction sectors during the period. However, credit to the agriculture sector has averaged only about 2 percent because of its inherent risk. More effort needs to be put into reducing the risk by increasing access to agricultural insurance in order to increase credit access for the sector.

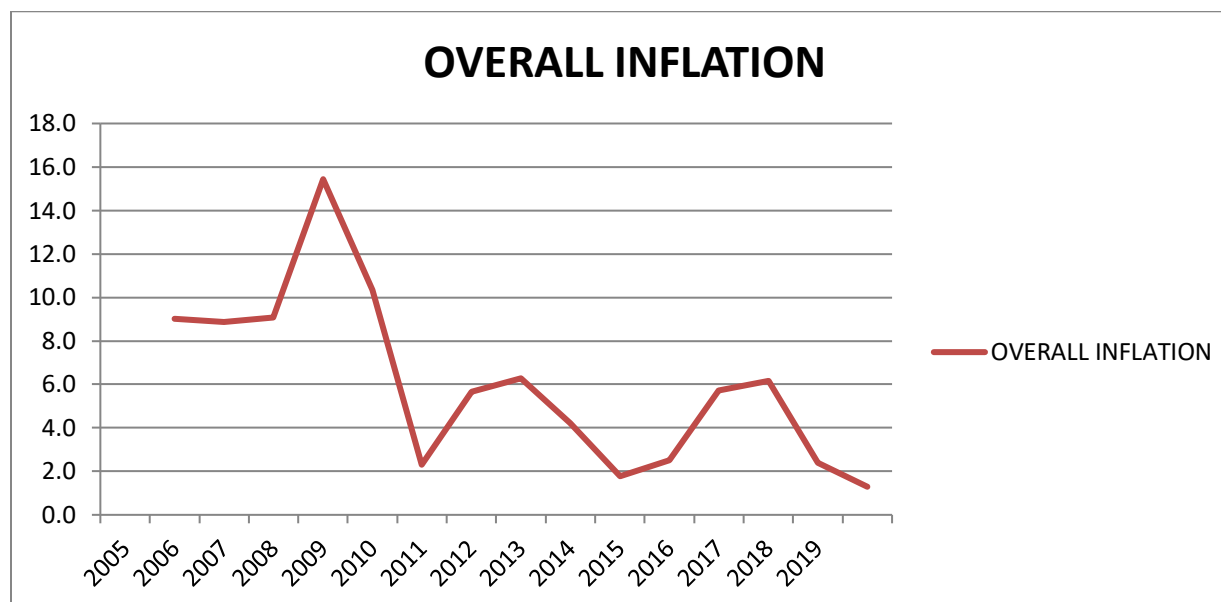
Table 4. New authorized loans, by economic sector, 2007-2018 (% of total loans)

	2007	2008	2009	2010– 2011	2011– 2012	2012– 2013	2013– 2014	2014– 2015	2015– 2016	2016– 2017	2017– 2018
Non-classified activities	6%	7%	9%	12%	17%	14%	11%	9%	9%	11%	12%
Agricultural fisheries and livestock	3%	1%	1%	3%	2%	2%	1%	2%	2%	1%	1%
Mining activities	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.03%	0.09%	0.21%	0.09%	0.05%
Manufacturing activities	10%	6%	9%	8%	4%	9%	13%	6%	9%	7%	8%
Water and energy	0.1%	0.1%	1.1%	0.8%	0.1%	0.9%	3.7%	1.6%	1.0%	3.3%	1.4%
Public works and buildings	20%	30%	21%	24%	25%	20%	20%	27%	26%	27%	28%
Commerce, restaurants and hotels	46%	41%	36%	39%	40%	43%	42%	41%	44%	39%	35%
Transport, warehousing communication	11%	10%	18%	7%	6%	6%	5%	7%	6%	7%	10%
OFI & insurance and ONFS	2%	1%	3%	3%	3%	2%	0%	1%	1%	1%	0%
Services provided to the community	2%	5%	2%	3%	2%	3%	3%	5%	3%	3%	3%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Source: National Bank of Rwanda Annual Reports

**Inflation:** Apart from 2008, Rwanda’s inflation has consistently been in single digits, averaging 6.9 percent in the past decade. Local inflation has averaged 6.9 percent, as against an imported inflation average of 5.1 percent. The major drivers of inflation have been food, housing and education. Overall Rwanda’s inflation has been within the government target of 5 percent and the prospects are that it will remain stable. However, it is still prone to volatilities in the agricultural sector and international oil prices.

Figure 8: Overall inflation, 2005-2019 (%)



## 1.6. Labor market developments

According to the 2018 Labor Force Survey, the annual unemployment rate in Rwanda stood at 15 percent. Unemployment rates for the years prior to 2018 had been less than 2 percent simply because of the definition of employment that identified an employed person as one who had worked for at least an hour in the past seven days irrespective of whether they had been paid or not. The 2018 Labor Force Survey definition of employment excluded unpaid family workers, which led to the reported unemployment rate of 15 percent. According to this survey, the unemployment rate was higher among women (17.1 percent) than among men (13.5 percent) and higher among young people (18.7 percent) than among adults (12.3 percent). It was also higher in urban areas (16.5 percent) than in rural areas (14.7 percent)

Rwanda's working age population has increased gradually from 4 million in 2000 to the current 6.7 million. This has been complemented by an increase in both employed and unemployed people. The total labor force participation rate has ranged between 80 percent and 86 percent, while the employment-to-population ratio averages 86 percent between 2010 and 2017. The inactive rate increased tremendously in 2016 because those who were initially classified as unemployed were reclassified as inactive.

Table 5. Selected indicators, 2000–2017

Indicator	2000–2001	2005–2006	2010–2011	2013–2014	2016–2017
Working age population (000)	4,118	5,116	5,888	6,400	6,756
Employed	3,571	4,299	4,783	5,479	5,825
Unemployed	488	735	994	810	109
Inactive	59	81	110	112	931
Labor force participation rate (%)			83.1	87.4	87

Employment-to-population ratio (%)

81.2

85.6

86

Source: Authors' calculations from EICV surveys.

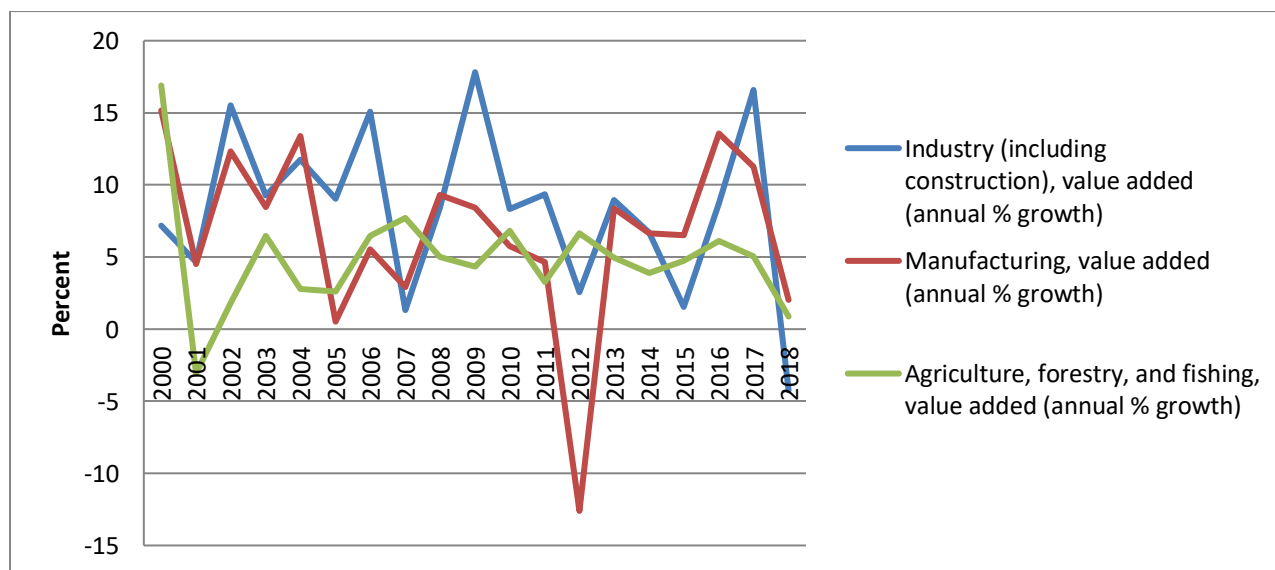
Table 6: Total employment and labor productivity, 2000-2017

Year	Total employment	Nominal GDP (Rwf)	National labor productivity	Real GDP (Rwf)	National labor productivity (real GDP; Rwf)
2000–2001	3,571,000	676,000,000,000	189,303		
2005–2006	4,299,000	1,439,914,990,482	334,942		
2010–2011	4,783,000	3,366,608,332,281	703,870	4,241,000,000,000	886,682
2014–2015	5,479,000	5,466,207,499,041	997,665	5,697,000,000,000	1,039,788
2016–2017	5,825,000	6,672,000,000,000	1,145,408	6,397,000,000,000	1,098,197

Source: Authors' calculations from national statistics and EICV survey data

In real terms, labor productivity in Rwanda in terms of output per worker has grown from Rwf 886,682 per year in 2010 to Rwf 1,098,197 per year in 2017

Figure 9: Annual sectoral productivity growth, 2000-2018 (%)



Source Authors' calculations from World Bank, World Development Indicators

A break-down of productivity growth by sector shows that value added has averaged 8.3 percent, 6.7 percent and 4.91 percent in the industrial, manufacturing and agricultural sectors respectively over the last 20 years (See Figure 10). This implies that compared with manufacturing and industry, productivity growth in Rwanda's agricultural sector has been lower.

An analysis of the impact of economic growth on structural transformation and employment in Rwanda shows that prior to the COVID-19 pandemic in 2020, economic development was coupled with employment generation. A breakdown of GDP growth in terms of per capita value added between 2005 and 2017 shows that 88 percent of Rwanda's GDP growth was linked to increased productivity, 6 percent to changes in the employment rate and 6 percent to the increase in the proportion of the working-age population (see Appendix 1). As opposed to the jobless growth witnessed in other developing countries, economic growth in Rwanda was accompanied by job creation.

In terms of employment, the most dynamic sectors over the past decade include construction, transport (by 53 percent), information and communications technology (ICT) (56 percent), tourism and recreation (120 percent), and services (113 percent). Evidence from the 2021 mid-term evaluation of the National Strategy for Transformation which was conducted by IPAR-Rwanda shows that the major policies driving the progress include the following:

- In the construction sector, Rwanda Housing Authority and the City of Kigali have implemented measures to reduce high costs and streamline procedures for obtaining construction permits.
- In the ICT sector, Rwanda's ambition is to become an ICT hub in the region. This has led to significant investment, including in high-speed broadband infrastructure and cyber security systems. These have transformed the country into one of the most connected in Africa.
- In the tourism sector, Rwanda has continued to position itself as a hub of "meetings, incentives conferencing and exhibitions" (MICE) tourism by making investments in Rwanda Air (the national carrier) and building conference facilities such as the Kigali Convention Centre and the Kigali Arena.
- In addition, Rwanda has partnered with European football clubs (such as Arsenal and Paris Saint-Germain) to promote the "Visit Rwanda Campaign", all of which have led to employment and revenue growth in the tourism sector. Employment in the services sector has been boosted by the above-mentioned Made-in-Rwanda program, a government-led domestic market recapturing strategy aimed at encouraging citizens to buy goods and services from both local and foreign companies located in Rwanda.

### **1.5. Poverty and Inequality**

Rwanda's policy agenda in the past two decades has been geared towards reducing household poverty. Against the national poverty line currently at Rwf 159,375 (NISR, 2018), poverty has fallen over the years. The policies implemented include free or subsidized access to education, and infrastructure development through rural road construction. These, among other policies, have reduced poverty from 58.9 percent in 2000 to 38.2 percent by 2017, as against the targeted 30 percent under Rwanda's National Strategy for Transformation (NST1).



Table 7. Poverty and inequality indicators, 2000-2017

	2000– 2001	2005– 2006	2010– 2011	2013– 2014	2016–2017
Headcount poverty rate	58.9%	56.7%	44.9%	39.1%	38.2%
Poverty gap rate			14.8	12	11.7
Working poverty rate		54.9%	40.9%	34.9%	33.6%
GINI coefficient	0.473	0.522	0.49	0.447	0.429

Source: Integrated Household Living Conditions Survey, NISR (2006, 2011, 2014, 2017).

Over the past 20 years, poverty rates in Rwanda have declined consistently, from 58.9 percent in 2000 to 38.2 percent in 2017. In addition, the level of inequality as indicated by the Gini coefficient has fallen from 0.47 in 2000 to 0.43 in 2017 implying that the gap between the poor and the well-off people is still relatively high. Given that Rwanda started from a very low base with high poverty rates of about 6 percent, reducing the poverty rate to about half within the past 20 years has been a remarkable consequence of the job-creating growth achieved in Rwanda. Findings from the estimation of the employment elasticity of growth show that Rwanda's economy has expanded in tandem with employment growth in the past two decades. This relationship reflects the positive jobs spill-over from economic growth or rather a positive employment elasticity of growth of 0.203\*\*\* as shown below.

Table 8. Employment elasticity of growth in Rwanda, 2000-2017

	Log total employment	
Lngdp	0.203***	
	(13.09)	
_cons	9.578***	
	(21.65)	
R-sq	0.983	
t statistics in parentheses		
** p<0.05	** p<0.01	*** p<0.001"

However, there is still need to address the current low productivity of the significant proportion of the population that is mainly employed in agriculture in order to further reduce poverty and income inequality (see Figure 10 above on productivity trends by sector) . These efforts will include provision of skills-based education, improved health care and increased use of inputs in agriculture.

### **Rwanda's demographic transition**

With a median age of 19 years, the population of Rwanda is dominated by young people and this looks set to persist into the future. The predominantly low level of education, however, threatens the expected demographic dividend. This is manifest in the high percentage of young people not in education or employment or training (NEET), which currently stands at 33.7 percent, having fallen from 35.9 percent in the past decade. The majority of NEET youths are women, at 43 percent, with men at 23.5 percent. Promoting sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all requires the government and development partners to address school drop-out rates, while at the same time supporting private sector development in order to create employment opportunities for young people.

# Chapter 2. Development policies and economic transformation

## 2.1. National plans and sectoral policies and strategies

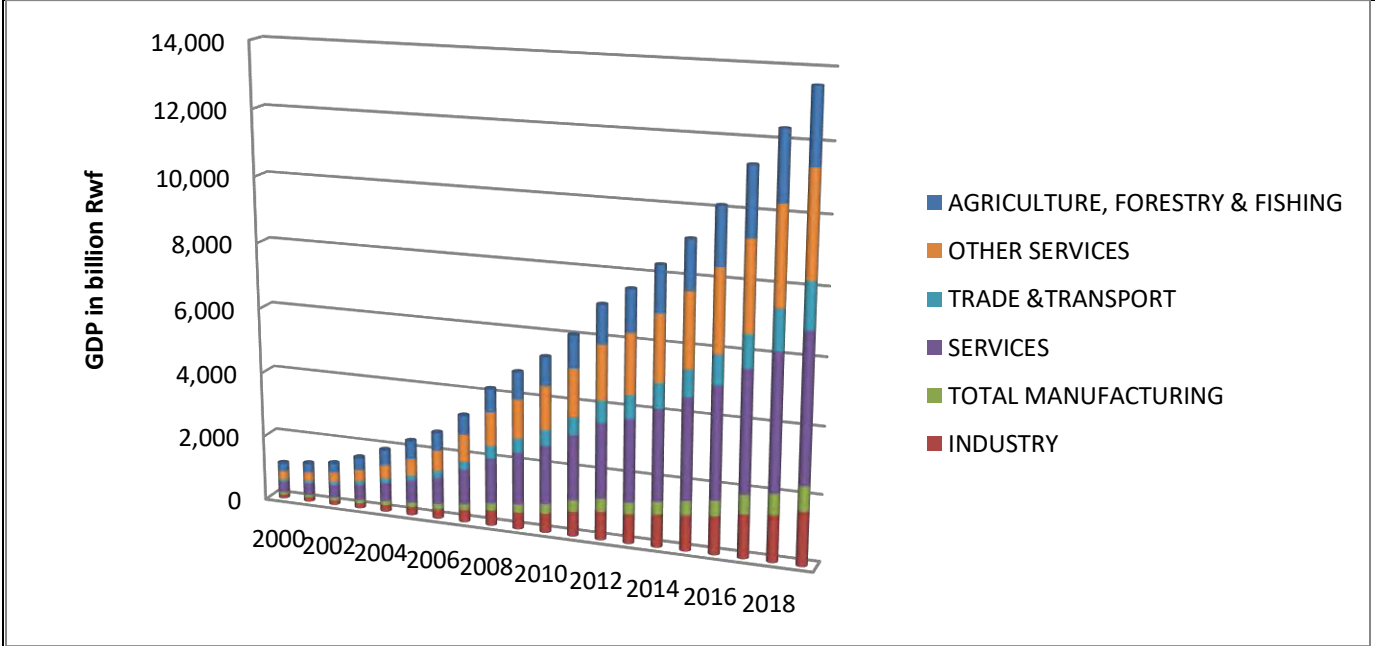
Rwanda’s development plans over the last 20 years start with Vision 2020 which has been implemented through a series of medium-term strategies. The Vision 2020 was launched in 2000 after a rigorous consultative process with the overarching goal of transforming Rwanda into a lower middle-income nation in which Rwandans are healthier, more educated and generally more prosperous.

Vision 2020 was implemented through the Interim Poverty Reduction Strategy (I-PRS), the Poverty Reduction Strategy Paper (PRSP), the Economic Development and Poverty Reduction Strategies (EDPRS) 1 and 2 and the National Strategy for Transformation (NST-1) for its final phase. While the first four national strategies were formulated to ensure systematic implementation and target achievement under Vision 2020, the NST1 serves as a transitional strategy between Vision 2020 and Vision 2050.

### 2.1.1. Sectoral policies

An analysis of the sectoral contributions to GDP over time show that the contribution of services to Rwanda’s economy has increased and overtaken agriculture. The contribution of manufacturing to GDP has remained low and stagnated while the contribution of industry has risen due to increased investments in construction and infrastructure works linked to MICE promotion.

Figure 10. Sectoral contributions to GDP, 2000-2019



Source: Authors’ calculations from MINECOFIN updated Macroeconomic Framework 2021

## **Agriculture**

The major policy that is being implemented is the Strategic Plan for Agricultural Transformation (PSTA). The current (and fourth) phase of implementation (i.e. PSTA4) runs from 2018 to 2024 and emphasizes commercialization, intensification, value addition and diversification into new non-traditional agricultural commodities with an export focus. This has led to productivity increases and a 3 percent reduction in agricultural employment between 2005 and 2017. Nevertheless, key agricultural sector challenges include land limitation, climate change impact on productivity, and subsistence methods which affect productivity of the sector

## **Manufacturing**

Rwanda's manufacturing sector has not kept pace with the services sector in terms of value addition and this is due to constraints such as limitations in capital investments, low levels of technology, a small domestic market, and the relatively high cost of utilities. Several initiatives have been implemented in the last 20 years to boost the manufacturing and industry sector including: operationalizing the Kigali Special Economic Zone (SEZ); developing four provincial industrial parks and other district industrial parks in secondary and tertiary cities (Office of the Prime Minister, 2017), and the issuance by the Rwanda Standards Board (RSB) of 2,051 standards and 369 product certifications to meet international standards. Although these policies have boosted investment, exports and jobs, there is still room for improvement in terms of boosting investment for industrial zones in the secondary cities which have attracted limited investment over the last 10 years.

## **Construction**

As part of the ongoing government reforms to improve the business climate in the country, three major reforms have been instituted that decrease bureaucracy in the construction sector. In addition to ensuring timely electricity provision for investors, the Rwanda Housing Authority and City of Kigali have implemented measures to reduce high costs and streamline procedures for obtaining construction permits. Procedures that have been revised include geo-technological studies, topographical surveys and environmental impact assessment. Reducing the bureaucracy involved in obtaining construction permits helps reduce losses incurred by property developers from high interest on loans and mortgages due to late issuance of construction permits.

## **ICT and transport**

As it is Rwanda's ambition to become an ICT hub of the region, the government has invested significantly, making it the most connected country in Africa. High-speed broadband infrastructure has now reached all corners of the country. A state-of-the-art cyber security facility has been operationalized to protect business and government systems from cyber-attacks. Government services are now accessible on the *Irembo* platform and payment is possible electronically. The number of electronic services has increased significantly, fuelled by disruptive advances in electronic financial services, such as Tap-and-Go, which has increased efficiency in the public transport sector by enabling passengers to swipe preloaded cards to make payments for their fares rather than paying cash. These electronic payment systems have reduced cash leakages, they are more efficient, facilitate tax collection from the sector and have created job opportunities within the sector.

## **Tourism**

Over the past 10 years, Rwanda has continued to position itself as a hub of MICE tourism by investing in Rwanda Air, the national carrier, building conference facilities such as the Kigali Convention Center and Kigali Arena, and attracting local and foreign investments in hotels. In addition, Rwanda has partnered with Arsenal Football Club and Paris Saint-Germain FC to promote the “Visit Rwanda” campaign. All have led to employment and revenue growth in the tourism sector.

## **Services**

In line with Rwanda’s ambition of becoming a middle-income, services-based economy, sustained policies such as improving the business environment have attracted both local and foreign direct investment in the real estate, education, health and social sectors. This has led to 144 percent growth in the number of jobs in the services sector over the past 10 years.

## **2.12. Strengths and weaknesses of Rwanda’s development policies**

### **Strengths**

#### **Coordination**

The establishment of coordination mechanisms and division of labor during the implementation of Rwanda’s development policies has led to improvements in the effectiveness of Rwanda’s development policies. Accrued benefits from coordination include reduced duplication of projects and interventions within and across sectors, efficient resource allocation, and priority setting to ensure that timely implementation of planned interventions.

During the implementation of development policies and strategies, the role of the lead ministry is instrumental for sector-level performance. The more aggressive the lead ministry is in coordinating and ensuring sector-level interventions, the more the actors in the sector are likely to contribute to effective implementation.

However, there is room for improvement in the implementation of development plans and strategies. For example, there is need for more efficient collaboration in priority areas that require a multi-sector approach such as food and nutrition security, job creation, sustainable environmental action and gender equality. These efficiency gains are likely to help improve labor allocation, responsibility sharing, resource mobilization, and accountability frameworks (through joint performance contracts). Implementation and follow-up of development policies is done through joint sector working groups comprising ministries, development partners and other policy makers.

## Weaknesses

### Capacity gaps in sector working groups

In order to ensure more benefit from the established platforms such as the sector working groups, more technical assistance is needed to support resource persons. Such people need to be capable of assessing and providing guidance on the following: priority areas, program implementation gaps at sector level, and sector-level policy analysis to improve the performance of ministries and agencies in the concerned sector.

## 2.2 Structural and economic transformation in Rwanda, 2005-2017<sup>5</sup>

### 2.21 Employment, output, productivity and population

Rwanda's GDP in terms of value added almost doubled from Rwf 3,143 billion in 2005 to Rwf 5,970 billion in 2017. According to the 2018 Labor Force Survey, the annual unemployment rate in Rwanda stood at 15.1 percent. The unemployment rate was higher among women (17.1 percent) than among men (13.5 percent) and higher among young people (18.7 percent) than among adults (12.3 percent). In addition, productivity in terms of output per worker has increased by 60 percent, while the employment rate has increased by 3 percent over the past decade. The proportion of working-age people has increased from 84 percent in 2005 to 87 percent in 2017.

Table 9. Employment, output, productivity and population, 2005-2017

	2005/6	2016/17	% change
GDP (value added) (Rwf million)	3,143	5,970	90
Total population	10,674,689	11,893,228	11
Total population of working age	8,966,739	10,299,535	15
Total number of employed	4,906,000	5,825,000	19
GDP (value added) per capita	294,435	501,966	70
Output per worker	640,644	1,024,893	60
Employment rate <sup>6</sup>	55	57	3
Share of population of working age	84	87	3

Source: Authors' calculation from NISR Rwanda surveys including EICV4 and EICV5

### 2.22. Dynamic sectors in terms of employment, 2005-2017

In terms of employment, the most dynamically growing sectors over the last 12 years include construction (53 percent), transport and ICT (56 percent), tourism and recreation (120.5 percent), and services, including health, education, real estate activities and household enterprises (113 percent)

<sup>5</sup> From the National Household Surveys of 2005/6, 2010/11 and 2016/17. The 2000 Household Survey's coverage was limited hence its exclusion from the analysis.

<sup>6</sup> Unemployment rates prior to the changes in definition of employment before 2018 were very low and less informative given that every person who worked for at least an hour in the past one week was regarded as employed.

(Table 10). Falling employment in financial services are mainly attributed to increasing digitalization in the sector, with an increase in electronic banking and banking agents who have brought banking services closer to the people as opposed to mainstream banking. In addition, the manufacturing sector had a slight reduction in employment due to the relatively low investment and productivity in the sector over the study period. Currently, the government is implementing the Manufacture and Build to Recover initiative which is intended boost investment and productivity within the manufacturing and construction sectors during the post-COVID-19 economic recovery period.

Table 10. Employment, by sector of economic activity, 2005-2017

	Sectoral employment					Employment/population of working age		
	2005	2005 Percent	2017	2017 Percent	% change	2005/6	2016/17	% change
Agriculture, fishing, forestry	3,596,000	73.3%	4,065,850	70%	13.1	40.1	39.5	-1.6
Mining and quarrying	48,000	1.0%	52,425	1%	9.2	0.5	0.5	-4.9
Manufacturing	112,000	2.3%	122,325	2%	9.2	1.2	1.2	-4.9
Utilities	10,000	0.2%	11,650	0%	16.5	0.1	0.1	1.4
<b>Construction</b>	<b>146,000</b>	<b>3.0%</b>	<b>256,300</b>	<b>4%</b>	<b>75.5</b>	<b>1.6</b>	<b>2.5</b>	<b>52.8</b>
Trade	444,000	9.1%	495,125	9%	11.5	5	4.8	-2.9
<b>Transport and communications</b>	<b>91,000</b>	<b>1.9%</b>	<b>163,100</b>	<b>3%</b>	<b>79.2</b>	<b>1</b>	<b>1.6</b>	<b>56</b>
Financial services	20,000	0.4%	17,475	0%	-12.6	0.2	0.2	-23.9
Government	211,000	4.3%	81,550	1%	-61.4	2.4	0.8	-66.4
<b>Recreation and tourism Other services (real estate, education, health &amp; social work, household enterprises)</b>	<b>23,000</b>	<b>0.5%</b>	<b>58,250</b>	<b>1%</b>	<b>153.3</b>	<b>0.3</b>	<b>0.6</b>	<b>120.5</b>
Total	4,906,000	100.0%	5,825,000	100%	18.7	54.7	56.6	3.4

Source: Authors' calculations from EICV 4 and EICV5. National Institute of Statistics Rwanda (NISR)

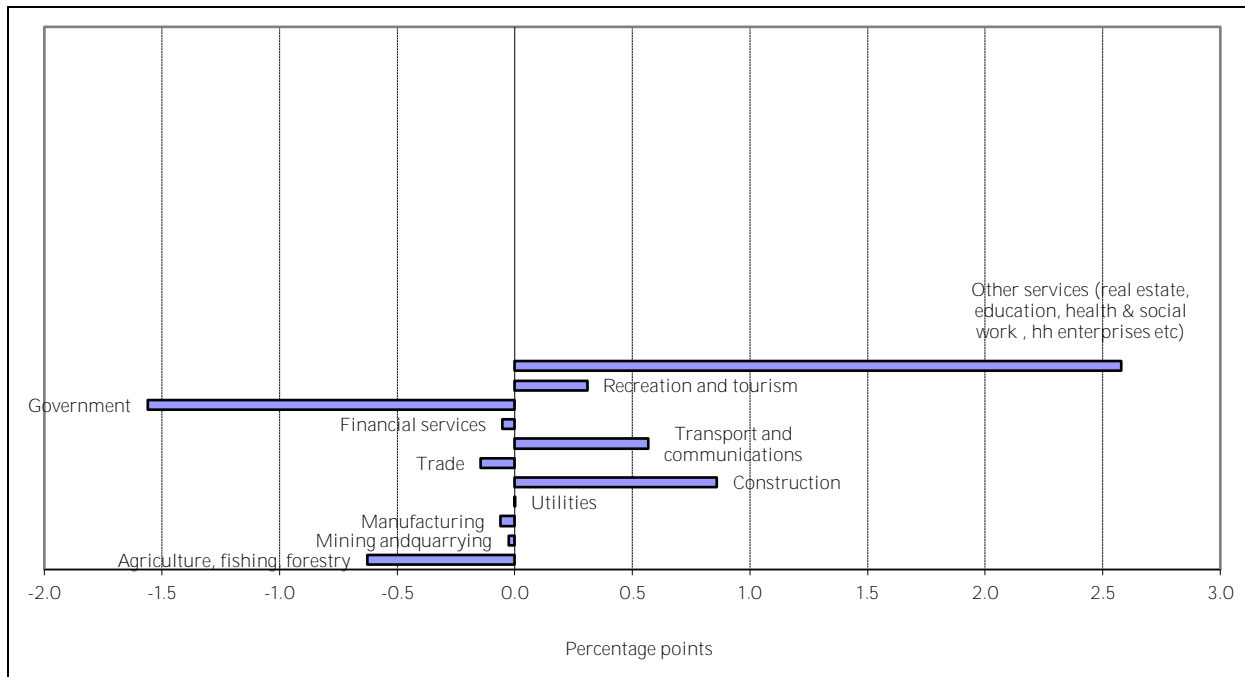
- (i) Changes in the proportions of factors (e.g., labor) employed in the various sectors of the economy

Figure 12 shows the contribution of each sector to the overall change in the employment-to-population ratio in Rwanda over the past 10 years. The contribution of each sector is calculated by dividing the employment in a given sector by the working age population in 2005 and 2017. This provides the difference between these two ratios for each sector to determine sectoral changes in the employment-to-population ratio. The overall change in this ratio is obtained by subtracting the national employment-to-population ratio in 2005 from the ratio in 2017. The sectoral changes are normalized to 1 and then multiplied by the national change in order to obtain the sectoral changes in percentage points.

The findings show that in terms of contribution to the changes in Rwanda's employment-to-population ratios, services was the most dynamically growing sector, with a contribution of 2.6 percentage points.

This is in line with Rwanda’s NST ambition of becoming a middle-income, services-based economy by 2030. Services were followed by construction, transport and ICT and tourism.<sup>7</sup>

Figure 11: Contribution of each sector to changes in the employment-to-population ratio, 2005 to 2017 (percentage points)



Source: Authors’ computations from EICV4 and EICV5 NISR Household Surveys

### 2.2.3. Dynamic sectors in terms of productivity, 2005-2017

In terms of productivity, government services, financial services, trade, utilities and construction enjoyed the highest growth over the past 10 years in Rwanda. Productivity in government services increased due to the policy of ICT mainstreaming in all government institutions. Here, registration and payment for government services can now be done electronically on the *Irembo* platform. Productivity in the financial industry improved through a series of digital interventions such as electronic banking, mobile banking and electronic payments, all of which are in line with Rwanda’s policy of promoting a cashless economy.

Within the trade sector, electronic billing machines (EBMs) were introduced to increase efficiency in the payment of taxes. As part of the ongoing effort to improve the business climate, three major reforms were instituted to decrease bureaucracy in construction, ensure timely electricity provision for investors, and reduce the amount of time exporters spend at Customs. Currently, exporters are able to obtain certificates of origin online. In addition, exporters are able to apply for phytosanitary certificates from the Ministry of Agriculture and Animal Husbandry online. This has facilitated businesses that export tea, coffee and other agricultural products.

<sup>7</sup> ICT and tourism are classified separately from other services due to their strategic and enabling importance within Rwanda’s economy, warranting separate monitoring. Tourism is a key service, while ICT is an enabler that cuts across other sectors.



Table 11. Changes in output per worker, by sector, 2005-2017 (2014 Rwf)

	2005/ 2006	2016/ 2017	% change
Agriculture, fishing, forestry	308,954	430,414	39
Mining and quarrying	2,166,667	2,956,605	36
Manufacturing	1,937,500	3,139,178	62
Utilities	3,300,000	7,896,996	139
Construction	1,041,096	1,802,575	73
Trade	454,955	943,196	107
Transport and communications	516,484	803,188	56
Financial services	1,750,000	6,008,584	243
Government	1,146,919	7,332,925	539
Recreation and tourism	3,000,000	2,128,755	-29
Other services (real estate, education, health and social work, household enterprises)	4,541,463	3,397,545	-25
Total output per worker	640,644	1,024,893	60

Source: Authors' computations from EICV4 and EICV5 NISR Household Surveys

i) Economy-wide productivity growth and contribution of labor

A breakdown of GDP growth in terms of per capita value added between 2005 and 2017 shows that 88 percent of GDP growth was linked to increased productivity (output per worker) within the different economic sectors, 6 percent to changes in the employment rate and 6 percent due to the increase in the share of the working age population. This implies that economic growth in Rwanda has been accompanied by job creation, which shows a significant positive elasticity of growth.

Table 12. Composition of growth in per capita value added, 2005-2017

	2014 Rwf	Percentage of total change in per capita value-added growth
Total growth in per capita GDP (value added)	207,532	100
Growth linked to output per worker	182,366	88
Growth linked to changes in employment rate	13,105	6
Growth linked to changes in share of population of working age	12,061	6

Source: Authors' computations from EICV4 and EICV5 NISR Household Surveys

#### 2.2.4. Inter-sectoral shifts in employment and productivity

Analysis of growth in terms of value added per capita by sector shows that in most sectors, increases in productivity have been a major contributor to observed growth compared with employment and inter-sectoral shifts over time<sup>8</sup>. Overall, increases in productivity contributed 73 percent of the observed growth, while employment changes, inter-sectoral shifts and demographic changes contributed 6 percent, 15 percent and 5.8 percent, respectively. Sectors in which growth has predominantly been driven by productivity increases rather than employment increases include trade, construction and the government sector. Despite the movement of people out of the government sector, productivity increased in that sector because of increasing automation through platforms such as *Irembo*. The productivity increase offset the reduction in output per capita due to employment shifts, leading to an overall government service contribution of 12.4 percent.

On the contrary, per capita growth in the services sector has been driven mainly by inter-sectoral shifts (accounting for 32 percent) and the creation of new jobs (accounting for 9 percent) rather than productivity. It implies that in addition to the creation of new jobs, workers have moved from low productivity activities to higher productivity activities in Rwanda's services sector over time. Furthermore, with the appropriate training programmes, there is still scope for labor to move from low-productivity agriculture into the services sector.

Given the high contribution of inter-sectoral changes within the services sector and the movement of labor out of the agricultural sector, increased upskilling of current workers through TVET and other on-the-job training programmes is needed to enable these transitions and achieve government targets.

<sup>8</sup> The Jobs Generation and Growth (JOGGS) methodology uses Shapley decompositions, which is a simple additive method that links changes in a particular component to changes in total per capita GDP, by taking into account the relative size of the sector or component, as well as the magnitude of the change. The aim of this methodology is to understand how growth is linked to changes in employment, output per worker and population structure at the aggregate level and by sector. In order to draw the profile of Rwanda's growth, the sources of output per worker growth are disentangled, including: total factor productivity (TFP) growth, movements of employment from one sector to another, or changes in the capital-labor ratio.

Table 13. Contribution to total growth in GDP (value added) per capita, 2005-2017 (%)

	Contribution of within-sector changes in output per worker (%)	Contribution of changes in employment (%)	Contributions of inter-sectoral shifts (%)	Total (%)
Sectoral contributions				
Agriculture, fishing, forestry	19.9	-2.2	3.7	21.4
Mining and quarrying	1.7	-0.1	-0.3	1.3
Manufacturing	6	-0.2	-0.7	5.1
Utilities	2.1	0	0	2.1
Construction	6.4	2.9	1.9	11.3
Trade	9.8	-0.5	0.2	9.5
Transport and communications	1.5	1.9	-0.4	3.1
Financial services	3.4	-0.2	-0.8	2.5
Government	40.3	-5.4	-22.6	12.4
Recreation and tourism	-1.5	1.1	2.1	1.7
Other services (real estate, education, health and social work, household enterprises)	-16.7	8.8	31.7	23.8
Subtotals	73.1	6.3	14.8	94.2
Demographic component	-	-		5.8
Total				100
	Total % change in value added per capita 2005/6-2016/17			70.5

Source: Authors' computations from EICV4 and EICV5 NISR Household surveys

In terms of inter-sectoral shifts, Tables 13 and 14 identify sectors that have been net recipients and net losers of workers in Rwanda over time. Construction, transport and ICT, tourism and recreational plus services have been net recipients, while the primary sectors of agriculture fishing, forestry, mining and quarrying have been the main net losers of workers. The shifting of workers from the agricultural sector, however, is a positive development which has contributed 25 percent of the inter-sectoral shifts observed within Rwanda's labor market over time. Other sectors that have been net losers of workers include manufacturing, finance, and government possibly due to the on-going digitalization and technological developments within these sectors.

Table 14. Decomposition of inter-sectoral shifts, Rwanda, 2005-2017

	Direction of employment share shift	Contribution to intersectoral shifts (%)
Sectoral contributions		
Agriculture, fishing, forestry	-	25
Mining and quarrying	-	-2.1
Manufacturing	-	-4.8
Utilities	-	-0.3
Construction	+	12.9
Trade	-	1.1
Transport and communications	+	-2.5
Financial services	-	-5.1
Government	-	-152.5
Recreation and tourism	+	14.2
Other services (real estate, education, health & social work, household enterprises)	+	214
Total contribution of inter-sectoral shifts		100

Source: Authors' computations from EICV4 and EICV5 NISR Household surveys

### 2.3 Policies that influence progress, constraints and opportunities

Overall, Rwanda has had a positive economic transformation trajectory over the past two decades. This has been mainly driven by (i) increased diversification of economic activities and exports; and (ii) improved standards of wellbeing among Rwanda's population. Rwanda's overall African Transformation Index (ATI) score rose between 2003 and 2013 after which it started to decline. GDP growth rose sharply between 2004 and 2007 then declined from more than 9 percent in 2007 to slightly over 6 percent in 2017.

Between 2005 and 2010, Rwanda marked a steep increase in economic transformation, which raised its ATI score from 11.23 to 15.54 (ACET, 2021). However, volatility in key agricultural commodity markets led to a gradual decline in economic transformation from a peak ATI index of about 16.5 in 2013 to an ATI index of about 14.5 in 2017. An analysis of the macroeconomic trends shows that the overall economy has grown at a significant rate, averaging annual GDP growth of 8 percent during this time.

**Growth:** Average growth in GDP growth in 2015 to 2018 was 7.4 percent a year, however, from 2001 to 2010, GDP growth averaged 6.4 percent a year, and GDP per capita growth 4.2 percent. In the 20 years from the end of the 1994 genocide against Tutsi, Rwanda's GDP per capita was US\$146. In 2017 it rose

to US\$774 and reached around US\$819.652 in 2018<sup>9</sup>. Growth in GDP per capita has averaged 5 percent per year since 2006<sup>10</sup>.

**2.31. Diversification:** The overall diversification of both economic activities and exports has increased, as shown by the positive growth trend in the ATI diversification index from about 23.7 in 2000 to about 33.4 in 2010. However, there was a slight decline in export and income diversification between 2011 and 2017. The decline observed in 2017 could be attributed to regional trade disruptions that limited Rwanda's exports within the East African Community. Despite this, there is still room to diversify exports given that Rwanda started from a low base of 3.5 percent in 2000 and increased to 23 percent within 20 years.

The share of manufacturing in GDP is low — down from 7.2 percent in 2000 to 6.8 percent in 2010 but rising to 9 percent in 2019. But the share of the top five export products was less than 6 percent in 2005 then trebled to 18 percent and further increased to 25 percent, tapering off slightly to 23 percent by 2017, a very significant improvement in commodity export diversification. The share of manufacturing and services in exports rose from 32 percent to 50 percent over the period, again, a significant movement on export diversification. Reflecting these movements, Rwanda's rank in diversification improved from 19<sup>th</sup> in 2010 to 18<sup>th</sup> in 2018.

#### **Policies underlying Rwanda's diversification results**

The government since 2000 adopted a wide range of reforms to stimulate export growth, which include; joining the East African Community (EAC) and the Common Market for Eastern and Southern Africa (COMESA), making significant improvements in the investment climate, and establishing an integrated set of strategies to address both general and sector-specific challenges. In 2010, however, Rwanda's general robust increase in diversification was due to the implementation of the National Export Strategy, implemented over the next five years with a key objective of increasing the value of Rwanda's exports, reducing the trade deficit and reducing donor dependence.

The implementation of Rwanda's export strategy has increased diversification of Rwanda's exports portfolio by raising agro-processing exports from zero to 4 percent of all exports in 2016. In addition, their share of Rwanda's goods exports<sup>11</sup> increased from 5 percent in 2006 to 11 percent in 2012 but fell to 9 percent in 2016. However, Rwanda initiated a made-in-Rwanda policy in 2015, which is a domestic market-recapturing strategy through promotion of patronage of locally manufactured products. This has led to the growth of companies assembling mobile phones (Maraphone), cars (Volkswagen), and a made-in-Rwanda textiles industry.

However, the manufacturing sector has not kept pace with the services sector in terms of value addition due to constraints such as low capital investment, low levels of technology, a small domestic market, and the relatively high cost of utilities. Several initiatives have been implemented in the last 20 years to boost the manufacturing and industry sector, including: Operationalizing the Kigali Special Economic Zone (SEZ); developing four provincial industrial parks and other district industrial parks in secondary and tertiary cities, and the Rwanda Standards Board (RSB) issuing 2,051 standards and 369 product certifications to meet international standards. As a result, over 100 industries have been set up within

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<sup>9</sup> IMF Country Report 2019

<sup>10</sup> World Bank: Rwanda Systematic Country Diagnostic June 25, 2019

<sup>11</sup> World Bank, future drivers of economic growth, 2020

the Kigali Special Economic Zone ranging from heavy and light manufacturing industries; large-scale industrial plants; industries requiring excellent national/international communication networks; industries requiring close links with other firms (which produce component parts for the same product or those involved in separate stages of the same industrial process); wholesalers; chemical, pharmacy and plastics; warehousing; tourism and service industries; and telecommunications, among other services. However, more effort is needed to attract investment to the industrial zones in the secondary cities.

### **2.32 Export competitiveness of Rwanda's economy**

According to ATI scores, the overall competitiveness of Rwanda's exports has increased as shown by the positive growth trend in the diversification index from 23.7 in 2000 to 33.4 in 2010. Despite the slight decline in exports competitiveness between 2011 and 2017, the overall growth in the competitiveness of Rwanda's exports has been robust. One of the factors that have contributed to the competitiveness of Rwanda's exports is product differentiation, which has been done through establishing niche markets for Rwanda's coffee and tea, despite the difficulty in competing with already established players like Brazil and Vietnam in these two markets. Through deliberate, robust and aggressive marketing campaigns, Rwanda has managed to establish niche markets for its coffee and tea in the European and US markets, making the brands recognizable among Western consumers.

Although Rwanda is implementing the "Made in Rwanda" policy, initiated in 2015 to promote the buying of locally manufactured products, the manufacturing sector has not kept pace with the services sector in terms of value addition. The key constraints to the expansion of the manufacturing sector include the relatively high cost of utilities such as power and water, a relatively small domestic market, and low investment in the agro-processing sector which would help add value to Rwanda's agricultural exports.

In addition, despite the fact that over half of the value added to GDP is generated from services and manufacturing, these two sectors contribute to less than half of the country's exports, with agricultural commodities and minerals dominating Rwanda's exports. The government has done a commendable job in laying the foundations for exports of services through ICT investments such as fiber optic networks, and initiatives such as one laptop per child. However, there is a need to increase digital literacy in the domestic labor market in order to increase the returns on investments in ICT infrastructure. A good example would be promoting business process outsourcing. In addition, there will be a need to ensure that the gains made in the services sector spill over into industry in general, manufacturing in particular, and agriculture also.

### **2.33 Technology, production and goods and services exports**

Although Rwanda has significantly improved its rank on technology upgrading from 20<sup>th</sup> in 2000 to 13<sup>th</sup> in 2010, the overall contribution of technology to economic transformation has been relatively low. Over the last 20 years, the level of technology upgrading in Rwanda's production activities has stagnated at a low level of about 6.6 percent in terms of the share of medium and high technology in total production activities. This implies that in addition to the manufacturing sector being small, the technologies being used in most production activities in Rwanda are low level. This translates into even a very low share of Rwanda's exports produced with medium and high technologies.

Figure 2 in Annex 1 shows that the proportion of medium- and high-technology products in total commodity exports increased by 0.6 percent between 2000 and 2005. This was mainly because until 2002 there was no strategy to improve the level of technology in the processing of agricultural exports, leading to low-quality exports. From 2002, Rwanda adopted a National Coffee Strategy which led to medium technologies such as coffee-washing stations, which brought improvements in export quality. The sharp increase higher technology product share between 2005 and 2010 is attributed to the Rwanda Resource Efficiency and Cleaner Production Centre (RRECPC) which was established in 2008 by the Ministry of Commerce (MINICOM) through the National Industrial Research and Development Agency (NIRDA) together with the United Nations Environment Program (UNEP) and the United Nations Industrial Development Organisation (UNIDO). This center provides capacity building and spearheads the adaptation and adoption of more efficient production technologies in the industrial sector. RRECPC also helps companies to identify their skills needs and sensitize them about the benefits and specifications of modern equipment. During the restructuring of public institutions that took place between 2010 and 2014, the National Industrial Research and Development Agency (NIRDA) helped to disseminate technology across sectors once a given firm demonstrated improved competitiveness and quality due to technological advancement and R&D.

In a bid to transform the country from subsistence agriculture to a knowledge- and services-based middle-income economy, Rwanda is fast turning into a preferred location for technology and innovation through a combination of visionary leadership and investment in ICT infrastructure. As part of its commitment to digital infrastructure investment, Rwanda signed a deal with Africa50 late in 2018 to co-build the US\$2 billion Kigali Innovation City. This is an Africa-focused innovation hub and a holistic ecosystem of technology clusters. The city is expected to attract technology companies from all over the world to create an innovation ecosystem in a knowledge-based economy. It is forecast to generate US\$150 million in ICT exports annually and over 2,600 students are expected to graduate every year from its universities, increasing the technology talent pool. (Rwanda ACET Report on Workforce Readiness for the Fourth Industrial Revolution, 2020)

### **2.33 Productivity**

Overall, labor productivity in Rwanda has increased significantly, from US\$189 in 2000 to US\$1,145 in 2017. Utilities, financial services, and government services have had the highest productivity growth due to the ICT innovations and mainstreaming implemented in these sectors (ILO, 2020). Compared with the manufacturing sector where annual productivity per worker increased four-fold from about US\$7,271 in

2005 to US\$21,271 per worker in 2017, worker productivity within the agriculture sector has increased only slightly, from about US\$266 per worker per year in 2000 to about US\$548 per worker per year. The significant increase in worker productivity in the manufacturing sector over the last 20 years has been due to more capital investment, as more local and foreign investors have imported capital equipment to improve efficiency in the production process, raise worker productivity, and further reduce the cost of production. Overall FDI inflows in Rwanda have increased from about 20 percent of GDP in 2010 to about 25 percent of GDP according to the World Bank (2020). The flow of FDI into Rwanda has been facilitated by a conducive business environment where Rwanda has been consistently ranked high in the World Bank doing business indicators. Improvements in the business environment have been coupled with efforts by the Rwanda Development Board to promote Rwanda as a favorable investment destination with an attractive investment code and tax incentives.

Other gains in worker productivity in Rwanda's manufacturing sector are attributed to significant efficiency gains derived from improvements in the quality of human capital and from the effects of other economic reforms – notably through higher investment in TVET and ICT. In addition, Rwanda has been a star performer in doing business reforms over the last 20 years and a good business environment has also increased worker productivity as workers can now focus on their core productive functions rather than the red tape (World Bank Doing Business Report , 2020)

In addition, since 2004, the government has developed and implemented three consecutive Strategic Plans for Agriculture Transformation – PSTA I from 2004; PSTA II from 2009; and PSTA III 2013). They have all aimed at improving productivity, commercialization, and modernization of the agriculture sector, leading to the observed gains in labor productivity. However, there still exists a set of unique challenges in the agriculture sector including negative impact of climate change on productivity, limited access to finance, low use of modern inputs, and low value addition.

On the other hand, productivity in government services has seen a tremendous increase as a result of the policy of ICT mainstreaming in all government institutions, where registration and payment for government services have been pioneered on the *Irembo* platform (accessed electronically). Productivity in the financial industry has also been improved through a series of digital interventions, such as electronic banking, mobile banking, and electronic payments, all of which are in line with Rwanda's National Payment Strategy 2018-2024 which sets out detailed steps for how to transition to a cashless economy.

