

EXECUTIVE POLICY BRIEF AUGUST 2022



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.

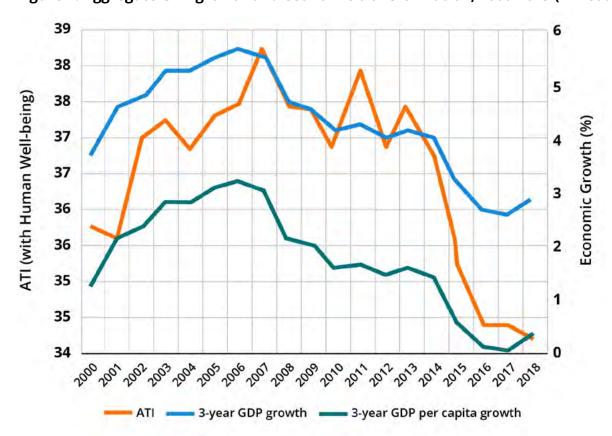


Figure 1. Aggregate GDP growth and economic transformation, 2000-2019 (ATI countries)

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.)

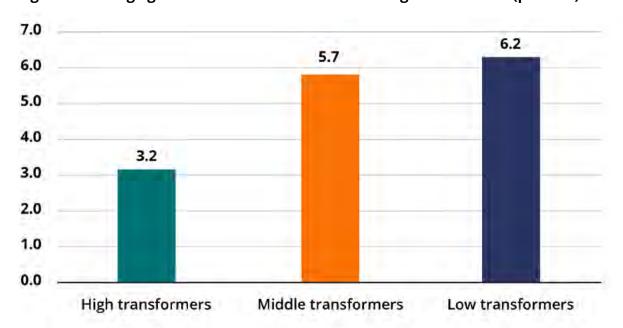


Figure 2. Average growth loss at "buckle time" among ATI countries (percent)

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.

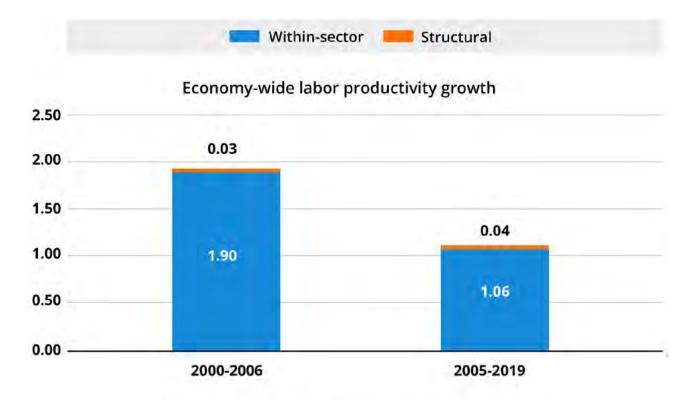
Economy-wide labor productivity in Africa increased from US\$4,347.75 per worker in 1991 to US\$5,654.76 per worker in 2019. Output per worker grew by an average of 1.47 percent annually compared to an average 2.41 percent in certain comparator countries (Brazil, Chile, Indonesia, Malaysia, Pakistan, 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).

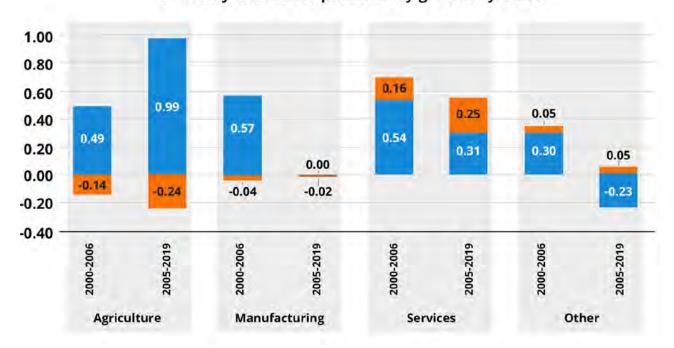
Indeed, the structural component has made very little contribution to Africa's economy-wide labor productivity. Modest growth came mainly from services and a few other sectors, primarily mining, utilities, and construction. Critical sectors such as agriculture and manufacturing have made negative or 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)