In the trade sector, three major government reforms to improve the business climate have been instituted that decrease bureaucracy in construction, ensure timely electricity provision for investors, and reduce the number of time exporters spend at Customs but rather use online platforms

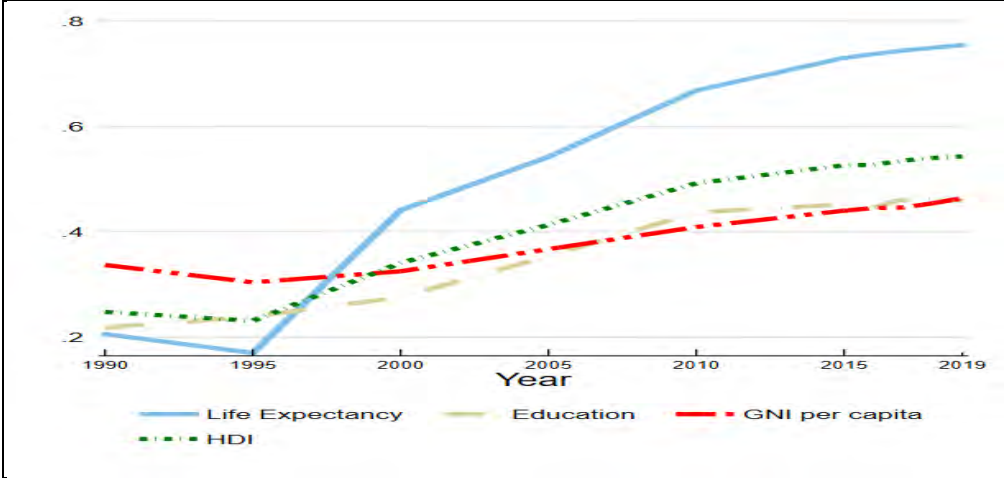
### **2.35 Human well-being**

Rwanda's ATI score on well-being increased from 16.33 in 2000 to 25.82 in 2017 while the country's ranking improved from 24<sup>th</sup> to 17<sup>th</sup> position over the same period. Improvements in human well-being have been one of the greatest contributions to the economic transformation observed in Rwanda over the last 20 years. This is due to the progress made in the human development indicators such as life expectancy at birth, years of schooling and gross national income. Between 2000 and 2019, Rwanda's



Human Development Index (HDI) value increased by 119 percent from 0.248 to 0.543. Between 2000 and 2019, Rwanda’s life expectancy at birth increased by 35.6 years, mean years of schooling increased by 2.7 years, and expected years of schooling increased by 5.5 years. Rwanda’s GNI per capita increased by 130.9 percent between 1990 and 2019 .

Figure 12. Trends in HDI component indices 1990-2019



Source: UNDP, Human Development Index Report ,2020

The above improvements in human well-being have led to a healthy and productive workforce that has been key in making progress with economic transformation. The 2005 Rwanda Health Policy, which was revised in 2015, and three health sector strategic plans (2005-2009, 2009-2012, 2012-2018) have guided the implementation of Vision 2020 in the health sector. Key interventions implemented between 2000 and 2020 include:

- i) Establishing the National Childhood Development Agency to coordinate preparation and monitoring of the implementation of a joint action plan to eradicate malnutrition.
- ii) Training of 1,015 health care providers and 6,325 community health workers on the maternal, infant, and young child nutrition (MIYCN) programs, with radio broadcasts on stunting prevention, maternal, and child nutrition and breastfeeding,
- iii) Delivery of early childhood development services, child protection, early learning as well as the inclusion of children with disabilities in 30 districts. In addition, there has been an increase in health insurance coverage from 38 percent to 69 percent of the population between 2000 and 2020, according to the NISR.

Figure 13. Growth and overall ATI index, 2000-2017

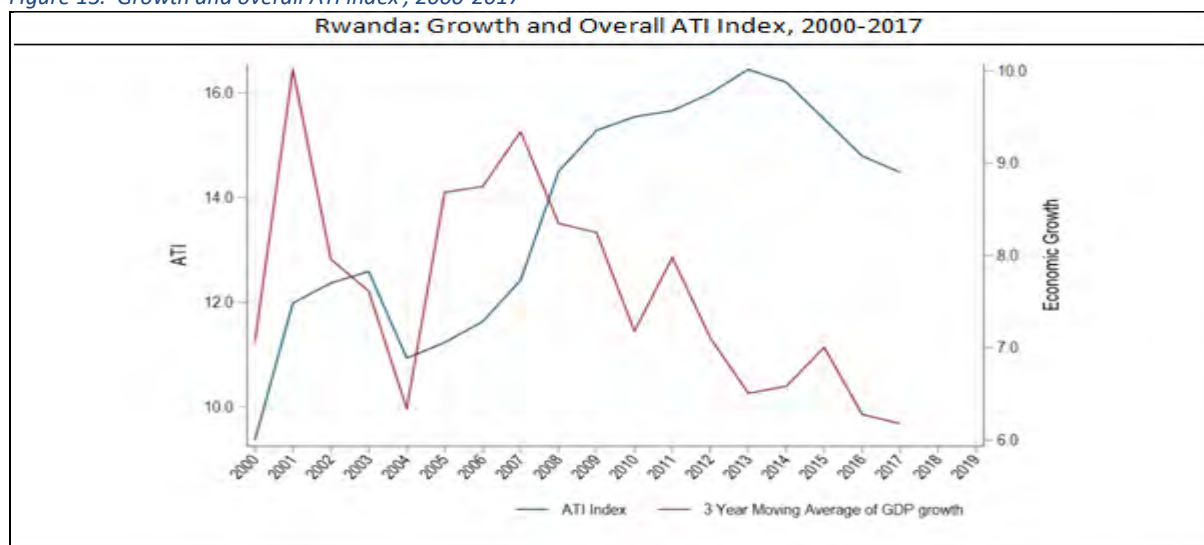


Table 15. Growth and overall ATI index, 2000-2017

Rwanda: ATI Overall and Dimension Indexes					
ATI Dimensions	Scores				
	2000	2005	2010	2015	2017
Overall ATI Index	9.37	11.23	15.54	15.50	14.48
Diversification	23.66	24.63	33.58	31.54	30.40
Technology Upgrading	4.08	7.95	14.93	11.84	7.93
Productivity	2.76	1.89	3.68	6.11	6.63
Export Competitiveness	0.02	0.17	1.79	2.04	1.62
Human Wellbeing	16.33	21.54	23.74	25.96	25.82
ATI Dimensions	Rankings				
	2000	2005	2010	2015	2017
Overall ATI Index	30	29	27	28	28
Diversification	23	25	19	16	18
Technology Upgrading	31	30	25	29	31
Productivity	30	30	30	27	27
Export Competitiveness	31	30	30	27	28
Human Wellbeing	24	17	17	17	17

Note: The values are averages of the Overall Transformation Index taken over 3-year periods centered on the year indicated on the horizontal axis. Thus the values for 2017 are averages for the three years 2016, 2017 and 2018.

Source: Source: ACET ATI2021 Edition, preliminary results. March 2021

### 3.6 Challenges facing economic transformation and resilience

According to a 2018 ILO study on estimating productive jobs in Rwanda,<sup>12</sup> the major challenges facing Rwanda's economic transformation and resilience include the following:

- *Agricultural productivity constraints*, such as prolonged droughts, land scarcity and inadequate soil fertility in some districts; and
- *Industrial productivity constraints*, such as the relatively high cost of utilities; mismatches between the skills demanded by employers in the private sector and the skills acquired by graduates; limitations in access to finance among entrepreneurs in the private sector due to high interest rates on SME loans; and structural challenges, as labor supply still outstrips demand in Rwanda.

<sup>12</sup> See Malunda et al., 2018. Estimating productive jobs in selected districts in Rwanda. Geneva: ILO

- **Agricultural productivity constraints**

Prolonged droughts, land scarcity and inadequate soil fertility in some districts are some of the major factors that impede the growth of productivity within the agricultural sector. In addition, some feeder roads are not accessible during the rainy season, which helps to slow down transformation in the rural economy. In order to handle drought, the government has rolled out the small-scale irrigation technologies program, a subsidized scheme in which smallholder farmers purchase irrigation equipment and pay into a revolving fund which enables other farmers to obtain irrigation equipment over time. In addition, the government is implementing a program aimed at developing secondary cities in order to promote planned urbanization. Through this program, more feeder roads have been built to link rural agricultural areas to the urban centres.

**Box 1: Constraints in the transformation of Rwanda’s agricultural sector**

Despite implementation of the private sector-focused and commercialized Agricultural Strategies for Transformation program, the agricultural sector is still constrained by the following factors: i) Limited availability of arable land, leading to small plot sizes which constrain productivity among smallholder farmers; ii) The agriculture sector currently fails to maximize the contribution of, and benefits to, women and youth. Women have a higher propensity to work in agriculture than men. Due to their limited access to inputs, women farmers’ plots are typically less productive than those worked by men. Additionally, women in agriculture are more vulnerable to climate change and land degradation because they generally have no other alternatives to earn their families’ living; (iii) The skills gap in agriculture limits productivity and profitability. Formal education levels among farmers are generally low. Farmers require a range of agronomic and “farming as a business” skills to optimize land and cropping practices and to make well-informed investment choices for greater production and/or profitability; (iv) Constraints in value chains, including market infrastructure, market access, sanitary and phytosanitary measures, market information, logistics, and regulations in trade inhibit the flow of agricultural products from the farm gate to processors, export markets, and consumers. The key lesson is that transformative policies have to be tailored to the needs of the local population if they are to achieve inclusive and long-term benefits for large sections of the population. Highly commercialized initiatives that are not anchored in the realities of the local population may have limitations in achieving a transformative impact on local populations (Rwanda Fourth Strategic Plan for Agriculture, PSTA 4, 2018)

- **Industrial productivity constraints**

There are still constraints that limit industrial productivity and consequently limit total productivity and economic transformation in Rwanda. In some industrial zones within secondary cities, the cost of acquiring land to set up industries is high. In addition, three-phase electricity lines are needed to support industrial production in the secondary and tertiary towns and cities. The inadequate supply of agricultural raw materials to feed the budding industrial sector means that industries are operating below capacity and this further affects jobs growth, productivity and economic transformation. In order to mitigate some of these challenges, the Rwanda Electricity Group (REG) has invested in new hydro-electric dams to generate more electricity. To mitigate problems of inadequate raw materials for industries, farmers have been encouraged to produce in cooperatives, which can then supply adequate raw materials, such as milk, to processing plants. In districts such as Nyagatare, the government has mapped out and earmarked 16,000 hectares for the Gabiro agricultural hub. This land will be irrigated

using water from the Akagera River to produce maize and other crops on a large scale to feed the planned agro-processing industries in the region.

### **Financial constraints to business productivity**

There are limitations in access to finance for businesses in the private sector such as high interest rates on SME loans. This reduces their options. High collateral requirements are another problem. Although the National Bank of Rwanda has regularly reduced the cap rates at which commercial banks borrow, this has not resulted in reduced interest rates for private sector loans. Commercial banks sometimes attribute this to low domestic savings rates, which means that they have to draw on foreign capital. High interest rates on loans limit business growth and expansion and thus the creation of more productive jobs in the informal business sector. To mitigate this problem, the government has implemented the Business Development Fund (BDF), which is aimed at increasing credit access to SMEs through loan guarantees.

## **3.7 Lessons underlying Rwanda's economic transformation outlook**

### **Lessons:**

- 1) The transformation vision in Rwanda over the last 20 years leaned heavily on the formulation and effective implementation of medium-term and long-term development plans. The long-term development plans had clearly articulated vision including making Rwanda a services-based economy and a meetings, incentives, conferences and exhibitions (MICE) hub in the East African Region. This goal was backed by investments in Rwanda Air, hotels, convention centers and the Kigali Arena, all of which continue to attract events and tourists into Rwanda.
- 2) Reforms to the public service structure were crucial for success. This entailed a sustained period of capacity building of Rwanda's workforce coupled with improvements in their health and well-being, attracting the right skills into the public service and digitalizing the service to improve efficiency in service delivery.
- 3) Political will coupled with accountability mechanisms such as performance contracts which are monitored and enforced on an annual basis have been key to the progress achieved in Rwanda's economic transformation.

## **Sector-specific lessons**

4) Leveraging ICT: Leveraging ICT service delivery has been a key driver of the observed gains in Rwanda's transformation. In addition, ICT use will be key in trade facilitation activities going forward due to the limitations that have been placed on export processes by the COVID-19 pandemic. Automation of processes through integrated clearance systems and capacity building of exporters in the new automated systems are critical in improving the efficiency of procedures.

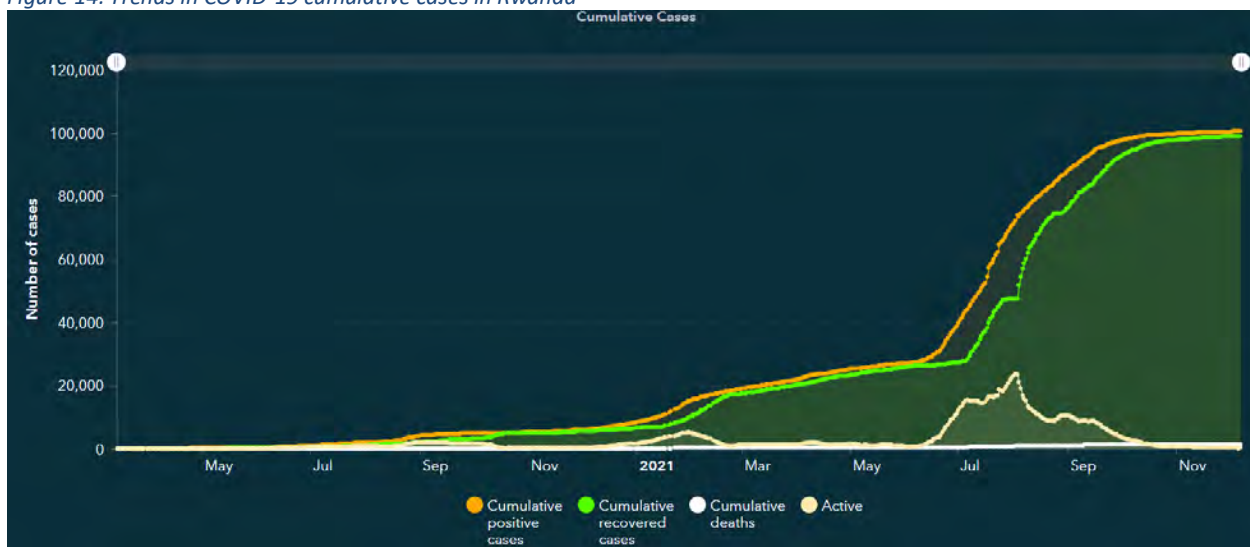
5) Exploiting niche markets is important for increasing export revenues, more so in agricultural commodity markets where international prices are volatile. Given the limitations to expanding the quantity of coffee exports in volatile markets given the stiff competition from high-volume countries like Brazil and Vietnam, Rwanda entered into the niche market of high-quality coffee and tea, which contributed to increased export revenues.

## Chapter 3. COVID-19 response and lessons

### 3.1. Evolution of the COVID-19 pandemic in Rwanda

Between January 2020 and December 2021, there have been 100,429 confirmed cases of COVID-19 with 1,343 deaths in Rwanda. By the end of November 2021, a total of 8,482,389 vaccine doses have been administered (WHO website, 2021). The government put in place measures to limit the spread of the COVID-19 virus. After a review following an improvement in the pandemic situation, preventive measures were lifted and new guidelines implemented.

Figure 14: Trends in COVID-19 cumulative cases in Rwanda



Source: Rwanda Ministry of Health website, 2021

Between 14 March and 31 May 2020, the government put in place the first preventive measures to control the COVID-19 pandemic spread in the country, with these preventive measures reviewed every two weeks. The main measure put in place was total lockdown nationwide. The Rwanda Biomedical Center (RBC) cumulatively recorded 370 confirmed COVID-19 pandemic active cases from which 64.19 percent fully recovered, 30.54 percent were active and 0.2 percent died. The first death due to COVID-19 was registered on 30 May 2020.

Between 1 June and 30 September 2020, cumulative positive, active, recovered and death cases continued to grow. To understand the prevalence of the pandemic, the government decided to introduce mass screening and testing. The first mass screening and testing was conducted in the capital city, Kigali, on 17-18 July then in the 8 districts that were in lockdown. In this period, in daily records, the gap between cumulative recovered cases and cumulative active cases was narrow and the increase in new confirmed cases was more than in new recovered cases.

By 31 December 2020, Rwanda had registered a total of 8,383 cumulative COVID-19 positive cases: 6,542 cumulative recovered cases, i.e. 78.04 percent of cumulative positive cases, 1,749 cumulative active cases (20.86 percent of cumulative positive cases) and 92 cumulative deaths (1.09 percent of cumulative positive cases).

Between 1 January and 31 March 2021, Rwanda recorded an increasing number of patients recovering from COVID-19 pandemic compared to the new cases. By 31 March 2021, Rwanda had confirmed 22,167 positive cases cumulatively showing an increase by 164.43 percent compared with 31 December 2020. During this period, the number of cumulative deaths caused by the pandemic continued to rise from 94 deaths by 1 January to 310 deaths by 31 March, an increase by 229.78 percent .

Between 1 April and 7 December 2021, cumulative recovered cases increased by 387.15 percent while cumulative active cases decreased by 86.636 percent .

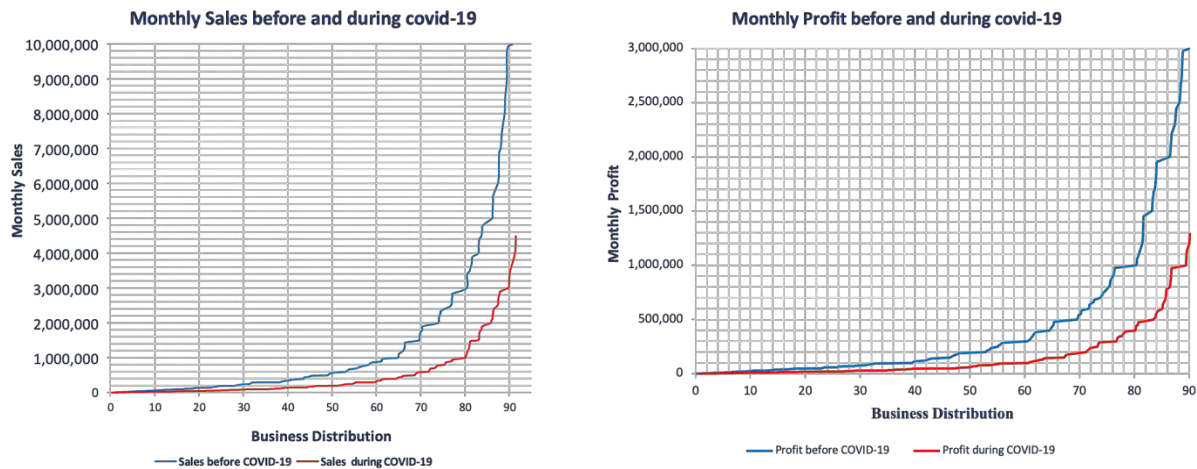
The measures put in place by the government of Rwanda to control the spread of COVID-19 included: prioritizing electronic payments and online banking; restricting late night movements; working from home for non-essential government employees; momentarily closing schools and other non-essential sector of the economy; social distancing, closing places of worship, gyms and recreational centers. All these measures affected businesses and household welfare negatively as shown in the next section.

### **3.2. Economic impact of the pandemic on businesses**

Findings from the Institute of Policy Analysis and Research (IPAR) survey of businesses show that overall, there was a very large impact on sales and profits, in some cases with reductions of around 50 percent in February 2021 compared with the previous year. The services sector was most severely hit, followed by industry then agriculture. There was no significant variation in the impact of COVID-19 by gender of business owner, firm size, province, or age of business. Businesses with more than one employee reported that during COVID-19 they reduced employment by around a third. While these figures are self-reported and may be exaggerated, they show that there was a significant fall in performance for most businesses as a result of COVID-19, at least during February 2021.

Figure 16 shows what businesses reported before COVID-19 (the blue lines) and during COVID-19 (the red lines). They show that at all stages, sales and profit during COVID-19 were lower than before COVID-19. In general, sales and profits have tended to fall by around half at each stage of the distribution. For example, the monthly profit before COVID-19 for businesses at the 80<sup>th</sup> percentile was around Rwf 1,000,000, while during COVID-19 this was around Rwf 400,000.

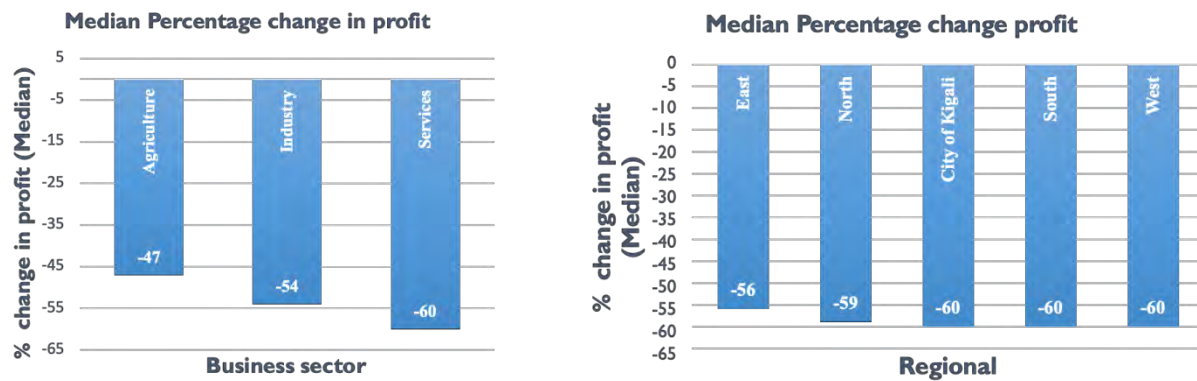
Figure 15. Monthly sales and profit before and during COVID-19



Source: IPAR-Rwanda COVID-19 Business Survey, 2021

There is some variation in sales and profit by business sector, although all sectors faced large reductions. Services saw the largest impact – with a median reduction of 56 percent in sales and 60 percent in profits. This is unsurprising given service activity requires greater interaction between people, which was intentionally reduced to limit the spread of COVID-19. Agricultural businesses saw the lowest reductions and businesses in the industry sector were in the middle.

Figure 16. Changes in profit due to COVID-19, by sector (%)



Source: IPAR-Rwanda COVID-19 Business Survey, 2021

### 3.3 Measures to mitigate the economic impact on households, businesses, government finances and the health system

The government has taken an effective range of measures to support businesses during COVID-19 as well as to accelerate economic recovery.

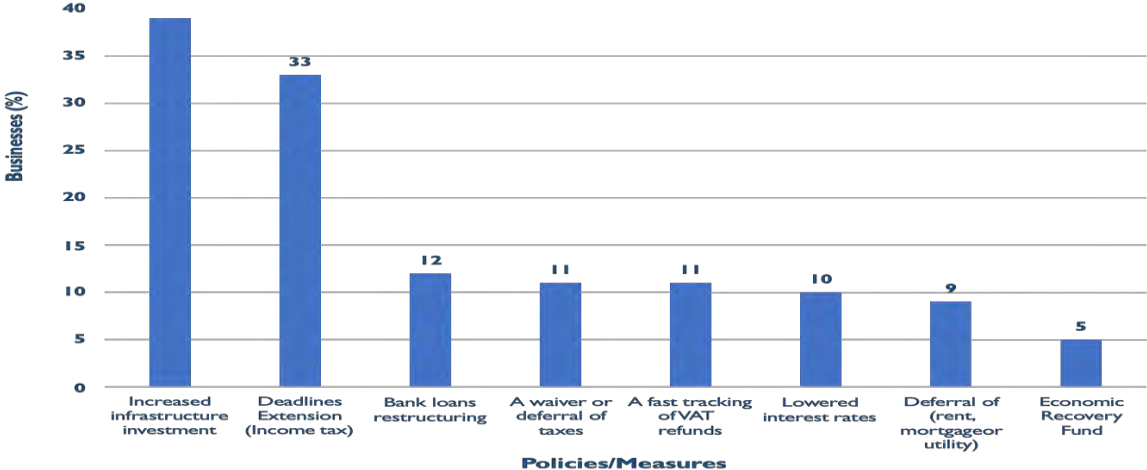


As well as increasing spending to strengthen the health system and contain the pandemic, a range of measures have been taken to support economic recovery. For example, the Economic Recovery Fund will continue to be a key tool for supporting the private sector. This as well as the Manufacture and Build to Recover program will support businesses to invest and drive the economic recovery. This is a new scheme to support manufacturing and construction, encouraging private sector investment and increased production of construction materials, agro-processing, as well as hygiene and sanitation products. It will be implemented by reducing the cost of setting up industries of selected products as well as existing firms who would like to expand their current operations. This scheme will provide incentives through the tax system, e.g. VAT exemptions on raw materials used as inputs for manufacturing and construction activity; tax credits; and reduced Pay-as-you-earn (PAYE) payments. It is meant to complement the Economic Recovery Fund by helping other sectors get affordable raw materials and will run until December 2022. Other measures include the Made-in-Rwanda policy which has been effective in reducing the trade deficit and increasing economic resilience. Finally, investment in public infrastructure is supporting businesses by reducing costs as well as increasing jobs.

On top of this, the National Bank of Rwanda implemented a range of measures early in the COVID-19 crisis. This included providing regulatory relief for financial institutions, supporting digital payments by reducing transaction fees, and modifying monetary policy to support the economy. Overall, 66 percent of the businesses surveyed reported receiving national or local government support measures in response to COVID-19. This shows that policy support was effectively distributed to a large proportion of the economy.

**Support from the government took many different forms.** Policies which supported the highest number of businesses were: extended deadlines for completing corporate income tax, which supported 33 percent of businesses; and increased investment in infrastructure, which supported 39 percent of businesses. These two policies are therefore highly effective ways for the government to reach a large number of businesses. The Economic Recovery Fund supported 5 percent of businesses in our sample, which suggests it was more targeted than other support measures.

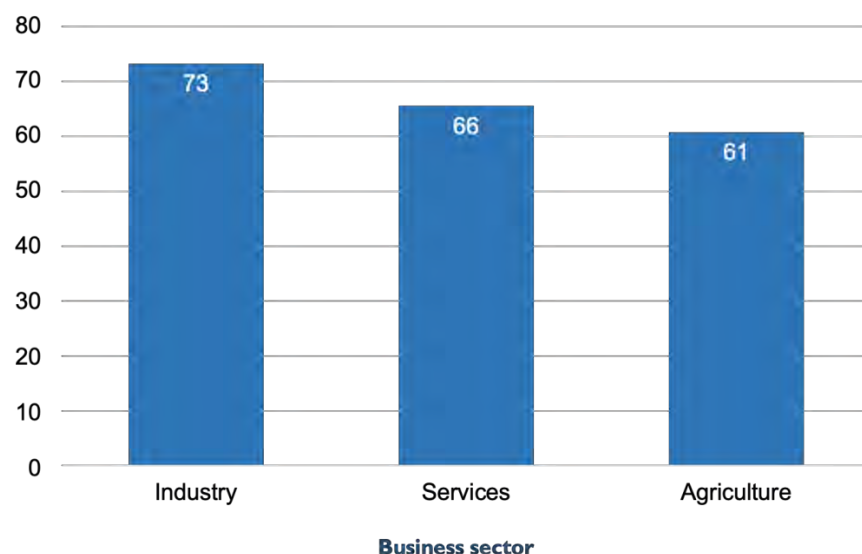
Figure 17. Proportion of businesses that benefited from government support measures (%)



Source: IPAR-Rwanda COVID-19 Business Survey, 2021

The number of businesses that received support was consistently high across different sectors. Industry was the sector where the highest proportion of businesses received support, at 73 percent. Services and agriculture also saw high levels of support, with 66 percent and 61 percent of businesses reporting that they had received support in response to the crisis since 1 March 2020.

Figure 18. Proportion of businesses that benefited from government support, by sector (%)



Source: IPAR-Rwanda COVID-19 Business Survey

### 3.4 Key post-pandemic recovery challenges faced by government, households and private businesses

These include the following:

**Reductions in domestic resource mobilisation which may affect achievement of national development priorities:** The government has established a number of frameworks to monitor progress towards national development targets by 2024 as enshrined in the National Strategy for Transformation (NST1). These include the annual evaluation of performance contracts; and mid-term end-line evaluations of development frameworks such the NST and Vision 2050. However, uncertainties occasioned by the COVID-19 pandemic have led to re-prioritization within some government programs with aspects such as vaccination and health care taking the forefront as opposed to other programs that had been planned at the initiation of the NST1. In addition, domestic resource mobilization has been affected due to measures that have been implemented to contain the pandemic including movement restrictions between districts, and curfew hours for business operations. Reductions in domestic resource mobilization have been coupled with delays in disbursements from development partners (who face uncertainty in their own economies) and increased borrowing by developing countries in order to cover budget deficits occasioned by the COVID-19 pandemic. In addition, the pandemic has led to a lowering

of projections of rates of economic growth, rates of employment and rates of poverty reduction that had been envisaged while setting initial targets in national development strategies such as the NST 1. This implies that some of the original targets could be missed if not well monitored. This therefore calls for regular monitoring of the progress for key indicators of the NST1 on annual basis to determine which indicators are lagging behind, which have had reversals in terms of progress, what impact have these reversal had on peoples' livelihoods and businesses, and what measures the government can adopt or change in order get on track with achieving planned NST targets by 2024.

**Worsening fiscal position with growing national debt becoming a serious issue.** Rwanda's public and publicly guaranteed (PPG) external debt-to-GDP ratio increased by 33 percentage points over the last six years, driven by borrowing to meet the needs envisaged in the National Strategy for Transformation (NST), but also to support the robust COVID-19 response. The current debt-to-GDP ratio of 55.6 percent is slightly above the debt sustainability threshold of 50 percent but it can be accommodated within the prevailing context of a COVID-19 recovery period.

**Reversals to gains made in poverty reduction.** The World Bank estimates that 500,000 people have fallen into poverty as a result of COVID-19. This is more in urban areas and in *Ubudehe* categories 2 and 3, as opposed to rural areas in category 1. Rwanda's NST aims to eradicate extreme poverty by 2024 and to reduce poverty to 10 percent. Since the early 2000s, Rwanda has been performing well in poverty reduction: the country's poverty rate fell from 56.7 percent in 2005/06 to 44.9 percent in 2010/11, 39.1 percent in 2013/14 (NISR, 2015) and 38.2 percent in 2016/17. To continue on this path, there is a strong need to look at the determinants of poverty in the country and generate new ways to tackle them. Improving the quality of research and making it available to policy makers is certainly key. As such, the development of institutional mechanisms to focus on the interest of the poor and the poorest is considered a priority. This need is exacerbated by the recent effects of the COVID-19 pandemic which have led to reversals in the poverty reductions gains made prior to the COVID-19 outbreak in 2020. It has been well noted that temporary gaps in employment and education can have lasting effects on earnings and living standards and as a result, it is important to address them proactively.

**Inclusive growth challenges.** According to IPAR consultations with the World Bank, the link between poverty reduction and economic growth in Rwanda has been weakening. The reduction in poverty corresponding to each percentage point increase in GDP per capita was 0.36 between 2005/06 and 2010/11, whereas between 2010/11 and 2016/17 it dropped to 0.24. Previously, economic policy had a greater focus on agriculture, which more directly reduced poverty. And that while public investment in recent years has continued to drive economic growth, it has not directly supported people on lower incomes. Post-COVID recovery measures should help Rwanda return to high growth and also promote poverty reduction and inclusion.

### **3.4.1. Recommendations for resilient and inclusive economic recovery post-COVID-19**

To help businesses, including small and micro enterprises, access finance more easily: **the initial piloting of and then rolling out of a targeted long-term access to finance scheme focused on businesses that will drive inclusive growth – an “Inclusive and Resilient Development Fund”**. This would learn lessons from the success of the Economic Recovery Fund. As well as attractive interest rates, the scheme could

be combined with education and awareness raising for borrowers to increase financial literacy and ensure all groups are able to access the scheme.

- To help further ensure resilient future economic growth: **consideration of additional priority target economic sectors for government support.** Three strong candidates to be prioritized for support from the government are: pharmaceuticals and vaccine manufacturing; digital financial services; and Rwanda becoming an e-commerce hub for Central and Eastern Africa.
- To help reduce poverty and ensure more equal growth: **A debate, including with employers, on options for increasing and effectively implementing a minimum wage.** Rwanda is yet to complete drafting a new minimum wage policy. The existing minimum wage was set at Rwf 100 per day in the 1970s. Along with Uganda and Burundi, Rwanda is the only country to have a minimum wage that is not above the extreme poverty line. Any introduction of a meaningful minimum wage would require careful consideration and further policy development, and now is the right time for this debate.
- To help reduce input costs for businesses, particular smaller businesses, to support inclusive growth: explore options including **expanding the Manufacture and Build to Recover scheme into additional sectors and use it to target micro and small firms**, with further investments in electricity transmission technology and infrastructure to reduce utilities bills.
- To help boost SME-led industrial development and growth: **introduce tax incentives to new local investors.** Current incentives are targeted at foreign investors. In addition, tax incentives for local investors could be targeted at specific businesses such as SMEs or those in job-intensive sectors. This could mean a more cost-effective that more directly supports inclusive economic growth.
- To help MSMEs access international markets, **an e-Commerce Recovery Challenge Fund targeted at SMEs in priority sectors could be implemented.** This could be based on a market assessment of which MSMEs have the potential to access international markets, including in the context of the AfCFTA. It could bring together the existing strong policies on promoting exports with the government's focus on e-Commerce for maximum effect.

### 3.5 Lessons learned from policy responses to the COVID-19 pandemic

#### 1. The need for responsive policies for a more vibrant private sector that can weather future shocks

With the COVID-19 pandemic, findings from IPAR studies show reductions in business revenues, profits and employment, with a number of businesses closing altogether. A number of policy interventions including the Economic Recovery Fund, loan restructuring, VAT repayments, and tax delays have been implemented to enable business recovery. However, it is not entirely clear yet what impact these interventions are having on enabling business recovery in an environment where purchasing power is low and economic recovery slow. Continued progress will require major shifts in Rwanda's development model where government will continue to act as both a delivery agent for development and as an enabler of private sector development, most notably through establishing backward and forward linkages between local private sector actors and international actors.

**2. The need to leverage ICT interventions in conducting local and international trade through E-commerce in order to promote economic resilience during future shocks**

Despite the numerous ICT innovations, it is not clear how the new start-ups in the private sector have fared in utilizing ICT innovations to improve productivity and profitability of their businesses in this COVID-19 era. In addition, the role of ICT in terms of business sustainability, impact and scalability in order to create new jobs for new labor market entrants is not yet clear. There is an opportunity to assess how the private sector is facing the challenges and taking advantage of ICT innovations and new digital technologies in order to drive forward the knowledge-based economy agenda in Rwanda.

**3. The need for positioning Rwanda to take advantage of opportunities from regional trade through the African Continental Free Trade Area, given the small domestic market**

COVID-19-induced supply chain shocks have shown that there are large interdependencies between African countries, with delays at ports of entry leading to delays in industrial processes and consequent domestic inflationary pressures. This implies that land-locked countries such as Rwanda need to position themselves in order to leverage the benefits that come with wider regional integration through the AfCFTA.

## Chapter 4. Economic resilience

### 4.0. Key vulnerabilities and risks faced relative to *Global Drivers of Change*

#### 4.1 Climate, environment and natural resource stress

##### 4.1.1. Risks and vulnerabilities

Like many other countries, Rwanda has been experiencing an increasing trend of extreme weather events associated with climate change. According to Rwanda's first voluntary national review report (MINECOFIN, 2019), the country's mean surface temperature increased by 1.4°C between 1970 and 2010 and is expected to increase further by 2.5°C by 2050 relative to 1970 levels. Rainfall seasons are becoming increasingly unreliable and intense, and average annual rainfall is expected to increase by 20 percent by 2050 relative to 1970 levels. In the Northern and Western provinces, rainfall is becoming increasingly intense while alternating rainfall deficits and excesses are more common in the Eastern Province. The heavy reliance on rain-fed agriculture as a source of livelihood and exports renders the country highly vulnerable to climate change. At the launch of NST1 in 2017, forest cover was 29.8 percent of surface area and 14.1 percent of public forests were managed by private operators. The high reliance on wood as a source of cooking energy (79.9 percent) also meant severe deforestation and rapid depletion of the country's forest resources and necessitated policy action to reverse the trend.

##### 4.1.2. Initiatives and policies to mitigate climate, environmental and natural resource stress

###### ***Key interventions and targets***

The key interventions to mitigate climate change under the National Strategy for Transformation (NST1) include (i) increasing forest cover as a proportion of total surface area; (ii) increasing the proportion of public forests allocated to private operators and reducing the proportion of households relying on biomass as a source of cooking energy. These indicators have an intended outcome of increasing forest cover and improving the management of the created forests as well as reducing the degradation of the environment through deforestation. Table 16 presents the interventions implemented to mitigate climate change, along with their respective targets.

Table 16. Key interventions and targets

Key interventions	Targets
Continue to strengthen forest management and, working with the private sector, ensure their sustainable exploitation	Increase privatization of management of public forests from 14.1 percent (2017) to 55 percent (2021) and 80 percent (2024)
Increase and sustain the area covered by forest through landscape restoration, incorporating afforestation and reforestation into district forest management plans	From 29.8 percent in 2017 to 30 percent by 2024
Halve the number of households depending on firewood as a source of energy for cooking	From 79.9 percent (2016/17) to 42 percent in 2024;
Develop a project to manage water flows from the volcano region and other rivers to mitigate related disasters and improve water resource management	No explicit target
Strengthen land administration and management to ensure optimal allocation and use of land	No explicit targets

Source: IPAR-Rwanda NST Mid-Term Evaluation Report, 2021

#### 4.1.3. Achievements and impact

Considerable success has been registered regarding environmental protection, particularly increasing the proportion of forest cover, which has been surpassed by 0.4 percentage points. Forest cover was increased by the planting of 724,666 hectares of different varieties including fruit and bamboo trees along rivers, planting new forests and rehabilitating degraded ones. In the effort to improve forest management, 38.45 percent of public forest plantations have so far been allocated to private operators (Ministry of Environment, 2021), against a baseline (2016/17) of 14.1 percent. The privatization rate in 2019/2020 amounted to 69.9 percent of the (2020/2021) target of 55 percent and 48.1 percent of the end-line (2023/2024) target of 80 percent. This trend reveals a moderate pace of privatization and the need for further efforts to fast-track the realization of the 80 percent target by 2024.

There are ongoing efforts to map and discuss the terms of agreements between the government and private operators, of which six were in the final stage of discussion while eight were under joint management and concession agreements by 2020. From the energy sector perspective, efforts to protect the environment included raising awareness regarding the benefits of using clean energy cooking solutions such as biogas and liquefied petroleum gas (LPG) in an attempt to minimize reliance on firewood as a source of cooking energy. Table 17 presents additional achievements in 2019/2020 as per the three core indicators of this priority area.

Table 17. Summary of key performance indicators

Indicator	Baseline	2020/2021 target	2023/2024 target	Status 2019/2020	Status as proportion of 2020/2021 target (%)
Forest cover as % of total surface area	29.8	30	30	30.4	101.3
% of public forest plantations allocated to private operators	14.1	55	80	38.45 (2020/2021)	69.9
% of households using firewood for cooking	79.9	66.6	42	80	83.3

Source: *Environment and Natural Resources Retrospective Joint Sector Review Report 2020*

#### 4.1.4. Opportunities and enabling factors

Achievements in this priority area greatly leveraged ongoing policy commitment to the global sustainable development agenda. Rwanda revised its nationally determined contributions (NDCs) in May 2020, which emphasized the reduction of biomass usage for cooking, directly in line with the third core indicator of this priority area (GoR, 2020). Similarly, the first core indicator of increasing the percentage of surface area covered by forests was enhanced by the updated NDCs which emphasized afforestation as a contribution to climate change mitigation in the agriculture, fisheries and forestry sector. The Voluntary National Review (VNR) of 2019 further stressed the country’s commitment to combat climate change and report on, among other indicators, hectares of land covered by forests and agro-forests as well as number of households with off-grid energy access (GoR, 2019). Additionally, the engagement of private sector operators reduced deforestation and degradation of planted forests and improved their management for sustainability and profitability. Decentralized efforts in environmental protection also enhanced smooth implementation of programs. For example, all sectors and districts regularly complete and submit an environmental mainstreaming checklist developed by the Ministry of Finance and Economic Planning (MINECOFIN), Ministry of Environment and Rwanda Environmental Management Authority (REMA). A new monitoring and evaluation framework from the Rwanda Forestry Authority (RFA) further facilitated monitoring of performance at local and national levels.

Other driving factors included implementation of the National Land Use and Development Master Plan (NLUDMP) and the Urban Wetland Master Plan. The establishment of a new cook stove testing laboratory at Rwanda Standards Board further facilitated the production of cook stoves by providing a



quality benchmark and guidance to private producers. Finally, the Ministry of Environment proactively led resource mobilization and coordination of other government institutions and agencies (Ministry of Local Government, MINECOFIN and the Local Administrative Entities Development Agency along with development partners (World Bank, Nordic Development Fund, etc.) to pilot the adoption of the revised NDCs in selected districts.

#### **4.1.5. Challenges and constraining factors**

The main challenges in this priority area of the environment were encountered mainly in the third core indicator: percentage of households using firewood for cooking. The challenges were mostly related to delays in executing planned interventions for several reasons. First, there were delays in conducting the biomass energy study which impeded establishing a benchmark for monitoring and evaluation purposes. By the time the sector review report was drafted, the study was not completed and the indicator was approximated from EICV5 data. According to consultations with the Ministry of Infrastructure, the survey was halted due to bankruptcy of the consultant. Second, there were delays in tendering for the supply of improved cook stoves; the tender was advertised thrice without a successful bidder. Third, the environment and natural resources sector has had dwindling budget allocations for the past three fiscal years, which curtailed the implementation of some projects. The outbreak of COVID-19 and associated containment measures meant that some planned projects that needed physical presence had to be delayed while others operated at 50 percent of the workforce required, which slowed progress. Some funds initially earmarked for forest planting were reallocated to social protection to deal with the adverse consequences of the pandemic. Both the publication of biomass study findings and distribution of cook stoves were postponed to the 2020/2021 fiscal year. Additionally, deforestation and the use of premature trees limited the expansion of forest coverage, despite overachievement of this target. Finally, limited knowledge and understanding of environment and climate mainstreaming is a further constraint to green growth. Other constraints include the high cost of LPG which limited its use, delays in the methane gas production project, and deforestation.

## 4.2. Key lessons and policies for economic transformation and resilience

- (1) Transformation in Rwanda has leaned heavily on the formulation and effective implementation of medium-term and long-term development plans. The long-term development plans clearly articulated a vision that included making Rwanda a services-based economy and a meetings, incentives, conferences and exhibitions (MICE) tourism hub in the East African region over the last 20 years. This goal was backed by investments in Rwanda Air, high-end hotels, convention centers and the Kigali Arena, all of which continue to attract events and tourists into Rwanda.
- (2) Reforms to the public service structure were crucial for success. This has entailed a sustained period of building the capacity of Rwanda's workforce coupled with improvements in the health and well-being of Rwandans, attracting the right skills into the service and digitalizing the public service system to improve efficiency in service delivery.
- (3) Effective public-private collaboration is crucial for transformation. Rwanda has invested heavily in doing business reforms to attract private investors into the country, coupled with an attractive investment code with tax incentives for foreign investors to invest in well-organized free trade zones such as the Kigali economic zones. These reforms made it easy to register and operate businesses in Rwanda.
- (4) Political will coupled with accountability mechanisms such as performance contracts which are monitored and enforced on an annual basis have been key to the progress achieved in Rwanda's economic transformation.

### 4.21 Policies to ensure rapid, inclusive growth and a resilient economy

- **Access to finance focused on post-COVID-19 and other business shocks.** In order to ensure rapid inclusive growth and a resilient economy in Rwanda, there are lessons to learn from the short-term measures that have been implemented (including the Economic Recovery Fund), and to apply longer term. One of the measures is to set a "bridge-lending window" that is available to businesses that have been hit by any kind of economic shock in the medium and long term. Borrowing from aspects of the COVID-19 Economic Recovery Fund, this window could provide subsidized interest rates for certain businesses or groups of people and longer grace periods for loan repayments in specific sectors or businesses that have been hit hard by any kind of external shock. There are ongoing discussions between the World Bank and Rwanda's Business Development Fund on how to set up a "bridge-lending window" . Access to finance needs to be coupled with the provision of financial literacy training for businesses and individuals to develop their use of financial services. This could, for example, focus on improve awareness of requirements of loans, including issues such as grace periods. One way to do this would be to have a regulation that requires banks to explain loan terms in a clear and accessible way to potential borrowers<sup>13</sup>.

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<sup>13</sup> See a more detailed evaluation on financial education schemes at <https://www.poverty-action.org/study/financial-education-through-savings-and-credit-cooperatives-saccos-Rwanda>

### • **Diversification of priority sectors to drive economic growth and resilience**

Key findings from IPAR’s consultations with policy makers on charting the policy priorities for post-COVID-19 economic recovery and resilience indicate that crucial importance of diversification in the key priority sectors. Prior to the onset of COVID-19, the government had invested heavily in the services sector, especially the MICE sector. However, the services and tourism sectors were badly hit by the pandemic. This has increased the impetus for diversification from the Rwanda Development Board in order to support sustainable economic growth and resilience. To ensure inclusive growth, other priority sectors include investments aimed at integrating smallholder farmers into agricultural value chains, value addition through agro-processing, and promoting linkages to improve market access among smallholder farmers.

The government is already promoting diversification in key priority sectors such as manufacturing and construction sectors. This is through the Manufacture to Build and Recover initiative and the Made in Rwanda policy which is aimed at supporting inputs made in Rwanda (e.g. cement for infrastructure development, including Bugesera airport). This will mean Rwanda does not have to pay high costs on international imports.

The Economic Recovery Fund (ERF) and the Manufacture to Build and Recover initiatives are generally well-designed policies and have evolved over time to address initial COVID-19 recovery challenges. Businesses were generally happy with the scheme and their main complaint was that they wanted the ERF to be scaled up. Although there is need for more time to evaluate the impact of the ERF on businesses, there also needs to be increasing awareness of the ERF among local businesses. This could be done in collaboration with the Private Sector Federation and other entities.

### • **Improving the business environment and competitiveness of Rwanda’s manufacturing sector**

The key aspects to improving the competitiveness of Rwanda’s exports involve electricity costs, skills, logistics, and regulation. The Rwanda Electricity Generation (REG) company needs to **set a tariff for electricity that would reduce the pressure on business viability and reinforce the competitiveness of Rwandan businesses in the region**. According to the Willingness to pay studies conducted by IPAR-Rwanda in 2021, this price should be around Rwf 80 per kilowatt hour for large industries, and between Rwf 100 and Rwf 110 per kilowatt hour for small and medium industries as well as hotels.

**Improve grid reliability:** In addition, REG should put in more effort to deal with distribution system reliability, and should consider replacing old networks and using modern technologies.

**Specific interventions to improve the local business environment include business support services to:** (i) increase awareness of what support is available to businesses in times of distress or shocks; and (ii) setting up an “after-service” to help people get through administrative processes such as registering new businesses.

- **Strengthening the private sector in order to promote a private sector-led and knowledge-based economy**

This is a priority in Rwanda's National Strategy for Transformation (NST1). However, it has not been completely achieved although it is key to promoting economic recovery and resilience. This is due to limitations in the domestic market, limitations in credit to the private sector, skills gaps and other challenges. One of the ways of strengthening the role of the private sector in economic growth is through de-risking private sector investments. Agriculture is a key sector where the Smart Nkuganire program has been implemented. Here, exhaustive and reliable data have been collected and stored in a database. This enables the provision of services such as agricultural insurance and consequently increases access to credit. Although agricultural insurance has been piloted in the livestock sector, it needs to be scaled up in the crops sector. Another de-risking scheme entailing the provision of subsidized loans has been to promote affordable housing. All these schemes need to be scaled up to meet the increasing demand for affordable housing and the provision of credit in the private sector.

Another avenue for strengthening the private sector would be through increasing its **role in infrastructure investment** through avenues such as municipal bonds and local content policies for infrastructure projects. International bonds offered by Rwanda in the past have been over-subscribed, implying that these successes could be replicated at local levels if local capacity is built. There needs to be provision for local content in all infrastructure projects in Rwanda in order to enable private sector actors (including youth and women) to access sub-contracts from foreign contractors on big infrastructure projects. In addition, the promotion of labor-intensive works for local youths and women within large infrastructure projects will increase the purchasing power of local citizens who will demand goods and services to enable economic recovery and resilience.

- **Positioning Rwanda to maximize the benefits of the AfCFTA agreement**

According to policy makers, the African Continental Free Trade Area (AfCFTA) is a great opportunity for trade policy development during the post-COVID-19 recovery period. Given the limitations of Rwanda's small domestic market for both services and goods, the AfCFTA which boost trade in goods services and e-commerce. Rwanda is well placed to take advantage of the services and e-commerce protocols of the AfCFTA. Rwanda has an impressive focus on digital trade as part of the National Strategy for Transformation (NST1) which recognizes ICT as an enabler. The government has rightly identified the potential opportunities, with many more businesses now connected and experienced with using e-government, and many also having already switched their operating model to using e-commerce. The government rightly adopted an ambitious agenda for expanding digital trade through a series of five-year strategies to support the progressive roll-out of digital infrastructure, public e-service, increase digital skills and position Rwanda as a regional ICT hub, underpinned by strong institutions and leadership (World Bank, 2020). However, there is a need to increase digital literacy within the population and carry out negotiations which will enable Rwanda to derive maximum benefits from the AfCFTA protocols on services, goods and e-commerce.

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## Annex 1. Methodology used to decompose GDP growth into its components parts

We used the World Bank analytical tool, Jobs Generation and Growth (JOGGs), which breaks down GDP growth into its component parts, including growth due to changes in employment rate, growth due to changes in productivity (output per worker) and growth due to changes in the proportion of the working age population. In addition, we will analyse changes in employment and productivity at the sectoral level in order to determine which sectors have been growing dynamically in terms of both employment and productivity. Lastly, we analyse dynamic shifts in employment between the different sectors over the past 10 years to determine the sectors that employees are leaving and joining. The analysis of inter-sectoral shifts gives an indication of the effectiveness of policies aimed at transitioning workers from low-productivity farm jobs into more productive off-farm jobs over time.

The methodology uses Shapley decompositions, which is a simple additive method that links changes in a particular component to changes in total per capita GDP, by taking into account the relative size of the sector or component, as well as the magnitude of the change (World Bank JOGGS Manual, 2015). Here, GDP growth is decomposed using several consecutive steps. In the first step, growth in per capita GDP (proxied by per capita value added) is decomposed into employment rate changes, changes in output per worker and demographic changes. In the second step, employment changes are further decomposed into changes in employment by sectors. The third step decomposes changes in output per worker into changes linked to variations in output per worker within sectors and changes linked to relocation of workers between sectors. A fourth step goes further in understanding the role played by each sector in the aggregate effect of employment relocation across sectors, while the fifth step looks at the role of capital and total factor productivity as sources of changes in output per worker at the aggregate level. A sixth step puts all the elements together, to see how each factor affected total per capita growth. The key findings of the decomposition are shown below.

### Growth in per capita value added, 2005 to 2017

	2014 (Rwf)	Total change in per capita value-added growth (%)
Total growth in per capita GDP (value added)	207,532	100
Growth linked to output per worker	182,366	88
Growth linked to changes in employment rate	13,105	6
Growth linked to changes in the proportion of working age population	12,061	6

Source: MINECOFIN updated Macroeconomic Framework Dataset, 2020

# **A New Policy Agenda To Build Resilient Economies in Africa in the Post-COVID-19 Era**

Country case study:  
**TUNISIA**

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**DRAFT REPORT**

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## Abbreviations

AfDB	African Development Bank Group
Econ4Tunisia	Economists for Tunisia Think Tank
GEDI	The Global Entrepreneurship and Development Institute
IRENA	International Renewable Energy Agency
IMF	International Monetary Fund
ITCEQ	Institut Tunisien de la Compétitivité et des Etudes Quantitatives (Tunisian Institute of Competitiveness and Quantitative Studies)
ITES	Institut Tunisien d’Etudes Stratégiques – Tunisian Institute of Strategic Studies
ITU	International Telecommunication Union
OECD	Organization for Economic Cooperation and Development
PMN	Programme de Mise à Niveau – National Program for Upgrading the Industrial Sector
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNFCC	United Nations Framework Convention on Climate Change
UNICEF	United Nations Children's Fund
WEF	World Economic Forum
WIPO	World Intellectual Property Organization
WRI	World Resources Institute

## 1. Introduction

Tunisia's growth and economic transformation over the last 20 years can be divided into two periods. The division is marked by the events that took place between 17<sup>th</sup> December 2010 and 14<sup>th</sup> January 2011 when the people (particularly the youth) revolted against the incumbent political regime, forcing a democratic transition that came to be known as the "Arab Spring". The events of the Arab Spring are relevant for the current study for two reasons: a) they are rooted in deep-seated structural features that partly reflect past weaknesses of the growth and transformation process and its failure to respond to the expectations of the people; and b) they continue to have significant economic implications as the democratic transition has become a long and at times chaotic process, which has delayed attainment of a national consensus on the economic reforms and transformative policies needed to promote an inclusive, sustainable and resilient economy.

According to the Institut Tunisien de la Compétitivité et des Etudes Quantitatives (ITCEQ, 2020d), the average real rate of gross domestic product (GDP) growth fell from 4.4 percent between 2002 and 2010 to 0.7 percent between 2011 and 2020 while GDP per capita regressed sharply from 3.4 percent to -5 percent. There was also a decline in public consumption (by 0.9 percent to 0.5 percent of GDP) and private consumption (from 2.7 percent of GDP to 2.1 percent of GDP) as well as an investment rate that declined from 23.3 percent of GDP to 19.4 percent of GDP after the revolution. In fact, average gross fixed capital formation (GFCF) during 2011-2020 was negative (-4.7 percent compared with 3.3 percent for the preceding period).

These underperformances are due, essentially, to the breakdown of the traditional levers of growth in Tunisia: exports, investments, tourism, and phosphate mining. Marked by the pandemic, 2020 registered a decline in growth rate by 4.2 percent in the first quarter, a contraction by 16.9 percent in the next quarter then a positive rebound by 16.5 percent during the third quarter. The economy struggled to go back to normal levels in 2021 with a decline of -2 percent in the second quarter.

The decline in growth, as well as the negative dynamic of macroeconomic variables resulted in GDP per capita falling below US\$3,500 in 2017 after being maintained in the bracket of US\$4,100-4,330 between 2010 and 2014. Moreover, inflation in non-tariff food products peaked in double figures and core inflation (obtained by excluding food products and energy products) remained constant at under 5 percent during the post-revolutionary period. Non-tariff products had a rate of inflation twice as high as that for administered prices. The index of prices for family consumption (base year = 100 in 2015) rose by 78 percent between January 2011 and November 2021. The adverse impact on the quality of life of Tunisians has not been counteracted by a growth in salaries, and the erosion of Tunisian competitiveness has been doubly eroded by the depreciation of the dinar and fluctuations of the prices of raw materials during the last years.

These gaps impacted the balances of public finances. Average external debt went from 37.4 percent in 2010 to 79.5 percent of GDP in 2020 and will exceed 100 percent towards the end of 2021. Debt service in percentage of exports of goods and services weighs increasingly heavily, moving from 10.5 percent during the first period to 16.5 percent in 2020. The breakdown took place in 2017-2018 when public debt reached 80 percent and state debt exceeded the critical level of 70 percent. The lack of national political consensus led to a loss of control over the social dialogue and an absence of a clear fiscal strategy.

**Table 1. Evolution of public finances, 2002-2010 and 2011- 2020 (% of total budget)**

<b>Period</b>	<b>2002-2010</b>	<b>2011-2020</b>
<b>Evolution of expenses (excluding debt service)</b>		
Management expenses	100	140
Public remunerations	84	150
Service means	68	154
<b>Fiscal revenue</b>		
Direct taxes	149	104
Income tax	114	211
Corporate tax	200	3
Indirect taxes	74	95
Customs duties	-5	119
Consumption duties	50	97
<b>Non-fiscal revenues</b>		
Gas pipeline payments	132	20
Revenue from shares	111	-40
External endowments	-42	276
<b>Loan revenues</b>		
Internal borrowing >1 year	-64	733
Treasury bonds CT 52 weeks	-84	554
BTA – State bonds in TND	-38	239
External borrowing	-24	99

Source: Ministry of Finance; percentages calculated by authors

Imbalances of public finances are illustrated by an acceleration in public spending in a post-revolutionary context characterized by weak growth and inability to implement economic reforms. The imbalance was as flagrant as the evolution of borrowing seven times more rapidly between 2011 and 2022 than fiscal revenue, while the period from 2002 to 2010 saw a slowdown in the recourse to debt.

The post-revolutionary period is marked by strong fiscal pressure weighing on wage earners (+211 percent in income tax against +3 percent in corporate tax) in contrast to more balanced pressure during the preceding period. Consequently, the locking of the budget deficit in the

region of 3 percent of GDP, which was the norm between 2002 and 2010, ended from 2012 (5.2 percent) and peaked above 10 percent in 2020.

The budget deficit worsened, with a parallel deficit in the commercial balance. The rate of imports-to-exports-coverage was systematically above 72 percent between 2002 and 2010 and almost reached 80 percent in 2007. In contrast, coverage was below 70 percent for the period 2011-2020 excluding 2011, a year of transition and the year 2020 when the decline in international trade artificially improved the coverage rate.

The overall negative evolution of macroeconomic indicators was accompanied by a rise of poverty from 15 percent in 2015, to peak at 20 percent in 2020, while child poverty rose between 6 percent and 10 percent in 2020 alone, according to the International Monetary Fund (IMF) citing a UNICEF study. Unemployment also rose, pushing more young people into the informal sector. According to an ITCEQ<sup>1</sup> study, informal economy represented less than 21 percent of the GDP before 2005 but reached 34 percent in 2010 and peaked at around 42 percent.

Parallel to impoverishment, the fiscal revenue deficit went from 7 percent of GDP to almost 10 percent in 2018. Another study<sup>2</sup> indicates that the active and unofficially employed population went from 0.09 percent in 2006 to 0.04 percent in 2010, only to go back to 0.46 percent in 2015. Regulating the situation of those involved in the informal economy could, besides reducing inequalities in social and medical support, compensate for a significant part of the current budget deficit.

The question of public sector employment remains a blocking point. Whereas the share of public employment in overall employment declined to 18 percent in 2010, it reversed course to reach almost 20 percent in 2014. Political issues and unionist tensions have made the debate on controlling this tendency very delicate since 2011<sup>3</sup>.

Other notable tendencies throughout this period include the increasing enrollment of girls at all levels of education, which has improved their representation in economic activity. The proportion of women graduates went from a little less than 7 percent in 2004 to more than 12 percent in 2014. However, women continue to be more discriminated against and more vulnerable to unemployment than men. The unemployment rate of graduate women before 2010 did not exceed 50 percent while after 2011, it came close to 70 percent, or three times the unemployment rate of graduate men. These rapid changes in society put pressure on the most conservative sections of the population.

The contribution of productive sectors to growth has varied across time, with an increasingly notable weakness in the role of manufacturing. This delay in the transformation of the Tunisian

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<sup>1</sup><http://www.itceq.tn/files/politiques-sociales/economie-non-observee-en-tunisie.pdf>

<sup>2</sup><http://www.itceq.tn/files/emploi/bilan-evolution-marche-travail.pdf>

<sup>3</sup><https://globalvoices.org/2021/06/22/to-save-its-economy-can-tunisia-reform-its-oversized-public-sector/>

economy turns out to be the result of the presence of sectors with weak productivity and technological content, and, therefore, weak added value. The level of export sophistication remains low, with few new activities that have high complexity and high technology. Constraints remain, such as slow progress in innovation and technology adoption, the weak commercial diversification and the insufficiency of logistics infrastructure, besides an unattractive business climate and financing difficulties.

These quantitative and qualitative aspects lead to a summary of the situation: Tunisia has made uneven progress in its process of economic transformation, which would be the key to boosting its overall economic performance and improving social well-being. The logical consequence of this delay in structural transformation is the weak resilience of the Tunisian economy. This resilience was seriously shaken by the first episode of democratic transition in 2011. A groundswell of social movements emerged and led the country into a future marked, unfortunately by political and social tensions.

Underlying these tensions were not only the overrepresentation of graduates among the unemployed, nor uniquely in the increasing impact of women in society, but also in the unequal access to all resources and all public services according to location, whether in the interior or in a coastal region. The decline in access to education, healthcare, drinkable water, and employment translates into significant disparities in development and poverty levels. The challenge facing Tunisia during the 2002-2010 decade was mainly the unequal distribution of wealth and economic opportunities between regions and social classes. The next challenge in 2011-2020 was to complete the political transition journey with all its social and economic challenges.

## **2. Development policies and economic transformation**

### **2.1. Coherence and consistency of national plans and development strategies**

#### ***2.1.1. National Plan 2002-2006: economic flexing***

Having achieved a remarkable 5.2 percent average economic growth rate throughout the 9<sup>th</sup> Plan period from 1997 to 2001, according to the National Statistics Institute (INS), Tunisia's 10<sup>th</sup> Development Plan for the period 2002-2006 aimed to boost economic growth, create jobs, maintain fiscal balance, open up the economy further, and consolidate the pillars of sustainable development. To sustain the pace of economic growth, special attention was given to boosting private investment and adapting sectoral policies to the challenges of globalization and the knowledge economy. The focus was also on increasing exports due to their essential role in boosting growth and national savings, rationalizing consumption, and reducing the pressure on the balance of payments.

Sectoral policies included strengthening the production and productivity in the agricultural sector, improving the competitiveness of industries, and modernizing services. In agriculture, the program included expanding irrigation, optimizing farms, and putting into production new fruit arboriculture plantations, along with improving the productivity of animal husbandry and developing fishery resources. Another objective was to achieve self-sufficiency in the production of fodder, cereals and vegetables to meet internal demand and export abroad.

Aiming to increase the competitiveness of industrial firms, an industrial upgrade program was launched to facilitate technical assistance, accreditation, acquisition of licenses and protection of intellectual property. Other features included improving monitoring, modernizing training methods and tools, and strengthening distribution and planning. This was complemented by support for the creation of sectoral conglomerates in order to ensure the development of internal trade and subcontracting. More attention was also paid to power production and prospection of new oil and gas fields.

Modernization of the services sector relied on the extension of the telecommunications network, use of modern technologies, implementation of new strategies for the tourism sector based on innovation, creativity, and quality, as well as boosting competitiveness in the fields of transport, and banking and other financial services. Despite these initiatives and programs, there was a slowing down of growth engines and a decline in the pace of wealth creation. The GDP growth rate went from an average of 5.2 percent during the 9<sup>th</sup> Plan period to 4.5 percent during the 10<sup>th</sup> Plan period, despite the good performance of agriculture and tourism.

This decline was a natural consequence of a combination of internal and external factors. The internal ones were linked to insufficient support for exporters as well as the emergence of uncertainty and insecurity in the business climate. Many entrance barriers were raised to protect investors close to the old regime<sup>4</sup> and corruption increased<sup>5</sup>. Regarding the external factors, there was a gradual increase of competition from East and Central European countries as well as from Asia<sup>6</sup>. Growth was propelled especially by global demand (notably public consumption). The main consequence was the stagnation of job creation compared with the pace of the previous five years, and a rise in the average unemployment rate (Table 2).

The decline of growth and the increase of the unemployment rate reflect the decrease of engagement of public and private actors. According to Table 3, the investment rate declined in the main sectors. In agriculture and fisheries, it went from 30.2 percent during the period 1997-2001 to 23.2 percent over the period 2002-2006, notably due to the increase of urbanization, the low valuation of products (packaging and marketing) and the increasing scarcity of financing.

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<sup>4</sup>The average investment rate varied from 24.6 percent of GDP during the 9<sup>th</sup> Plan period to 22.7 percent during the 10<sup>th</sup> Plan period, according to INS.

<sup>5</sup> The perception corruption index moved from 36 in 2002 to 54 in 2006, according to Transparency International.

<sup>6</sup> The trade deficit moved from 3,762.3 million dinars to 4,445.4 million dinars in 2006 according to the Central Bank of Tunisia.

**Table 2. Evolution of growth rates and employment indicators, 1997-2006 ( %)**

	9 <sup>th</sup> Development Plan (1997-2001)	10 <sup>th</sup> Development Plan (2002-2006)
GDP (at market prices)	5.2	4.5
Global consumption	5.2	4.7
Gross fixed capital formation	7.1	1.9
Exports	7.3	2.1
Imports	7.5	1.5
Total employment (per 1,000 workers)	2.7	2.7

Source: ITCEQ

For manufacturing, the investment rate declined from 19.8 percent during the period of the 9th Plan to 17.1 percent during the period of the 10<sup>th</sup> Plan, essentially due to excessive reliance on a narrow internal market and a persistence of protectionist barriers. Finally, the investment rate in the services sector also fell, from 23.5 percent during the period 1997-2001 to 21.8 percent over the period 2002-2006, particularly due to an absence of new forms of leisure and the persistence of a product based on the sun and the beach.

**Table 3. Investment rates, by sector (gross fixed capital formation/value added; %)**

	1997- 2001	2002- 2006	2007- 2010	2011- 2015	2016- 2020
Agriculture and fisheries	30.2	23.2	21.1	16.6	12.3
Manufacturing industry	19.8	17.1	16.1	15.4	12.7
Agro-food Industry	26.4	20.3	17.4	18.2	16.7
Building materials, ceramics and glass	22.4	29.8	37.2	35.1	20.4
Mechanical and electrical industries	17.4	15.2	12.5	8.9	8.5
Chemical industries	14.3	12.7	16.3	25.0	21.0
Textile, clothing and leather	18.3	12.5	11.4	7.3	6.7
Various industries	20.4	20.5	15.5	18.4	14.2
Non-manufacturing industries	30.8	28.0	42.2	28.2	39.8
Mines	22.0	25.5	25.8	25.0	34.9
Oil and natural gas	31.8	33.0	55.0	30.2	57.5
Electricity	105.4	77.8	106.1	81.5	125.7
Water	51.8	64.5	50.7	69.6	71.4
Building and civil engineering	9.6	9.5	10.0	9.7	10.9
Trade service activities	23.5	21.8	20.1	16.9	13.4
Trade	6.0	6.1	5.7	6.3	6.3
Transport	43.2	35.9	41.6	40.9	37.2
Post and telecommunications	45.0	43.1	34.0	18.2	17.6
Hotel and restaurant services	21.0	15.5	13.5	9.7	7.6
Banks and insurance	9.8	8.5	8.6	6.5	6.1
Other services	22.3	23.1	16.0	16.0	9.6
Collective equipment	17.4	15.2	16.1	17.4	13.6
Total economy	24.6	22.7	23.9	21.2	14.5

Source: ITCEQ

### **2.1.2. National Plan (2007-2011): economic downturn**

The 11<sup>th</sup> Development Plan emphasized the consolidation of economic stability and boosting integration in the world economy to improve local capacities and accelerate growth in an increasingly knowledge-based economy.

The Plan provided for sectoral policies that promoted modernization and diversification of the economy by raising the share of activities with high value addition and a high knowledge content. More specifically, transformation efforts were based on greater liberalization of the services sector, notably the information and communications technology sector (ICT), which is considered as a strategic sector with a potential for job creation.

Manufacturing was also considered a pillar of growth and the objective was to increase value addition of products and exports to better respond to external shocks. For example, it was decided to encourage a changes in the textile sector from subsidization to co-contracting and to extend this change to the mechanical and electrical industries sector. Food, chemical and biochemical and other non-traditional industries with high added value were also targeted in this Plan, notably through the promotion of partnerships, technopoles and other private initiatives. Lastly, the Plan aimed to boost agriculture, which made a stable contribution to GDP, notably by strengthening traditional sub-sectors which had not reached European quotas (such as olive oil) as well as new sub-sectors (such as bio farming).

However, the results of the Plan after five years included a decreasing growth rate in the main engines (industry and tourism) as well as a rise in unemployment (especially among young graduates). This downturn was explained by progressive decay of the educational system, bureaucratic rigidity, a sclerotic public sector, growth in corruption, and deepening social and spatial disparities and inequalities. These trends provided evidence of an obsolete development model, unable to respond to the aspirations of a society seeking freedom and dignity, and opening the door to the social movements in 2010-2011 (Alaya, 2018).

**Table 4. Job creation growth, 2007-2011 (%)**

	<b>10<sup>th</sup> Development Plan (2002-2006)</b>	<b>11<sup>th</sup> Development Plan (2007-2011)</b>
GDP at market prices	4,5	4,2
Total consumption	4,7	4,6
Gross fixed capital formation	1,9	5,1
Exports	2,1	4,1
Imports	1,5	5,4
Overall employment (per 1,000 workers)	2,7	2,2

Source: ITCEQ



The growth rate fell from 4.5 percent on average during the period of the 10<sup>th</sup> Plan to an average of 4.2 percent under the 11<sup>th</sup> Plan, reflecting a slowdown in the pace of job creation and an increase in the complexity of the unemployment problem.

This situation is not at all surprising given the extent of the 2007-2008 economic and financial crisis and the degradation of the business climate which caused a decline in investment rates in all sectors, except non-manufacturing industries (see Table 3). Indeed, despite the net increase of investment rate in the overall economy (from 22.7 percent to 23.9 percent) following good performance in the mining and energy sector, the last years of the Ben Ali regime were characterized by crony capitalism, predation, favoritism, and the protection of the interests of those close to power. The authorization system that imposed an entrance barrier to many investors as well as the proliferation of bureaucratic procedures discouraged private investment. Moreover, the slowness in the management of property issues and the insecurity in the treatment of legal disputes complicated the situation.

This economic downturn reflected the insufficiency of transformation in Tunisia, a result of the weakness of the main economic sectors. In particular, the progressive decline of tourism was due to its inadequacy in the face of market developments which were at the origin of a slowdown in investments as well as many financial difficulties for hotels and banks. The latter industries have suffered the consequences of an increase in non-performing loans and the decline in the quality of their assets<sup>7</sup>. Meanwhile, the outsourcing practices did not favor the transfer of technologies and the creation of decent jobs in many manufacturing industries which faced increasing competition from European products<sup>8</sup>. This outsourcing became a factor of exploitation of a low-quality workforce which aggravated precarity and inequality. Agriculture also faced the slow execution of many projects, particularly in the areas of irrigation and breeding.

### ***2.1.3. Post-revolution strategies of development (2011-2021): economic decadence***

Following the revolution of 2011, Tunisia was unable to establish a five-year plan. The task was limited to yearly budgets through the contribution of different actors (administration, private sector, and civil society). The follow up of public projects in the different state budgets was done every three months and monthly for projects facing difficulties. The evident costs of the absence of planning and strategic vision for the country pushed the freshly elected government to prepare a five-year development plan (2016-2020). This plan was to truly transform the Tunisian economy, a long awaited and postponed objective. It consisted, in particular, in transforming the structure of the economy by diversifying production, especially in favor of

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<sup>7</sup> The bank non-performing loans/gross loans average ratio was 15.9 percent during the period 2007-2011 (St. Louis FED database).

<sup>8</sup> The Multi-Fiber Agreement (which protected textile sector from huge competition) ended in 2005 and the association agreement between Tunisia and European Union entered into force on March 30, 2008.

sectors with high technological content. It consisted also in promoting private investment by improving the business climate which had degraded significantly. Another aim was to boost economic integration through the diversification of partners.

Despite all the good intentions, economic performance was disappointing. The 2016-2020 Plan turned out to be a collection of projects without coherence and guarantee of feasibility and financing, with a lack of economic, environmental and social impact studies. Economic growth fell from 4.2 percent over the 2007-2011 period to just 0.7 percent during the post-revolution decade, especially due to political economy considerations. Indeed, political instability was one of main factors that explain the decline. Political institutions set up after the revolution was not operating and the country lacked accountability, transparency and social justice.

The significant decline in investment reflected the proliferation of regulations and permits as well as logistic weaknesses (especially, at the Port of Rades) and the deteriorating relationship between the government and the labor unions. The post-revolutionary period also featured the growing weight of the informal sector, which had a 35 percent share of GDP<sup>9</sup>, while the 2016-2020 Plan projected its reduction to 20 percent.

There was deterioration of the investment climate and a decline in overall entrepreneurial momentum, with the investment rate falling continuously over the last decade in all sectors, except non-manufacturing industries.

Even total consumption, which had maintained a positive growth rate in the past, saw an important decline, notably due to inflation. Imports fell, especially of equipment, translating weak engagement from investors in the presence of a morose situation.

The degrading situation of employment in Europe also affected the behavior of European consumers, which in turn disrupted demand for Tunisian exports and caused the collapse of tourism. Total receipts have moved from 1,853 million euros in 2010 to 1,790 million euros in 2019, before collapsing to 0.68 million euros in 2020 because of COVID-19.

Moreover, the employment market could no longer absorb the growing workforce, aggravating total unemployment. All this led to the crumbling of not only state finances but also of the external account of a country suffering from a political deadlock and an economy with stalling growth and in need of deep reform. The public deficit rose from 1 percent of GDP in 2010 to 8.8 percent of GDP in 2021 while public debt has reached a record level, moving from 38.8 percent in 2010 to 90.1 percent in 2021.

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<sup>9</sup>Nabli, M-K, 2019 *“J’y crois toujours » : au-delà de la débâcle...une Tunisie démocratique et prospère*. SUD Editions.

**Table 5. Evolution of tourist receipts, 2010-2020**

Year	Receipts in millions of euros
2010	1,853
2011	1,242,2
2012	1,587,5
2013	1,495,4
2014	1,609,1
2015	1,081,5
2016	978,4
2017	1,039
2018	1,309
2019	1,790
2020	0.68

Source: Tunisian National Tourism Office (ONTT)

**Table 6. Public finances in Tunisia, 2010-2021**

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Public deficit (in millions TND)	-650	-2127	-3853	-5207	-4074	-4069	-5510	-5987	-5055	-4060	-11615	-7944
In % of GDP	1	-3.1	-5.2	-6.6	-4.8	-4.5	-5.8	-5.9	-4.5	-3.3	-9.9	-6.6
Fiscal pressure	20.1	21.1	21.1	21.7	23.1	21.9	20.8	21.9	23.2	23.6	23.2	24.6
Public debt (in millions TND)	25640	28780	31418	34987	41054	46922	55921	67830	82295	83334	93045	109236
In % of GDP	38.8	42.5	42.5	44.2	48.1	52.3	58.7	66.5	73	67.9	79.5	90.1

Source: Ministry of Finance, Tunisia

At sectoral level, it was noted that the majority of projects in the Plan were not achieved, because of the lack of impact studies and, especially, financing. The industrial decline continued, emanating from the decay of the textile sector and other industries which could not adapt to the end of the Multi-Fiber Agreement and the rise of competition from emerging neighboring countries (namely Morocco). Investment rates in manufacturing declined from 15.4 percent during the period 2011-2015 to 12.7 percent during the period 2016-2020 (Table 3). In general, Tunisia's comparative advantage based on low wages was no longer a reality with many competitor countries also offering industrial products with low labor costs. Social agitation after the revolution also affected production levels of non-manufacturing industries, while terrorist attacks and political agitation further weakened the tourism sector.

**Table 7. Employment rates after the revolution (%)**

	<b>11<sup>th</sup> Development Plan (2007-2011)</b>	<b>Post-Revolution development strategies</b>
GDP in market price	4.2	0.7
Global consumption	4.6	2.4
FBCF	5.1	-4.7
Exports	4.1	-2.2
Imports	5.4	-1.9
Total employment (per 1,000 workers)	2.2	0.4

Source: ITCEQ

In summary, the results of the last two decades were the logical consequence of the absence of a transformation of the development model of Tunisia. Economic policy kept postponing structural problems and could not avoid the deterioration of the economic and financial situation. The dynamic of decline did not stop and affected the political as much as the economic and the social sectors.

## **2.2. Policies for structural change and economic transformation**

### ***2.2.1. Sectoral drivers of growth***

The median growth rate of the Tunisian economy has kept slowing down throughout the last two decades. It went from 4.4 percent during the 2000s decade to only 0.7 percent during the post-revolutionary 2011-2020 decade. The shock of the pandemic further weakened the productive sectors and accelerated the decline of the Tunisian economy.

Throughout the 2000s decade, merchant services had the primary role, with a contribution reaching an average of 54.6 percent during that period (see Table 8). This contribution reflects the important role shouldered by the telecommunications sector as well as the other services (consulting, engineering, etc.) in Tunisia's economic growth. The size of this contribution is explained by the liberalization of these services to the private sector.

Non-merchant services also had a remarkable role in economic growth during the same decade, with an average contribution of 16.1 percent. This contribution is due to the important presence of the public sector in the economy, notably the public companies and administrations.

The contribution of manufacturing industries in economic growth rose to 11 percent on average throughout the decade, in part due to Tunisia's comparative advantages in certain industries. Strategies to attract FDI since the 1990s and a favorable position within European

value chains, especially in mechanical and electric industries and the car industry sector, also helped manufacturing make a favorable contribution to economic growth.

Agriculture and fishing contributed only 5.4 percent on average to growth during the same period. This reflects the structural deformity of the economy in favor of the secondary and tertiary sectors. Indeed, there was erratic evolution of the sector over a long period, with a negative growth rate during the drought years and positive rates during the years with good rain. This is despite the presence of hydraulic infrastructure and the continuous development of irrigated areas, which contributed to shock reduction and better food security (BAD, 2007).

For non-manufacturing industries, their average contribution to growth during the decade rose to 5.7 percent. This contribution is primarily due to the role played by construction, supported by large public investments. Comparatively, the repeated social tensions in the mining basin and the spread of corruption in the oil sector weakened the contribution of mines and energy to overall growth.

The post-revolution decade, which was characterized by a very low growth rate, saw a radical change in the contribution of every sector. Non-merchant services became dominant with a contribution valued at 70.9 percent, on average. Massive hiring in the public sector with the aim of buying social peace, as well as the constant salary raises and social grants due to union pressure made final consumption the primary engine of growth. Similarly, the contribution of agriculture and fishing was 58 percent, on average due to favorable climate conditions and good harvests, where Tunisia already possesses considerable advantages in olive oil, vegetable, legumes, fishing, and figs. The substantial contribution of these two sectors reflects the deterioration of the contribution of other sectors, mainly manufacturing and services during the last decade. For the latter, the positive contribution of 19.1 percent, on average, was attributed to telecommunications, banks and insurance as well as trade performance, while tourism continued to suffer from business cycle conditions.

The last decade was also characterized by a negative contribution of manufacturing and non-manufacturing industries in economic growth. For manufacturing, the weakness of private investment continued after the revolution which made Tunisia a country on the path to de-industrialization.

Moreover, given the small size of the local market and the decline of national demand (especially from the other sectors such as transport and trade), Tunisian industry continued to largely rely on the European market, and, thus, suffered from the variations in conditions in Europe. The COVID-19 pandemic worsened the situation by causing a halt or sharp reduction in industrial activities and hampering their supply chains. For non-manufacturing industries, the decrease of contribution to economic growth was essentially due to the natural depletion of oil wells and the climate of social tension, especially around the mining basin region.

**Table 8. Sectoral contributions to growth (%)**

	<b>2002-2010</b>	<b>2011-2020</b>
Agriculture and fisheries	5.4	58.0
Manufacturing industry	11.0	- 23.6
Agro-food industry	2.5	9.6
Building materials, ceramics and glass	1.2	- 2.0
Mechanical and electrical industries	7.2	- 2.2
Chemical industries	0.4	- 12.4
Textile, clothing and leather	- 1.4	- 14.3
Various industries	1.1	- 2.5
Non-agriculture manufacturing industries	8.5	- 33.3
Non-manufacturing industries	5.7	-41
Mining and energy	1.3	- 30.5
Mines	- 0.1	- 6.5
Oil and natural gas	0.4	- 28.3
Electricity	0.7	2.7
Water	0.3	1.6
Building and civil engineering	4.4	- 10.6
Trade service activities	54.6	19.1
Trade	8.6	11.9
Transport	7.3	- 41.5
Post and telecommunications	13.9	59.1
Hotel and restaurant services	4.0	- 43.2
Banks and insurance	4.7	29
Other services	16,1	3.7
Sub-total non-agriculture market activities	7.3	-45.6
Sub-total market activities	76.8	12.4
Non-market service activities	17.1	70.9
Cost factors GDP	93.9	83.3
Net indirect taxes of subsidies on products	6	16.7
GDP (at market prices)	100.0	100.0

Source: ITCEQ

### **2.2.2. Aggregate and sectoral labor productivity growth drivers: an assessment**

Productivity in Tunisia continued to decline throughout the last two decades, from 2 percent average growth during the 2002-2010 decade to only 0.2 percent during the following decade. Political and security shocks and the general laxity in law and regulations enforcement were the main causes of this decline. The general decline in labor productivity was also due to structural factors. All sectors were affected by this decline, particularly those that contribute the most to economic growth,. In contrast, productivity in agriculture rose sharply from 0.5 percent on average during the 2002-2010 decade to 5.5 percent during the last decade. This was despite its dependence on climate conditions and the structural constraints it continues to face (for example, access to water and land, to credits, and insurance, the weight of small farmers, weak agricultural organizations, and low value addition to agricultural products)<sup>10</sup>.

Trade service activities also saw a decrease in productivity, going from 2.3 percent on average during the 2002-2010 decade to 0.1 percent during the post-revolution period. This decline is mainly attributed to the poor performance of the tourism sector, which remains vulnerable to external shocks and weakness such as the concentration on mass beach tourism.

The decline in the productivity in manufacturing industries was from 1.7 percent on average during the decade preceding the revolution to -1.1 percent during the 2011-2020 decade. This is attributed to the fact that industry was already contracting and began facing growing competition from emerging countries. Other factors included the dispersion of industries, weak supervision, insufficient commercialization and marketing activities, and the absence of links between exporting companies and others<sup>11</sup>. Finally, there was inadequate synchronization of post-crisis business cycles between Tunisia and its main trade partner, the European Union.

For non-manufacturing industries, the decline in labor productivity was spectacular over the last two decades. Mines and fuels are considered distressed sectors, having received multiple shocks. Private investment became constrained, especially after the publication of Article 13 of the Constitution, which stipulates a vote by parliament on each energy concession. Moreover, the financial distress of public companies operating in mining sector made the situation more complex, with continuous salary raises amid social unrest.

A group of experts from the Forex Club Tunisia<sup>12</sup> tried to dissect labor productivity trends using the McMillan and Rodrik method (2011). The objective was to see if the growth in labor productivity in Tunisia could be achieved through intra-sectoral progress (a “within effect”)<sup>13</sup>, or

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<sup>10</sup> See H.E. Chebbi, J.-P. Pellissier, W. Khechimi, J.-P. Rolland. Rapport de synthèse sur l’agriculture en Tunisie. [Rapport de recherche] CIHEAM-IAMM. 2019.

<sup>11</sup> See Riadh ben Jelili (2016).

<sup>12</sup> Forex Club Tunisie (2021): “LIVRE BLANC: Stratégie de Sortie de Crise, Repères Structurels de Réformes Prioritaires et Scénarii de Cadrage Macroéconomique à Moyen Terme « Résurgence d’une Economie Tunisienne Résiliente et Leviers pour une Prospérité Partagée et une Croissance Inclusive et Durable », Septembre.

<sup>13</sup> In this case, the productivity of labor is sustained by the growth in capital, technical progress, and optimized management of the labor factor.

through inter-sectoral allocation of work (a structural effect)<sup>14</sup>. This exercise demonstrated that the intra-sectoral contribution to productivity growth remains predominant, regardless of the period under consideration. Indeed, over the period 1975-2010, the “within effect”, estimated at 1.5 percent, contributed up to 71.4 percent of the growth of productivity of the Tunisian economy as a whole. This contribution became 83.3 percent in the period 2011-2019, even if this effect declined at 0.5 percent. However, the structural effect (estimated at 0.6 percent for the first period and 0.1 percent for the second one), contributed only 21.6 percent over the period 1975-2010, before declining at 16.7 percent for the period 2011-2019. This allowed the Forex Club Tunisia to conclude that the decline in the productivity of labor in the Tunisian economy is in part due to the reallocation of the workforce from sectors with high productivity to sectors where the productivity of labor became either weak or in constant regression<sup>15</sup>.

**Table 9. Productivity of labor, by sector (% growth)**

	<b>2002-2010</b>	<b>2011-2020</b>
Agriculture and fisheries	0.5	5.5
Manufacturing industry	1.7	-1.1
Agro-food Industry	2.1	-0.2
Building materials, ceramics and glass	3.9	1.2
Mechanical and electrical industries	2.5	-2.6
Chemical industries	-2	-3.4
Textile, clothing and leather	-0.3	-2.6
Various industries	1.3	-1.2
Non-manufacturing industries	-1.8	-3.1
Mines	5	-7
Oil and natural gas	-4.5	-8
Electricity	3.8	3.6
Water	4	1
Building and civil engineering	0.4	-1.9
Trade service activities	2.3	0.1
Trade	0.9	0.2
Transport	1.9	1.3
Posts and telecommunications	11	-0.4
Hotel and restaurant services	0	-5.1
Banks and insurance	3.4	1.5
Other services	1.6	-0.1
Housing	0	0
Administration	3.3	1.2
Total Economy	2	0.2

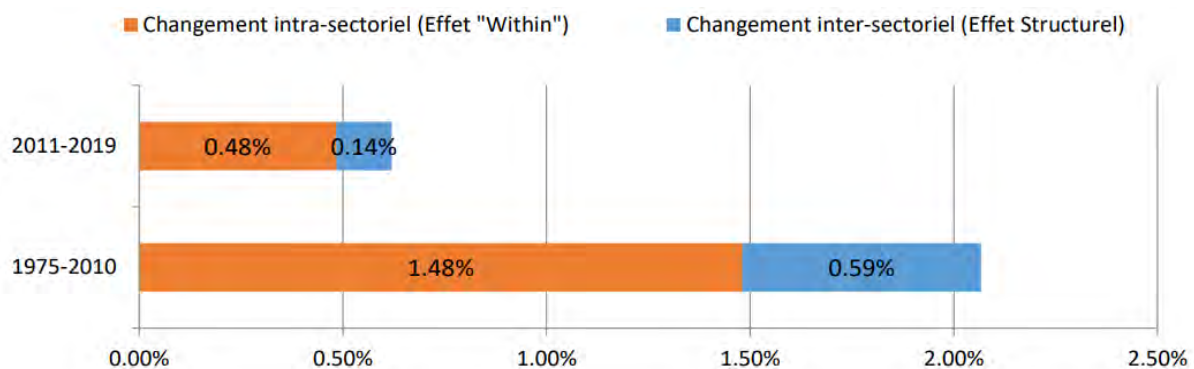
Source: ITCEQ

<sup>14</sup> In this case, the growth in the productivity of labor is explained by the reallocation of the labor factor from less productive sectors to the more productive ones.

<sup>15</sup> This situation is mainly due to the choice of economic operators as well as to the influence of specific sectoral policies.



**Graph 1. Decomposition of productivity growth**



Source: Forex Club Tunisie (2021)

### **2.2.3. Economic transformation in Tunisia: opportunities and constraints**

Over the past two decades, the Tunisian economy has continued to show structural weaknesses that negatively impact growth. One of the reasons is the weakening of total factor productivity<sup>16</sup> This reflects the fact that the country has seen little technological progress because companies do not invest enough and do not sufficiently use innovation to develop new products or to modernize the production process. It could also be partly due to the decline in the quality of the workforce (Ben Jelili, 2016).

The decomposition of sectoral total factor productivity shows that decrease in growth in Tunisia is the result of a decline in technological progress in all sectors except agriculture. The latter has, in fact, registered a notable improvement in the rhythm of growth of total factor productivity, going from 0.5 percent, on average, during the 2002-2010 decade to 5.5 percent during the 2011-2020 decade.

Manufacturing industries saw a fall in their total factor productivity, whereas traditionally, it is in the industrial sector that gains in productivity are most important. The transition from total factor productivity growth of 1.9 percent, on average, during the 2002-2010 decade, to a negative -0.8 percent for the post-revolution decade proves that the manufacturing industry seems to be the "poor relative" of sectoral transformation of the Tunisian economy despite the fact it is supposed to be its true engine. Even trade services have seen a decline in total factor productivity, signaling an increasingly weak presence of technological and other progress.

<sup>16</sup> Total factor productivity is a residual term that appears in the production function. It reflects the level of technological progress.

**Table 10. Total factor productivity, 2002-2020 (% growth)**

	<b>2002-2010</b>	<b>2011-2020</b>
Agriculture and fisheries	-0.2	3.9
Manufacturing industry	1.9	-0.8
Agro-food Industry	3	0.6
Building materials, ceramics and glass	1.4	-0.2
Mechanical and electrical industries	3.6	-2
Chemical industries	-1.8	-4.6
Textiles, clothing and leather	0.5	-1.4
Various industries	1.7	-0.9
Non-manufacturing industries	-3.1	-3.6
Mines	0.2	-5.6
Oil and natural gas	-8	-8.2
Electricity	2.8	1.2
Water	4	0.3
Building and civil engineering	0.8	-2.6
Trade service activities	1.6	-0.3
Trade	1.1	-2.7
Transport	0.3	-1.2
Posts and telecommunications	10.3	5.6
Hotel and restaurant services	1.2	-3.5
Banks and insurance	2.6	1.9
Other services	0.5	0.7
Housing	0	0
Administration	2.6	0.5
Total economy	1.3	-0.7

Source: ITCEQ

Clearly, structural transformation in Tunisia is driven by vulnerable sectors. Such vulnerability is primarily due to insufficiently skilled human capital, the deficit in researchers and the lack in spending on R&D. Indeed, Tunisia dedicates 0.67 percent of its GDP to R&D, compared with 2.4 percent in OECD countries<sup>17</sup>. The indicators of technological growth and global innovation are at 23.3 and 32.9 in 2018, still inferior by almost half to OECD levels of 40.9 and 50.7 respectively. Theoretical knowledge is rarely translated into outputs transferable to the productive sector. The lack of competitiveness is apparent, although there have been a number of advances made with regard to knowledge acquisition and ICT (CUA/OCDE, 2019). According to ACET, the export competitiveness ranking of Tunisia declined after the revolution, despite the progress made over the last few years (see Table 11). Issues linked to transfer of property, difficult access to financing and corruption continue to affect resilience of the economy and constrain the transition to a new technology era (artificial intelligence, digitalization, big data, etc.).

<sup>17</sup> This is a 2010-2015 average.

**Table 11. ATI competitiveness index**

	Export competitiveness rankings	Export competitiveness score
2000	4	49.14
2001	4	41.45
2002	4	37.76
2003	4	37.23
2004	4	46.70
2005	3	57.71
2006	3	77.30
2007	2	86.64
2008	2	88.62
2009	2	85.69
2010	2	72.99
2011	2	76.42
2012	2	71.92
2013	2	72.95
2014	3	67.03
2015	3	58.19
2016	3	55.26
2017	3	77.12
2018	2	81.98

Source: ACET

Meanwhile, Tunisia still lacks high technological content, with its manufactured exports coming from a limited number of sub-sectors (clothing, textile, leather, chemistry, electric appliances, automobile parts) and depend often on imported inputs. That is why the Tunisian economy has for several years moved timidly towards high-tech exports (IT and ICT information and communication technology, aeronautics, etc.). Its exports also remain little diversified in terms of products and destinations. Price competitiveness was often based on low labor costs and a superficially stable real effective exchange rate, rather than on structural competitiveness based on product quality and sophistication. The ATI technology index confirms this finding since it shows a deterioration of Tunisian rankings in recent years. This is a result of two main factors: a lack of state support as well as moderate private sector engagement.

Moreover, the economy has remained very dependent on the European Union, which accounts for 70 percent of Tunisia's goods exports, 83 percent of tourism, 73 percent of FDI and 90 percent of Tunisian remittances from abroad. Only three countries absorb most of the low value-added manufacturing products which has made Tunisia very vulnerable to slowdown and/or exogenous economic shocks.

**Table 12. ATI technology sub-indicator index**

	Technology rankings	Technology score
2000	4	51.58
2001	2	53.98
2002	3	64.87
2003	2	69.41
2004	2	69.28
2005	2	74.38
2006	2	75.75
2007	2	91.73
2008	1	94.71
2009	1	99.83
2010	1	100.00
2011	1	100.00
2012	1	86.37
2013	1	89.28
2014	1	82.56
2015	3	70.61
2016	3	66.21
2017	3	66.32
2018	3	66.07

Source: ACET

The absence of the strategic vision to become a regional export platform as well as a hub for joint production and regional value chains makes the situation more complex with the existing insufficiencies in infrastructure and logistics. Tunisia's logistic performance index stood at 2.57 in 2018, while it was at 3.65 in Europe and Central Asia countries (see Table 13). Tunisia is, in fact, among the more inefficient countries in customs procedures and the quality of infrastructure. Transport costs are high, despite its long coastline. The costs of transshipment, difficulties in transit, and the absence of harmonization in regulations, too, remain constraining.

**Table 13. Logistic performance index, 2018**

	Tunisia	Europe and Central Asia
Timeliness	3.24	3.24
Tracking and tracing	2.86	3.27
International shipments	2.5	3.14
Customs	2.38	3.04
Logistics competence	2.3	3.21
Infrastructure	2.1	3.13
<b>LPI Score</b>	<b>2.57</b>	<b>3.65</b>

Source: World Bank, 2018

Finally, the poor business climate is a big challenge with companies confronted with problems that affect their competitiveness such as property transfer, corruption and solvency. The problem of weak institutions was made worse by a growing informal sector and the growing risk of political instability. Financing is also a big problem due to a strong risk perception, a lack of guarantees and wide disparities between urban and rural areas.

### 3. COVID-19 response and lessons

#### 3.1. Extent of COVID-19 spread and corresponding responses

A great deal of the literature links the epidemiological dimension of COVID-19 to its economic dimension<sup>18</sup>. It consists mainly of a description of the evolution of the health situation in the country and the behavioral responses to it on a microeconomic level in order to put in place macroeconomic strategies and measures. This study discusses the most important consequences of the pandemic and the countermeasures at healthcare, economic, and social levels.

Since the start of the pandemic in March 2020 and until October 2021, there have been 717,163 confirmed cases and 25,363 deaths, attributed to COVID-19 in the country<sup>19</sup>. The pandemic's growth curve in Tunisia was relatively flat from the start in March 2020, then later showed radical fluctuations corresponding to both the tightening and relaxing of health measures by authorities throughout this period. It is noteworthy that the stringency index<sup>20</sup> shows that ever since the start of the pandemic, the authorities have oscillated between draconian health measures and their relaxation according to the evolution of the pandemic.

Tunisia managed to control the number of new cases detected as well as the number of deaths through a general lockdown from March 22<sup>nd</sup>, 2020 which was extended on two occasions. However, with the reopening of frontiers on June 27<sup>th</sup>, 2020, the number of cases kept increasing until October 2020 when the government decreed a curfew, the closure of religion places, and a ban on all public and private gatherings. The relaxation of these measures at the end of November 2020 after a relative decrease in the number of discovered COVID-19 cases resulted in a substantial rise in the number of new cases and deaths, reaching a record in January 2021 (69,488 persons infected and 2,072 deaths, according to Inkyfada)<sup>21</sup>.

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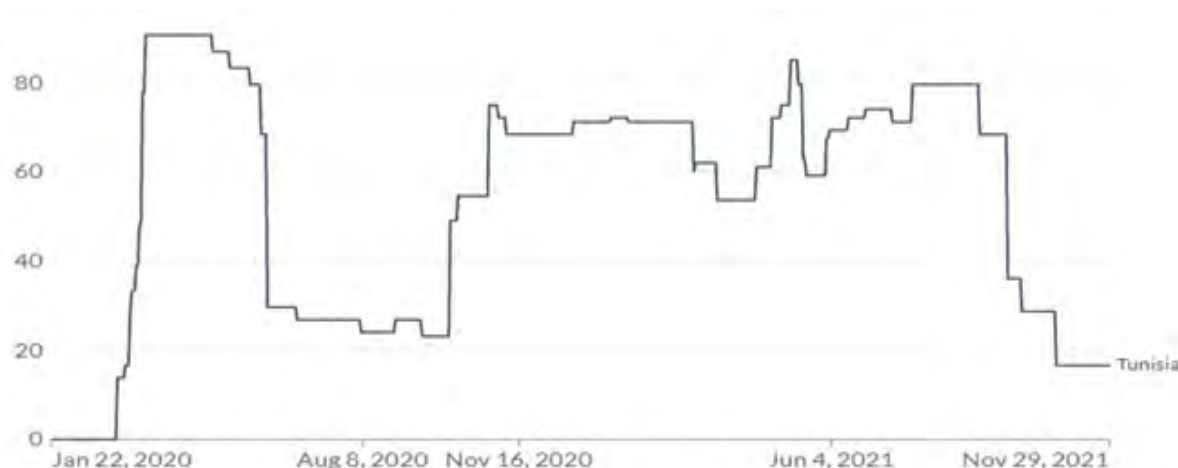
<sup>18</sup>See the documentation center of the IRDES.