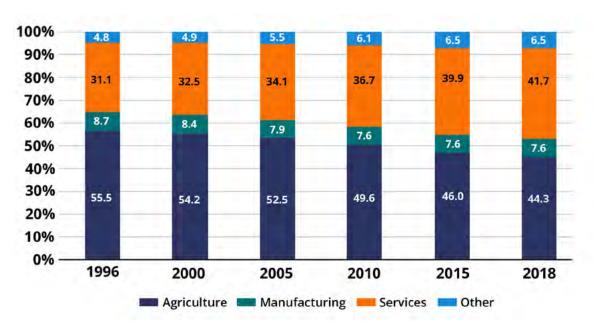


Economy-wide labor productivity growth by sector



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 laborabsorbing 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
economic transformers	Tunisia Eswatini South Africa Morocco Mauritius Lesotho Namibia	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. They can further improve their transformation outcomes by focusing on policies that: Improve human economic well-being and productivity growth by promoting structural shifts into 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 enhance competitiveness. Promote product diversification within subsectors to improve export competitiveness (choice of product and export mix).

CLUSTERS	COUNTRIES	RECOMMENDATIONS
MIDDLE economic transformers	Egypt Gabon Botswana Algeria Sudan	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. They can improve their transformation outcomes by focusing on policies that: Improve economic diversification of production and exports. Increase nonextractive exports to improve export competitiveness. Invest in technology upgrading and skills development to facilitate structural change in labor productivity growth. Diversify within subsectors to lower export instability. Reduce vulnerabilities intrinsic to the agriculture sector.
LOW economic transformers	Senegal Congo Republic Kenya Nigeria Côte d'Ivoire Central African Republic Zambia Uganda Cameroon Tanzania Ghana Madagascar Niger Malawi Rwanda Ethiopia Gambia Mozambique Benin Burundi Burkina Faso	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. They can improve their resilience outcomes by focusing on policies that: Improve labor market rigidities to help transition labor into higher productivity activities such as manufacturing and tradable services. 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. Invest in technology upgrading and skills development to increase the share of medium- and high-technology intensive manufactures in production and exports. Diversify within subsectors to lower export instability. Reduce vulnerabilities intrinsic to the agriculture sector.

^{*}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













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

Country case study: **GHANA**

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DRAFT REPORT

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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.

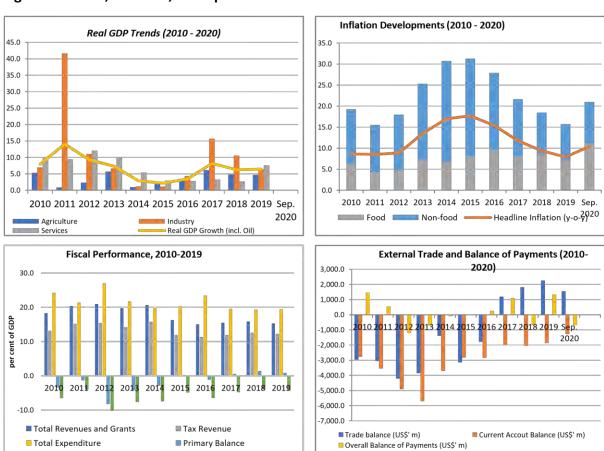


Figure 1.1. GDP, inflation, fiscal performance and trade

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.