<sup>19</sup><https://graphics.reuters.com/world-coronavirus-tracker-and-maps/fr/countries-and-territories/tunisia/>.

<sup>20</sup> The stringency index is a composite measure based on nine response indicators including school closures, workplace closures and travel bans, rescaled to a value from 0 to 100 (100 = strictest). If policies vary at the sub-national level, the index shows the response level of the strictest sub-region.

<sup>21</sup><https://inkyfada.com/fr/2021/07/06/covid-19-dashboard-tunisie/>

**Graph 2. Evolution of the Stringency Index in Tunisia**



Source: Oxford COVID-19 government Response Tracker, Blavatnik School of Government, University of Oxford, November 2021.

The government took the opportunity of January 14<sup>th</sup> (anniversary holiday of the revolution) to announce a lockdown of 4 days and closure of schools for 10 days. A few days later, the government also decreed a closure of weekly markets, a suspension of all gatherings until January 24<sup>th</sup>, 2021, and a ban on interregional travel. This slowed down the spread of the virus and brought down the number of deaths (21,639 infections and 821 deaths in March 2021, according to Inkyfada).

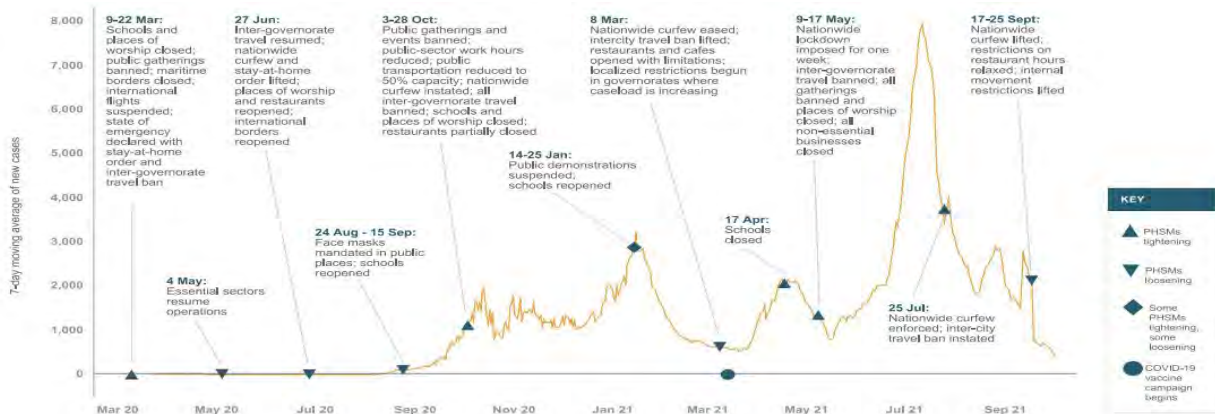
The beginning of March 2021 saw a relaxation of health measures and the start of the first vaccination campaign. This relaxation led to a significant rise in the number of infections, which reached another record level in April 2021. This situation pushed the government to impose restrictions, especially since it coincided with Ramadan, a month characterized by increased mobility after the breaking of the fast. The government instituted a ban on gatherings, a closure of weekly markets, a curfew on car traffic after 19:00, and prohibiting cafés and restaurants from opening after the breaking of the fast. The resulting fall in the number of cases was merely temporary and the authorities were forced to impose a lockdown on the Aid (May 9<sup>th</sup>, 2021). On this public feast, interregional travel was prohibited, and non-essential businesses were closed.

The months of June and July 2021 were considered as the deadliest in Tunisia since the start of the crisis with 80,000 new cases and over 2,000 deaths in June, followed by 170,000 tested positive and 5,000 dead in July. The lockdown declared in four governorates (Beja, Siliana, Kairouan, and Zaghouan) on June 20<sup>th</sup> and the tightening of health measures in other places at the beginning of July, coupled with the acceleration of the vaccination campaign, allowed the government to regain control of the pandemic situation in the country.

Since October 2021, the President relaxed most national restrictions. The only remaining restrictions concern the maximum number of people allowed to access an establishment, the necessity of observing health protocols at public events, and the mandatory vaccination and possession of a vaccination passport.

The following table summarizes the evolution of the health situation from the beginning of the pandemic until recently as well as the corresponding health measures:

**Graph 3. Health situation and government responses**



Source: Partnership for Evidence-Based Response to COVID-19 Survey 4

### 3.2. Impact of the pandemic and the response measures on the macro-economy

The pandemic not only cost lives in Tunisia, but also had major economic and social repercussions due to the lockdowns and drastic restrictions on people’s mobility. The year 2020 was characterized by significant macroeconomic imbalances, an -8.8 percent growth rate, and an unemployment rate of 17.4 percent. The rise in public debt and overdue payments weakened the state’s balance sheet, compromising any hopes for stabilizing debt. Towards the end of 2020, with hirings in the health sector on the one hand and a decrease in tax revenue on the other hand following the total or partial halt of production activities for companies, the budget deficit reached 10 percent of GDP while public debt reached a historic record of 79.5 percent of GDP. Economic activity resumed timidly in 2021, with a growth rate reaching only 0.3 percent in the third quarter of the year, an unemployment rate of 18.4 percent, and hopes for a yearly growth rate of only 2.6 percent.

The pandemic impacted entire swathes of the economy. Vital sectors, such as retail, leisure, tourism, transport, and public events were affected by lockdowns, closures, and curfews. Exporters were impacted by the fluctuations in demand linked to procurement problems and stock shortages. Added to this was the impact on companies that were unable to implement work-from-home solutions and social distancing rules (Forex Club, Tunisia, 2021).

INS figures on quarterly GDP showed a 9.4 percent fall in trade services in the last quarter compared with the same period in 2019, and an annual decrease of 13.3 percent. Hotels, restaurants and cafés registered the greatest decrease in activity (-49.1 percent) followed by transport (around -23 percent). In manufacturing, gross added value dropped by 9.3 percent in 2020 for most fields: chemical industries (-13.8 percent), food industry (-8.2 percent), textiles and clothing (-5.5 percent), and mechanical and electrical industries (-0.9 percent).

For non-manufacturing industries, their added value shrank by 8.8 percent for the entire year of 2020 following a fall in mining activities, especially phosphates (3.1 million tons produced in 2020 against 3.7 million tons in 2019) and gas and petroleum drilling. Added to this, was the weakening of the construction sector (-1.3 percent in the last quarter of 2020) and the electricity sector due to the drop in energy demand from the industrial sector. The only exception was the agricultural sector, which held its own against the pandemic as it registered a rise of 4.4 percent in its added value in 2020.

**Table 14. Evolution of quarterly growth for all sectors**

	2019					2020				
	T1	T2	T3	T4	Annual	T1	T2	T3	T4	Annual
Agriculture and fishing	-2	1.4	2.2	-0.6	<b>0.4</b>	6.7	3.3	3.4	4.5	<b>4.4</b>
Industry and manufacturing	-0.9	-1.1	-1.7	0.1	-0.9	-1.8	-27	-3.2	-4.5	-9.3
Non-manufacturing industries	-1.6	-3.4	-3.7	-0.8	-1.9	-4.7	-20.2	-6.9	-3.2	-8.8
Merchant services	3.5	2.7	2.4	2.2	2.6	-3.2	-29.8	-10.9	-9.4	-13.3
Non-merchant services	1	1.2	1.1	1.3	1.1	-1.9	-15.8	0	-7.6	-6.3
GDP	1.1	1	0.8	0.9	0.9	-2.1	-21.3	-5.7	-6.1	-8.8

Source: INS

For households, the pandemic proved to be a heavy burden on several levels. On the one hand, those who are active in the informal sector found themselves jobless due to the lockdown and/or other health restrictions. On the other hand, many of the elderly missed or postponed their medical appointments due to the pandemic while others could not find the medication they needed, especially those suffering from diabetes or cardiovascular diseases.

Finally, and especially during the first wave of the pestilence, a shortage of some staple goods caused a hike in the prices of food products. According to the INS, from the start of the pandemic in March 2020, inflation increased for three consecutive months (from 5.8 percent to 6.2 percent to 6.3 percent), particularly due to the increase in food prices. The pandemic also impacted social groups in varying degrees, further aggravating inequalities. Less-qualified workers, the youth, women and migrant workers were the most severely impacted while women and youth employment saw a bigger decrease compared to men and adults' employment.



### **3.3. Measures to mitigate the impacts on households and businesses**

To counteract the pandemic effects, the authorities sought to absorb the shock through measures protecting purchasing power, supporting industries, and protecting the most fragile strata of the population. To these ends, an allocation of 2,500 million dinars was made to facilitate the implementation of the exceptional measures targeting three levels: the economic, the social, and the monetary.

At the economic level, the main measures were aimed at all companies (without exception) that is to say, distressed companies as well as fully functioning exporters. For companies in all fields, a three-month delay was allowed in paying corporate tax (starting from April 2020) with a suspension of penalties for delay (apart from major corporations taxed at 35 percent) as well as a suspension of fiscal controls and fiscal verification and objection deadlines. In the same vein, companies were authorized to reevaluate their built and non-built real estate registered in their balance sheets according to their real value. An exemption of their capital gains from revaluations was also decreed, subject to non-assignment.

For distressed companies, VAT payments were relaxed, tax and Customs debts were restructured over a maximum seven-year period, the payment schedule of their social fund contributions was delayed until after mid-year by three months, and the obligation to present immediately documentary proof of their tax and duty suspension as well as other fiscal documents was relaxed as long as they committed to presenting them at a later date. Additionally, the government issued a line of credit guarantee of 500 million dinars to firms for management and operating expenses as well as a credit line of 300 million dinars to assist temporarily unemployed workers.

Export companies were allowed to increase their sales in the local market relative to their export revenue. On a social level, certain parts of the Labor Act which enabled unilateral termination of workers' employment were suspended even in exceptional circumstances. Additionally, temporary and exceptional grants of 200 dinars were given to those who were temporarily inactive. Finally, special measures to protect consumer purchasing power were adopted, notably with severe penalties for violations of competition and pricing rules.

On a monetary level, the central bank adopted monetary policy measures such as lowering the interest rate by 100 points in March 2020 and by another 5 points in September 2020; credit installment payments were suspended for seven months for companies and professionals belonging to categories 0 and 1 (with the possibility of extending this forbearance to include categories 2 and 3); as well as a more relaxed application of the credit-deposit ratio which was elevated to 120 percent. The central bank also delayed the payment of credit installments by seven months for those whose salaries lower than 1,000 dinars and by three months for those with salaries above that level. Lastly, the central bank encouraged banks to facilitate access for enterprises to needed liquidity, notably through refinancing opportunities, and to support

certain sectors (especially olive oil and tourism) through credit restructuring and/or reducing the interest rate on operational credits.

In addition to this, the central bank took measures related to the tariffs and continuity of banking services during the pandemic (Circular n° 2020-05 19 March 2020). They encouraged remote operations and reducing physical visits to banking establishments, especially by obliging banks temporarily to offer interbank ATM withdrawals free of charge; suspending, for all transactions not exceeding 100 dinars, all commissions charged to merchants and service providers for electronic payments; and providing a credit card, free of charge, to every client who owns a bank account and who requests a card.

However, all these measures turned out to be insufficient and the consequences of the shock were substantial. Resilience of the economy was at stake, especially because of the structural weakness that characterized Tunisia, even before the COVID-19 pandemic.

## **4. Tunisia's economic resilience**

### **4.1. Key vulnerabilities and risks relative to global drivers of change**

#### ***4.1.1. Economic (trade, globalization)***

Tunisia's trade balance was never positive from 1975 to 2021. In 2011, the year of the revolution, the commercial deficit increased by 4 percent compared with the previous year, with 7 percent growth in exports during the same period. Nevertheless, from 2011 to 2019, the deficit grew to 19.436 million dinars, or 2.25 times that of 2011. Imports however, grew more rapidly (+88 percent) than exports (+75 percent) between 2011 and 2019. A slight recovery was noted in 2020 largely due to the impact of the pandemic and the slowing down of international trade. It is noteworthy that the variations of imports compared to the GDP reached 61.5 percent in 2018), for example, while exports could fall to 40 percent GDP in 2016, which translates into a severe inability to cover imports through exports.

From a structural point of view, the trade deficits were caused mainly by a disequilibrium in goods trade. The trade balance of services was constantly positive but not high enough to cover other deficits. Tunisia has always been unable to rely solely on services exports to cushion the commercial deficit since they constitute only 15 percent-20 percent less than goods imports (example: 15 percent in 2015 and 19 percent in 2019). According to IMF estimates, imports growth will continue to be faster than that of exports by 1 percent to 2 percent between 2022 and 2025. According to INS figures, commercial deficit in the first 10 months of 2021 reached 13.3 billion dinars which translates into an evolution of 23 percent compared to the same period in 2020. Throughout this period, growth in exports (+20.9 percent) has been less than

growth in imports (+21.6 percent ).Tunisia’s commercial deficit, therefore, is both structural and continuous within the current economic parameters.

According to ITCEQ analysis (2021)<sup>22</sup>, imports tend to correlate with GFCF, which confirms the Tunisian economy’s dependence on imported goods and equipment, notably intermediary goods. Indeed, the importation of goods (except for agricultural and energy products) follows the variations in local demand, which remains their principal parameter. The same study indicates that a depreciating dinar can improve the commercial balance of sectors like textiles, clothing and leather, as well as agriculture and the food industry, which underscores the transient nature of the volume effect (growth in the volume of exports and fall in the volume of imports). It has always been true that the price effect would have a considerable impact on the commercial balance given the important share of fuel in the total imports (for example, about 16 percent in 2019).

In another report issued in December 2020, ITCEQ (2020)<sup>23</sup> notes that Tunisia’s efforts to diversify its exports and upgrade their quality (especially in field of high-tech<sup>24</sup>) remain modest compared to those of Morocco, Turkey, and China. External competitiveness of Tunisia’s economy remains also shackled by a negative correlation between “necessary delays” and “costs” both for importing and exporting<sup>25</sup>. According to the World Bank’s latest Doing Business report, complex, and sometimes even opaque, customs procedures and infrastructure remain the primary bottleneck preventing secure logistical operations, mastering time-to-market, and international trade operations costs.

Other problems related to relations with European Union partner countries are also hampering the Tunisian state and operators from having true rules of reciprocity<sup>26</sup>. France, Italy, Germany, and Spain are key partners. The main points of objection raise by the Europeans against Tunisian authorities are technical controls over goods through “rulebooks”, the requirement of free sale certificates for certain products, the requirement of declaring exports on paper while European procedures have become entirely digitized, and the obligation to pay an advances on import taxes and on VAT for every operation, among other grievances. It turns out that, indeed, the accumulation of archaic bureaucratic procedures is a true obstacle to improved Tunisian integration in international trade value chains.

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<sup>22</sup> ITCEQ (2021): <http://www.itceq.tn/files/climat-des-affaires-competitivite/2021/importations-tunisiennes-quel-comportement-sectoriel.pdf>

<sup>23</sup>ITCEQ (2020): <http://www.itceq.tn/files/climat-des-affaires-competitivite/2021/competitivite-externe-de-l-economie-tunisienne.pdf>

<sup>24</sup>Sectors of interest are: pharmaceutical products, computer products, radios, TVs, and communication products, medical and other precision instruments, aeronautics and space, and high-tech products.

<sup>25</sup> ITCEQ (2020) : From 2016 to 2020, Morocco has increased its competitiveness in terms of import and export costs faster than Tunisia.

<sup>26</sup>EU Commission(2021) : [https://trade.ec.europa.eu/doclib/docs/2021/june/tradoc\\_159602.pdf](https://trade.ec.europa.eu/doclib/docs/2021/june/tradoc_159602.pdf)

#### 4.1.2. Climate, environmental, and natural resources stress

According to projections by the Ministry of the Environment<sup>27</sup>, average annual temperatures in Tunisia will rise by 1°C- 1.8°C by 2050. These hikes will be felt the most in the interior low regions, regions from the seashore, and rural and agricultural regions with special development needs. Paradoxically, some of these regions will see a decrease in precipitation by 5 percent to 10 percent in 2050 and perhaps by as much as 20 percent in 2100. The risks of agricultural season and subsistence farming disruption may plunge an already fragile population further into poverty and malnutrition. These phenomena may also boost inter-regional migration, creating more urban pressure through unplanned temporary dwellings and social pressure (for example, the greater presence of unemployed youth in suburban areas), which may be the prelude to tensions during troubled times. Furthermore, besides their effects on the economy, climate change and environmental challenges will surely have an important social impact in Tunisia.

Despite its firm engagement to multiple international agreements on the climate, and the support of financial backers<sup>28</sup>, Tunisia continues to lag in reaching its objectives of reducing greenhouse gases. In reality, substantial public resources are badly needed to concretize the National Determined Contribution (NDC) through which Tunisia commits to reducing its national carbon intensity by 41 percent to 45 percent by 2030 compared to its level in 2010. However, such an objective requires financing of US\$19.3 billion between 2021 and 2030, according to UNDO estimates, and 4 percent of this amount must be provided by Tunisia.

According to the International Renewable Energy Agency (IRENA)<sup>29</sup>, electricity produced through renewable energy in Tunisia has increased from 8821 GWH in 2000 to 167,2 GWH in 2011 (+90 percent ) and to 528 GWH in 2018 (+216 percent).

**Table 15. Electricity produced through renewable energy, 2000, 2011, 2018 (GwH)**

	2000	2011	2018
Wind	23	10.2	453
Solar	1.21	4.3	58
Hydro	64	53.7	17
<b>Total</b>	<b>88.21</b>	<b>167.2</b>	<b>528</b>

Source: IRENA, Avoided emissions calculator

<sup>27</sup> <http://www.environnement.gov.tn/index.php/fr/environnement-en-tunisie/les-changements-climatiques/evolution-du-climat-et-projections-climatiques-en-tunisie>

<sup>28</sup> [https://www.tn.undp.org/content/tunisia/fr/home/projects/nama-d\\_appui-au-plan-solaire-tunisien/](https://www.tn.undp.org/content/tunisia/fr/home/projects/nama-d_appui-au-plan-solaire-tunisien/)

<sup>29</sup> <https://www.irena.org/Statistics/View-Data-by-Topic/Climate-Change/Avoided-Emissions-Calculator>

Theoretically, the objectives of STEG-Energies Renouvelables (STEG Renewable Energies), a subsidiary of the Tunisian Electricity and Gas Company (STEG, public monopoly of energy) created in 2010, are to reach 1,000 MW in 2016 and 4,700 MW in 2030 (that is, 40 percent of overall electric power supply in the country). Still, these projects face difficulties that prevent them from being fully implemented (for example, the solar panel fields in Tozeur<sup>30</sup>) or to become operational due to institutional issues. For example, the solar fields of Tataouine have been ready since May 2020 but are still not linked to the STEG network due to the opposition of unions to private sector production of electricity instead of the national company).

Progress in these fields is very slow and characterized by constantly high electricity production costs which require considerable subsidies from the state's subsidy fund<sup>31</sup>. Budget risks weigh heavily on government capacity to continue subsidizing the production of electricity. Global warming, especially during the summer when the demand for electricity for air conditioning peaks, also weighs heavily, with more frequent interruptions in distribution.

Even when fossil energy is factored in along with renewable energy, the energy deficit remains structural and is likely to become aggravated in the coming years. According to ITCEQ<sup>32</sup>, the level of energy independence has gone from 124 percent in 1990 to 80 percent in 2012 and 59 percent in 2016.

The Ministry of the Environment identifies water shortage as a major vulnerability in Tunisia<sup>33</sup>, notably due to the increase of water erosion, the increase in water needs, the degradation in water quality and the overuse of phreatic zones. Furthermore, the World Resources Institute ranks Tunisia 25<sup>th</sup> among the countries most at risk of water scarcity while having substantial capacity for producing electricity through renewable energy (wind and solar)<sup>34</sup>. In reality, threats to food security (environmental transformation and local farming and the decrease in some products with high water demand) and economic and social withdrawal in rural and agricultural areas can be counterbalanced by the development of renewable energy.

#### **4.1.3. Population dynamics and social inequality**

INS figures indicate that the birth rate has fallen from 19.3 for every 1,000 inhabitants in 2010 to 16.8 for every 1,000 inhabitants in 2019. This is consistent with a marriage rate in decline over the same period from 18.2 for every 1,000 inhabitants in 2010 to 14.3 for every 1,000

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<sup>30</sup>[https://www.poledjerid.com/specialites-du-pole.php#Cluster\\_energie](https://www.poledjerid.com/specialites-du-pole.php#Cluster_energie).

<sup>31</sup>The average cost of a single kWh of electricity was 267.2 millimes in 2020 compared with 319.2 millimes in 2019, that is, a general sale price (without taxes) of respectively 248,6 millimes (2020) and 244 millimes (2019). The remaining amount is subsidized and increases the financial losses of STEG.

<sup>32</sup><http://www.itceq.tn/files/developpement-durable/politique-energetique.pdf>.

<sup>33</sup> <http://www.environnement.gov.tn/index.php/fr/environnement-en-tunisie/les-changements-climatiques/synthese-des-vulnerabilites-et-des-mesures-prioritaires-pour-l-adaptation-aux-changements-climatiques-en-tunisie>

<sup>34</sup><https://www.wri.org/insights/these-20-water-stressed-countries-have-most-solar-and-wind-potential>

inhabitants in 2019. Tunisians are getting married less, at an increasingly later age, and are having fewer children.

This is also related to the increasing number of women with higher education degrees compared with men. Women are more involved and active in civil society, claiming more social and civil rights, which has caused some social disruption that complicates some marriages and in a conservative country. Indeed, in 2019 there were 17,306 finalized divorces against 12,871 in 2010.

Studies<sup>35,36</sup> show that Tunisian girls have inferior grade retention rates compared with boys from primary to secondary level and have the weakest dropout rates. In university, they represent up to 89 percent of students in life sciences, or 85 percent of students in education sciences. However, their unemployment rate is higher than that of men both on a general population level as well as for those with higher education degrees.

This phenomenon is more pronounced in a country still dominated by a patriarchal, and perhaps even a tribal culture, particularly in the rural and agricultural interior regions of the country. Tunisian society is going through a deep transformation in which women, increasingly educated and more than ever qualified for work, and with a strong will for self-emancipation and with more urgent grievances, are seeking more active involvement of men in home management.

Living conditions differ greatly between rural and urban parts of the country. Studies show<sup>37</sup> that the poverty rates in urban and coastal regions are at around 11 percent (5.3 percent in greater Tunis) while they reach 31 percent in the mid-west. It is undeniable that generally speaking, poverty has decreased since one of four people lived in poverty in 2000 compared with one in six in 2015. Discrepancies between cities remain considerable and mostly visible in some parts of the mid-west. It turns out that five of the poorest states in the country (with a poverty rate above 55 percent in 2015) are in Kasserine. In Kairouan, more than 200,000 people survive on less than 5 dinars a day. The coastal regions also have significant disparities in the same state. In greater Tunis, the poverty rate in Carthage is at 1.6 percent compared to 15.2 percent in Tebourba. The same can be seen in the state of Sfax where the town center has a rate of 2.5 percent compared with 17.4 percent in the rural area of Bir Ali Ben Khelifa.

The same studies find that the poorest areas have difficulties accessing public services such as water, natural gas and the sanitation system. They also accumulate other social difficulties with the highest school dropout rates and unemployment rates in the country, factors correlating with a very high poverty rate.

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<sup>35</sup><https://inkyfada.com/fr/2021/09/10/inegalites-hommes-femmes-ecole-travail-tunisie/>

<sup>36</sup><http://www.itceq.tn/files/developpement-durable/realisation-objectifs-millennaires.pdf>

<sup>37</sup><https://inkyfada.com/fr/2021/08/18/vivre-moins-5-dinars-jours-carte-pauvrete-tunisie/>

The impact of the regional disparities in the economic and social development of the population is a structural factor of fragility, an endemic malfunction, and a latent source of political tensions.

#### **4.1.4. Technological changes**

Tunisia ranks 87<sup>th</sup> among 141 countries in the Global Competitiveness Index 2019, with an information and communications technology ranking of 83<sup>rd</sup> <sup>38</sup>. Although its rate of use of smartphones puts it in an advanced rank (47<sup>th</sup>), that of fiber internet is at 88<sup>th</sup>. There is a discrepancy between the wireless and the wired technology infrastructure, which handicaps certain economic activities with added value, and which require higher bandwidths. Other rankings corroborate this handicap.<sup>39</sup> They equally point to multiple difficulties concerning usage, such as the weak penetration of e-commerce.

According to the INS, the percentage of households connected to the internet in Tunisia has gone from 11.4 percent in 2010 to 51.5 percent in 2019 and the international bandwidth size of the network has gone from 50 Gb to 780 Gb during the same period. This translates into a more democratic access to the internet and a quality of bandwidth in constant improvement. The content available on a national level has become more diverse, with the number of Tunisian websites registered by the INS rising from 11,873 sites in 2010 to 42,710 sites in 2019, which translates into 260 percent growth.

Analyzing these rankings shows that Tunisia has achieved significant progress in several fields related to open data, infrastructure setup and online services usage. It is among a group of countries with rather similar levels of technological maturity including Morocco, Mauritius, Seychelles, South Africa, Egypt and Rwanda. In this respect, according to the Global Innovation Index (GII), Tunisia ranks 7<sup>th</sup> among 34 countries in the lower middle-income group and 9<sup>th</sup> among 19 North African and West Asian countries in 2020. On this basis, the country is considered as being relatively better performing than other countries with a similar level of development and as producing relatively more innovations than other countries with the same levels of investment in innovation<sup>40</sup>.

Nevertheless, difficulties and obstacles persist. The ICT development index (of the ITU) and the NRI index of Tunisia are below the international average, handicapped notably by the extent of technology usage despite the number of skilled professionals in IT above the average for countries in the same category. The digital governance index appears to be one of the substantial bottlenecks in terms of a technological takeoff, particularly when it comes to the delay in deploying e-commerce, the online use of debit cards, more secure financial transfers

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<sup>38</sup>[https://www3.weforum.org/docs/WEF\\_TheGlobalCompetitivenessReport2019.pdf](https://www3.weforum.org/docs/WEF_TheGlobalCompetitivenessReport2019.pdf)

<sup>39</sup>See please the details of the ranking established by the International Union of Telecommunications(IUT) in the context of its CT Development Index (last updated in2017) : <https://www.itu.int/net4/ITU-D/idi/2017/index.html#idi2017economycard-tab&TUN>

<sup>40</sup>[https://www.wipo.int/edocs/pubdocs/en/wipo\\_pub\\_gii\\_2021/tn.pdf](https://www.wipo.int/edocs/pubdocs/en/wipo_pub_gii_2021/tn.pdf)

between economic actors, and digitalization of transactions. In fact, despite an honorable international ranking compared with those of the other countries in the region, Tunisia has delays in the deployment of artificial intelligence and legislative handicaps impeding the adoption of the internet of things (IoT).

The Tunisian government is also struggling to accelerate digital transformation even though many common services are now available for citizens online (for example, checking a criminal record or enrolling in universities have become exclusively online) and are receiving satisfactory reviews, according to studies<sup>41</sup>. However, many bureaucratic requirements are blocking the massive deployment of end-to-end administrative processes such as authenticated signatures, which are obligatory for several economic activities and require the physical presence of the requesting citizen, entrepreneurs, and considerable financial and time costs. Substantial legislative change remains hampered by the political environment, since it touches the mechanics of the functioning of the Tunisian state, and by extension, the internal balance of powers of the administration.

## **4.2. Key challenges in addressing vulnerabilities and achieving economic resilience**

### **4.2.1. Fiscal space**

A report by the International Labor Organization (ILO) about the fiscal domain reveals the difficulty of reconciling “a budgetary margin of maneuver” which allows the state to dispatch resources for a defined objective without compromising the viability of its financial situation while promoting its long-term development objectives<sup>42</sup>.

According to the Ministry of Finance<sup>43</sup>, tax revenue has grown by 114 percent between 2010 and 2020 to reach 27.147 billion dinars. During the same period, the different fiscal aggregates have not evolved at the same pace (+244 percent of income tax against +28 percent of corporate tax) with a significant hike in indirect taxes (+118 percent in customs duties , +92 percent in VAT and +85 percent in consumption duties). The unequal tax burden shouldered by economic actors is a concrete reality and a structural impediment for public revenue collection<sup>44</sup>. When drafting the 2021 Budget, and despite a much sought decrease of 5 percent in direct taxes and a 7 percent decrease in indirect taxes compared with 2019, taxes on wage earners will increase by 6 percent while taxes on corporations will fall by 19 percent .

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<sup>41</sup><http://www.itceq.tn/files/innovation-Tic/2021/le-gov-a-l-ere-du-digital.pdf>

<sup>42</sup>[https://www.ilo.org/wcmsp5/groups/public/---ed\\_emp/documents/publication/wcms\\_565523.pdf](https://www.ilo.org/wcmsp5/groups/public/---ed_emp/documents/publication/wcms_565523.pdf)

<sup>43</sup><http://www.finances.gov.tn/fr/les-indicateurs/ressources>

<sup>44</sup><http://www.itceq.tn/files/finances-publiques/2021/pression-fiscal-sur-travail-salarie.PDF>



Non-fiscal revenue is relatively weak compared with fiscal revenue and grew by +65 percent between 2010 and 2020 to reach 3.506 billion dinars. Here too, unequal distribution can be seen with oil revenues rising by +122 percent against revenues coming from the state stake in companies rising by only 17 percent. The condition of public companies in this respect is quite worrying given the weak revenue they generate, the significant resources they absorb to deal with their debts (towards banks and suppliers), or to guarantee them for third parties. The stalled restructuring of these establishments is due to, among other issues, problems of social dialogue, but also due to deficiencies in governance and financial management<sup>45</sup>.

The most worrying issue, nevertheless, remains public debt. Domestic debt has risen by around 18 times between 2010 and 2020 to reach the sum of 11,126 million dinars, of which 5,702 million dinars (48 percent) in OATs (Bons du Trésor Assimilables) payable within 52 weeks to several years. The Tunisian state has become a strong competitor against other economic actors for liquidity and financing of activities with added value. Banks are required to contribute and, thus, have to arbitrate between credits to private sector clients – who are becoming increasingly scarce- and credits to the state. In the face of the state’s difficulty to renew the IMF support program and enter foreign financial markets, banks have to drill into non-residents foreign currency accounts to lend to the Tunisian state. From 2010 to 2020, external borrowing resources grew by 290 percent. The 2021 Budget intends to raise them from 7,364 million dinars (in the 2020 Budget) to 13,015 million dinars in 2021, which translates into an increase of +77%!

Faced with a low growth rate, high inflation, rigid borrowing interest rates, and the state’s ever faster growing need for borrowing, the budget projections remain uncertain. The recent downgrading of Tunisia’s long-term sovereign rating – in dinars as well as in foreign currency – by Moody’s from B3 to CAA1 complicates access to foreign finance in a context where local actors seem to have reached the limits of their capacity. What remains then, is to find less painful ways to circumvent (or change) the rules governing central bank financing of state deficit.

The budget is fragile in the absence of structural reforms capable of improving the covering of expenses without recourse to additional fiscal pressure or borrowing. The fiscal space is already quite narrow. The international commodity markets see significant hikes in the prices of staple necessities which can turn a headlong rush from debt into a social and political crisis.

Widening the fiscal space will require a detailed review of its current coverage. Studies demonstrate<sup>46</sup> that a third of the active population works in the informal sector, while a fifth of

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<sup>45</sup>White Paper « Rapport de synthèse sur la réforme des entreprises publiques en Tunisie » ; The Presidency, March 2018 :

[https://www.leaders.com.tn/uploads/FCK\\_files/Livre%20Blanc%20\(Rapport%20de%20synth%C3%A8se%20sur%20la%20r%C3%A9forme%20de%20la%20gouvernance%20et%20des%20entreprises%20publiques%20en%20Tunisie%20\)\(1\).pdf](https://www.leaders.com.tn/uploads/FCK_files/Livre%20Blanc%20(Rapport%20de%20synth%C3%A8se%20sur%20la%20r%C3%A9forme%20de%20la%20gouvernance%20et%20des%20entreprises%20publiques%20en%20Tunisie%20)(1).pdf)

<sup>46</sup><http://www.itceq.tn/files/finances-publiques/endettement-tunisie.pdf>

wage earners are untaxed and half of the contributors identified by state services are in default, of which 63,000 are companies. The bulk of income tax (71 percent) is shouldered by wage earners, while liberal professions (representing an estimated 60 percent of taxable income) contribute barely 3 percent.

With 530 new fiscal measures between 2011 and 2016, the fiscal system is considered complex, opaque, and unstable, with a margin of interpretation that greatly favors the tax authorities. This situation has been aggravating year after year, inciting economic actors to fiscal fraud, and discouraging investors because of regulation inflation.

#### **4.2.2. Infrastructure**

According to Ministry of Equipment and Housing figures<sup>47</sup>, Tunisia has 360 km in highways and 3,938 km of paved roads in a total network of 12,750 km and more than 1,100 bridges with differing capacities. The country has 41 fishing ports, 7 airports, 39 dams, and 25 electricity production units (gas turbines, vapor turbines, combined cycles, hydraulics, wind). The country is well equipped compared with other countries in the region and ranks 5<sup>th</sup> in Africa in terms of the most integrated infrastructure, according to the regional integration index of AfDB<sup>48</sup>.

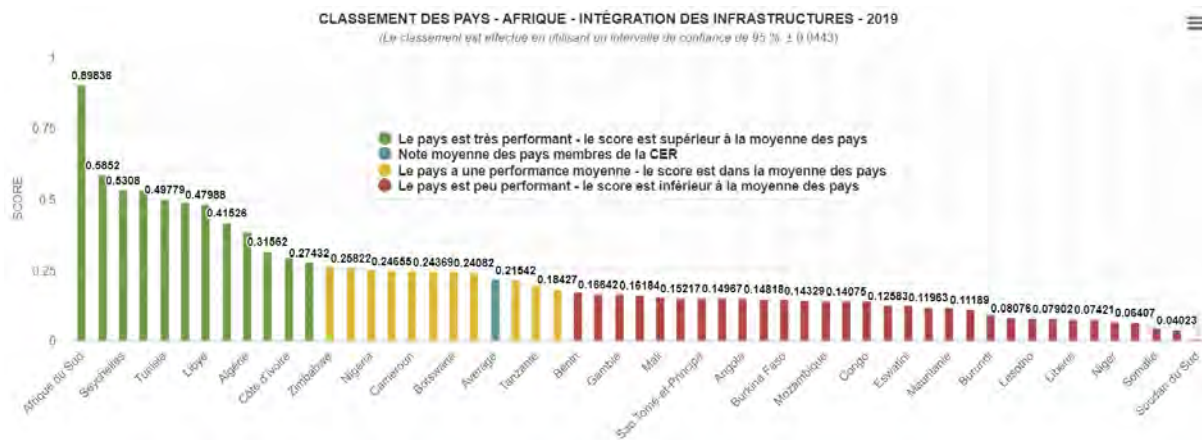
Infrastructure conditions differ according to location and sector. According to the Global Competitiveness Index (GCI) of 2019, Tunisia ranks 87<sup>th</sup> out of 141 countries in infrastructure. It turns out, upon closer scrutiny, that although there is connectivity of road and rail networks, their reliability remains hampered by their capacities. This is the key issue affecting air transport and port logistics. These aspects, considered to be in decline by the GCI of 2019, are, however, essential for attracting investment, securing international commerce, and galvanizing the tourism sector.

#### **Graph 4. Ranking of African countries by integration level of infrastructure, 2019**

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<sup>47</sup><http://www.mehat.gov.tn/>

<sup>48</sup> <https://www.afdb.org/fr/news-and-events/press-releases/rapport-2019-lindice-dintegration-regionale-en-afrique-appelle-le-continent-batir-des-economies-plus-resilientes-grace-lintegration-35751>



Source: AfDB, index score calculated by AfDB

Infrastructure conditions differ according to location and sector. According to the Global Competitiveness Index (GCI) of 2019, Tunisia ranks 87<sup>th</sup> out of 141 countries in infrastructure. It turns out, upon closer scrutiny, that although there is connectivity of road and rail networks, their reliability remains hampered by their capacities. This is the key issue affecting air transport and port logistics. These aspects, considered to be in decline by the GCI of 2019, are, however, essential for attracting investment, securing international commerce, and galvanizing the tourism sector.


Maritime freight transport is facing several difficulties. It is structurally in deficit (costing more in fees than what it generates in revenue) due to “underperforming ports, inadequate infrastructure, and an economy limited in scale”<sup>49</sup>. Tunisia has a smaller and less varied fleet than its peers and has no national container ship. The World Bank’s Logistics Performance Index of 2018 (LPI) ranks Tunisia 104<sup>th</sup> out of 167 countries based on six criteria of performance<sup>50</sup>: Customs, infrastructure, international shipments, logistics competence, and tracking and tracing. Other factors such as lack of storage capacities and costs and delays of export and import freight are also pointed out by the ITCEQ<sup>51</sup>. Maritime transport reform is a matter of priority for improving Tunisia’s international competitiveness.

**Table 16. Infrastructure section of Tunisia’s Global Competitiveness Index, 2019**

<sup>49</sup><http://www.itceq.tn/files/climat-des-affaires-competitivite/2021/note%2063-service-du-transport.pdf>

<sup>50</sup><https://lpi.worldbank.org/international/aggregated-ranking>

<sup>51</sup><http://www.itceq.tn/files/climat-des-affaires-competitivite/2021/note%2063-service-du-transport.pdf>

 <b>2nd pillar: Infrastructure</b> 0–100	-	62.7 ↑	85	Singapore
<b>Transport infrastructure</b> 0–100	-	41.8 ↑	101	Singapore
2.01 Road connectivity 0–100 (best)	82.7	82.7 ↑	46	Multiple (3)
2.02 Quality of road infrastructure 1–7 (best)	3.6	42.9 ↓	96	Singapore
2.03 Railroad density km/1,000 km <sup>2</sup>	13.9	34.8 ↑	51	Multiple (24)
2.04 Efficiency of train services 1–7 (best)	3.2	37.4 ↑	59	Japan
2.05 Airport connectivity score	34,374.4	46.7 =	71	Multiple (8)
2.06 Efficiency of air transport services 1–7 (best)	3.6	43.1 ↓	118	Singapore
2.07 Liner shipping connectivity 0–100 (best)	6.3	6.3 ↓	101	Multiple (5)
2.08 Efficiency of seaport services 1–7 (best)	3.4	40.5 ↓	95	Singapore
<b>Utility infrastructure</b> 0–100	-	83.7 ↓	74	Iceland
2.09 Electricity access % of population	100.0	100.0 =	2	Multiple (67)
2.10 Electricity supply quality % of output	15.5	88.0 ↑	98	Multiple (10)
2.11 Exposure to unsafe drinking water % of population	20.2	81.4 ↓	80	Multiple (28)
2.12 Reliability of water supply 1–7 (best)	4.9	65.3 ↓	67	Iceland

Source: Global Competitiveness Index 2019

The performance of the air transport sector remains marked by the commercial and financial problems of the national company (Tunisair) and the slow implementation of the Open Sky accord which was announced and postponed numerous times. If this matter is resolved, even against the interests of the national company, it will lead to better connectivity among Tunisian airports and will boost the performance of the tourism sector.

From a budget point of view, government expenses have grown by almost 200 percent between 2010 and 2020 to reach 29.951 billion dinars, while equipment expenditures – an important indicator of public investment in infrastructures – have evolved by only 68 percent during the same period to reach 7.207 billion dinars. In fact, state investments from foreign borrowing – that is, foreign loans dedicated directly to public investment – have risen 14% from 2010 to 2020. This clearly means that Tunisia's external debt during that period was used essentially to finance recurrent expenses, at the expense of investment in infrastructure. This explains the deterioration in road infrastructure and the difficulties encountered in maintaining a sufficient level of reliability in water and electricity services.

#### **4.2.3. Human capital**

The education sectors received continue to receive considerable attention from the Tunisian state ever since independence. The Ministry of Education employs more than 200,000 of the 600,000 employees of the public sector, with a budget of 6.728 billion dinars in 2021. Higher education employs 36,726 people with an overall budget of 1.828 billion dinars. The number of newly opened primary schools has varied only by 1 percent between 2010 and 2019 while the number of new classes has grown by 7 percent over same period. The number of primary school pupils has grown by 17 percent between 2010 and 2019, according to the INS. However, these numbers hide social and regional issues and disparities, particularly the rise in school

dropouts by 100,000 children per year<sup>52</sup>. UNICEF indicates that only 48.7 percent of adolescents finish secondary education (high schools) and blames it on an underperforming educational system<sup>53</sup>.

The ITCEQ report on the “Knowledge Economy”<sup>54</sup> shows a disparity between the quality of entrants in innovation and the value of output. It says, “this can be explained by the lack of coordination between the different intervening parties (companies, universities, and research institutes), the crippling bureaucracy, and the lack of means to finance projects, etc.”

**Table 17. Top 5 weaknesses of Tunisia, according to the Global Innovation Index**

Strengths			Weaknesses		
Code	Indicator name	Rank	Code	Indicator name	Rank
1.3.1	Ease of starting a business	18	2.1.4	PISA scales in reading, maths and science	74
2.1	Education	8	2.3.3	Global corporate R&D investors, top 3, mn US\$	41
2.1.1	Expenditure on education, % GDP	7	2.3.4	QS university ranking, top 3	74
2.1.2	Government funding/pupil, secondary, % GDP/cap	1	3.2	General infrastructure	128
2.2	Tertiary education	16	3.2.3	Gross capital formation, % GDP	124

Source: GII, 2020

The condition of human capital in Tunisia is paradoxical. On the one hand, international evaluations recognize the country as a strong producer of quality human resources, notably in engineering and medicine. On the other hand, Tunisian public universities are poorly recognized internationally, and unemployment rates of higher education graduates remains higher than the national average. Studies show a mismatch between academic qualifications and the needs of the market, which offers low-quality jobs to those with degrees<sup>55</sup>. Graduates in economics, management, law, and literature and social sciences are in weaker positions for the job market than engineering graduates. Of the total number of employed graduates, the number of those occupying jobs that require average or low qualifications was as much as 20 percent in 2013. They are taken up by agriculture, construction, commerce, and hotels and restaurants<sup>56</sup>. Currently, Tunisia is facing a worrying phenomenon – massive brain drain – which has been accelerating over recent years.

<sup>52</sup><https://www.unige.ch/fapse/erdie/files/4414/6651/2677/Boughzou-EED7.pdf>

<sup>53</sup><https://www.unicef.org/tunisia/la-2%C3%A8me-d%C3%A9cennie-%C3%A9ducation-et-protection>

<sup>54</sup><http://www.itceq.tn/files/innovation-Tic/economie-du-savoir-performance-de-Tunisie.pdf>

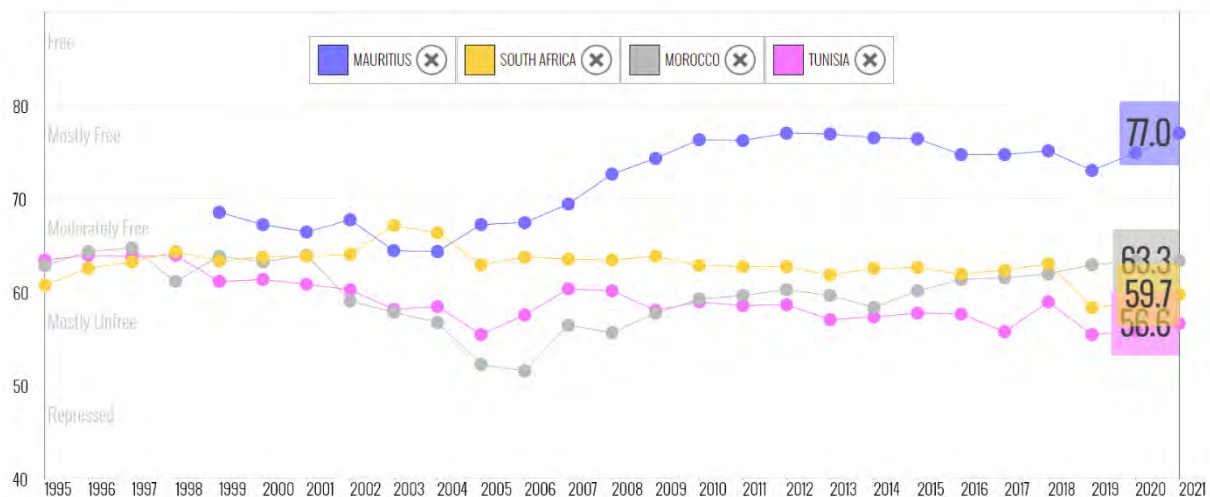
<sup>55</sup><http://www.itceq.tn/files/emploi/inadequation-des-qualifications-en-tunisie.pdf>

<sup>56</sup><http://www.itceq.tn/files/emploi/over-education-tunisian-labor-market.pdf>

#### 4.2.4. Liberalization-related challenges

According to the Economic Freedom Index 2021, published by the Heritage Institute<sup>57</sup>, Tunisia is in the group of countries considered generally not free, with a ranking of 119 of 178 countries and with a score improving very slowly. Its difficulties include vulnerable property rights, a judicial system susceptible to corruption, a tax system with a tendency towards increases due to the continual rise in state expenditure. The other two difficulties the Index pointed out are the complexity of social law and a particularly archaic monetary exchange law which penalizes international transfers.

**Graph 5. Economic Freedom Index, 1995-2020**



Source: The Heritage Institute, Economic Freedom Index 2021

ITCEQ has performed a deep analysis of the results obtained by the Economic Freedom Index in 2020<sup>58</sup> and revealed shortcomings on multiple levels:

- Judicial efficacy
- Government integrity
- Fiscal health
- Freedom of business
- Fiscal burden
- Government expenditures
- Freedom of labor
- Monetary freedom
- Freedom of commerce
- Freedom of investment
- Financial freedom

<sup>57</sup><https://www.heritage.org/index/ranking>

<sup>58</sup><http://www.itceq.tn/files/climat-des-affaires-competitivite/2021/economic-freedom-index-2020.pdf>

Since 2011, political instability has led to very clear directions when it comes to liberalization of the economy. European partners have voiced their concerns on multiple occasions, with Tunisia having taking measures that go against the spirit of the free-exchange accord. The country remains characterized by a hegemonic bureaucracy and an environment less favorable to the liberalization of the economy.

### **4.3. Risk factors and opportunities: Is Tunisia ready for the future?**

While examining the main vulnerabilities of the Tunisian economy, several risk factors crop up repeatedly and consistently and constitute the key to the country's future opportunities.

Bureaucracy is at the heart of all economic difficulties. It is a major obstacle facing international trade and the liberalization of trade, with partially digitalized services and the Customs service viewed by many people as the most corrupt public service<sup>59</sup>. The restrictive monetary exchange Act strictly regulates the possession of foreign currency and assets by fiscally resident citizens. Even though it protects the national currency from fluctuations in the exchange rate, it is seen as archaic, incites fraud and tax evasion of an extent still unknown.

One of the emblematic events related to the anachronistic nature of this exchange law is the inability to legalize PayPal and the criminalization of the possession of cryptocurrency by taxpayers. Some breakthroughs were made via the Tunisian Start-up Act which allows young and innovative companies to be identified and to enjoy some flexibility in operating foreign currency accounts. Yet, even with innovative legislation, the identification process remains reliant on bureaucratic procedures, even when done online – and dependent on paying a commission. There is also the unfortunate criminalization of the possession and use of drones, including for companies innovating in the fields of robotics and IoT.

The bureaucratic approach is also very present in matters as serious as the preservation of the environment. Here too, the administration prides itself on its zeal for “legal texts” while also ignoring its lack of discernment and its fragility in the face of corruption.

The slow transformation of the administration illustrates how difficult it is to change organizational and cultural paradigms. Aborted or incomplete digitalization initiatives by the state do not allow any projections of the country's future, even though massive investment in digitalization helps improve services for citizens, improve project monitoring and evaluation, restrict corruption, better allocate human resources, and retain local talents in the IT field.

Nevertheless, even if there were clear targets for digitalization, the fight against poverty, better adaptation of the education system to the labor market, the preservation of water resources, etc., the lack of material means to finance these ambitions makes them unrealistic.

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<sup>59</sup> Digitalization of Customs services is ongoing via financing provided by the World Bank but the status of the project is unknown: <https://www.webmanagercenter.com/2020/09/26/456334/lutte-contre-la-corruption-la-douane-ne-doit-pas-etre-le-seul-maillon-de-la-chaine-estime-youssef-zouaghi/>

All in all, the persistent question for Tunisia is how to increase public investments while also stabilizing salaries in the public sector and operating costs while avoiding excessive levels of debt. A related question is how to use debt in a manner that does not make it a painkiller that covers the state's inability to cover its expenses with an acceptable level of taxation. Is it possible to increase tax revenue without adding to the burden of individual income tax, and by enlarging the tax pool (rather than level) imposed on companies and professionals?

Responding to these questions is a complex endeavor, as long as political actors and unions avoid thinking about new solutions, let alone a change of paradigm, and also avoid confrontation and opt for consensus in the interests of social peace. Public finances are, therefore, today, at a level of uncertainty that does not allow for ambitions of reform or innovation to become credible.

## 5. Key lessons and policies for economic transformation and resilience

### 5.1. Lessons from what worked well in the past

In 2018, Tunisia was ranked 40<sup>th</sup> worldwide according to the Global Entrepreneurship Index<sup>60</sup>. The comparison was also made with “competitor” countries in Africa and showed that Tunisia possesses undeniable assets in human capital and capacity to assimilate technologies. This is not at all surprising considering the long-term investment made in education and higher education. Nevertheless, to stay in the global race for talents, Tunisia needs to improve its ranking in the Programme for International Student Assessment (PISA) index and stem the brain drain, an old, but of late, also an accelerating phenomenon<sup>61</sup>. This ambition is achievable as Tunisia has traditionally had commendable results in the number of scientific publications in respected international journals and has connections with international labs that can allow it to catch up with Morocco or South Africa in terms of innovation and internationalization of economic activities. Consequently, the resilience of Tunisia's assets in terms of technical and scientific competencies is real, and brings the country many competitive advantages.

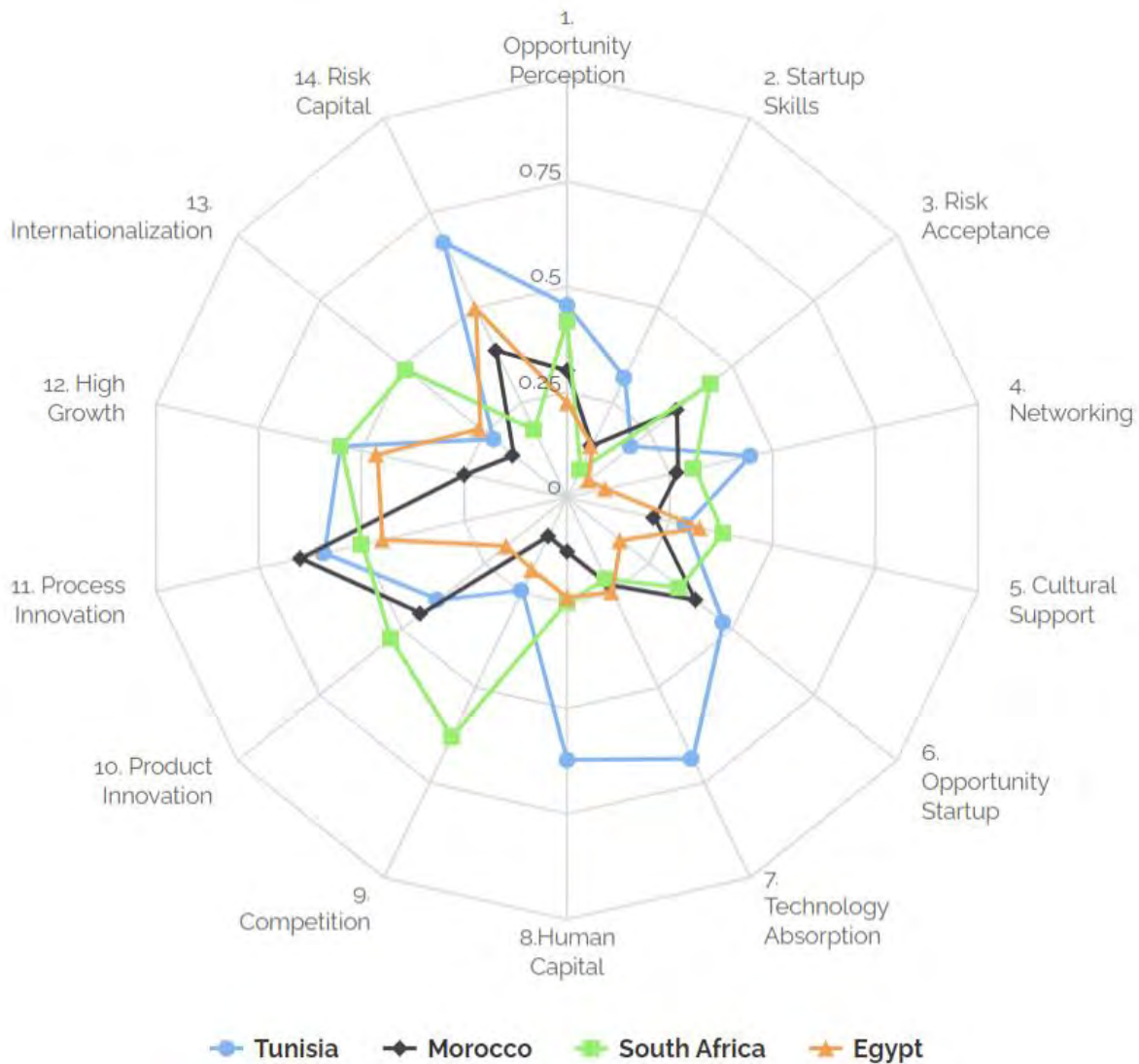
#### Graph 6. Global Entrepreneurship Index, 2018

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<sup>60</sup><https://thegedi.org/global-entrepreneurship-and-development-index/>

<sup>61</sup><https://journals.openedition.org/hommesmigrations/2891>





Source: 2019 Global Entrepreneurship Index

Furthermore, Tunisia’s control over its demographics is unique feat in Africa and the Arab and Muslim world. With a fertility rate close to that of some developed countries, the country offers women better access to active professional lives and the possibility of strengthening the labor market. For future generations, such a context creates less pressure on public services, notably, education and healthcare. Still, the country may suffer more and more from the aging of the population and the inadequacies of its migratory policies compared to its needs. For example, the Tunisian private higher education system attracts students from multiple African countries but struggles to give them opportunities, including in sectors in need. The demographic variable is truly a factor of resilience which requires public policy action to reach its true potential in economic development.

Lastly, Tunisia can learn valuable lessons from the National Upgrade Program (PMN)<sup>62</sup>. The 8<sup>th</sup> Enquiry into the achievements of the PMN<sup>63</sup> (March 2017) states that the majority of benefiting companies are satisfied with the mentoring provided to reach their objectives. In addition to improving the pertinence of the strategy, commercial performance, especially in export growth, as well as in competitive competencies. A study by ITCEQ<sup>64</sup> in turn confirms that the PMN strongly contributed to the digitalization of manufacturing companies. This digitalization was certainly unequal since it profited offshore companies, medium-sized and big companies, and those based in the coast more than any other firms. Expanding the upgrade rationale to a larger group of companies and targeting SMCs based in the interior regions could have a strong snowball effect as in a more homogeneous distribution of the capacities of economic resilience.

## **5.2. Impact, policy responses, lessons and opportunities from the COVID-19 pandemic**

According to an OECD report<sup>65</sup>, the level of industrial production and exports in Tunisia started growing in the 4<sup>th</sup> quarter of 2021. The return of international economy activity with a strong demand for goods and services opened the door for Tunisian exporters to catch up on what had they lost. Additionally, transactions from the Tunisian diaspora beat the record in 2021. According to the Tunisian Central Bank's data, these transactions reached nearly 6.2 billion dinars by the end of September 2021, compared with 4.4 billion dinars during the same period of 2020 and 3.8 billion dinars in 2019. In dollars, remittances since the beginning of 2021 rose to around US\$2.2 billion or 1.9 billion euros. In percentage of GDP, they reached the historic level of 5.5 percent of GDP, against 2.7 percent in 2010. The diaspora's transfers, therefore, represent more than three times the revenue from tourism, which only reached the sum of 1.8 billion dinars by September 30<sup>th</sup> 2021.

During the international surge in teleworking, new opportunities started to interest more and more emerging countries. Some created specific visas or immigrant status to attract Western talents who were working 100 percent from home (for example, the United Arab Emirates). These statuses stabilize the presence of foreigners in the host country, their financial flow, and local consumption, much better than tourists. The International Organization of Tourism predicts that world tourism levels of 2019 will not be reached again before 2025, at best. With the capital Tunis being ranked as one of the cheapest cities in the world, Tunisia has a considerable asset to reposition itself as a sunny destination and close enough to Europe for long-term expatriation.

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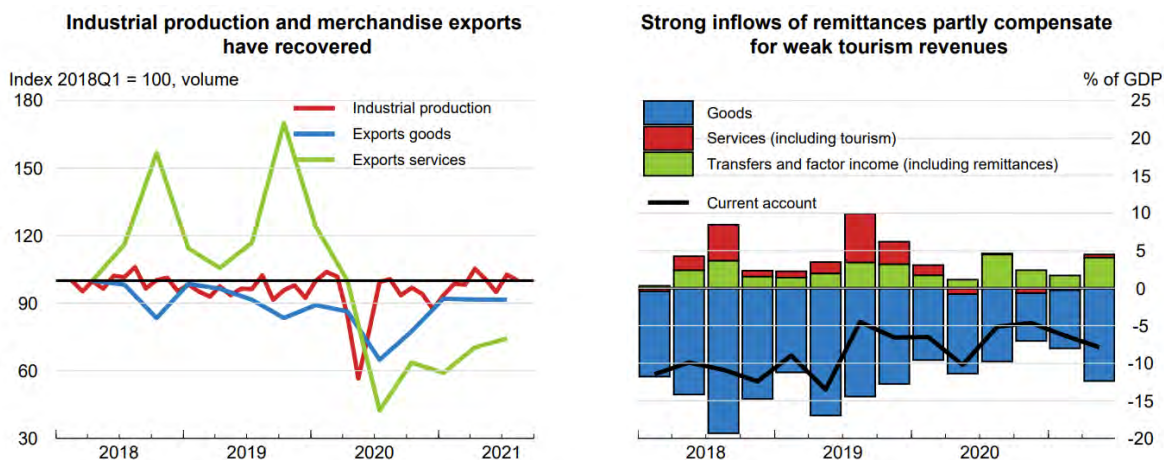
<sup>62</sup> The PMN is a national program of support for the manufacturing industry in Tunisia. It was initiated after the free trade agreement with the European Union : <http://www.pmn.nat.tn/>

<sup>63</sup> [http://www.pmn.nat.tn/wp-content/uploads/2018/01/8\\_Enquete\\_PMN\\_mars\\_2017.pdf](http://www.pmn.nat.tn/wp-content/uploads/2018/01/8_Enquete_PMN_mars_2017.pdf)

<sup>64</sup> <http://www.itceq.tn/files/innovation-Tic/PMN-digitalisation-industrie-tunisienne.pdf>

<sup>65</sup> OECD ECONOMIC OUTLOOK, VOLUME 2021 ISSUE2: PRELIMINARY VERSION : [https://read.oecd-ilibrary.org/view/?ref=1118\\_1118143-uo2kgexebr&title=Country-profile-Tunisia-OECD-Economic-Outlook-Volume-2021-2&\\_ga=2.248069839.99705201.1638657500-1437068969.1635235264](https://read.oecd-ilibrary.org/view/?ref=1118_1118143-uo2kgexebr&title=Country-profile-Tunisia-OECD-Economic-Outlook-Volume-2021-2&_ga=2.248069839.99705201.1638657500-1437068969.1635235264).

**Graph 7. Industrial production, merchandise exports, remittances and tourism revenue, 2018-Q2 2021**



Source: OECD

With the emergence (as this report is being written) of the Omicron variant of COVID-19, it is clear that the pandemic's cycle is not yet over. Nevertheless, Tunisia can profit from the following opportunities:

- **Multiplying the number of jobs in export sectors** – this will help meet the rise in international demand and enable better control over the commercial balance deficit, and replenish foreign currency reserves, which are critical for debt.
- **Increasing remittances and other support from the Tunisian diaspora** – efforts can be made to stimulate a higher volume of remittances and homeward investment from the Tunisian diaspora, addressing the needs of local families, productive investment, and public debt.
- **Sustainable transformation of the tourism sector** – through reestablishing the affordability of preferred destinations to attract new clients, namely senior and other officials, and exiting the category of low-cost destination for short stays by raising the quality of facilities and moving into several months-long periods of stay.

To conclude, exports, the Tunisian diaspora and opportunities for the transformation of the tourism sector can be the new foundations of Tunisia's post-pandemic growth.

According to a strategic study by the ITES<sup>66</sup>, Tunisia could profit from at least two other opportunities linked to the post-pandemic context:

<sup>66</sup>« Etude stratégique : COVID-19, analyse et priorisation d'actions sectorielles », ITES / Fondation Konrad Adenaur, M. Gassab / A. Belhaj, 2020.

- Relocating a part of the value chain, or at least repositioning them close to production and consumption centers. In fact, logistic difficulties linked to the rebound in economic activity at the end of 2020 and during all of 2021 pushed buyers to seek solutions in proximity, in place of seeking supplies from China, for example.
- The decarbonization of processes in the value chains, arising from the desire of Europeans industrialists to relocate their production where certain commitments regarding consumption and green energy, the reduction in reliance on fossil energy, and recycling capacities are more important.

In taking into account these new needs, Tunisia can be an excellent candidate for proximity-seeking relocation of automobile, aeronautics, and electronics industries. They are, in fact, sectors where robotization and digitalization are very advanced, which would have a positive effect on technological value addition as well as productivity of Tunisia's manufacturing sector.

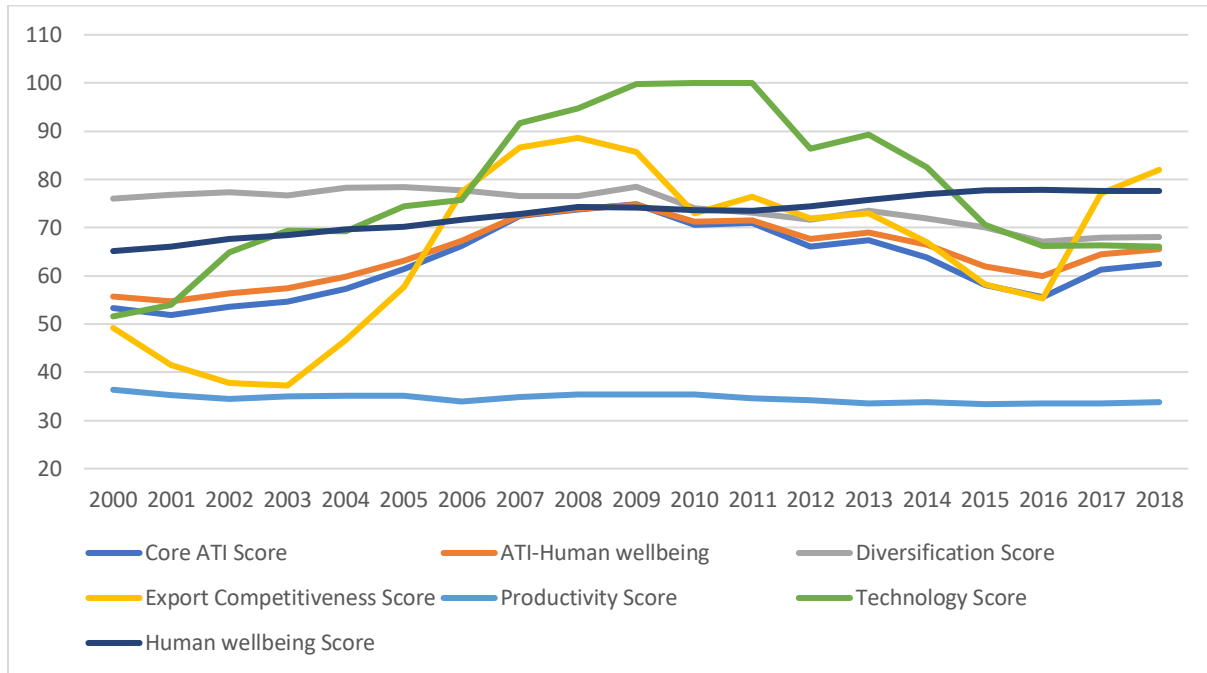
### **5.3. Policies, strategy and specific interventions to enhance economic transformation**

A study of the ATI dimensions and the indicators of structural transformation between 2010 and 2018 show the contrasting evolution in the foundations of Tunisia (see Graph 8). Hence, the ATI indicator of exports (moving average of the value of manufactured exports in relation to GDP compared with the worldwide value of manufactured exports compared with world GDP) has improved by 13 percent in 10 years. This supports the idea that the resilience of manufactured product exports remains a key asset for the Tunisian economy. On the other hand, the rolling average of the added value of manufacturing by asset eroded by 34 percent between 2010 and 2018 and that of added value of manufacturing from GDP regressed by 10 percent over this same period. Manufacturing shows strong signals of weakness while its export potential is very strong.

Other notable changes include those of the technology indicators, which saw a 34 percent decline in value in 10 years, particularly due to a decrease in the share of technology in overall production activities, while the technological part in exports grew. These elements confirm a deindustrialization of Tunisia despite its strong capacity to export a growing part of technological content.

From a structural point of view, the ATI productivity indicator's minor decline of 5 percent in 10 years emanates essentially from the underperformance of the added value by asset in the manufacturing sector, where even the indicators for the agricultural and services sectors are improving. All these elements indicate that exporting manufacturing industries are an important key to exiting the crisis for Tunisia through not only improving the factors of productivity, but also the technological content.

**Graph 8. Evolution of the ATI and ACET indicators from 2000 to 2018**



Source: ACET

#### 5.4. Policies to ensure a rapid, inclusive and resilient economy

The challenge facing Tunisia during the 2002-2010 decade was mainly the unequal distribution of wealth and economic opportunity between regions and social classes. Even if the quinquennial development plan was a good instrument for planification, no real structural changes prepared the economy to face the consequences of the 2008 global, financial crisis. For long time, local investors gave priority to profitable businesses in the short term, with low focus on innovation and R&D. Corruption and bureaucratic obstacles inhibited long-term investment. The state also poorly managed relations with labor unions, concentrating negotiations at the highest level of the political system and preventing entrepreneurs, investors and even general managers of state companies from adapting them to their own context. Nevertheless, the Tunisian economy was quite resilient, with public debt at less than 40 percent of GDP, a public deficit of around 3 percent, Tunisia joined the WTO, then signed off on a free trade agreement with the EU.

But with 600,000 companies, mainly micro-sized with 1 or 2 employees, job creation was not enough to respond to a growing and youthful workforce. A poor employment market, growing social tensions and multiple demands for more freedom of speech led to the revolution of 2011.

At this moment in the history of Tunisia, the overall governance of the country (state organization, industrial relationships, investment levels, etc.) was poor and unable to face social challenges. The post-2011 period was mainly dedicated to rebuilding severely weakened political institutions that aggravated already existing governance issues. Implementing balanced governance respecting economic rights enshrined in the Constitution and the necessary sources of revenues needed to support them, is an important first step. It means that the Constitution of 2014 needed amendments to be aligned with a realistic economic ambition.<sup>67</sup>

The modernization of governance of economic policies has suffered from political infighting, differences in point of view between the government and the central bank, the fiscal administration and corporations (not to mention accountants, doctors, lawyers, etc.) and the absence of an Economic and Social Council. A new organization of public powers in economic matters is, then, necessary to make concrete any of the propositions of an economic or sectoral nature<sup>68</sup>.

The return to active sectorial policies, where the state retakes its role of strategic planning to put the country on the path of innovation, emerging industries, repositioning manufacturing, agriculture, and tourism within the international value chains. These elements are key since the state cannot commit instead of private economic actors and must prepare for them a modern and dynamic framework and then allow for them margins of maneuver in execution<sup>69</sup>. This will bear fruit in growth, employment, and tax revenue.

Mastering the imports and trade balance, including time-to-market issues related to maritime logistics and bureaucratic Customs procedures are important. In addition, an intelligent commercial policy, with an activation of the safeguards and anti-dumping clauses with respect to the international commitments of Tunisia within WTO and EU are key to solving the trade deficit.

Because of their impact on the agriculture sector and the food security, climate change and environmental issues are major threats for Tunisia. Disruption of agriculture seasons have an impact on rural incomes, and they could inflame social distress and accelerate population disequilibrium between regions. Billions are needed to finance greenhouse gas reduction for the next decade. However, this period of trade and budgetary deficits and the rising external

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<sup>67</sup>Confirmed by Dr. Achraf AYADI, economic expert and banker during February 25<sup>th</sup> High-level Validation Workshop for this Tunisia country report.

<sup>68</sup>Madam LobnaJ ERIBI, former Minister in charge of Major Projects, stated during the validation workshop the need to reorganize public administration and to rethink the government's role and improve its efficiency, and therefore accelerate the country's economic transformation. She insisted on the crucial role the National Social Dialogue Council (NSDC-CNDS) – created in 2018 – could play in facilitating the social negotiations and contributing to socioeconomic stabilization. In addition, M. Habib KARAOU LI, Chairman & CEO of CAP Bank, elucidated that reforming the public administration is senseless. He also stressed on the importance of limiting and shrinking its scope instead

<sup>69</sup>M. Ali KOOLI, former Minister of Economy, pointed out during the validation workshop that long-term vision is required for every sector and that 3-5 year plans are no longer viable.

debt are limiting the ability to manage the pressure on resources (especially water scarcity) and to develop renewable energy capabilities (to cover the energy deficit). This is a voluntary policy that political stakeholders need to set as a long-term commitment of the country, whatever the government is.

Despite the significant progress of Tunisia in several fields related to technology adoption and share of technology in manufacturing exports, many difficulties and obstacles persist. E-commerce is progressing slowly, and electronic payments need wider adoption by the population. Local startups are performing well but the local market is too tight to ensure sufficient revenue and growth perspectives. The ability of the innovation ecosystem to attract foreign investors and to benefit from foreign money inflows needs deep reforms, particularly related to the exchange rate and the liberalization of current accounts in foreign currencies by individuals and small businesses<sup>70</sup>.

To collect the necessary resources, the Tunisian state needs to deal with a very tight fiscal space. Activating policies of relaunching growth and public investment (especially in transport infrastructure), attracting foreign direct investment, and accelerating state enterprise reforms will permit, among other things, boosting revenues of economic agents and lowering the financial burden on public finances.

At the heart of any national project, human capital remains a key challenge. The rising empowerment of women in a conservative society like Tunisia, with a significant presence at all levels of the education system, needs to be supported carefully. Investment in human capital and innovation, with a special focus on linking R&D activities with companies, improving their competitiveness through more structured transfer of technologies, and the implementation of a national innovation governance system which has to be operational (and not bureaucratic).

Lastly, there cannot be structural economic reforms in such a complex historic moment for Tunisia without a social mobilization that puts education at the heart of the project, saving the retirement system, and giving hope to unemployed graduates. It is a social project that needs a broad consensus, which should give energy and the necessary support to reforms that may not be always popular or immediately operational.

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70M. Bilel SAHNOUN, CEO of Tunis Stock Exchange (BVMT) said during the validation workshop that Tunisia missed many opportunities in its transformation process such as digitalization of public administration and the inability of Tunisia to reposition itself and benefit from its geographic and economic proximity to Europe in the redistribution of global value chains.

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# **A New Policy Agenda To Build Resilient Economies in Africa in the Post-COVID-19 Era**

Country case study:  
**ZAMBIA**

**Pamela Nakamba**

**Caesar Cheelo**

**DRAFT REPORT**

Submitted to the  
African Center for Economic Transformation (ACET)

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## 1. Introduction

Sub-Saharan Africa entered the 21<sup>st</sup> century with most economies experiencing accelerated growth. Overall, real GDP growth in the sub-region averaged rates of 4.9 percent per year over the 2000-2004 period, up from 3.4 percent in the last five years of the 1990s (World Bank, 2022). The growth trajectory remained buoyant during the subsequent decade up to 2015. However, from 2016 onward, sub-Saharan Africa faced increasing growth deficits in many economies and as populations continued to grow steadily, per capita incomes started to gradually decline. Economies in the sub-region now faced not only an intermittent growth challenge, but also serious deficits of in-built resilience and economic transformation (ACET, 2014). Therefore, taking the case of Zambia, this report explores various aspects of the success and failure factors in economic growth, transformation and resilience. A key lesson from the Zambian case is that the macroeconomic stabilization and structural adjustment policies coupled with business environment reforms and private sector development efforts that started in the 1990s and carried on during 2001-2010 were important for establishing macroeconomic stability and positive economic growth.

However, the policies and reforms were neither sufficient for locking in the growth rates experienced in the past or building resilience nor did they achieve the envisaged poverty and inequality reduction outcomes. Instead, new economic growth challenges emerged including from exogenous shocks like COVID-19, while outstanding issues persisted, such as limited inclusive and equitable growth, weak poverty and inequality reduction outcomes and overall limited traction on economic transformation and resilience. This report therefore ultimately postulates a new policy agenda towards re-establishing growth and building resiliency in the Zambian economy in the post-COVID-19 era. This introductory section offers a summary of recent trends in Zambia's economic development over the 2000-2020 period.

### 1.1. Overall and per capita growth

Zambia's economic growth over the two decades to 2019 averaged 5.9 percent per year, although this was not uniform over time. While the COVID-19 pandemic brought a contraction not experienced since 1994 (during the post-1991 liberalization, privatization and public sector reform era), the recent downturn occurred in a context where the economy was already showing serious growth weaknesses.

Initially, growth had accelerated from an annual average of 5.5 percent in 2000-2004 to 8.1 percent over the subsequent five years, 2005-2009 (Table 1.1) as the country reaped the benefits of the macroeconomic stabilization and structural adjustment policy measures implemented during the 1990s. The sustained growth episode between 2000-2010 was

therefore in the context of persistent application of prudent and conservative macroeconomic (fiscal and monetary) policies coupled with deep-rooted structural adjustments (including public sector reforms, economic liberalization and privatization) as well as business environment and competitiveness reforms and private sector development programs from the early 1990s under the Movement for Multi-party Democracy (MMD) government.

**Table 1.1. Summary economic development indicators, 2000-2020**

	2000-2004	2005-2009	2010-2014	2015-2019	2020
<b>Growth</b>					
Real GDP growth rate (annual avg. % change)	5.5%	8.1%	6.6%	3.1%	-2.8%
Real GDP per capita growth rate (annual avg. % change)	2.8%	5.2%	3.4%	0.1%	-5.6%
<b>Consumption</b>					
Household consumption expenditure (incl. NPISH) (% of GDP)	78.5%	58.2%	54.0%	47.8%	n.a.
General government final consumption expenditure (% of GDP)	6.8%	9.5%	11.8%	14.2%	n.a.
<b>Savings and investment</b>					
Total investment (% of GDP)	35.1%	31.9%	32.7%	40.3%	34.5%
Gross national savings (% of GDP)	24.3%	32.5%	36.5%	38.7%	36.0%
<b>Fiscal and debt situation</b>					
Govt. revenue (% of GDP)	22.1%	22.0%	17.7%	18.9%	20.0%
Govt. expenditure (% of GDP)	25.5%	19.9%	21.5%	27.2%	34.0%
Primary net lending/borrowing (also referred as primary fiscal balance) (% of GDP)	-1.5%	3.8%	-2.3%	-3.7%	-7.3%
Net lending/borrowing (also referred as overall fiscal balance) (% of GDP)	-4.6%	2.2%	-3.8%	-8.1%	-12.9%
Govt. gross debt (% of GDP)	188.2%	32.5%	25.7%	72.2%	117.8%
<b>External economy</b>					
Goods exports (% of GDP)	24.1%	29.5%	37.7%	32.4%	41.3%
Goods imports (% of GDP)	28.4%	24.0%	29.3%	30.2%	24.7%
Services exports (% of GDP)	6.3%	4.5%	3.1%	3.9%	2.9%
Services imports (% of GDP)	8.2%	4.8%	5.4%	6.3%	5.4%
Current account balance (% of GDP)	-12.0%	-0.5%	3.4%	-1.7%	12.6%
FDI inward flow (% of GDP)	5.4%	5.7%	6.6%	3.5%	-0.9%
Note: n.a.. = not available					

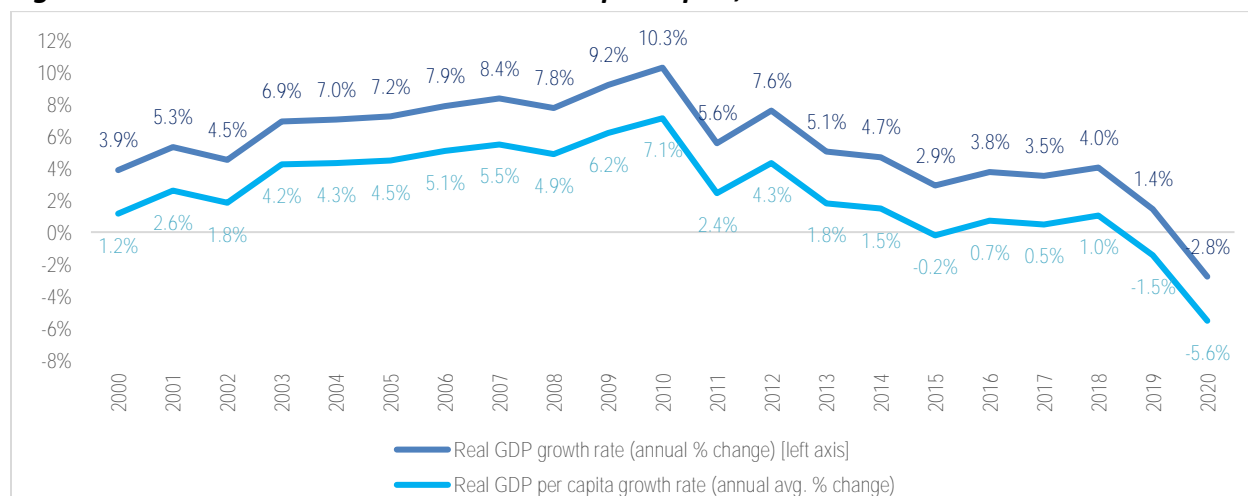
Source: Constructed from Zamstats, Bank of Zambia, IMF World Economic Outlook, and UNCTAD databases

However, as the political economy landscape changed with the coming into office of the Patriotic Front (PF) government in September 2011, the economic development paradigm and policy space changed. Under the PF, Zambia took on a more statist slant to economic governance, policy making and conducting business, with, concomitantly, the emergence of an increasingly authoritarian political system (Fraser, 2017; Brosché et al., 2020). The ideology of private sector-led growth and the government taking a back seat started to fade; subsequently, growth rates began to decline under the new paradigm.

The new economic paradigm under the PF government assumed that Zambia’s prospects for growth and poverty reduction could best be achieved through an aggressive infrastructure development drive and through the public sector getting substantively involved in business and economic activities in the country. The period 2011-2020 was thus generally underpinned by prolonged fiscal expansion and fiscal laxity, debt accumulation, irrational expenditures and limited attention to private sector development and business environment reforms (Resnick and Thurlow, 2014).

These domestic policy misalignments and failures were exacerbated by occasional exogenous shocks such as a partial drought in 2014/2015, which resulted in food and hydroelectric power shortages in 2015 and knock-on inflationary and exchange rate instabilities in 2016. Figure 1.1 illustrates the steady real growth and per capita real growth decline, which set in post 2011. Real GDP growth in 2015 slowed to a low of 2.9 percent and per capita real GDP contracted by 0.2 percent. With the exogenous shock of the COVID-19 pandemic in 2020 (combined with domestic policy failures), real GDP growth contracted by 2.8 percent and per capita real GDP contracted by 5.6 percent (Figure 1.1).

**Figure 1.1. Growth in real GDP and real GDP per capita, 2000-2020**



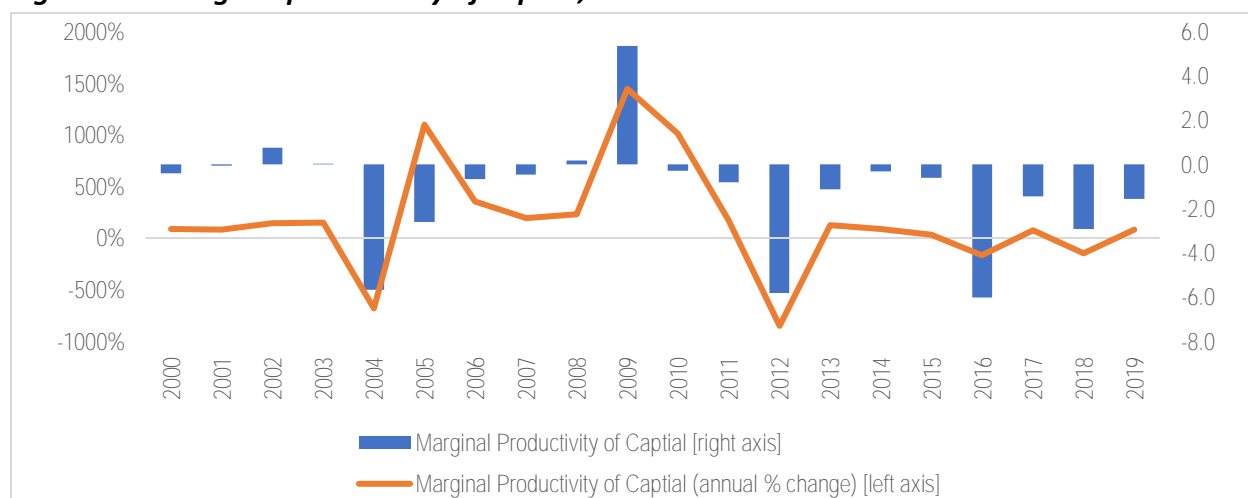
Source: Constructed from Zamstat and IMF WEO data



## 1.2. Savings and investment trends

As presented in Table 1.1, both savings and investment remained relatively high over the entire reference period. Savings remained above 30 percent of GDP per year on average throughout the reference period, except during 2000-2004 when it averaged 24.3 percent of GDP. On average, investments were also above 30 percent of GDP per year over the reference period, reaching 40.3 percent of GDP per year on average during 2015-2019. The period 2015-2019 is also when real GDP growth was lowest, suggesting that the heightened total (public and private, including foreign direct) investments in that period were not growth enhancing. In fact, the change in the marginal productivity of capital – where capital is measured as gross fixed capital formation – declined from 664.9 percent per year on average over 2005-2009 to 108.6 percent per annum on average in 2010-2014; in the 2015-2019 sub-period, the marginal productivity of capital contracted by 24.4 percent per year on average (Figure 1.2).

**Figure 1.2. Marginal productivity of capital, 2000-2019**



*Note: the Marginal Productivity of Capital ( $MP_K$ ) was calculated as the annual change in national output (proxied by current GDP in US\$) per unit change in capital (proxied by current Gross Fixed Capital Formation in US\$).  $MP_K$  shows by how much GDP changes when capital changes by one unit; annual changes in the  $MP_K$  were calculated as:  $[(MP_{Kt} - MP_{Kt-1})/MP_{Kt-1}] \times 100$ .*

*Source: Constructed from UNCTADStats data*

Investments usually take time to pay off, but as seen in Figure 1.2, the changes in the marginal productivity of capital were low, flat and in many instances negative during 2011-2019. This is corroborated by the analysis of the Zambia Institute for Policy Analysis and Research (ZIPAR, 2018) who said of Zambia's Incremental Capital-Output Ratio (ICOR) that during 2005-2010, Zambia made efficiency gains in generating GDP based a total investment and that in a reversal of fortunes, from 2011, the economy made efficiency losses in capital per unit of GDP;. ZIPAR

concluded that “investments of the recent past delivered relatively less growth-enhancing capital formation. As production efficiencies declined, so did GDP growth”. Thus, the quality of investments may have been poor over the latter part of the reference period. In particular, public investments in infrastructure (roads, airports, energy installations, schools and health facilities, public administration buildings, etc.) during most of 2011-2020 were typically made without project appraisals, feasibility studies, economic impact assessments and so on and were made in the absence of any public investment plan or strategy (ZIPAR, 2018; Cheelo and Liebenthal, 2018; Dolphin and Saasa, 2018). This severely compromised the quality of projects selected as well as the focus on value-for-money in terms of anticipated investment returns. It is, therefore, not surprising that public investments were not growth enhancing.

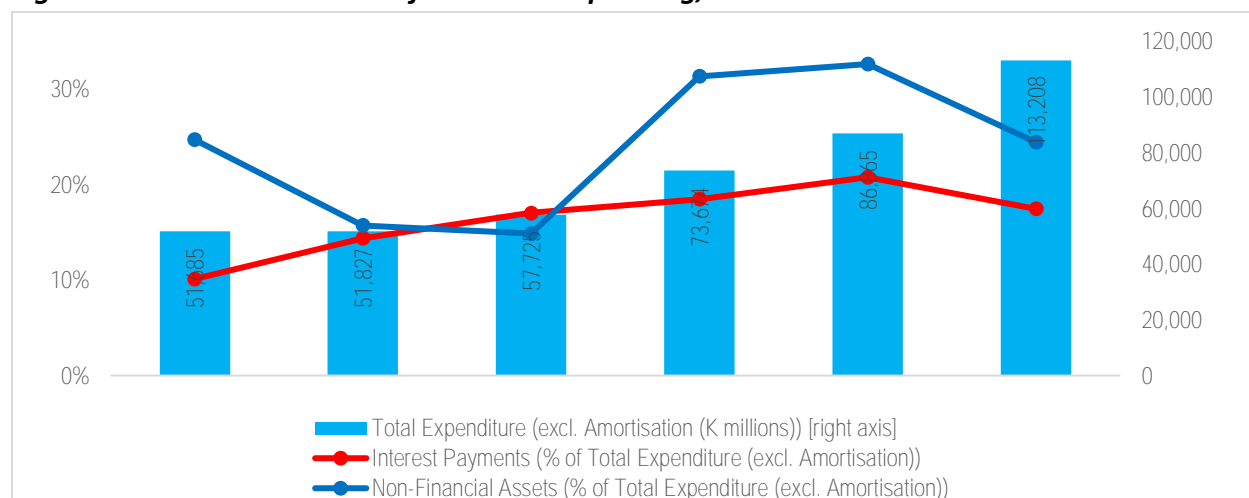
Private investment, which is split into domestic investment and foreign direct investment (FDI), is anecdotally known to be dominated by the latter in Zambia. Data on domestic investment trends was unavailable so that determining the quality of this form of investment and its nexus with growth was not possible. The trends, sources and results of FDI are discussed further below in Sub-section 1.4.

### **1.3. Fiscal performance**

Fiscal or budget balances as a percentage of GDP improved from an annual average deficit of 3.4 percent of GDP over 2000-2004 to a surplus of 2.2 percent in 2005-2009 (Table 1.1.) The surpluses were soon eroded and by 2015-2019, an annual average deficit of 8.3 percent of GDP was recorded. With the advent of COVID-19, a budget deficit of 13.9 percent of GDP was recorded in 2020. As a result, Zambia’s public debt, at 117.8 percent of GDP, was rapidly approach pre-HIPC levels (188.2 percent of GDP over 2000-2004). As of 2020, 52 percent of total public debt was external debt while 48 percent was domestic debt and arrears.

The debt service burden worsened as a significant portion of debt stock became commercial debt owed to private creditors. In 2020, about 49 percent of external debt stock was commercial debt, with bondholders holding 27 percent and other private commercial creditors holding 22 percent (World Bank, 2022). Figure 1.3 shows that debt service interest payments as a proportion of approved public expenditure (excluding amortization) rose from 10.1 percent in 2015 to 17.5 percent in 2020. While the share of debt service interest payments in public expenditure, at 16 percent over 2015-2020, was generally below that of non-financial assets (mainly infrastructure development) expenditure (of 24 percent over the same period), the debt service share was sizable and likely placed significant constraints on infrastructure development expenditure.

**Figure 1.3. Debt service and infrastructure spending, 2015-2022**



Source: Constructed from Annual Economic Reports (MOFNP)

#### 1.4. External economy: trade and foreign investment

Zambia’s trade surpluses were underpinned by robust copper exports (70 percent-74 percent of total exports) over most of the period 2000-2020. Services trade was smaller than goods trade and in deficit throughout the reference period. The current account balance experienced various levels of deficit over the period, except for 2010-2014 and 2020 which saw annual average surpluses of 3.4 percent and 12.6 percent of GDP, respectively. The exceptions were mainly due to strong goods export performance relative to goods imports in the 2010-2014 period and then a weakening of import demand greater than export supply reductions during the pandemic in 2020.

Foreign direct investment (FDI) inward flows were relatively strong during 2000-2004, 2005-2009 and 2010-2014, averaging 5.4 percent, 5.7 percent and 6.6 percent of GDP per year, respectively. There was a marked decline in inflows to 3.5 percent of GDP per annum over 2015-2019. Furthermore, with the COVID-19 pandemic in 2020, FDI flows experienced a contraction of 0.9 percent of GDP. Thus, the inward flows, which had performed quite favorably, growing in nominal terms by averages of 37 percent, 29 percent and 32 percent per year respectively, during 2000-2004, 2005-2009 and 2010-2014, slowed down markedly, contracting by 5 percent per year on average during 2015-2019 (UNCTAD, 2022).

**Table 1.2. Inward flows of FDI to Zambia, 2009-2017**

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2009-2017 (avg)
	% of total (unless otherwise stated)									
Agriculture, forestry & fishing	2.0%	0.8%	3.0%	1.6%	4.1%	2.6%	2.9%	7.2%	-1.2%	2.5%
Mining & Quarrying	50.8%	66.0%	91.3%	53.9%	65.5%	66.7%	24.9%	6.3%	25.5%	50.1%
Manufacturing	39.5%	21.6%	-17.1%	27.1%	21.2%	13.4%	46.3%	52.2%	31.1%	26.2%
Electricity, gas, etc.	0.0%	0.0%	1.3%	0.4%	-2.2%	-1.6%	1.3%	-2.5%	5.4%	0.2%
Construction	6.1%	1.0%	3.7%	3.2%	0.0%	6.1%	-3.0%	6.1%	1.2%	2.7%
Accommodation & Food	5.7%	0.2%	1.3%	0.0%	-0.2%	0.0%	0.4%	0.8%	-1.8%	0.7%
Information & Communication	0.0%	8.6%	4.0%	-1.1%	-0.1%	-5.2%	4.4%	11.8%	4.2%	3.0%
Finance & Insurance	-	-0.6%	6.7%	11.2%	9.4%	8.6%	5.9%	9.3%	18.3%	6.4%
	11.6%									
Wholesale, retail, etc.	9.0%	-0.1%	7.3%	2.2%	1.5%	15.1%	5.9%	11.3%	19.6%	8.0%
Other Tertiary services	-1.5%	2.5%	-1.6%	1.5%	1.0%	-5.6%	11.0%	-2.4%	-2.4%	0.3%
<b>Total (US\$ million)</b>	<b>722.50</b>	<b>1,729.30</b>	<b>1,046.20</b>	<b>1,731.20</b>	<b>2,099.92</b>	<b>1,490.60</b>	<b>1,304.91</b>	<b>662.82</b>	<b>1,107.51</b>	<b>1,321.66</b>
<b>Total (% change)</b>		<b>139.3%</b>	<b>-39.5%</b>	<b>65.5%</b>	<b>21.3%</b>	<b>-29.0%</b>	<b>-12.5%</b>	<b>-</b>	<b>67.1%</b>	<b>20.4%</b>
								<b>49.2%</b>		

Source: Constructed from International Trade Centre (ITC, 2022) data

In 2020, inward flows of FDI contracted dramatically by 57 percent. The top beneficiary sectors were mining and quarrying, manufacturing and wholesale and retail trade, respectively accounting for annual averages of 50.1 percent, 26.2 percent and 8.0 percent over the period 2009-2017 (Table 1.2). Of these top FDI beneficiary sectors, wholesale and retail trade and mining and quarrying ranked highest and third as the main drivers of real GDP growth, respectively (see Sub-Section 4.1, on real GDP growth drivers).

Mwale (2014) empirically established that Zambia's investment climate relative to other countries, the country's governance, quality of infrastructure development, resource availability (and natural resource endowment), trade openness, and macroeconomic fundamentals (e.g., real effective exchange rate and inflation) were key determinants of FDI inward flows over the period 1994-2011. These determinants most likely continued to be important over this study's reference period, up to 2020. It is therefore plausible that the downturn in FDI inflows over 2014-2019 had a significant relationship with the deteriorating investment and business climate, weakening governance, poor quality of infrastructure development, and macroeconomic instabilities, particularly on the fiscal front as earlier seen.

## 1.5. Demographic trends and issues

Zambia has not held a national census since 2010 and relies on 2011-2035 projections from the 2010 figures. According to the Central Statistical Office (2013), the population was expected to grow at an average annual rate of around 2.8 percent during the projection period, 2011-2035, from 13.7 million persons in 2011 to 26.9 million in 2035. The total fertility rate (TFR) was projected to drop by 1.4 children per woman over the 25-year period, from 5.9 in 2011 to 4.5 by 2035. However, the young age structure of the population was expected to keep Zambia on a growth trajectory despite projected fertility decline. A gradual increase in life expectancy at birth was anticipated over the projection period, with overall life expectancy at birth projected to rise by 8.6 years, from 52.6 years in 2011 to 61.2 years by 2035. This increase in life expectancy at birth was assumed to result from overall declines in both childhood and adult mortality, coupled with the positive impact of health interventions aimed at reducing morbidity and the disease burden from major killers of children and adults such as malaria, HIV/AIDS, diarrhea, and malnutrition.

Zambia is going through a demographic transition where the population is increasingly more youthful. According to UNDESA (2019) data, 79 percent of Zambia's population was 34 years old or below in 2020, with children aged 0-14 years accounting for 43 percent of the total and the youth (15-34 years old) accounting for 35 percent. Projections suggest that by 2050, 69 percent of the country's population will be 34 years old or below, indicating that the population will remain youthful over the long term. This particular type of demographic transition will require Zambia to make critical social sector investments in health and nutrition, water and sanitation, education, skills and entrepreneurial development for children and the youth now and build a productive workforce for the future.

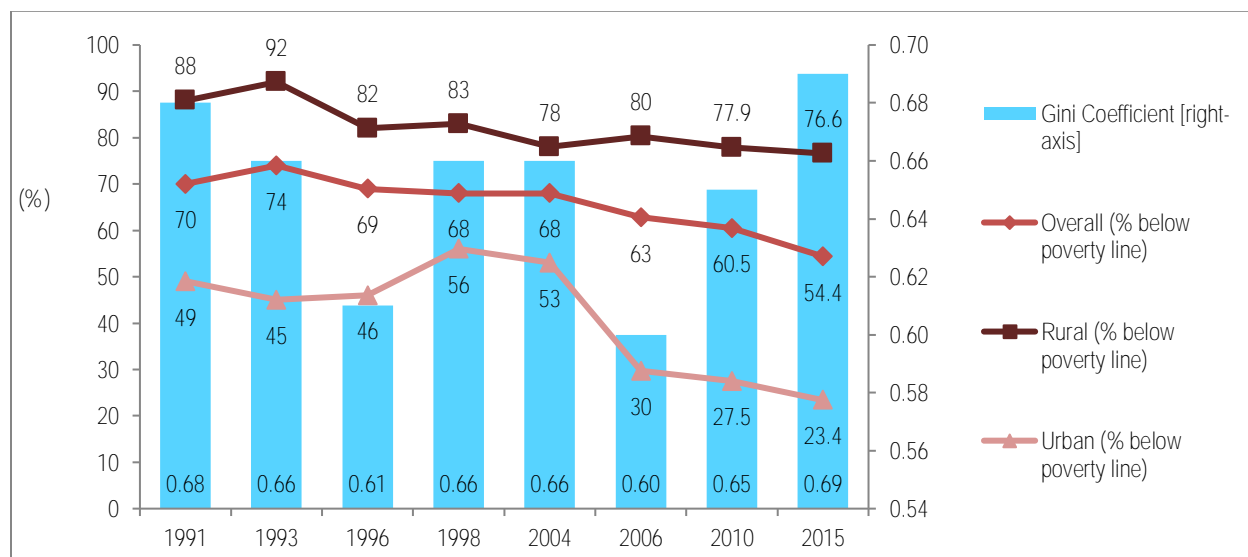
The Consolidated 2016 Enrolment Database for Home-Growth School-Feeding (HGSF) districts, covers enrolment the school feeding program in all early child education schools, primary schools and basic schools (up to grade 9) and excludes private schools. The 2020 National Budget or Yellow Book and accompanying Budget Address noted that the HGSF program targeting vulnerable children would continue to be implemented in 2020, to increase learner attendance and retention. As of 2020, supported learners at and primary school levels were 34,123 (or 24 percent of the total of 143,913 learners) and 814,285 (or 25 percent the total of 3,215,723 learners), respectively.

A total of 936,627 learners countrywide were estimated to be benefiting from the Program, which was allocated a total of K34.6 million, implying a per capita allocation of K 36.90 (US\$2.02) per learner for the year. In contrast, in the same year, the one million beneficiaries of the Farmer Input Support Programme (FISP) who were allocated a total of K1.1 billion or K1,112 (US\$60.72) per farmer.

## 1.6. Poverty and inequality

Current poverty and inequality levels in Zambia are difficult to gauge because the most reliable household level assessment, the Living Conditions and Monitoring Survey (LCMS) was last conducted in 2015. In 2015, the overall poverty headcount was at 54.4 percent of the total population, down from 70 percent in 1991 (Figure 1.4). What is worrying is the rural-urban disparity. While urban poverty declined markedly from 49 percent in 1991 to 23.4 percent in 2015, rural poverty declined relatively less, from 88 percent in 1991 to 76.6 percent in 2015. This suggests that the sustained positive growth (and policies behind it) during 2000-2019 worked well for urban dwellers but left the rural population behind in terms of addressing poverty. Inequality remained high throughout the period 1991-2015, with a Gini coefficient that increased marginally from 0.68 in 1991 to 0.69 in 2015, suggesting slightly rising inequalities. Poverty and inequality monitoring is critically lacking in Zambia, limiting the ability to target policies and programs.

**Figure 1.4: Poverty and inequality, 1991-2015**



Source: Constructed from various LCMS (and Priority Survey) reports

## **1.7. Employment and unemployment**

The most reliable employment estimates for Zambia are from periodic Labour Force Surveys (LFS) by the Zambia Statistical Agency (Zamstats). In 2017, Zamstats changed the methodology of the LFS, thus comparability between pre-2017 LFS datasets and the 2017 and post-2017 dataset was not possible.

Overall, the total employed population stood at 2.99 million persons in 2020, a 1 percent increase over total employment in 2017. Formal employment was 26 percent of total employment while informal employment was 74 percent of the total in 2020. Between 2017 and 2020, formal employment declined by 29 percent overall, by 45 percent in rural areas and by 22 percent in urban areas; whereas informal employment increased by 18 percent overall, declined by 4 percent in rural areas and increased by 37 percent in urban areas. Thus, over the period, rural areas lost both formal and informal jobs but with more formal job losses while urban areas informalized in terms of employment. These trends of declining rural employment coupled with increasing urban, informal employment may partially explain the widening poverty gap between rural and urban areas.

Overall, female, youth and female urban youth unemployment rates all rose over the period 2017-2020, respectively from 12.6 percent, 13.5 percent, 17.4 percent and 22.5 percent in 2017 to 13.8 percent, 16.4 percent, 19.9 percent and 24.7 percent in 2020. All four selected groups experienced rising unemployment rates, with the female urban youth bearing the brunt. Thus, over 2017-2020, the joblessness and job loss circumstances among female urban youth was the most critical gender challenge in Zambia. This was compounded by underlying inadequacies and disparities in human capital development – including education, skills, health, and water and sanitation – between boys and girls, men and women.

## **1.8. Technology and digital trade**

The proliferation of information and communications technology (ICT) across the globe ushered in a digital age in which social life and economic activities are both dominated by new ways of consuming and utilizing information and thus assimilating and applying various forms of technology. Technological advancement is almost synonymous with ICT proliferation. In tandem, international trade has been markedly transformed as the world has gone digital. The online sale of consumer products and the supply of online services as well as the flow of data that enables global value chains, services that enable smart manufacturing, and the use of myriad other platforms and applications all define and dictate how trade happens digitally.

Within the global digital transition, Zambia, like most African countries, has lagged behind in terms of a range of indicators of ICT advancement, digital trade readiness and digital trade

performance. Overall, in terms of ICT productive capacities<sup>1</sup>, in 2018 (the latest data year), Zambia ranked 160<sup>th</sup> out of 195 countries with a ICT PCI score of 6.6 (out of a possible 100) compared with a global average score of 13.2 across all countries. In relation to fixed broadband subscriptions (per 100 people) in 2020, WDI data show that Zambia's broadband subscriptions were relatively low at 0.4 per 100 people compared with 0.8 per 100 people, on average, in sub-Saharan Africa and 17.1 per 100 people on average in the world. Similarly, for secure internet servers (per one million people), Zambia had a lower number (40.5 servers per one million people) than the sub-Saharan average (799.5 per one million people) and the world average (11,502.5 per one million people). Zambia fared better than sub-Saharan Africa in mobile cellular subscriptions in 2020, with 103.9 subscriptions per 100 people, compared to 93.6 on average in sub-Saharan Africa; this was comparable with the world average of 107.5.

As a result, Zambia's digital trade record was relatively low: according to WDI data, computer, communications and other services exports and imports in 2020 were only 8.4 percent of commercial service exports and 18.8% of commercial service imports compared with 35.3 percent and 43.6 percent respectively in sub-Saharan Africa and 55.5 percent and 52.7 percent respectively at the global level. ICT service exports (in current prices) in 2016 totaled US\$34.9 million in Zambia while in sub-Saharan Africa and the world, average ICT services exports per country were estimated at US\$51.9 million and US\$2.3 billion respectively. Closing the digital divide for Zambia will require strategic investments in ICT infrastructure and services, among other things.

## **1.9. Summary of key macroeconomic developments**

Against the background of the past 20 years, the key development challenges facing Zambia today include: (i) at the macroeconomic level, prolonged fiscal instability, weak fiscal discipline (characterized by expenditure slippages), irrational spending, and debt unsustainability; (ii) exogenous shocks such as the COVID-19 pandemic, HIV/AIDS, adverse global commodity (copper and oil) price movements, adverse weather conditions (droughts, high temperature, etc.) due to climate change effects; (iii) inadequate investments in human capital development (amidst a demographic transition), resulting in low and low-quality productivity; (iv) limited structural transformation of the economy due to limited attention to business climate reforms, private sector development and export diversification ; and (v) the relatively low digital productive capacity and preparedness hindering digital transformation and performance. The implications of this situation for economic transformation are discussed in greater detail in Sections 3 and 4.

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<sup>1</sup> UNCTADStats (<https://unctadstat.unctad.org/EN/>; accessed 24<sup>th</sup> March 2022)



## 2. Development policies and economic transformation

### 2.1. Overview of development policies

The onset of the 2000s was marked by the re-emergence of national planning in Zambia following nearly two decades of implementing stabilization and adjustment programs. This was after a realization that that even in a liberalized economy, development planning is necessary for guiding prioritization and resource allocation to enable broad-based socio-economic development. The key recognition was that while economic growth was on the rebound compared with the previous decades, poverty remained pervasive such that all indicators of human welfare – life expectancy, educational attainment and income per capita, as measured by the UNDP Human Development Index – were adverse. To improve the situation, Vision 2030 was developed to guide the formulation of medium-term national development plans. The Fifth National Development Plan (FNDP) 2006-2010 (GRZ, 2006) was the first plan under Vision 2030, followed by the Sixth National Development Plan (SNDP) 2011-2015 (GRZ, 2011), Revised Sixth National Development Plan (R-SNDP) 2013-2016 ((GRZ, 2014), and Seventh National Development Plan (7NDP) 2017-2021 (GRZ, 2017).

Starting with the FNDP (2006-2010), the strategic focus was on pro-poor growth-oriented sectors that create employment and income opportunities. The focus areas included rural development, agriculture, and manufacturing, which provide a greater opportunity for creating wealth and jobs, thereby rapidly reducing poverty. The focus on agriculture and agro-processing was premised on the fact that about 60 percent of the total population and 70 percent of the poor live in rural Zambia. Further, most rural and urban households rely on incomes from agriculture and agro-processing. Agriculture and agro-processing tend to be more labor intensive and also have strong linkages with the rest of the economy. Growth in these sectors was therefore viewed as a two-pronged instrument, to generate jobs and create employment opportunities for households, and also to lay the foundation for achieving long-term growth and the development objectives of structural transformation.

The specific strategies adopted to support this stance centered on achieving higher economic growth driven by a stronger performance in agriculture and agro-related manufacturing. To spur this growth, in agriculture, strategies focused on the promotion of modern technologies, development of rural markets, provision of agricultural and financial services, establishment of marketing chains and provision of infrastructure. Such growth in agriculture and agriculture-related manufacturing was to be propelled by the private sector, which in turn critically needs an appropriate enabling environment that supports robust private sector development. This was to be achieved through a stable and conducive macroeconomic environment characterized by low inflation, low interest rates and a stable and competitive exchange rate. Apart from macroeconomic stabilization, more emphasis was to be placed on improving the

competitiveness of the economy, strengthening the investment climate to accelerate investment and improving economic infrastructure. The investment and business climate was to be enhanced through the implementation of the Private Sector Development (PSD) Programme and the Financial Sector Development Plan (FSDP).

The SNDP (2011-2015) shifted the strategic focus and the aim was to accelerate infrastructure development; economic growth and diversification; promote rural investment and accelerate poverty reduction and enhance human development. Priority sectors included agriculture, livestock and fisheries, manufacturing, tourism, commerce and trade. The focus on infrastructure paid particular attention to investment in rural infrastructure such as roads, energy, ICT, etc. The rural development dimension of the FNDP was maintained and expanded.

In the agriculture sector, the focus was on crop diversification while improving marketing systems and harnessing the value chain in production as a way to promote agriculture-related manufacturing. For manufacturing, the strategy was to attract investment that promotes high-value manufacturing and job creation by providing a good regulatory framework and business environment that sought more directly to link FDI to Zambia's resource endowment. A key instrument to attract investment into manufacturing was the facilitation of the development of manufacturing infrastructure in Multi-Facility Economic Zones (MFEZs) and Industrial Parks (See Box 1).

With the transition of the SNDP into the R-SNDP (2013-2016), the focus shifted to public capital investments to guide rural development and job creation for inclusive growth. This revision followed the change of government in 2011. In essence, the new government took a more aggressive role in driving the economy through public infrastructure investment. Related to this active role of government was the shrinking of the private sector as a driver for growth.

## **2.2. Structural change and economic transformation: policies and performance**

The approach of both the FNDP and SNDP was adequate to put the country on the right path towards economic transformation. However, the implementation and direction of sectoral policies in both agriculture and manufacturing were not consistent with the plans. Within agriculture, the plans envisaged reducing dependence on maize production and rain-fed agriculture by supporting other crops, livestock and fisheries production thereby providing a base for the take-off of agriculture-related manufacturing through backward and forward linkages. However, government policies tilted incentives in favour of maize to the disadvantage of other crops and long-term diversification opportunities. Figure 2.1 shows the significance of the proportion of expenditure on the Farmer Input Support Programme (FISP) in total expenditure in agriculture sector. It can be observed that in years where total expenditure in agriculture declined, expenditure on FISP maintained its upward trajectory.

### **Box 1. Multi-Facility Economic Zones and Industrial Parks in Zambia**

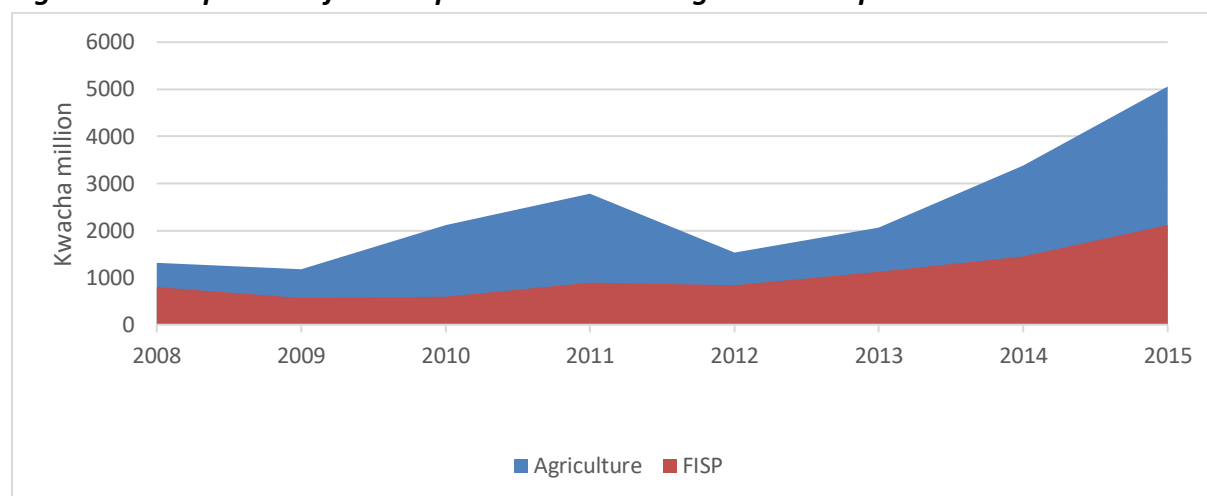
Multi-Facility Economic Zones (MFEZs) were introduced in 2005 to enhance competitiveness through increased manufacturing and trade and therefore drive industrialization. The Zambia Development Agency (ZDA) Act 2006 provide for the establishment and development of MFEZs and industrial parks. The first MFEZ was opened in 2007 under the Zambia-China Economic and Trade Cooperation Zone (ZCCZ), the first China overseas economic and trade cooperation project to be established in Africa. Since then, four MFEZs (of which three are operational) and two industrial parks have been designated as of 2020. The three operational MFEZs – Chambiashi MFEZ (CH-MFEZ), Lusaka East MFEZ (LE-MFEZ) and Lusaka South MFEZ (LS-MFEZ) together have recorded a cumulative investment of US\$4 billion of which US\$3.3 billion is investment in CH-MFEZ. A total of 14,642 jobs have been created, of which 9,500 jobs are in Chambiashi, as of 2020. All the economic zones are multi-use zones and are open to both local and foreign investors. The CH-MFEZ, the biggest of the three, however, is established largely around the mining sector, with activities associated with various stages of the mining value chain.

While some investment and jobs have been created in the zones, this remain below projected targets. This is due to significant challenges (Zeng, 2016) and (Phiri, 2020). The challenges can be grouped into three key ones: 1) weak institutional capacity and inefficient services of the public sector; 2) inadequate infrastructure; and 3) weak linkages between the zones and local firms. As a result of weak institutional capacity and inefficient services of the public sector, three issues stand out in terms of adversely affecting economic zones in achieving their potential as drivers of industrialization and therefore economic transformation.

First, there has been a lack of clear positioning of the economic zones to leverage Zambia’s comparative advantages vis-à-vis both domestic and global value chains. With the exception of the CH-MFEZ, each MFEZ is not strongly anchored on a particular priority sector in order to unlock and develop its value chain. As a result, benefits from agglomeration economies which would have arisen in terms of cost reduction and efficiency have not been fully realized thereby slowing down development of value-addition activities and expansion of manufacturing. Second, Zambia has not established a real automated one-stop-shop service center thereby making the process of setting up business in the Zones long and laborious and therefore increasing transaction costs for investors. Lastly, the fiscal investment incentives framework has not been stable but instead susceptible to change without prior consultation with the private sector. An example is the introduction of VAT Rule 18 in 2013 which placed burdensome requirements for proof of export to enable claims for VAT refund. VAT Rule 18 was amended in 2015 due to outcries from the private sector. In 2018, the government streamlined the fiscal incentives investment package for MFEZs and industrial parks by removing a zero percent corporate income tax rate for the first five years of operation in an MFEZ, making the incentive package less competitive relative than those of countries in the region. In 2022, however, with rekindled interest in MFEZs and industrial parks, the government has re-introduced zero percent corporate income tax rate with a variation that this be for first 10 years of commencement of operations and on profits made from exports. For years 11 to 13, only 50 percent of profits made on exports by companies operating in the MFEZs and industrial parks are to be taxed and 75 percent of profits for years 14 and 15.

In terms of infrastructure, the MFEZs suffer from poor roads into the zones, and weak sewage, and water supply. In the government’s Lusaka-South MFEZ, infrastructure only a bare minimum is provided; meanwhile, land is leased out to investors. None of the MFEZs have been spared from the country-wide electricity power rationing, too. Weak linkages between the Zones and local firms has been exacerbated by the lack of clustering of Zone activities around a particular value chain, resulting in increased logistics and transaction costs.

**Figure 2.1. Proportion of FISP expenditure in total agriculture expenditure**



First, from budgetary allocation patterns in the sector, while the highest ranked priorities in agriculture were irrigation development, agriculture infrastructure, land development, livestock development and agriculture technology, the dominant government function in the sector was to provide inputs to subsistence farmers under the Fertilizer Support Programme (FSP), which was later renamed the Farmer Input Support Programme (FISP), and maize price and income support to smallholder producers and consumers under the Food Reserve Agency (FRA). Spending on input and output subsidies between 2000 and 2008 averaged 58 percent of total average value of expenditure in agriculture (World Bank, 2010). This trend continued throughout the R-SNDP and 7NDP and has undermined the vision of an agriculture-driven growth and economic transformation.

The introduction of the e-voucher system in 2015 as a model of administering the FISP was meant to re-align the bias away from maize and allow for a flexibility of choice in agriculture inputs. However, the government has not been able to fully migrate all FISP recipients to the E-voucher system due to challenges ranging from limited telecommunications connectivity and financial services provision and limited information technology (GRZ, 2018). Therefore, a large proportion of the FISP still remains under the direct input supply model which confines the support to maize inputs and therefore limits diversification within the sector<sup>2</sup> (See Box 2 for the evolution of FISP).

<sup>2</sup> For the 2019/2020 farming season, only 40 percent of the beneficiaries of FISP were targeted to receive inputs under the E-voucher system, according to the 2020 Budget Address.

## **Box 2. The evolution of the Farmer Input Support Programme in Zambia**

The Farmer Input Support Programme (FISP) was first introduced in 2001 as the Fertiliser Support Programme (FSP). The overall objective was to improve the supply and delivery of agricultural inputs to small-scale farmers through sustainable private sector participation at affordable cost, to increase production and productivity, thereby enhancing household food security and incomes. For the agriculture season 2002/2003-2008/2009, the FSP package consisted of 400 kg of fertilizer and 20 kg of maize seed distributed to selected beneficiaries through farmer cooperatives. Although the intention was to distribute these inputs through private sector participation, this was not achieved during this period and the government continued to be only player.

In 2009, the FSP was renamed FISP so that it could be more diversified to include non-maize-related inputs. It largely retained the same features except that the package was now halved to 200 kg of fertilizer and 10 kg of maize seed in order to accommodate more beneficiaries. In the 2012/2013 agriculture season, a small quantity of seeds for rice, groundnuts, and sorghum was included to help diversify crops. However, this was restrictive as each farmer was only entitled to inputs for one crop only. Consequently, it remained biased towards maize-related inputs. Furthermore, the administration of the FISP continued to be dominated by the government, leading to the crowding out of the private sector. Given the growing fiscal constraints, the programme became expensive for the government and was plagued with delays in delivery of inputs. Actual FISP expenditure continuously outstripped budgeted allocations. In 2009, FISP expenditure was over budget by 30 percent, rising to 86 percent in 2011 and jumping to 191 percent in 2014 (Ministry of Finance).

Consequently, between 2015 and 2017 the government partly departed from the traditional FISP to pilot a flexible FISP which utilized an e-voucher system. Under the e-voucher system, inputs were to be delivered through a Visa debit card redeemable at registered, private sector agro-dealers. The e-voucher was worth K2,100 (approximately US\$210) of which K400 was a contribution from the recipient and K1,700 was from the government. The e-voucher was redeemable for crop, livestock, or fisheries inputs or equipment. In the 2015/2016 agricultural season, the e-voucher 13 out of 106 districts and the number was increased to 39 districts in the 2016/2017 season. A full migration to e-voucher was planned for the 2017/2018 but this could not be achieved due to various logistical challenges. This resulted in rolling back the e-voucher to only 40 percent of intended beneficiaries in the 2018/2019 season.

As to whether the e-voucher pilot achieved its objectives, preliminary results suggest that the 2015/16 FISP e-voucher pilot may have spurred greater crop diversification than the traditional FISP. But impact on access to and use of modern inputs was non-existent, and there was also no change in distance to FISP fertilizer collection points or timely availability. This is largely because late activation of e-vouchers has been a major problem. Some farmers have not been receiving inputs despite contributing their portion, making the program unequitable. The problem of late delivery of inputs that dogged the traditional FISP persisted with e-voucher system due to delayed mobilization of funds arising from fiscal constraints.

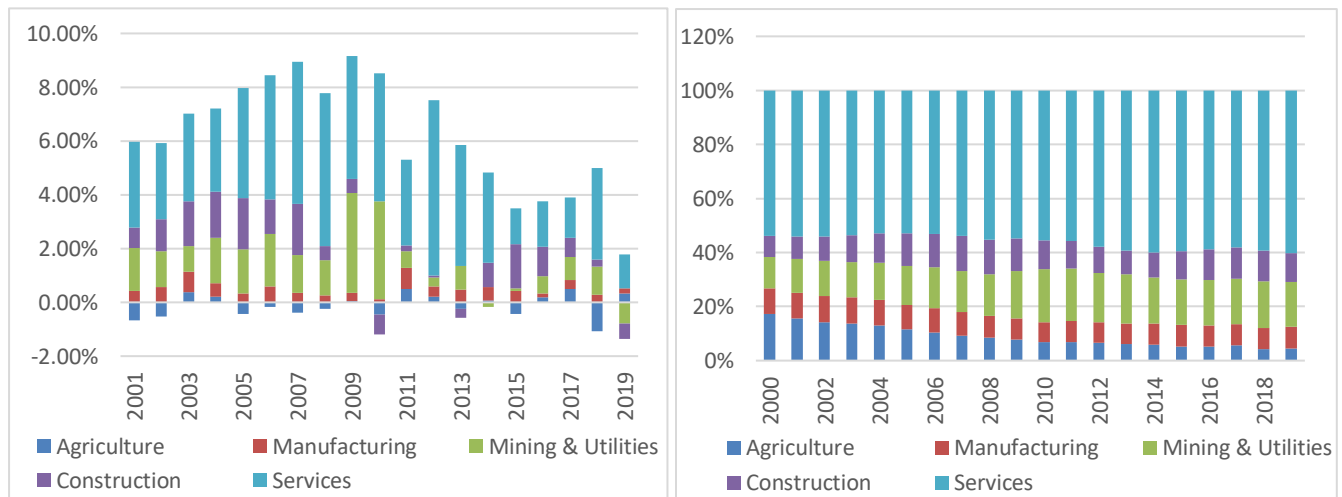
Consequently, in the 2021/2022 season, all beneficiaries were put back onto the traditional FISP. This points to the fact that the FISP, as currently implemented, is not sustainable. By 2020, FISP expenditure was nine times above budgeted allocation. While expenditure on FISP has continued to rise, both the number of beneficiaries and the inputs packages have remained unchanged. Given the foregoing, the government has proposed to implement a new comprehensive agriculture support program commencing in the 2022/2023 season. This program is expected to be cost effective, better targeted and equitable across beneficiaries. It will also support the supply of quality inputs, attain diversification of crops as well as increase production and productivity.

### 2.2.1. Manufacturing

With regard to manufacturing, the Commercial, Trade and Industrial Policy (CTI) 2010 and the National Industrial Policy (NIP) 2018 recognize MFEZs and industrial parks as an instrument to boost investment in manufacturing and anchor industrialization. Strategies to support this included a generous package of both fiscal and non-fiscal incentives to investors in both MFEZs and industrial parks.

Despite this, the performance of the zones and industrial parks has been poor (GRZ, 2021). Few investors have been attracted due to the lack of high-quality infrastructure in the zones and parks (Phiri, 2020). Where investment has been attracted into the zones and parks, there has been weak agglomeration and spillover effects to the broader economy. Therefore, the backward and forward linkages between the firms in the zones and parks with the broader economy, and specifically with small and medium enterprises (SMEs) as envisaged in the 2008 MSME Policy (GRZ, 2008) have not been harnessed. This is partly due to the failure to spur agriculture-related manufacturing as well as due to weaknesses in agriculture such as low productivity and poor yields, inadequate infrastructure and technology, which have persisted because of expenditure biases mentioned earlier.

**Figure 2.2a. Sectoral contribution to GDP growth**    **Figure 2.2b. Sectoral contribution to total value added**



Source: Constructed using WDI and UNCTADstat

Thus, the envisioned agriculture-driven manufacturing growth has not been realized. This is evident from Figure 2.2a which shows growth rates of major sectors. Throughout the period under review, growth rates in agriculture have fluctuated, but negative more than half the time.

This is because agriculture remains largely rain-fed and, therefore, vulnerable to rain patterns. This underscores the importance of the priorities for agriculture that were relegated in favor of input and output subsidies. Meanwhile, the manufacturing sector's ability to add value to local raw materials remains extremely low. Most raw materials extracted are exported in raw form, therefore breaking the value chain at the first level.

Therefore, as Figure 2.2a shows, manufacturing sector contribution to economic growth rate has been positive but minimal, averaging 0.4 percent throughout the period 2001-2019. Growth in manufacturing has been buoyed by growth in non-metallic mineral products (in particular, cement) and to a lesser extent, growth in basic metal industries (in particular gemstones and light engineering). Both these sectors have maintained a positive rate for most of the period under consideration. Given the minimal growth rates, manufacturing shares in value added have trended downwards, as shown in Figure 2.2b. Therefore, the reduction in the share of agriculture in value addition observed throughout the period was not accompanied by the anticipated shift to manufacturing.

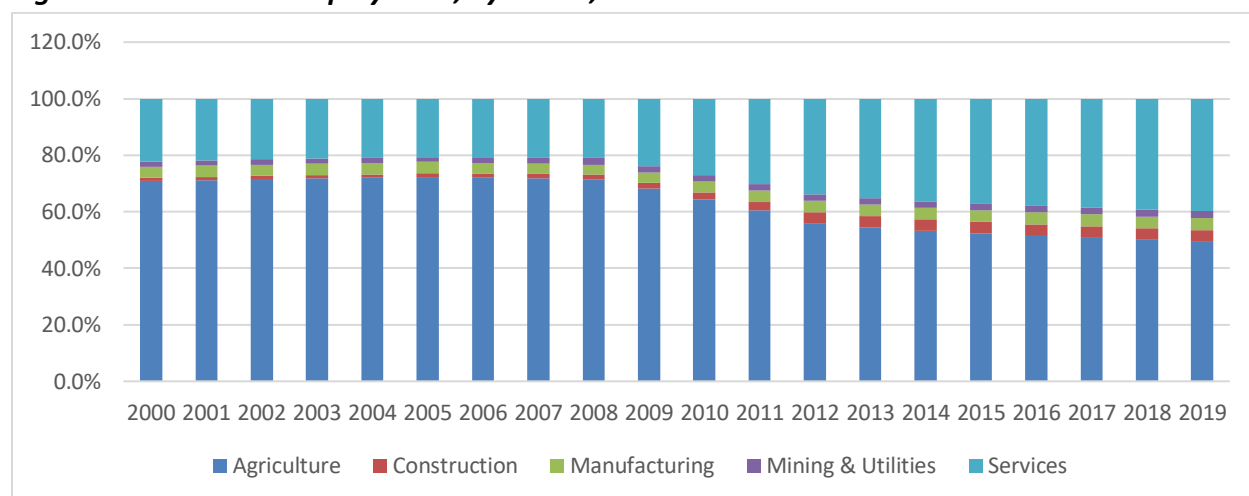
### **2.2.2. Services**

The services sector compensated for the reduction in the share of agriculture as it contributed the highest growth rates, averaging 4 percent between 2001 and 2010 and tapering off slightly to 3 percent between 2011 and 2019. This has been driven by growth in wholesale and retail trade, information and communications technology (ICT) and financial services. A stable macroeconomic environment and improved business environment owing to the implementation of the PSD program and the FSDP during the period 2001 to 2010 supported the flourishing of these sectors. The wholesale and retail trade sector saw a number of international chain stores set up in Zambia as well as a flourishing small traders' sub-sector, albeit largely informal. In the ICT sector the expansion of mobile telecommunication services was the driver of the positive performance. Thus, the combined services sector contributed more than half of total value added throughout 2001-2019.

### **2.2.3. Construction**

The construction sector grew rapidly between 2001 and 2007 but thereafter recorded mixed results which deteriorated significantly towards end-2007 due to mounting fiscal constraints as most of the construction was driven by public works. A similar trend occurred in the mining and utilities sector. The waning performance, notwithstanding rising in metal prices towards the end of the period, has been fueled largely by challenges in the mining sector arising from an unstable fiscal regime. From 2007 to 2021, the tax structure and rates for the mining sector changed 11 times, as reported in the national budget addresses during this period.

**Figure 2.3: Trends in employment, by sector, 2000-2019**



Source: ILOSTAT

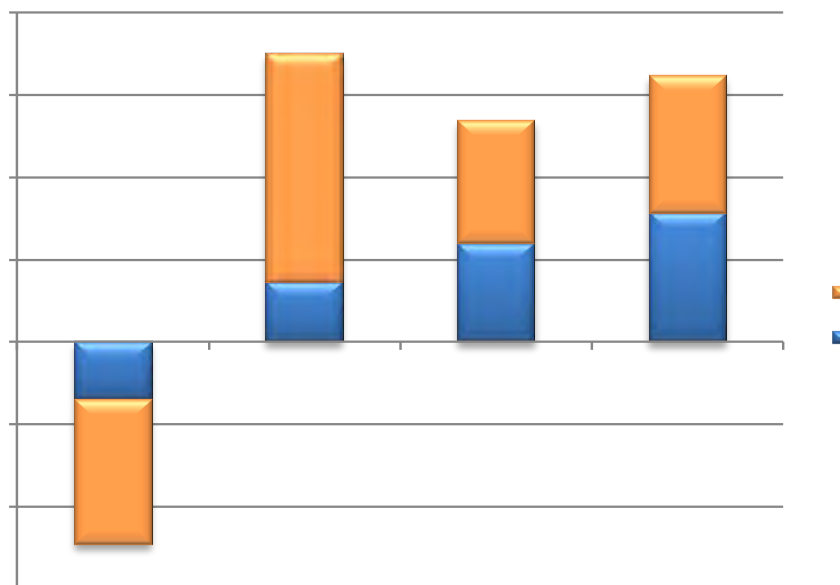
#### **2.2.4. Sector employment**

Concomitant with the changes in sectoral contributions to value added and economic growth have been changes in employment shares. As Figure 2.3 indicates, the agricultural sector contributed over 70 percent to total employment in 2000. This share fell to 50 percent by 2019. The beneficiaries of this decline over the same period have been the services sector and, to a small extent, the construction sector. Services doubled its share of total employment from 20 percent in 2000 to 40 percent over the same period while the construction sector increased its share from 1 percent to 4 percent. Both manufacturing and mining experienced no significant shifts in employment shares and maintained their shares between 3 percent and 4 percent each. From the foregoing, what is evident is the shift in the structure of the economy from a largely agriculture-dominated one towards services. While policies for transformation focused largely on agriculture in relation to manufacturing, the direction of transformation moved towards the services sector, which showed significant growth.

Assessment of the structural change requires looking at how value-added per worker changed based on a decomposition of economy-wide labor productivity into within-sector change and structural change (McMillan, M., 2014). With a shift in workers from low- to high-productivity sectors, the structural change is said to have contributed positively to national productivity.



**Figure 2.4. Aggregate labor productivity decomposition**



*Source: Constructed using UN and ILO WESO databases*

The period 1991-2000 was characterized by a decline in labor productivity by 2.5 percent due to largely negative structural change, which accounted for 1.75 percent compared with a decline in within-sector productivity of 0.7 percent. According to Resnick and Thurlow (2016), this was due to workers moving out of industry and services into low-productivity agriculture in the wake of de-urbanization prompted by the structural adjustment policies which saw the privatization of several parastatal companies. The negative structural change was exacerbated by falling productivity within all the sectors except manufacturing.

Between 2000 and 2005, as the economy began to recover productivity increased sharply by 3.5 percent driven largely by structural change (2.8 percentage points) and to a small extent a within-sector productivity increase of 0.74 percentage points. This increase was driven by employment growth in services as shown above in Figure 2.3 while employment in low-productivity agriculture declined. Both structural change and within-sector productivity continued to contribute to positive labor productivity growth from 2005-2013, with both components making nearly equal contributions in the period 2010-2013 as employment numbers in agriculture continuously declined, thereby raising labor productivity within the sector in the process.

Table 2.1 shows the two components disaggregated into various sectors. Of notable importance is that while the manufacturing sector recorded positive within-sector productivity growth and positive structural change throughout 1991-2013, its contribution to economic growth has been minimal, averaging 0.4% during 2000-2019 and with a declining share in GDP as earlier discussed. It also appears that as more labor exited agriculture, its productivity improved and the opposite happened for the services sector which received more labor. Granted that the services sector contributed more to GDP growth, this has been with declining productivity. This is because within the services sector labor moved to the relatively low-productivity but more labor-absorbing retail and informal trade compared to the higher productivity but less labor absorbing such as financial and ICT services. This phenomenon has been observed in other African countries and explains why growth has not been inclusive (de Vries, 2014).

**Table 2.1. Sectoral decomposition of labor productivity**

<b>Change components</b>	<b>1991-2000</b>	<b>2000-2005</b>	<b>2005-2010</b>	<b>2010-2013</b>
<b>Within sector</b>				
Agriculture	-1.10	-0.35	1.68	3.13
Manufacturing	0.90	0.12	0.04	0.07
Mining and Utilities	-0.31	0.29	0.02	-0.11
Construction	-0.05	0.12	-0.06	-0.14
Services	-0.13	0.57	-0.48	-1.38
<b>Structural change</b>				
Agriculture	-0.6	-0.13	0.65	1.65
Manufacturing	8.0	2.98	0.88	1.72
Mining and Utilities	-10.99	12.86	0.98	-4.37
Construction	-5.08	11.22	-4.94	-5.62
Services	-1.97	7.79	0.52	-10.07

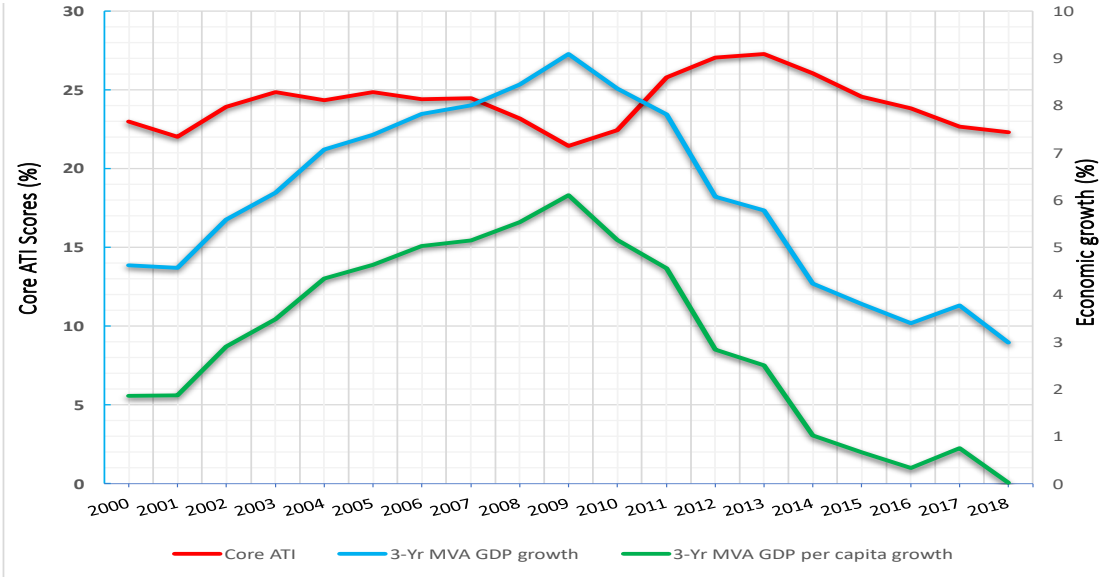
*Source: Constructed from UN and ILO WES databases*

### **2.3. Performance in economic transformation**

Given the foregoing discussion, Zambia has not made significant progress towards economic transformation largely because the accelerated growth was not driven by the sectors where the transformative process was to come from. The country recorded a deterioration in economic transformation from a score of 22.1 between 1999-2001 to 20.7 between 2009 and 2011. This low score in transformation coincided with the highest growth rate attained during the period 1999-2019. When growth started to decline thereafter, economic transformation picked up until 2012-2013 and thereafter deteriorating to a score lower than recorded in 2000.

The policy focus discussed above was to unleash a transformative process driven by agriculture-related manufacturing with linkages to other sectors. However, the sector floundered due to heavy bias towards a single crop and failure to create the envisaged linkages to manufacturing.

**Figure 2.5. Economic growth and transformation, 2000-2018**

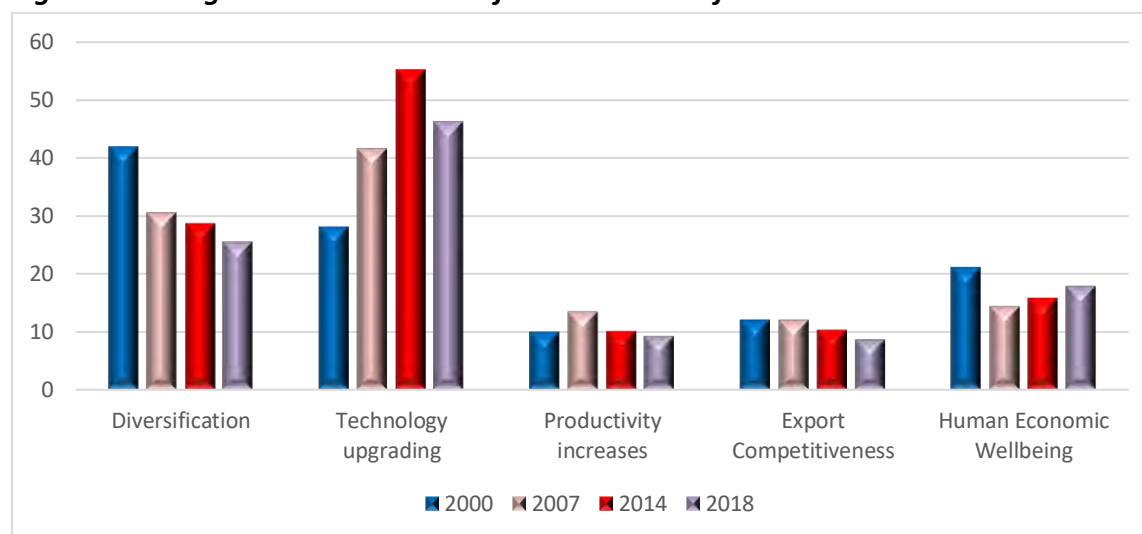


Source: ATI2021 Database

After 2010, growth slowed down due in significant part to the slowdown in mining activity. This coincided with an improvement on the transformation index as other sectors such as construction and services were holding up. However, as growth deteriorated further due to weakening economic fundamentals, transformation declined too. Therefore, what appears to have been progress in transformation could not be sustained during further deterioration in the economy. This deterioration was largely fueled by lack of improvements in most of the individual indices of the ATI, as discussed in the following sections.

As shown in Figure 2.6, the country slid down on the diversification index from a score of 42 in 2000 to 25 in 2018. This was driven by a decline in the contribution of manufacturing to GDP from 10.3 percent to 8.4 percent while the services share in GDP remained largely constant (ACET, 2021b). The share of both manufacturing and services in total exports almost halved in 2018 from their level in 2000. Further insights from ATI2021 show that exports became less diversified as the top five exports increased their share in total commodity exports with the remainder of exports accounting for a declining share. Key policies that Zambia pursued to diversify production and exports include maintaining a stable macroeconomic environment, attracting quality investment into manufacturing through FDI and PPPs by providing a good regulatory framework and facilitating the development of Multi-Facility Economic Zones (MFEZs), and providing fiscal and non-fiscal incentives.

**Figure 2.6. Progress on dimensions of economic transformation**



Source: ATI2021 Database

Macroeconomic instability driven by an increasingly unsustainable debt contributed to weak performance in terms of diversification of the economy. Based on various Annual Economic Reports of the Ministry of Finance (MOF), it is estimated that Zambia's external debt stock rose from US\$1.9 billion in 2011 to US\$6.7 billion in 2015 and closed at US\$11.7 billion in 2019. This resulted in increased debt service and debt repayments exerting pressure on the exchange rate, inflation rate and interest rates among other macroeconomic indicators.

The unfavorable macroeconomic environment also adversely impacted FDI inflows into the various sectors of the economy. This is notwithstanding the improvement in the business environment resulting from implementation of the PSD and FSD programs, as evidenced by the Ease of Doing Business which ranked Zambia among the top five in SSA as an attractive investment destination.

The development of Multi-Facility Economic Zones (MFEZs) as a key strategy for expansion of manufacturing and exports, as attempted in most African countries, has not yet yielded significant results. Poor infrastructure and weak anchoring and clustering of business in MFEZs around priority sector value-chains has resulted in slow pace of development of value-addition activities and therefore exports (Phiri, 2020). In tandem with a poor record in diversification, Zambia recorded a poor ranking for export competitiveness, which deteriorated from a score of 12.1 in 2000 to 8.6 in 2018. This due to a decline in the proportion of exports in GDP relative to world averages.

The weakening macroeconomic environment, as stated earlier, resulted in increased production costs. First, costs of borrowing for the private sector were rising due to increased

government borrowing from the domestic financial market due to failure to undertake fiscal consolidation amidst rising vulnerabilities. Average lending rates rose from 12.5 percent in 2015 to 26.5 percent in 2020, as reported by the Bank of Zambia online Selected Macroeconomic Indicators database (Bank of Zambia)

In addition, despite progress in most of the measures on the Ease of Doing Business, Zambia lagged in the dimension of trading across borders thereby making exports less competitive. In 2019, Zambia scored 56.9 out of 100 and ranked 155<sup>th</sup> out of 190 countries due to high costs to export (World Bank, 2020). Furthermore, policy inconsistency and unfavorable policies overall in relation to exporting have contributed significantly to exports becoming less competitive. Key to exports was the issue of the administration of VAT refunds.

Due to government revenue shortfalls and weaknesses in commitment control systems, the accumulation of arrears in VAT refunds was ignited. This came on top of arrears owed to domestic suppliers of goods and services, therefore further constraining the liquidity of firms and affecting production. The stock of domestic arrears rose from ZMW641.2 million (approximately US\$28.5 million) at end-2014 to ZMW27.7 billion (approximately US\$1.2 billion) at end-2019 (Ministry of Finance, 2021). The single biggest portion of the arrears is ZMW6.9 million (approximately US\$306 million) relates to VAT refunds owed to export producers.

Against this backdrop, over the period 2011-2021 the government's will to advance reforms that support business and private sector weakened substantially thereby eroding some of the gains achieved earlier regarding private sector reforms. As the government took on a more significant role in driving the economy through its massive public infrastructure investment drive, public institutions assumed a defensive stance with regard to policy, regulatory and institutional reforms that favor economic transformation. For instance, in agricultural sector, the writing was already on wall with by the beginning of the 2010 decade with FISP administration through direct input support no longer achieving its intended effect and therefore becoming unsustainable.

Nevertheless, the FISP continued to be defended and allocated increased amounts of funding in the national budget every year. Trade policy for instance also became defensive over time, with *ad hoc* bans of both imports and exports of agricultural commodities signaling a more inward orientation. Therefore, a return to export promotion tenets, debates/consultations and evidence-based policy making is required. Zambia needs an outward (export) orientation through more robust and consultative export promotion strategies.

Notably, Zambia made progress in technology upgrading with a score of 28.1 in 2000 rising to 46.1 in 2018. This was driven largely by an increase in the share of medium- and high-technology products in total production due to technology and increased FDI inflows in manufacturing. Manufacturing was the second recipient of FDI inflows after mining and

averaged 16 percent of total inflows between 2010 and 2014. This share increased to an average of 45 percent between 2015 and 2018 as inflows into mining tapered off (Bank of Zambia, ,2015, 2016, 2017, 2018).

In addition, the country made appreciable progress in utilization of ICT, particularly digital technology and most notably, digital infrastructure, digital financial services and digital platforms (World Bank, 2020). However, the country still lags behind in digital skills, which affects the use of digital technologies as well as the development of digital entrepreneurship. This is largely due to skills gaps related to science, technology, engineering, and mathematics (STEM). Consequently, firms face challenges in developing new products, implementing new technology or maintaining the required quantity or quality of products (UNIDO, 2020). This has resulted in low sophistication of exports, with the share of medium- and high-technology exports in total commodity exports recorded at a meager 2 percent throughout the two decades (ACET, 2021b).

Between 2000 and 2007, Zambia's score on productivity increased from 10 to 13 but declined thereafter to 9.2 in 2019. This was largely driven by increases in productivity in both manufacturing and services in tandem with high economic growth rates. Productivity scores declined thereafter in both manufacturing and services as the sectors increasingly absorbed more labor relative to other sectors.

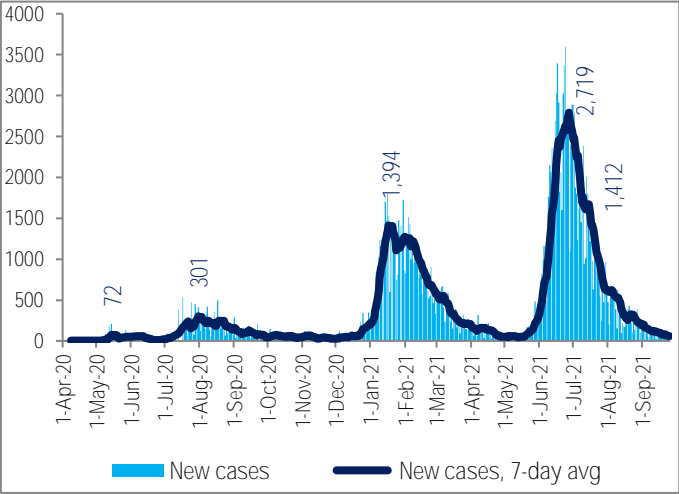
Zambia's record on human well-being on the ATI scores shows lackluster performance. The country dropped from 21.2 in 2000 to 14.4 in 2007 and improved to only 17.5 in 2018. The stellar economic growth recorded during most of the period under consideration has firstly been driven by growth in the mining sector, which is relatively low in labor intensity and therefore less inclusive. Growth in services and construction became key drivers as growth in mining waned. As mentioned earlier, because the more labor-absorbing services sub-sectors such as retail and informal trade are also relatively low labor productivity sectors compared with financial and ICT services, which are less labor absorbing, this growth has not been inclusive. Consequently, this exacerbated inequality and thereby weakened the gains from increases in GDP per capita which resulted in Zambia being classified as a lower middle-income country in 2013.

### **3. COVID-19 response and lessons**

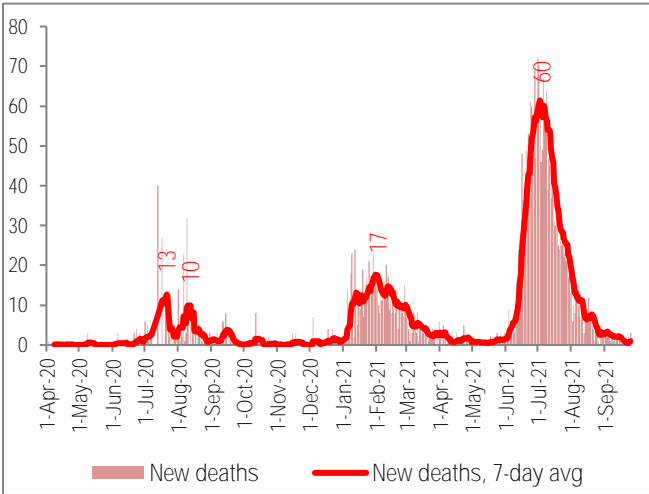
The first COVID-19 cases were reported in Zambia in mid-March 2020 and coincided with the declaration by the WHO of the outbreak as a global pandemic. Since then, Zambia has experienced three COVID-19 waves of increasing intensity in terms of both number of cases and deaths (See Figure 3.1a and Figure 3.1b). The third wave took the worst toll with the highest

seven-day moving average of daily positive cases at 2,719 in June 2021 and the highest number of daily deaths at 60. The third wave dissipated by the end of August 2021 with the case positivity rate dropping to 1 percent from a high of 26 percent at the peak of the wave. By mid-November 2021, 209,000 cumulative COVID-19 positive cases had been recorded, 3,661 deaths and 206,000 recoveries. This represents 11,700 COVID-19 confirmed cases per million people and 205 COVID-19-related deaths per million.

**Figure 3.1a. COVID-19 cases**



**Figure 3.1b. COVID-19 deaths**



Source: Constructed from COVID-19 Daily Reports, MoH

**3.1. Measures to mitigate the spread of the pandemic**

After the first cases of the COVID-19 were reported, the government put in place containment measures to stem the pandemic. The first act was the announcement of public health guidelines which promoted mass utilization of masks, social distancing, regular handwashing and sanitization. A restriction or shutdown of some sectors of the economy which could be hotspots and avenues for spreading the virus was implemented intermittently as the daily number of cases evolved. Specific measures to counter the pandemic included: suspension of non-essential foreign travel to hotspot countries; quarantine of travelers entering the country and exhibiting symptoms; restriction of public gatherings to a small number subject to them complying with public health guidelines; restriction of restaurants to operate on a take-away or delivery basis; closure of bars, night clubs, cinemas, gyms and casinos; closure of airports except the Kenneth Kaunda International Airport to ensure efficient and effective screening of travelers. These measures were successful in keeping infections and deaths during the first two waves relatively low.

With the onset of more vicious COVID-19 variants in April 2021, the government launched a vaccination program after receiving an initial consignment of 228,000 doses of AstraZeneca from the COVAX facility. The aim was to vaccinate a total of 8.4 million people above the age of 18 years. Since the vaccination program launch, the country has received more doses under COVAX<sup>3</sup> as well as from the People's Republic of China.

However, the vaccination pace has remained slow mainly partly due to vaccination hesitancy and misinformation. By mid-November 2021, a total of 985,456 people had been vaccinated, of whom 602,599 were fully vaccinated, putting the national vaccination rate at 3.3 percent. This is far below the global goal set by the World Health Assembly of each country vaccinating 10 percent of their target population by September 2021. Due to this slow pace, the government re-launched the vaccination campaign in October 2021 to encourage more people to get vaccinated. This was done in the wake of anticipating a fourth wave of COVID-19 by December 2021. The re-launch of the vaccination campaign saw the national vaccination rate rise to 7 percent of the target population by the beginning of December 2021.

### **3.2. Economic impact of COVID-19**

At macro-economic level, output contracted by 2.8 percent in 2020 but is projected to rebound by 3.3% in 2021 (GRZ, 2021). While Zambia has not implemented any country-wide lockdowns, lockdowns in major supply source countries (for example, China and South Africa), tighter border controls and travel bans resulted in supply chain disruptions, delays and increased production costs. Consequently in 2020, copper export earnings declined by 14.8 percent compared with 2019 earning (Siwale, 2021), despite a 16.5 percent increase in copper export volumes. Overall export earnings also declined by 15.8 percent over the first half of 2020 with non-traditional exports, an important sub-sector, declining by 17.9 percent.

In addition, businesses have been confronted with low demand as consumers were encouraged to stay home and therefore required fewer goods and services deemed non-essential. Equally, imports declined in the first half of 2020 by 30 percent compared to the corresponding period in 2019. The result of all this was that some businesses were forced to close permanently, lay off workers or temporarily require some non-essential workers to stay at home. A World Bank survey found that small (5 to 20 employees) and medium (21 to 99 employees) enterprises were far more likely to have closed than large companies (Finn, A., 2021). Casualties at sectoral level included tourism, wholesale and retail trade, construction and manufacturing, where economic output contracted considerably in 2020. At the same time, some sub-sectors survived,

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<sup>3</sup> This includes the Johnson & Johnson single-shot vaccine, Sinopharm and Moderna in addition to AstraZeneca.



some even profiting from the pandemic. These included information and communications technologies (ICT), agriculture, financial and insurance services, and to a lesser extent, mining.

According to a business survey on the impact of COVID-19 on Zambian enterprises, 71 percent of businesses interviewed had partially closed their operations while 14 percent had completely shut down operations (GRZ, 2020). A considerable number of firms (77.3 percent) also indicated having lost customers while 37.7 percent reported supply chain disruptions. Employees in tourism and the transport and storage sectors were most vulnerable to job cuts. In the tourism sector, the most hard hit, the survey showed that during the first quarter of 2019, the sector had an average of 19,541 workers and this dropped to 12,328 in the second quarter of 2020. The survey indicated that overall, 44.3 percent of enterprises interviewed had laid off workers temporarily.

In recovery too, small- and medium-sized business have been bearing the brunt – the survey shows that they were less likely to increase permanent workforce compared to large firms. The impact of the pandemic on jobs has had a social dimension in that female workers were most likely to have been laid off in the manufacturing and retail sectors. The extent of the impact of COVID-19 on the economy has been significant given that SMEs are estimated to account for 97 percent of total businesses in Zambia.

### **3.3. Measures to mitigate COVID-19 impact on the economy**

The outbreak of the COVID-19 pandemic found a very weak economy and a government unable to mount an extraordinarily strong response to mitigate the adverse economic impact. Nevertheless, through the central bank, the government established a Targeted Medium-Term Refinancing Facility (TMTRF) worth K10 billion (approximately US\$500 million) to provide liquidity to financial service providers (FSPs). This is a three-to five-year facility to enable FSPs to restructure or refinance qualifying facilities or on-lend to eligible clients. At the same time, the central bank scaled up open-market operations to provide short-term liquidity support to commercial banks on more flexible terms than before the COVID-19 outbreak.

As of June 2021, a total of 32 FSPs had applied to access funds from the TMTRF to the tune of K10.5 billion (105 percent of the total facility) (Bank of Zambia, 2021). Out of the 32 applications, 30 were approved at the value of K9.1 billion (87 percent of total value of applications). From the total value of approved advances, FSPs have disbursed K6.4 billion to corporate businesses and households, which is 70% of the funds they were sitting on. Of the disbursed amount, nearly three-quarters was disbursed by banks and the rest was disbursed by non-bank FSPs. However, while banks disbursed more funds in absolute terms, non-bank FSPs handled 98 percent of total beneficiaries. This indicates the greater ease in accessing funds from non-bank FSPs compared with banks.

The government issued a K8 billion (US\$400 million) COVID-19 bond as an additional economic stimulus. The proceeds of the issuance were aimed at dismantling domestic arrears owed to retirees and VAT refunds arrears owed to firms. At the time of preparing this paper, information was not yet publicly available on how much has been raised and how much has been channeled towards eliminating arrears. The above measures were aimed at injecting liquidity in the economy to stimulate economic activity.

On the fiscal side, the biggest challenge has been external debt and the mounting pressure from debt-servicing and repayments. By 2019, debt servicing accounted for 45 percent of total government revenue, surpassing the proportion of public wage bill which stood at 42 percent (GRZ, 2018). Therefore, following the endorsement of the Debt Service Suspension Initiative (DSSI) by the G20 in April 2020, Zambia applied for and was granted debt suspension for the period May-December 2020, which was later extended to June 2021. To get the full benefits of the DSSI, it became necessary to request eurobond holders for a six-month suspension of debt service so that all categories of creditors received similar treatment.

Consequently, a consent solicitation memorandum was issued on 15<sup>th</sup> September 2020 requesting a six-month coupon payment standstill on eurobonds due in 2022, 2024 and 2025-2027. On 13<sup>th</sup> November 2020, the eurobond holders rejected the government's request, citing lack of transparency in the treatment of all creditors, particularly Chinese creditors. With this rejection, the government defaulted on a US\$42.5 million coupon payment on the 2024 eurobond that was due on 13<sup>th</sup> October 2020, making Zambia the first and only sovereign defaulter in COVID-19 times. Essentially, Zambia initiated a "forced" debt service standstill with eurobond holders. The government also made efforts to get some debt service relief from Chinese creditors to mitigate the impact of the COVID-19 pandemic. This included a deal with China Development Bank (CDB) to defer interest and principal due on 25<sup>th</sup> October 20 20 to 25<sup>th</sup> April 2021 and an agreement with China Exim Bank to suspend interest and principal payments worth US\$110 million that had been due between May 1<sup>st</sup> and December 31<sup>st</sup> 2020<sup>4</sup>.

The government provided tax relief across the board through a waiver of tax penalties and interest on outstanding tax liabilities resulting from the impact of COVID-19. Specific tax relief and non-tax relief measures were also instituted for the tourism sector to ease cashflow and pressure on businesses (GRZ, 2020). Specific reliefs included: a one-year reduction of corporate income tax rate to 15 percent from 35 percent on income earned by hotels and lodges; suspension of annual license renewal fees paid by hotels and lodges for an initial period of one year, to be reviewed in line with COVID-19 developments; a one-year suspension of retention fees paid by tourism enterprises and hotel manager registration fees; and a one-year

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<sup>4</sup> <https://www.reuters.com/article/zambia-debt-china-exim-idUSL8N2I258D>

suspension of customs duty on the importation of Safari motor vehicles with seating capacity of at least eight people (GRZ, 2021).

In addition to measures to cushion the various economic sectors, the government, in collaboration with its social partners, the Zambia Federation of Employers and the labor movement, instituted some measures to ensure that jobs were not lost and at the same time that employers survived and remained viable. The key measures include: (1) Placing of employees on paid leave for all employers adversely affected by COVID-19. Employees on paid leave would only be paid a basic salary; (2) Placing employees on forced leave for all employers in the tourism sector. During forced leave employees would not be paid any salary. Any sector other than tourism deemed as disproportionately affected would qualify for forced leave for their employees upon assessment by the labor ministry.

The foregoing measures have only been effective in mitigating the adverse effects on livelihoods so long as the businesses do not shut down permanently. In some cases, businesses have shut down and jobs have been lost. To provide relief to workers that lost jobs due to the impact of COVID-19, in July 2020 the government launched the COVID-19 Emergency Cash Transfer (C-ECT). The C-ECT was to target 200,000 households with an amount of K400 (approximately US\$20) per month per household for six months from August 2020 in 22 priority districts. The 22 priority districts were selected based on objective criteria that incorporates factors such as COVID-19 prevalence, level of urbanization, border town and tourist destination.

### **3.4. Key post-pandemic recovery challenges for the government, households and businesses**

While the economy rebounded significantly in 2021, the country still faces some post-pandemic recovery challenges. The country needs to get back to a higher growth trajectory that is consistent with achieving economic transformation, reducing poverty levels and building a more resilient economy. This requires creating fiscal space for the government to channel resources to developmental needs in spite of a debilitating debt overhang. This will require restructuring of external debt with Zambia's major creditors using a combination of both maturity extension and interest rate reductions thereby creating some breathing space. It will also require continuous implementation of revenue administration reforms. The government has to continue ramping up the campaign to get more people vaccinated as well as secure more vaccines to reach the target required to achieve herd immunity. The government has also provided additional measures and concessions to various sectors in the 2022 national budget to reinvigorate growth.

The high cost of living as a result of high inflation amidst high unemployment levels is the challenge households continue to face. The government has therefore committed to reducing

inflation to single digit by the end of 2022 through the consistent and balanced application of prudent monetary policies. This will call for the Bank of Zambia to take necessary action through its implementation of monetary policy based on the forward-looking framework anchored on the monetary policy rate (GRZ, 2021). Cognizant of the need to invigorate growth by making access to credit cheaper, implementation of the monetary policy will thus call for a balancing act between keeping inflation low and supporting growth.

Social protection measures have been enhanced by increasing the number of beneficiaries and transfer value for the Social Cash Transfer (SCT) Programme even after the end of the C-ECT which was launched to mitigate pandemic effects. The number of beneficiaries under the program is targeted to increase from 880,539 as of August 2021 to over 1 million in 2022. The transfer value will be increased from K150 to K200 per month. The government will also disburse all outstanding arrears owed to retired public service workers and curtail their accumulation henceforth.

The health system remains one of the critical needs to ensure that the country stands prepared to tackle future epidemics and pandemics. The pressure on the health system from the onslaught of COVID-19 was significant due to limited health personnel, hospital beds and drugs and medical supplies. This need must be met. In 2022 the government has committed to increasing financing towards epidemic and pandemic management. As a start, over 11,000 health personnel will be recruited and deployed in 2022. Further budgetary allocations for drugs and medical supplies will also cover supplies for COVID-19. The government will also continue expansion of health facilities.

## **4. Economic resilience**

This section assesses the key vulnerabilities and risks faced by Zambia, from domestic drivers to global drivers of change. It also discusses aspects of economic growth, productivity capacity constraints, trade challenges, macroeconomic and sectoral policies, climate and environmental change risks, natural resource stresses, population dynamics (urbanization, and demographic age transition), social inequality, and technological changes.

### **4.1. Growth risks and challenges**

In order to appreciate the risks and challenges to real GDP growth in Zambia, Table 4.1 presents a further decomposition of sectoral contributions to real GDP. In Table 4.1 a decomposition of sectoral contributions to real GDP is presented in five-year intervals over the period 2000-2020. Over the entire period, the top three contributors to annual average real GDP growth rates were wholesale and retail trade, all other services (including education, health, professional,

community, etc. services) and mining, in that order. The key underlying growth drivers included economic liberalization and business reform policies as well as private sector development programs, which were propagated during much of the MMD era, particularly during 2002-2010 when real GDP grew at 6.4 percent per year on average and population growth slowed to 2.3 percent per year (Resnick and Thurlow, 2016). At the same time, the bottom three sectors with the lowest contributions to annual average real GDP growth rates were agriculture, electricity, gas, water and sanitation, and financial and insurance.

Interestingly, the sectors of the economy that had made among the biggest consistent contributions to real GDP growth over the period – specifically wholesale and retail trade and all other services – made the most significant negative contributions to growth during COVID-19 in 2020. Similarly, agriculture, which performed relatively poorly over the period, made among the most significant contributions to growth during the pandemic. This is partially explained in that the spatial distribution of COVID-19 incidence was relatively higher in urban areas, and had limited spread in rural areas, thus limiting the disruptions to rural economic activities such as agriculture. Thus, building resilient economic growth will require a critical understanding of the key drivers of growth and using that understanding to insulate them from adverse exogenous shocks, through appropriate policy, regulatory and reform measures.

**Table 4.1. Sectoral contributions to real GDP growth rates**

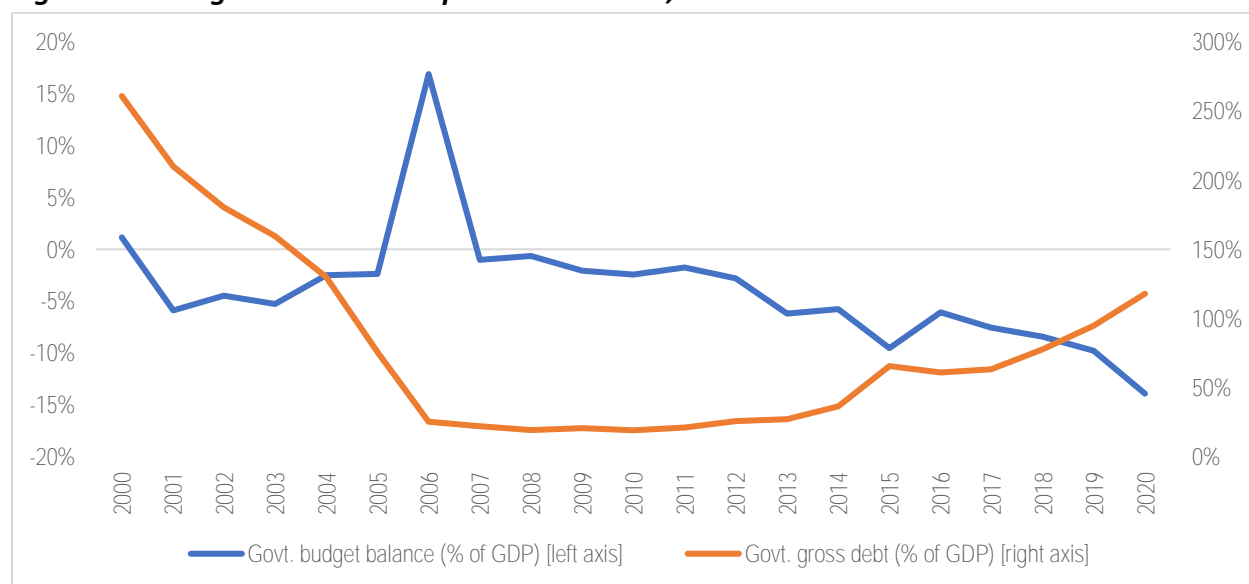
	2000-2004	2005-2009	2010-2014	2015-2019	2020	Avg. (2000-2020)	Rank (avg. (2000-2020))
Agriculture	-0.17%	-0.35%	0.03%	-0.17%	1.07%	-0.10%	12
Mining	0.89%	1.57%	0.65%	0.24%	0.80%	0.83%	3
Manufacturing	0.57%	0.40%	0.46%	0.29%	0.08%	0.41%	6
Electricity, gas, water, sanitation	0.02%	0.07%	0.14%	0.02%	0.05%	0.06%	11
Construction	1.15%	1.23%	0.02%	0.61%	-0.55%	0.69%	4
Wholesale and retail trade	1.37%	1.21%	2.32%	0.25%	-2.65%	1.10%	1
Transport, storage, info, comms	0.27%	1.08%	0.56%	0.54%	1.21%	0.64%	5
Accommodation, food	0.19%	0.10%	0.17%	0.04%	-0.42%	0.10%	9
Financial, insurance	-0.01%	0.01%	0.01%	0.25%	0.55%	0.09%	10
Real estate	0.68%	0.59%	-0.60%	0.11%	0.12%	0.19%	8
All other services	0.46%	1.80%	1.86%	0.77%	-2.35%	1.05%	2
Taxes less subsidies	0.17%	0.33%	0.41%	0.19%	-0.70%	0.23%	7
Total growth rates	5.5%	8.1%	6.6%	3.1%	-2.8%	5.4%	
PRIMARY SECTOR	0.7%	1.2%	0.7%	0.1%	1.9%	0.73%	3
SECONDARY SECTOR	1.7%	1.7%	0.6%	0.9%	-0.4%	1.16%	2
TERTIARY SECTOR	3.0%	4.8%	4.3%	2.0%	-3.5%	3.18%	1
Taxes less subsidies	0.2%	0.3%	0.4%	0.2%	-0.7%	0.23%	4
Total growth rates	5.5%	8.1%	6.6%	3.1%	-2.8%	5.4%	

Source: Constructed from Zamstats National Accounts data

## 4.2. Macroeconomic policy risks

As noted earlier, a key policy driver of economic growth and resilience is the macroeconomic policy stance, particularly the coherence, rationality and consistency of fiscal and public debt policies. Zambia built strong public institutions and systems for sound fiscal governance and debt management during 1993-1998, which ultimately led to fiscal discipline and prudence, fiscal stability and debt sustainability and contributed immensely to sustained GDP growth. However, these public institutions and systems were largely based on discretionary policy positions without equally strong legal and regulatory frameworks. Thus, once political shifts took place and changed fiscal and debt policies, the policy stance of the strong institutions and systems changed dramatically. Ultimately, after a new government came to power in 2011, deficits escalated, public debt (also called government gross debt) mounted (Figure 4.1), debt-service costs rose and eventually, economic growth started to decline.

**Figure 4.1. Budget balances and public debt stock, 2000-2020**



Source: Constructed from IMF WEO database

There is a clear need, going forward, for stronger and more robust legal frameworks for fiscal and debt management, which impose non-discretionary rules for restraining the fiscus and instilling discipline. Some legislative fiscal reforms have been attempted in the past five years, including the enactment of the Public Financial Management Act (2018), the Planning and Budgeting Act (2020) and the Public Procurement Act (2020). However, other required legislative reforms include repeal and replacement of the Loans and Guarantees Act (1994) and the incorporation into the Planning and Budgeting Act of legally binding fiscal restrictions that serve as a form of legal restraint on fiscal and debt accumulation variables.

### 4.3. Productive capacity constraints and trade limitations

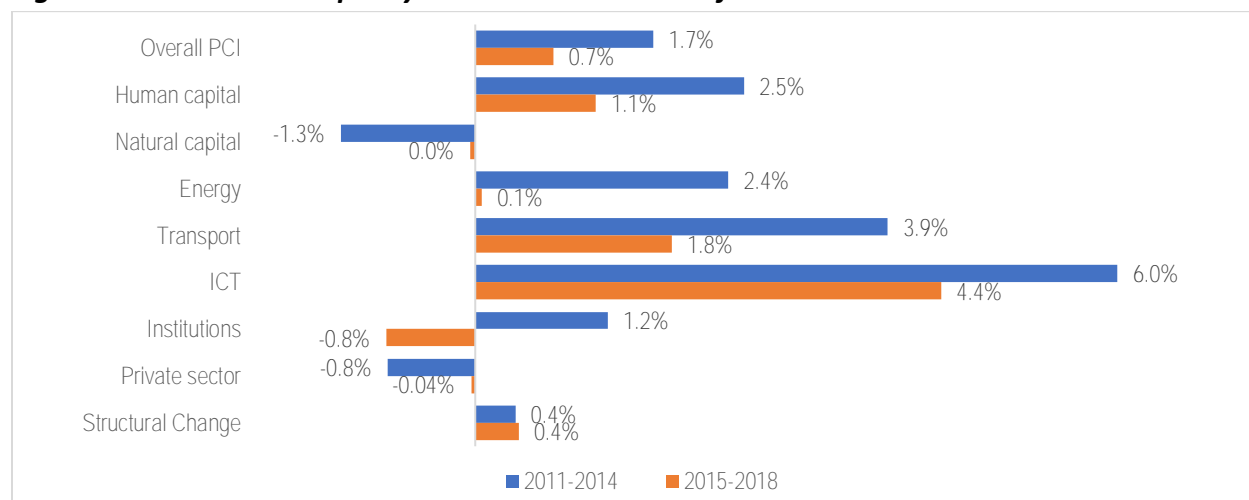
There are risks and challenges inherent in an economy's condition in terms of productive capacity and the knock-on positive effects on export diversification and export sophistication. Thus, what do Zambia's productive capacities look like? UNCTAD publishes a composite productive capacity index (PCI), which comprises of eight sub-indices, namely: human capital, natural capital; energy, transport; ICT; institutions; private sector; and structural change.

Figure 4.2 presents the annual average changes in the PCI and sub-indices for Zambia over the period 2010-2018, which is split into two sub-periods. The country's overall PCI improved by 0.7 percent per year on average over 2015-2018, suggesting smaller improvements in overall productive capacities compared with the period 2011-2014 (when the PCI annual average change was 1.7 percent). A fundamental concern for economic and export diversification and sophistication relates to the sub-indices on (public) institutions and the private sector. Over 2011-2014, productive capacity in public institutions improved by 1.2 percent per year on average, but in a reversal of fortunes, declined by 0.8 percent per year on average in the subsequent period (2015-2018). Essentially, public institutional capacity was eroded during 2015-2018. For private sector capacity, both periods saw erosion, with private sector productive capacity declining by 0.8 percent and 0.04 percent per annum on average during 2011-2014 and 2015-2018, respectively.

This is significance in that without appropriate investments in building public institutional and private sector productive capacities, all the improvements in human capital, energy, transport and ICT had limited influence on economic growth, economic diversification and export diversification and sophistication. Strong public institutions are crucial for supporting the private sector with the right policy, regulatory and business environment. At the same time, a strong and capable private sector is the main engine for economic growth and enhanced trade performance.

Because Zambia did not pay sufficient attention to productive capacity building in the private sector and public institutions over 2010-2018, economic diversification and domestic productivity remained critical challenges. Unsurprisingly, the record of formal job creation was relatively weak, as seen in Sections 1 and 2 and in Table 4.2. Over the 2012-2020 period, Zambia lost 4 percent of formal jobs per year on average. This was largely due to the job-creation limitations of public institutions and private sector productive capacity. Arguably, the private sector overall still needs considerable support in terms of business reform policies and strategies to fix the business environment and establish well-targeted programs to rebuild the private sector's productive capacity.

**Figure 4.2. Productive capacity index and sub-indices for Zambia**



Source: Constructed from UNCTADStats database

Moreover, exports remain highly concentrated in two commodities – copper and cobalt – which jointly accounted for 72 percent of total exports per year on average over the 2000-2020 period. With relatively low productive capacity, the private sector was unable to see, let alone capitalize on the increasing global import demand for sophisticated, medium technological content goods. The world has been gravitating towards sophisticated medium-technology imports, and their share of total world imports increase from 30 percent per annum on average over 2001-2005 to 44 percent per year on average over 2016-2020. However, over these same two periods, Zambia’s export profile became increasingly dominated by resource-based goods, with their share increasing from 15 percent per year on average during 2001-2005 to 41 percent per year over 2016-2020 (Figure 4.3).

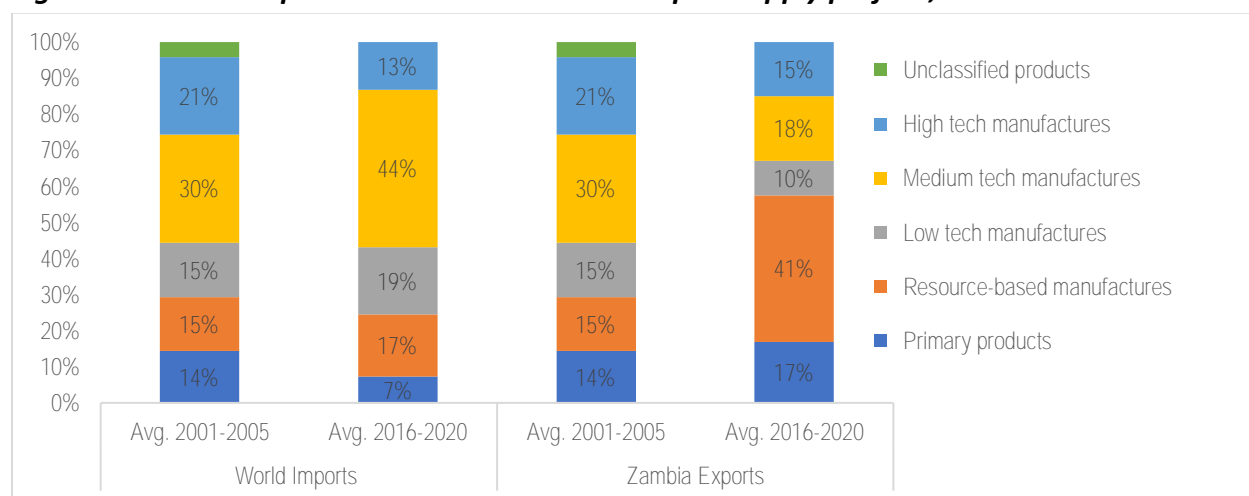
**Table 4.2. Total formal employment, 2012-2020**

	2012	2014	2017	2018	2019	2020	Avg. 2012-2020
<b>Total formal employment</b>	847,420	629,626	1,192,712	931,906	941,292	783,422	887,730
<b>Total formal employment (annual avg. % change)</b>		-13%	30%	-22%	1%	-17%	-4%

Source: constructed from Labour Force Survey reports (various)



**Figure 4.3. World import demand and Zambian export supply profiles, 2001-2010**



Source: Constructed from UNCTADStats database

#### 4.4. Susceptibility to exogenous commodity price shocks

With this export profile of resource-based goods (mainly copper), Zambia remains highly vulnerable to exogenous commodity shocks. As seen in Figure 4.4, annual average changes in Zambia’s copper exports over 2000-2020 were very closely associated with changes in global copper prices, with a correlation coefficient of 0.93 between the two. Bearing in mind that mining was one of the top three contributors to the overall real GDP growth rate over the same period, adverse international copper price movements were anticipated to have significant negative effects on mining sector production through reduced export supply potential.

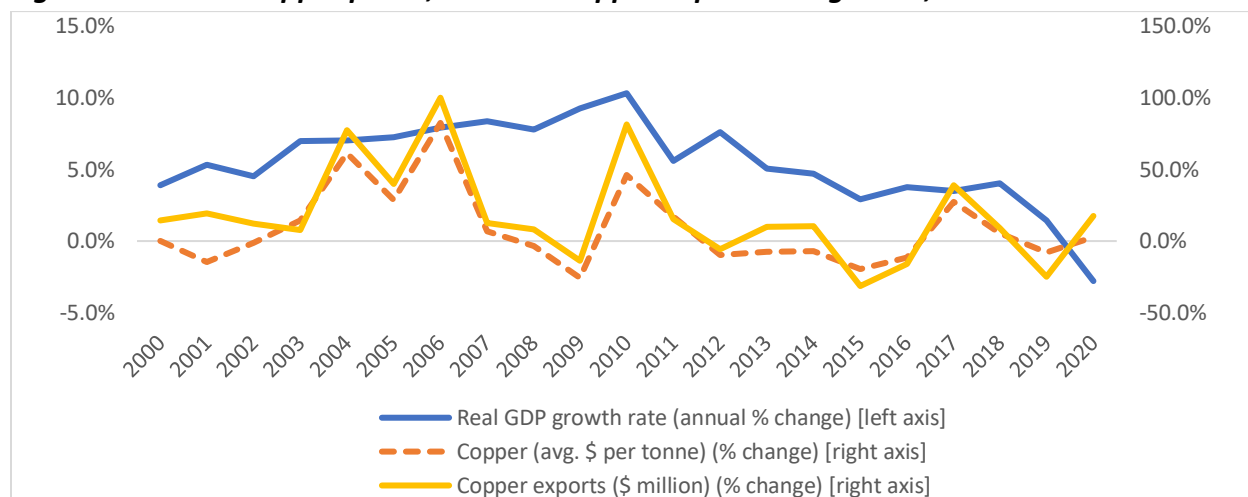
#### 4.5. Threats regarding the demographic transition

According to the Zambia Statistical Agency (ZSA), as of 2020, Zambia’s population was estimated at 18.4 million, with an annual population growth rate of 2.8 percent. Zambia is said to be in its second stage of demographic transition with a high fertility rate estimated at 5.3 children per woman despite the high use (45 percent) of modern contraception among married women. Consequently, Zambia’s population is relatively young, with 44 percent being under age 15 and 82 percent under age 35 (Zambia Statistical Agency - Zamstats).

UNDESA (2019) projects that by 2065, Zambia will have a total population of 51.8 million people, of which 17.3 million (or 33.4 percent) will be in the 15–34-year age bracket and 15.3 million (29.5 percent) will be in the 35-64 year age group (Figure 4.5). This implies that the country will have to plan for the training and skills development of an average of 1.2 million youth (15-34

years old) per year entering the labor market. In tandem, 1.3 million persons per year on average will graduate from the youth group to the 35-64-year group.

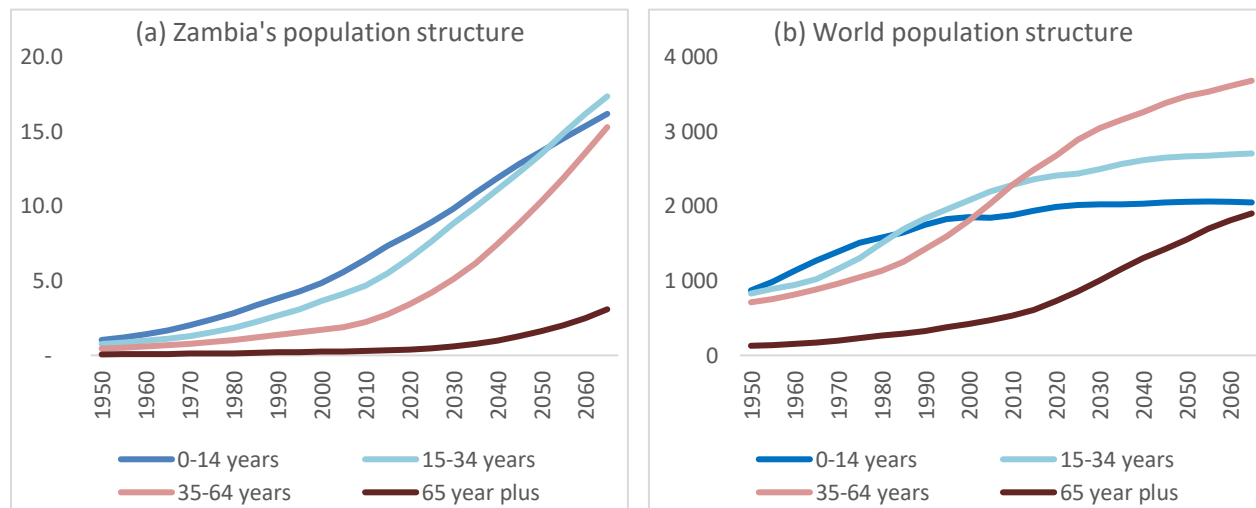
**Figure 4.4. Global copper prices, Zambian copper exports and growth, 2000-2020**



Source: constructed from BOZ BOP and Fortnightly Statistics databases, and Zamstats data

Zambia’s short-, medium- and long-term investments (public and private) in education, skills development and gainful employment creation will be crucial for harnessing the demographic transition anticipated in Figure 4.5 and turn it into a dividend — not a debt. Furthermore, for the country to realize such a dividend, the fertility rate needs to decline significantly. Combined with the right investments in health, education, housing and other social services as well as job creation, a decline in fertility could open a window of opportunity for economic growth.

**Figure 4.5. Zambia and world overall population structure by age group**



Source: Constructed from UNDESA (2019) database

Under the 7NDP, the provision for sexual and reproductive health services and access to comprehensive sexuality education (especially for young girls) was one of the measures expected to improve knowledge and skills aimed at reducing teenage pregnancy, HIV/STIs infection and child marriages. The government was also to focus on improving the access to and quality of education for young people to ensure they acquire the requisite skills and knowledge relevant to the current economy and job market.

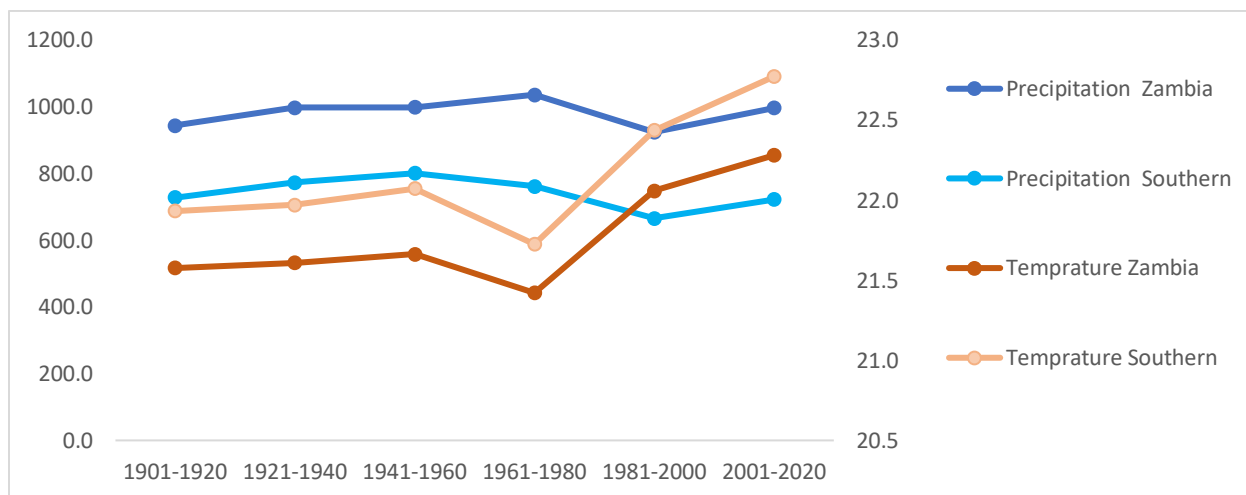
However, while the government has invested quite substantially in infrastructure in both the health and education sector through the ambitious infrastructure program mentioned in earlier sections, investment in complementary human resources, equipment, supplies and services has lagged due to diminishing fiscal space. For instance, an employment freeze for the public service which includes a freeze on hiring teachers and health personnel has been in place for some time now. As of 2021, over 55,000 trained teachers and an undisclosed number of health personnel were not yet deployed despite schools and health facilities having a limited number of personnel (GRZ, 2021). This has resulted in an erosion of both education and health access and quality threatening the demographic dividend that could be reaped from Zambia's youthful population.

Zambia also anticipates an increasingly urbanized population. According to UNDESA (2019), in 2020, 45 percent of the total population was in urban areas (compared with 42 percent on average in sub-Saharan Africa). By 2050, it is projected to be 62 percent urbanized (compared with 58 percent on average in sub-Saharan Africa). This implies that Zambia will either have to cater for increasing social services and infrastructure in urban areas relative to rural areas or take measures to stem the high and increasing urbanization rates. The former option could further marginalize already marginalized rural areas that bear the brunt of poverty and inequality (as seen in Section 1). The latter option could mean revamping rural areas, particularly if the policies and strategies for human and commercial spatial settlement incorporate rural fiscal and non-fiscal incentives to economic actors.

#### **4.6. Shocks related to climate change**

Climate change constitutes a significant threat to Zambia's sustainable development. Climate change shocks in Zambia have included drought and dry spells, seasonal and flash floods and extreme temperatures. The long-range annual average precipitation and temperatures for Zambia overall and for the Southern province in particular, the country's agricultural and food hub, are shown in 20-year intervals in Figure 4.6. While the climate change effects on precipitation are not obvious, temperatures clearly increased markedly, by over 1 degree Celsius (°c), over the period. Temperatures were significantly higher in the Southern province – Zambia's agricultural hub – than the national average while precipitation was consistently lower in Southern province than in the rest of the country.

**Figure 4.6. Annual average temperatures (°c) and precipitation (mm), 1901-2020**



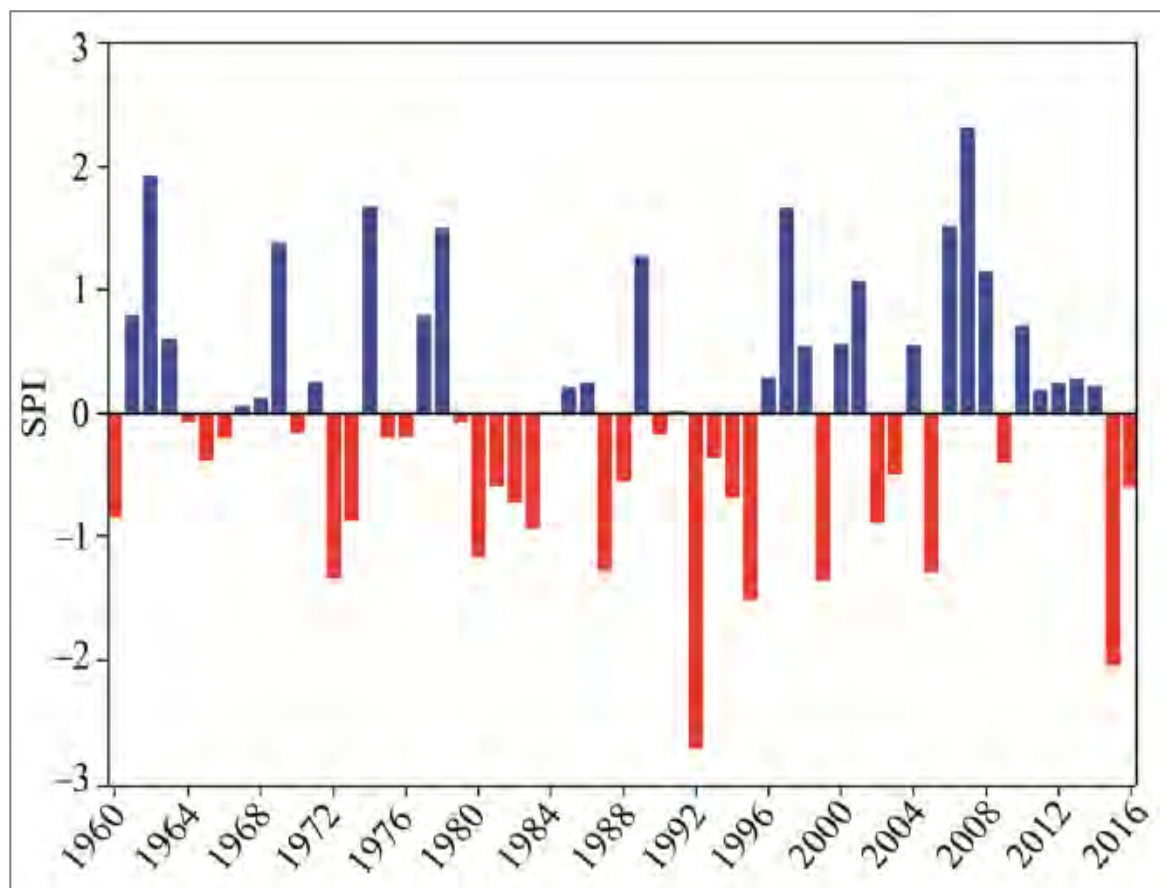
Source: Constructed from World Bank WDI database

Moreover, Libanda et al. (2019) calculate a Standardized Precipitation Index (SPI) for Zambia for the period 1960-2016 and find that based on a gamma distribution, SPI successfully categorized 1992 and 2015 as extremely dry years (with an SPI value less than or equal to -2.0) for Zambia; 1995 as a severely dry year (-1.9 to -1.5), 1972, 1980, 1987, 1999 and 2005 as moderately dry years (-1.4 to -1.0), and 26 years as near normal years (-0.9 to 0.9). As seen in Figure 4.7, the intensity of dry spells or droughts in Zambia increased markedly after 1992.

Thus, overall, episodes of these shocks, especially droughts and floods have increased in frequency and intensity over the past few decades and have adversely impacted on the food and water security, water quality, energy and sustainable livelihoods. Temperatures also show a rising trend (Figure 4.6) with potential for increased heat stress, land degradation and desertification. These climate change-related impacts are likely to compound the daunting challenges of economic transformation and improving human well-being that the country already faces.

Cognizant of this, in 2016 the government put in place a National Policy on Climate Change (NPCC) (GRZ, 2016). The 2016 NPCC has been developed to support and facilitate a coordinated response to climate change issues in the country. It aims to enable Zambia to re-align its climate-sensitive sectors and its society to meet its development goals through adaptation and mitigation interventions. At the same time, it will contribute to the achievement of the overall objectives of the United Nations Framework Convention on Climate Change (UNFCCC) which Zambia signed and ratified on 11 June 1992 and 28 May 1993 respectively. Going hand-in-hand with the NPCC was Zambia's signing and ratification of the Paris Agreement on 20 September 2016 and 9 December 2016 respectively.

**Figure 4.7. Estimated standardized precipitation for Zambia, 1960-2016**



*Note: Standardized precipitation index (SPI) results over Zambia for the period 1960-2016 based on GPCP data. The values were averaged over longitudes 21°30'E–34°00'E and latitudes 18°00'S–08°00'S. Source: Adapted from Libanda et al. (2019).*

However, in order to make an impactful contribution to addressing climate change shocks, adequate and sustainable financing is required to shift from a carbon-intensive development path to a low-carbon green economy and to support technologies and capacity building for the country to adapt and mitigate shocks. With the constrained fiscal space, however, this implies an additional layer to the challenges, leaving the country highly vulnerable to climate change shocks. Thus, at the COP-26 Summit held in Scotland in November 2021, Zambia submitted that it was ready to reduce emissions by 47 percent if supported by global partners (GRZ, 2021). In this regard Zambia will expedite implementation of activities through the development of bankable project proposals to enable the country to access the necessary financing.

#### **4.7 Institutional weaknesses and compromised resilience to shocks**

A number of observers and commentators (Hinfelaar and Cheelo, 2021; Cheelo et al., 2021; Brosché et al., 2020, Cheelo and Liebenthal, 2018; Dolphin and Saasa, 2018; Fraser, 2017) have covered various aspect of weaknesses in public institutions in Zambia. The sources of the

weaknesses range from excessive political interference and elite state capture to social and cultural habits (tribalism, nepotism, religiosity, etc.) and vices like public financial misappropriation (fraud, corruption, rent seeking, etc.). As these and other factors have permeated the public sector, the professional conduct and efficient operations of some apex public policy-making economic institutions has been severely compromised.

Annual audit reports published by the Auditor-General and annual Trends Reports by the Financial Intelligence Centre (FIC) reveal widespread practices of public sector financial misappropriation and suspected illicit financial transactions. The endemic nature of these malpractices, especially over the 2011-2021 period, resulted in weak institutions and poor public policy making and implementation. Ultimately, the emerging policy environment is clouded by lack of professionalism, transparency and accountability in public workplaces, high propensities for self-preservation on the job, and complicity in corruption and other vices as well as a battery of other adverse factors that have severely eroded economic management and overall governance. This has been one of the most significant realized core risks to economic resilience, recovery and transformation for Zambia over the past decade. By the end of 2021, the country's public institutions needed deep-rooted institutional reforms.

#### **4.8. Summary of economic resilience to exogenous shocks**

From the foregoing, among the main challenges in addressing the key vulnerabilities to shocks and achieving economic resilience are:

- The lack of knowledge-driven, evidence-based inputs into priority setting during short-medium and long-term planning and budgeting of public resources.
- The misalignment between public expenditure policy choices and the needs and priorities of private sector investment and development.
- Weak legal, legislative and regulatory frameworks to constrain macroeconomic policy slippages, misalignments and failures and more broadly to insulate public institutions.
- The weakened state of both public institutions and the private sector in terms of productive capacity, which renders the private sector ineffective at creating formal jobs and taking advantage of infrastructure development.
- An adverse business and competitiveness environment in the domestic economy, which has received little attention in terms of business and competitiveness reforms.

## 5. Economic transformation and resilience: key lessons and policies

Among the key lessons from the past 20 years is the fact the structural adjustment policies along with business environment reform and private sector development efforts that were implemented in the years prior to 2000 and broadly over the 2001-2010 period were significant for establishing macroeconomic stability and ultimately sustained positive economic growth.

However, the sustained growth did not yield satisfactory poverty and inequality reduction outcomes. These policies gave way in 2011 to more populist and expansionary policies that were not founded in evidence. The post-2011 economic development paradigm hurt economic growth over time and did not address outstanding issues of inclusive growth, poverty and inequality reduction and overall economic transformation and resilience. Among the key shortfalls of the post-2011 policies were: the massive accumulation of debt, which readily became unsustainable over time; disparities between monetary and fiscal policies, which, over time, contributed to weakening economic growth performance; the disconnect between macroeconomic and sectoral policies coupled with a severe lack of attention to private sector development policies and strategies, which ultimately eroded private sector productive capacity; the limited insulation of public institutions, which weakened public sector capacity to formulate sound policies and implement them; and the defensive attitudes of public institutions that hindered public sector reforms and institutional capacity building.

A new policy agenda is both relevant and necessary for Zambia to restore macroeconomic stability, achieve robust real economic growth and over time, achieve the structural transformation required for a resilient economy. The following policies, strategies, and specific interventions are recommended in order to promote economic transformation:

- Given past weaknesses in the processes of formulating national development plans, annual budgets and related macroeconomic and sectoral policies, a return to knowledge-driven, evidence-based priority setting and public investment choices is recommended during planning and budgeting for the short, medium and long term.
- Renewed attention should be given to coherence, credibility and consistency in the implementation of policies, plans and strategies, both macroeconomic (especially fiscal) and within key sectors such as agriculture, agro-processing and other manufacturing, mining, and selected services. Appropriate criteria for assessing coherence, credibility and consistency of policy, strategy and plan formulation and implementation should be established and integrated into public sector monitoring and evaluation as well as in independent assessment systems and procedures.

- Establishment of government-led private sector development programs that identify and prioritize key growth-driver sectors and promote economic diversification. Stronger export orientation, diversification and sophistication will be critical for rebuilding weakened private sector productive capacity and sectoral economic resilience.
- Strengthening key legal and regulatory frameworks will be important for insulating public institutions from undue influences, particularly in macroeconomic policymaking. This will limit the erosion of productive capacity in key economic governance institutions.
- Returning to business and competitiveness reforms (similar to those pursued during most parts of the MMD political era) will be vital for enhancing business, competitiveness and trade readiness.
- Building overall economic resilience, especially in the wake of the COVID-19 pandemic through prioritization and focus on:
  - Enhancing food security and value addition based on effective shifts in policy attention from basic agriculture to agro-processing.
  - Improving ICT and other technologies to foster transformation and resilience.
  - Implementing climate change mitigation and adaptation policy measures, to help cope with the vagaries of climate change; and
  - Harnessing the demographic transitions (youthful population and urbanization) through targeted public investments in related areas such as education, training and skills development, and provision of other critical services such as water and sanitation, health, addressing the particular needs of rural and urban area.
- Given general weaknesses in ICT capacity, it will be vital to establish data, information and knowledge systems that support capacity building in public institutions as well as in the private sector.



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**ACET** African Center  
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Transformation

**Transforming and Building Resilient Economies in Africa:**  
Resetting Priorities for the Policy Agenda  
in the Post-COVID-19 Era

TICAD 8 Side Event

August 23, 2022

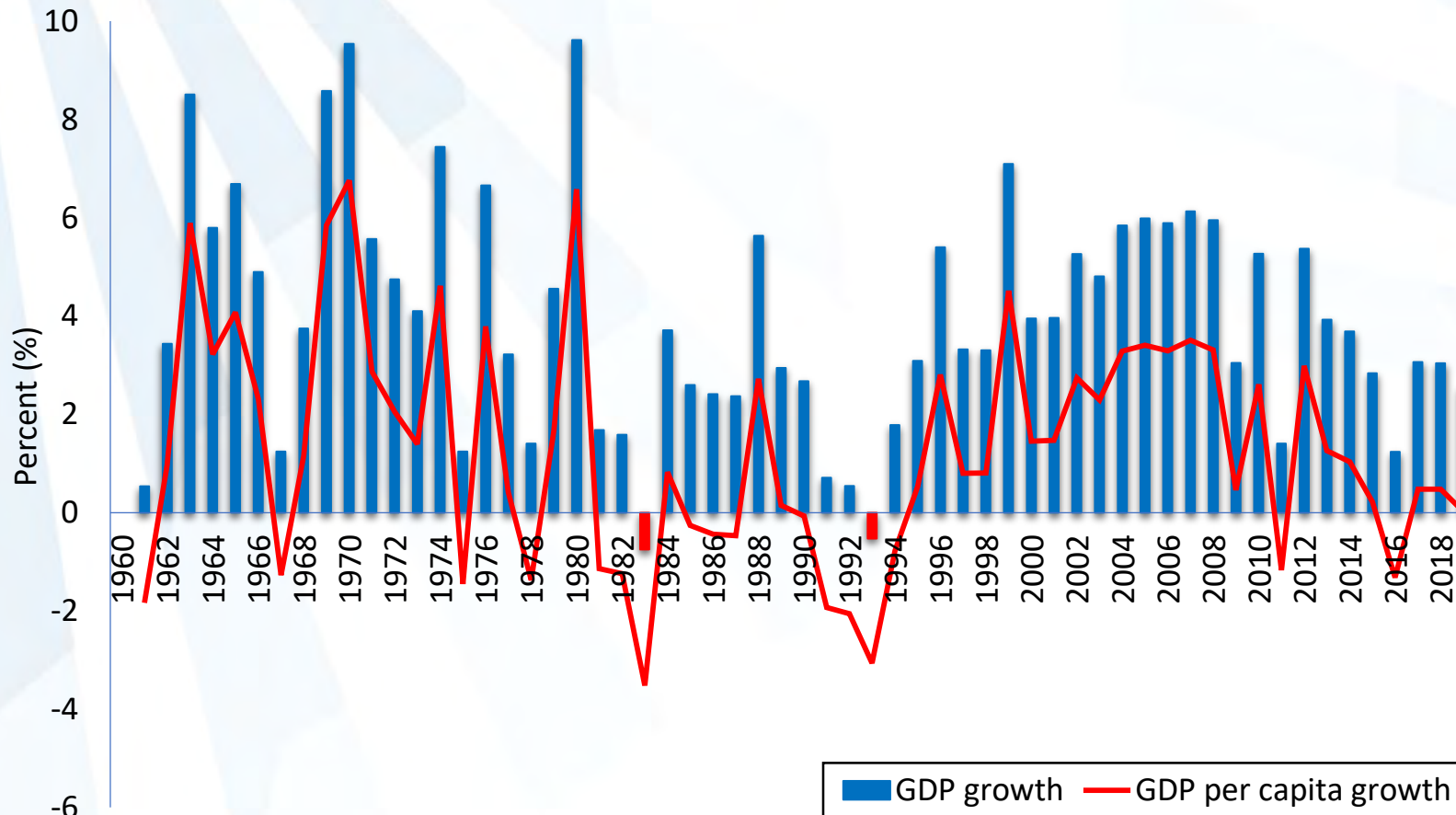
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- **Policy Priorities for Building Economic Resilience**
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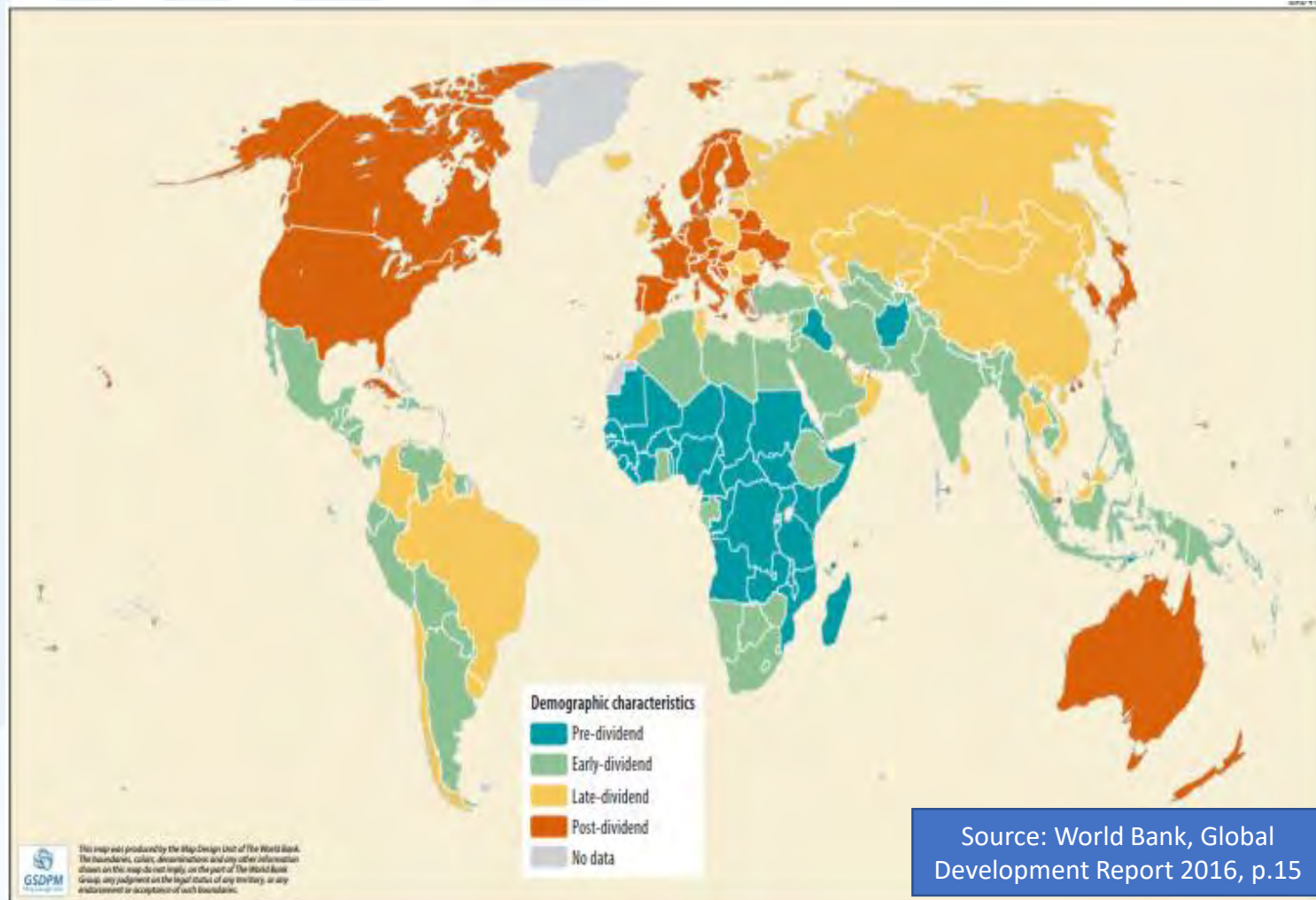
# Background

**Africa's most recent growth acceleration period (1994-2008) lasted longer than any previous one. However it ended for similar reasons as in the past.**



- Global business and growth cycles + idiosyncratic market shocks →
  - ↓ Global demand & investment
  - ↓ Terms of trade
- Other factors:
  - Climate change
  - Wars
  - Civil unrest

# Population growth and early demographic transition (dividend) strain African labor markets



- High, volatile, accelerating population growth
- Bulging population age pyramids
  - High dependency ratios
  - Large cohort of young poorly educated youth
  - Youth unemployment and underemployment

**Investments in physical and human capital struggle to outpace the growing population.**



# Framework

# ACET's DEPTH Framework and the ATI

## DEPTH

African Transformation Index  
(Growth + DEPTH)

### Diversification in production and export

- Manufacturing value added (% of GDP)
- Services value added (% of GDP)
- % Share of Manufact & Services in Total Exports of Goods & Service
- Inverse share of % of Top 5 Country's Total Commodity Exports (100-% top 5)

### Export Competitiveness

% of exports in GDP  
relative to world average

### Productivity increases

- MVA per Manufacturing Worker
- Agricultural value added per worker.
- Services value added per worker.

### Technology upgrading

- % Share of Med. & High Tech. in Total Production Activities
- % Share of Medium and High Technology Exports in Total Commodity Exports

### Human Well-being

- GDP Per Capita
- Waged and salaried females (% of female employment)
- Inverse of Gini coefficient
- Ratio of Formal Employment in Labor force

# The Growth-Transformation-Resilience Relationship

## Economic transformation

Economic and social outcomes from policies that can reduce or exacerbate vulnerability and weaken or strengthen resilience.



## Economic vulnerability

Natural and man-made conditions that expose a country to shocks.

**Policies**

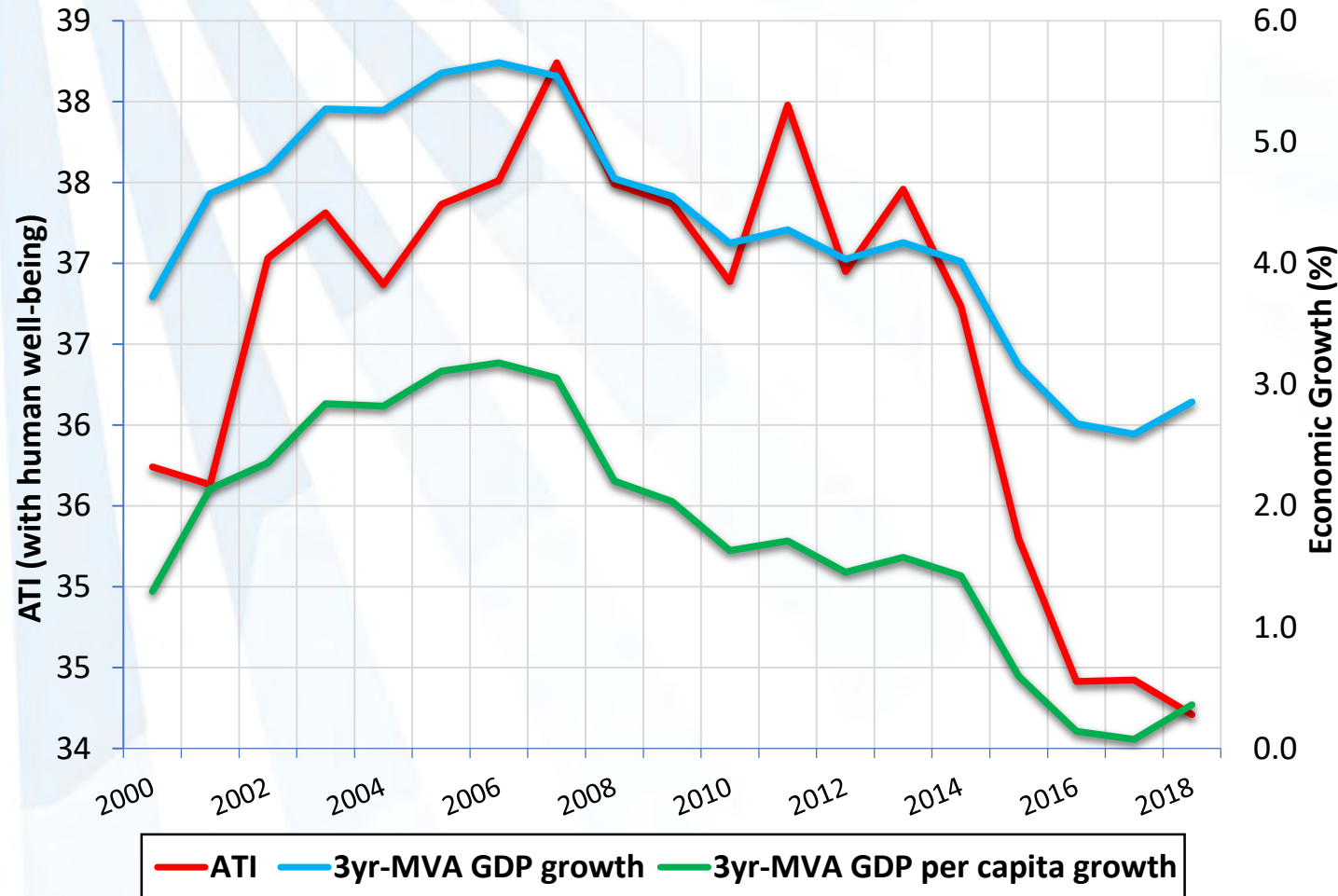
## Economic resilience

The ability of an economy to withstand, and to quickly and strongly recover from, shocks.

# Key Findings

# **Africa's Growth and Economic Transformation 2000-2019**

## Though growing, African economies were not transforming enough.

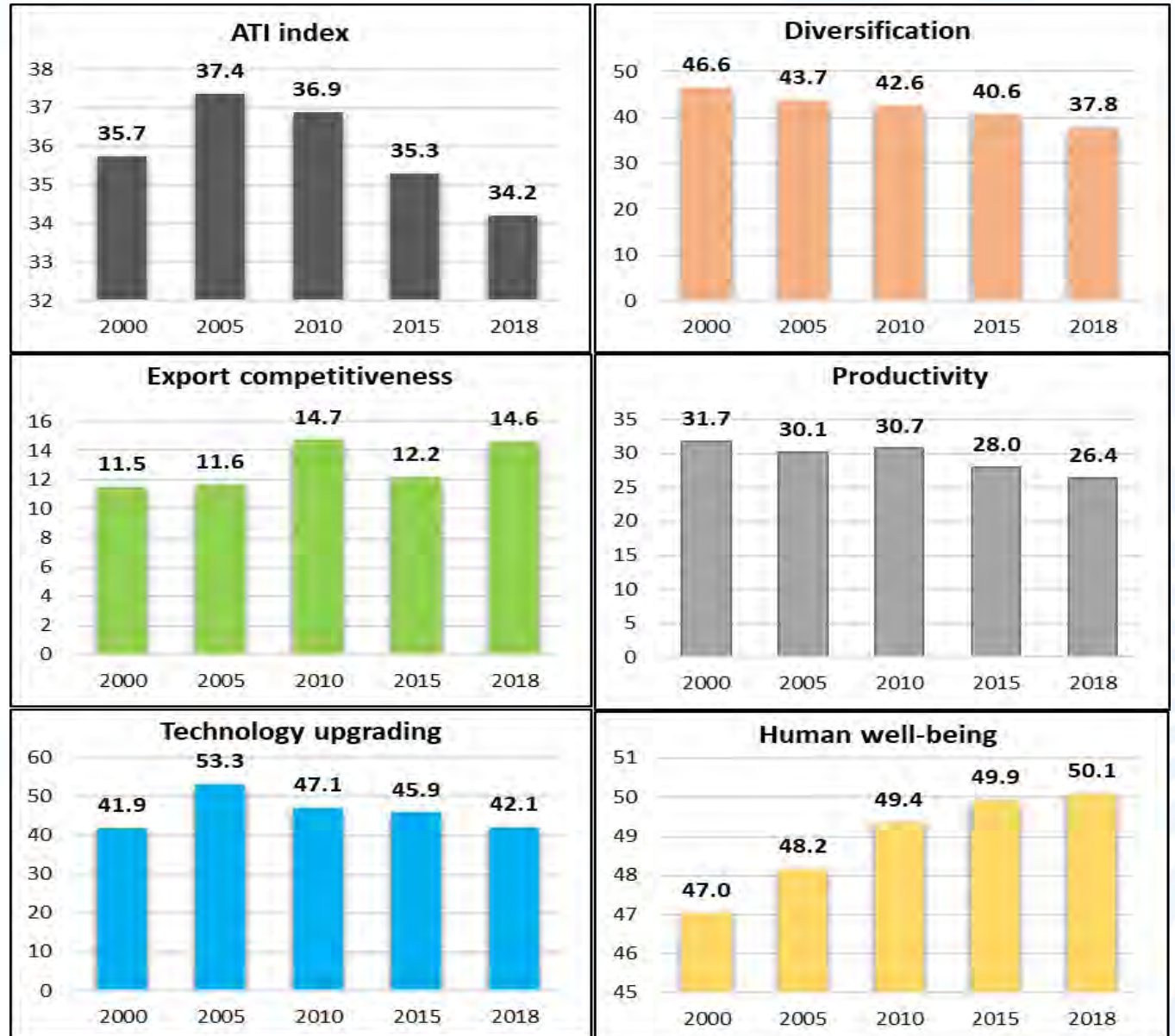


Data sources: WDI, UNIDO, ILO, COMTRADE

- Overall progress of economic transformation in Africa has been weak – below 40 on a scale of 0 to 100.
- The peak performance (2006-2008) was **38.24**.
- The lowest performance (2017-2019) was **34.21**.

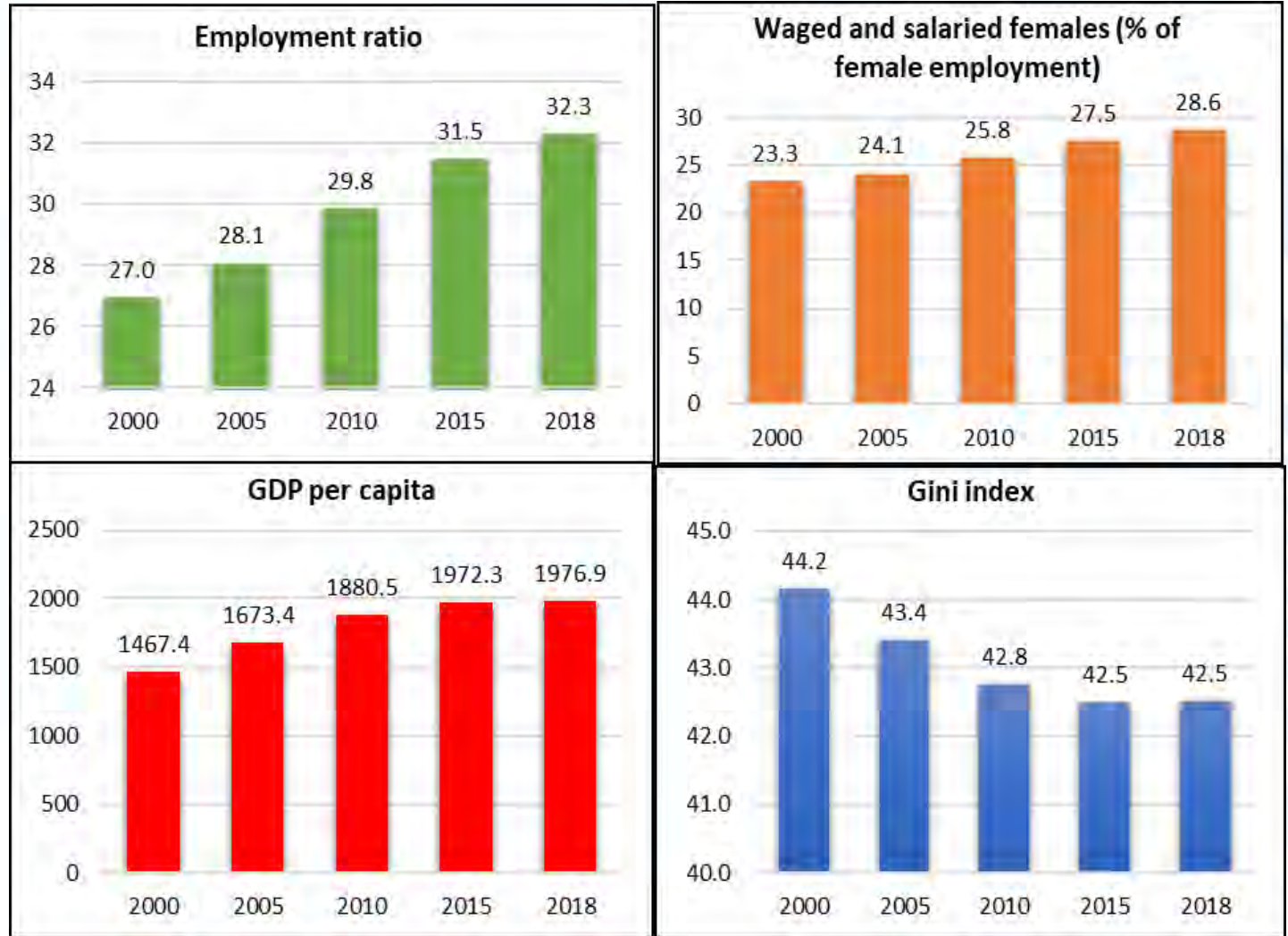
## Africa's economic transformation performance on DEPTH dimensions, 2000-2018

- Deteriorating outcomes in product and export diversification **(-8.8)**
- Stagnant export competitiveness after early gains **(+3.1)**
- Steady productivity decline **(-5.3)**
- Declining progress in technological upgrading since 2005 **(-11.2)**
- Steady progress in human well-being **(+3.1)**



## Is Africa's progress on human economic well-being sustainable?

- Progress in the first decade was broad-based across all components, but the second decade saw stagnating income levels and inequality.
- Deteriorating outcomes in other dimensions of economic transformation risk to future human economic well-being.



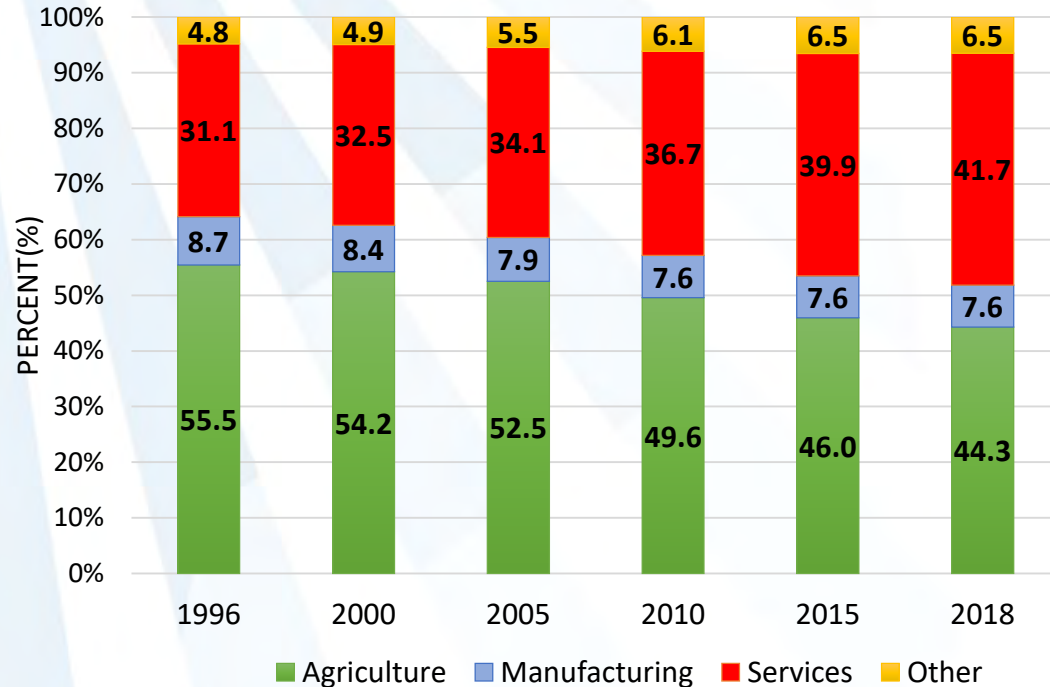
Data source: World Development Indicators



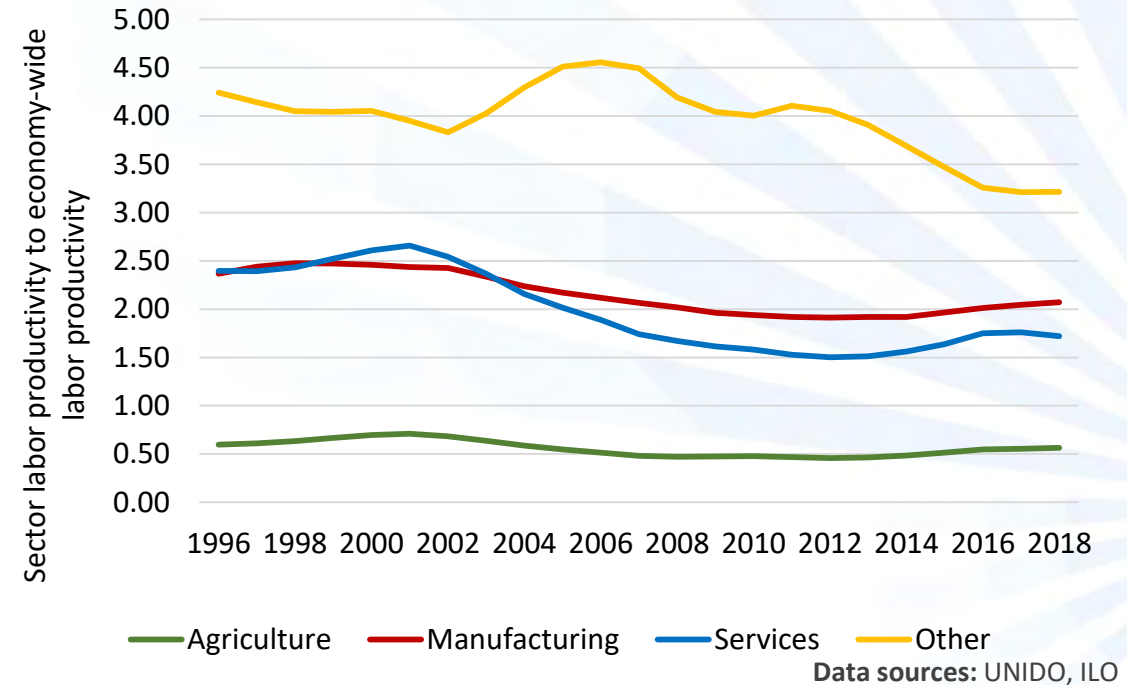
# **Unpacking Africa's Labor Productivity Growth and Technology Challenges**

# In Africa, on average, over the last two decades, sector labor reallocations away from agriculture favored services, and relative labor productivities favored manufacturing

Sector labor shares in Africa, 1996-2018



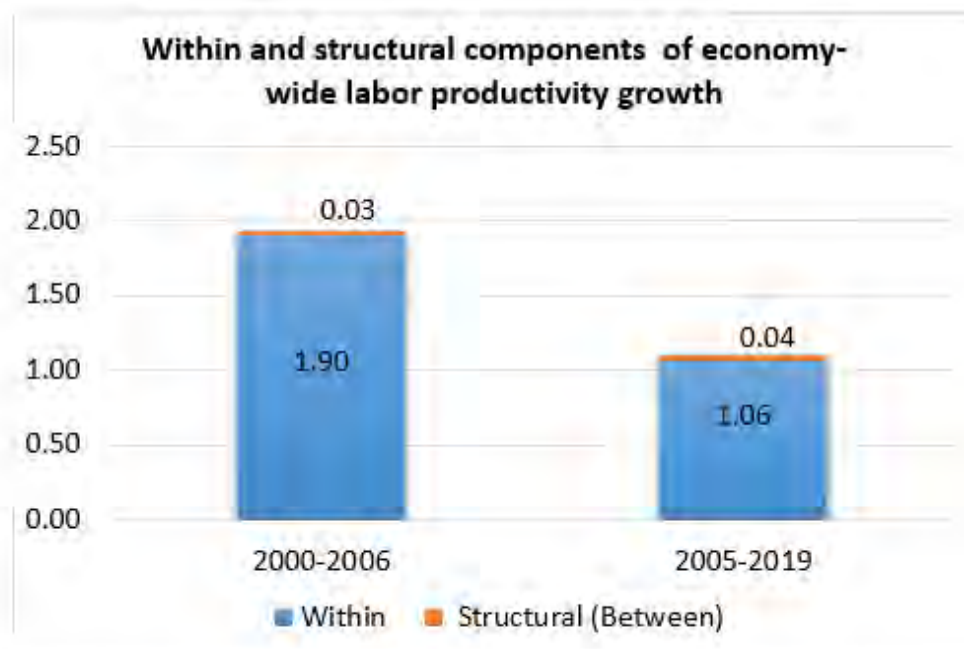
Relative sector labor productivities, 1996-2018



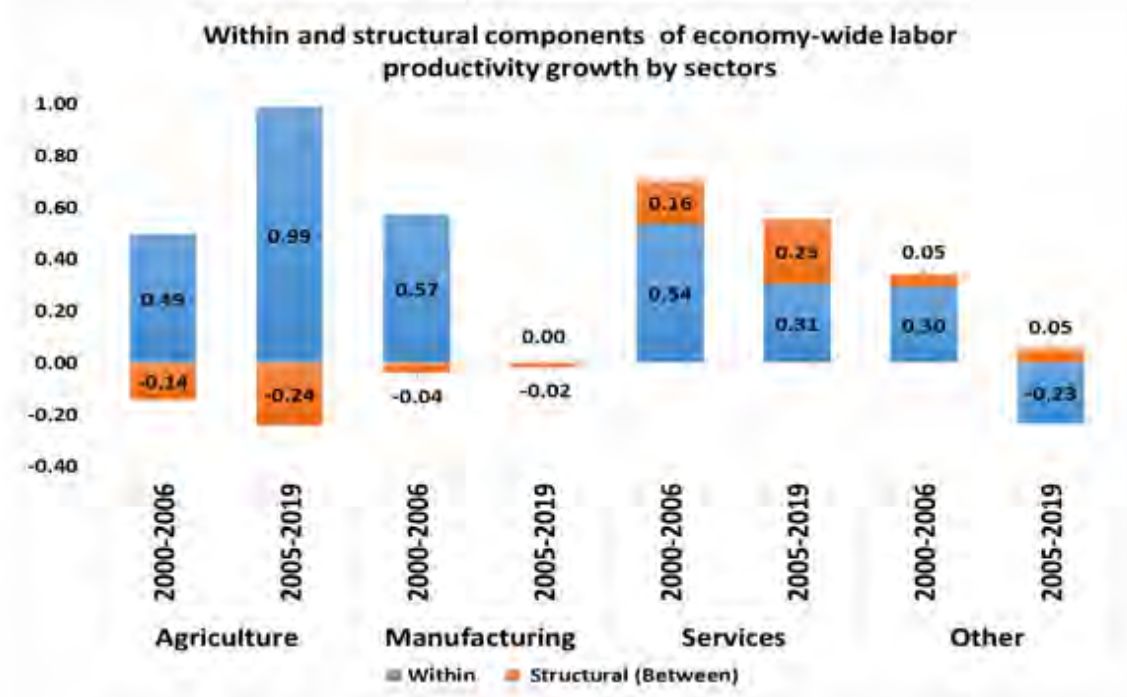
Labor is reallocating from agriculture (-11.2) and manufacturing (-1.1) towards services (+10.6) and other sectors (+1.7), but *relative* labor productivity in services is below manufacturing and other sectors, and it is falling substantially – and unlikely to translate into substantial aggregate labor productivity growth.

## Disaggregation of contributions to economy-wide labor productivity growth

- Within-sector productivity growth remains the predominant overall contributor to economy-wide productivity growth, but it is uneven across sectors
- The structural (“between sectors”) component played a very negligible role in the aggregate. The modest gains in structural component came from services.
- Little (if any) contribution of manufacturing to economy-wide labor productivity growth

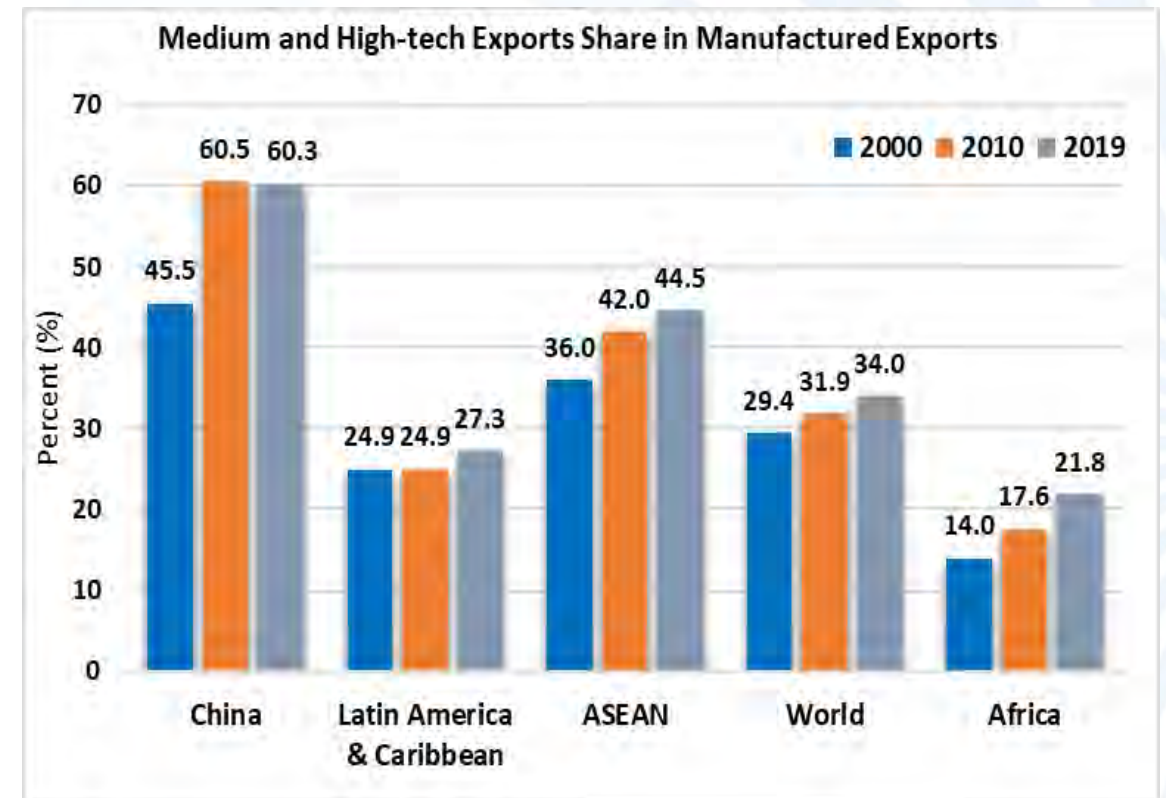
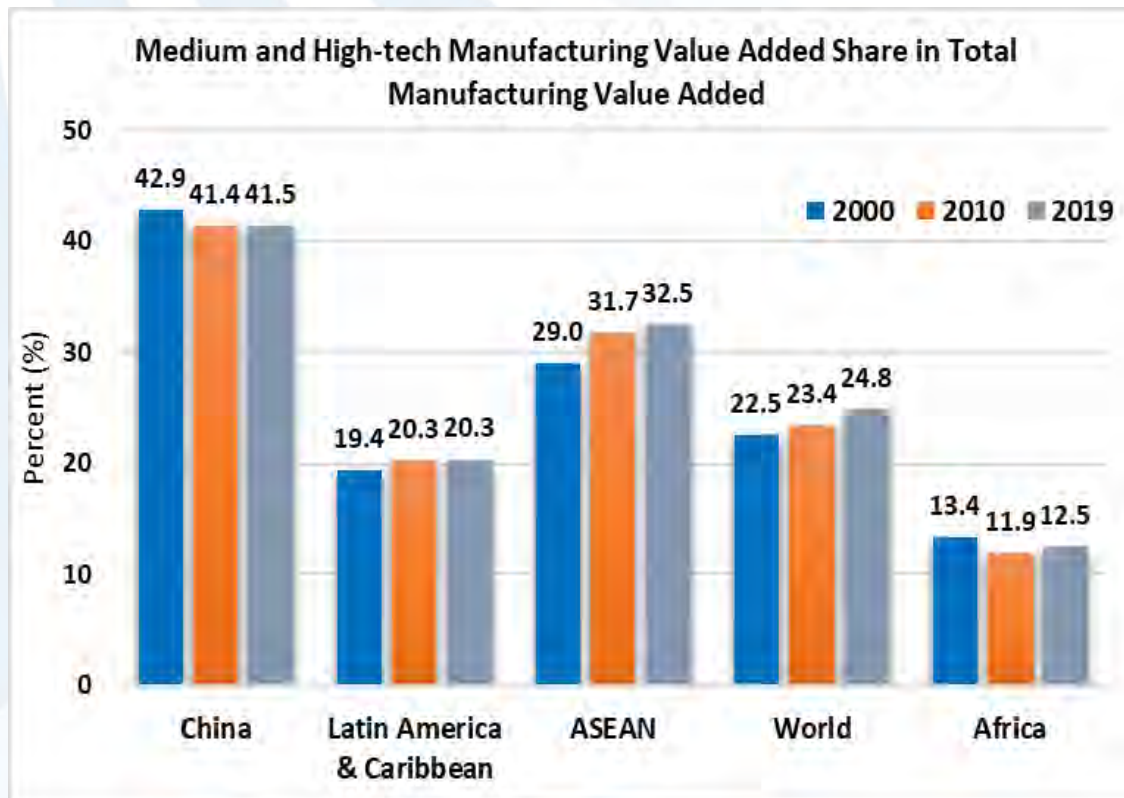


Data sources: UNIDO, ILO



## Africa's technology dilemma

Africa lags behind other developing regions in the technology content of its manufactured and exported value added, but it is making progress on exports.



Data source: UNIDO

# Insights from country classifications

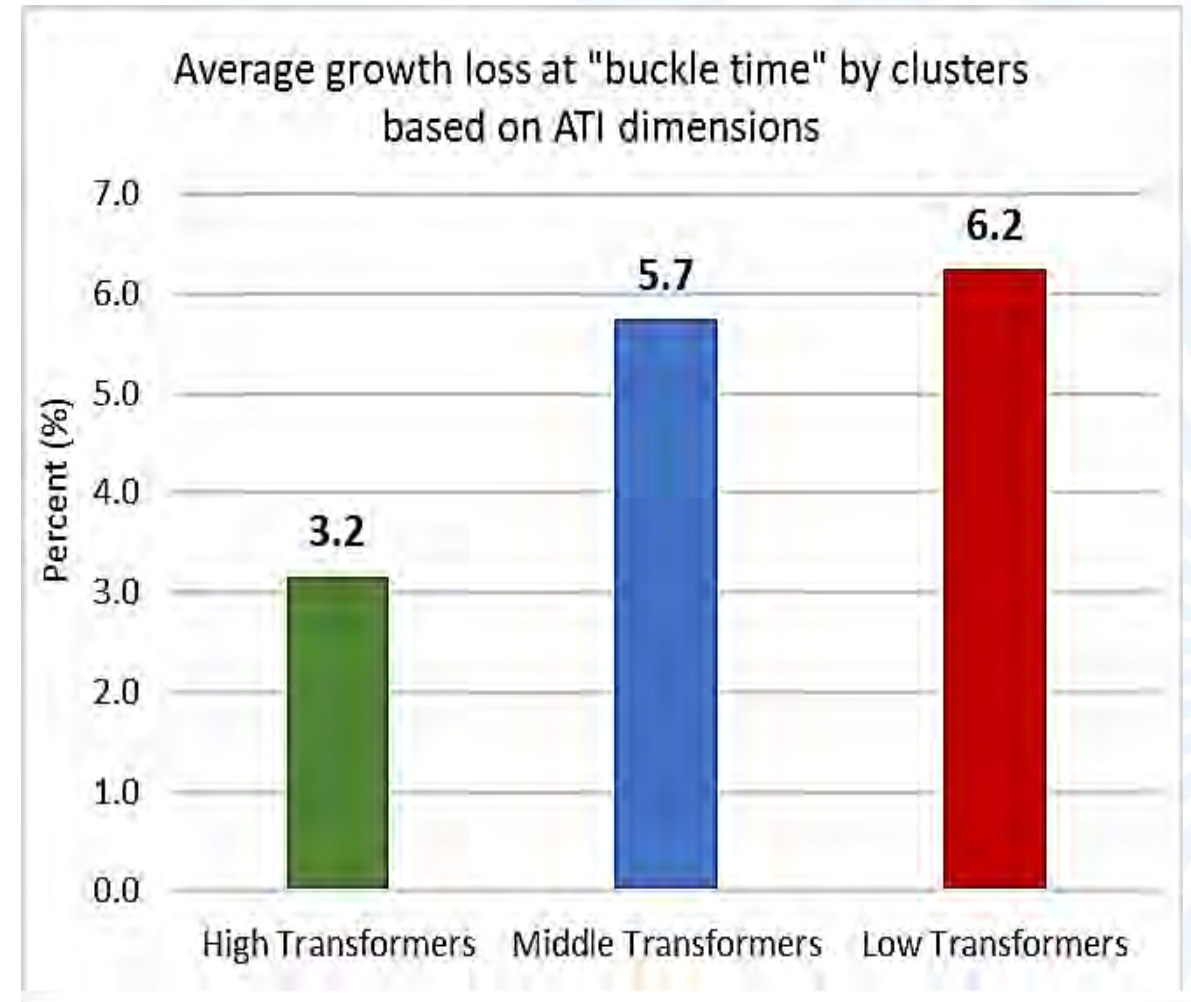
## Country classifications based on ATI DEPTH dimensions

- **High economic transformers:** Tunisia, Eswatini, Morocco, South Africa, Mauritius, Lesotho, Namibia
  - *Perform above average in all DEPTH dimensions except Human well-being*
  
- **Middle economic transformers:** Egypt, Gabon, Botswana, Sudan, Algeria
  - *Perform worse than the other two clusters in Diversification and Export competitiveness*
  - *Technology upgrading is very far below average of the high transformers*
  - *Perform better on Human well-being than the other two clusters*
  
- **Low economic transformers:** Central African Republic, Zambia, Nigeria, Kenya, Côte d'Ivoire, Uganda, Cameroon, Tanzania, Madagascar, Niger, Ghana, Ethiopia, Mozambique, Rwanda, Malawi, Benin, Gambia, Burundi, Burkina Faso
  - *Weaker in Productivity and Export competitiveness*
  - *Score very low on Human well-being*

# Findings on Transformation and Resilience

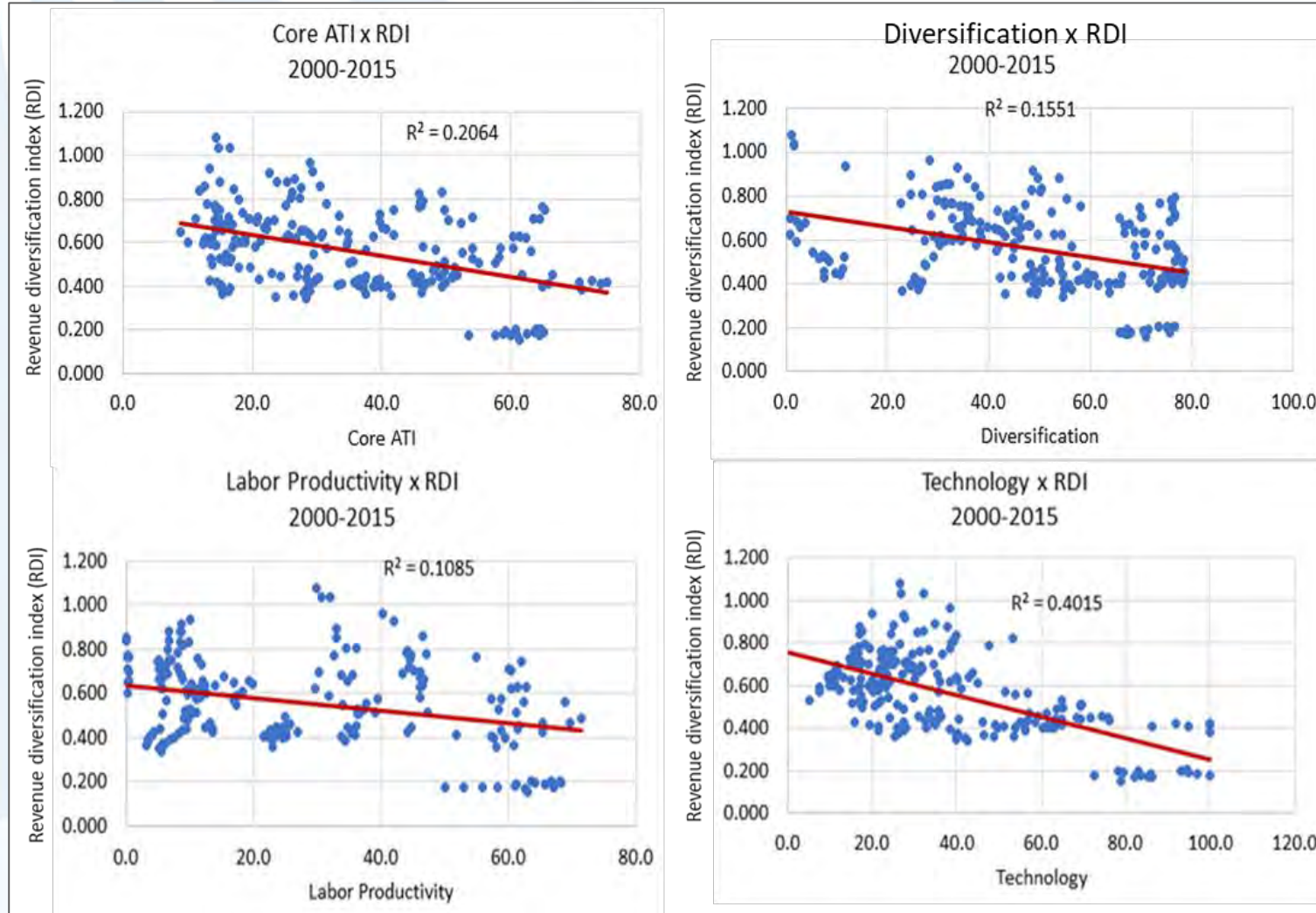
# Growth Resilience and Economic Transformation

- **The extent of loss in growth that occurs as a result of the shock (Growth Resilience).**
- Global Financial Crisis (2007-2008) used as a “natural” experiment for a non-country-specific negative exogenous shock.
- **High transformer countries suffered less growth loss from the shock of the Global Financial Crisis than low and middle transformers**



Data source: World Development Indicators





## Relationship between good economic transformation outcomes and fiscal resilience

- Countries with better economic transformation outcomes tend to exhibit good fiscal resilience (have lower revenue concentration).
- Such countries typically are less dependent on resource-based revenues.

Data sources: ATI; Ouedraogo, Tapsoba, Sow & Compaoré (2020)

# Policy Priorities for Building Economic Resilience

## General recommendations

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### 1. Prioritize economic transformation.

- Focus on initiatives to promote economic diversification, productivity increases, export competitiveness, technological upgrading, and human well-being (Growth with DEPTH).
- Invest in skills development, productive jobs creation, and capacity retention.
- Ensure conducive settings for institutional and economic governance.

### 2. Have a coherent industrial policy.

- Cast industrial policy in a modern perspective to promote structural transformation.
- Adopt systematic approaches and methods of policy design and coordination, including learning from other countries.
- Develop industrial policy organizations – such as banks, capacity building groups, training institutions, SME support units, and more – that are well managed and well financed.

### **3. Coordinate with the private sector.**

- Create strong systems to steer government policy implementation in partnership with business, to promote mutual accountability, and to address key market failures.
- Establish apex bodies to foster public-private dialogue and provision of public goods.
- Establish inter-industry bodies to address self-selection externalities and parallel investments.

### **4. Invest more in digital technology and innovation.**

- Develop and implement digital transformation strategies to improve inclusive development.
- Invest in digital skills development, digital entrepreneurship, and digitizing financial services.

### **5. Fix the political economy of development.**

- Commit to leadership that will identify common interests and build coalitions.
- Invest in building competent and less corrupt bureaucracies.
- Set goals for implementing strategies, monitoring processes, and evaluating outcomes.

## Recommendations based on ATI and growth resilience

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### High economic transformers

- Improve human economic well-being and productivity growth by promoting structural shifts to higher productivity sectors.
- Enhance proximity to external markets through regional integration and alignment of national policies to AfCFTA policies to lower trade and nontrade barriers and to enhance competitiveness.
- Promote product diversification within subsectors to improve export competitiveness.

### Middle economic transformers

- Improve economic diversification of production and exports.
- Invest in technology upgrading and skills development for structural change in labor productivity growth.
- Increase nonextractive exports to improve export competitiveness.

### Low economic transformers

- Diversify economies from their narrow production base and promote nonextractive and nontraditional exports to improve competitiveness and build growth resilience.
- Improve human economic well-being by expanding formal sector employment, increasing female labor market participation in paid employment, and increasing shared economic prosperity.
- Reduce the vulnerabilities intrinsic to the agriculture sector.



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**Thank you.**



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