56.5 60 9,000.0 Gross International Reserves (2010-2020) 4.5 8,000.0 4.0 50 43.9 7,000.0 3.5 31.9 Percent 6,000.0 3.0 30 24.2 23.4 5.000.0 2.5 6.5 20 4,000.0 2.0 10 3,000.0 1.5 2,000.0 1.0 2012/13 1,000.0 0.5 0.0 0.0 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 Sep. ■ Extreme Poverty Poverty Incidence Gross International Reserves Exchange Rate Developments (Depreciations,) **Interest Rate Trends** 15.0 35 10.0 30 5.0 25 0.0 20 g 2010 2011 2012 2013 2014 2015 2018 2019 2016 2017 -5.0 **a** 15 9_{10.0} **ĕ** -15.0 10 5 -20.0 0 2011 2012 2013 2014 2015 2016 2017 2018 2019 Sep. -25.0 GH¢/US\$ Monetary Policy rate Interbank rate -30.0 GH¢/Pound Sterling 91-Day treasury bill rate — Average lending rate -35.0 ■ GH¢/Euro

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
2000	64.84	68.87	66.81
2006	65.59	69.22	67.3
2010	65.4	68.92	67.07
2013	71.97	77.4	74.48
2015	61.2	68.84	64.54
2017	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)

Proportion of labor force (%)							
Category	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
Total unemployment	2.3	2.7	3.1	5.2	5.1	10.4	5.8
Male unemployment	2.2	3.4	3.2	4.8	4.5	10.1	5.4
Female unemployment	2.4	2.2	3.0	5.5	5.7	10.7	6.3
Urban unemployment	6.7	5.8	6.1	6.5	7.8	12.8	8.0
Rural unemployment	0.5	1.2	1.3	3.9	3.5	8.6	3.5
Youth unemployment (15-24)	5.2	5.0	6.6	10.9	7.1	16.7	12.9
Adult unemployment (25+)	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			Con	tribution	to GDP	GDP growth rate			
	Services	Industry	Agriculture	Services	Industry	Agriculture	Services	Industry	Agriculture
2000- 2004	30.88	14.05	55.08	28.99	25.16	36.03			
2005- 2009	32.72	14.03	53.25	46.93	19.30	29.16	7.08	8.55	4.30
2010- 2014	39.34	14.43	46.22	43.92	27.40	22.76	10.26	13.15	3.06
2015- 2020	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
Wholesale and retail trade	19.5	21.3
Transportation and storage	3.8	3.6
Accommodation and food service activities	3.9	3.2
Information and communication	0.4	0.3
Financial and insurance activities	0.7	1.1
Real estate activities	0.1	0.2
Professional, scientific and technical activities	1.0	0.6
Administrative and support service activities	1.0	0.6
Public administration and defense	0.8	1.8
Education	3.6	5.1
Human health and social work activities	1.0	1.5
Arts, entertainment and recreation	0.4	0.7
Other service activities	3.8	3.2
Activities of households as employers	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.

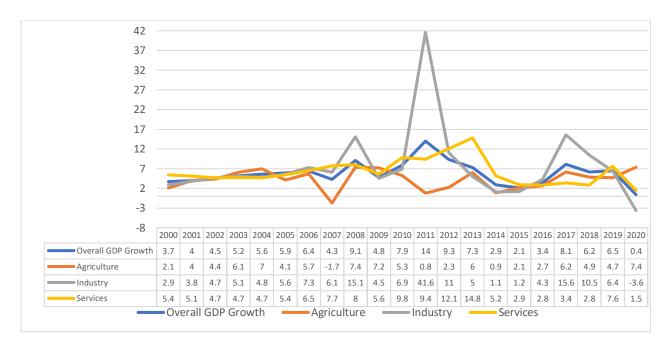
Table 2.1. Annual growth rate of industrial sector and sub-sectors, 2010-2020 (%)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020Q1
Industry	7	41.6	11.0	6.6	1.1	1.1	4.3	15.7	10.6	6 .4	-3.1
Manufacturing	1.0	17.0	2.0	-0.5	-2.6	3.7	7.9	9.5	4.1	6.3	-1.8
Electricity	-	-0.8	11.1	16.3	1.3	17.7	-5.8	19.4	5.5	6	14.9
Water and Sewage	-	2.9	2.2	-1.6	5.9	13.9	-11.8	6.1	-3.6	-4.4	8.7
Construction	7.9	17.2	11.2	8.6	-0.4	9.5	8.4	5.1	1.1	-4.4	0.1
Mining and Quarrying	10.5	106.5	16.4	11.6	5.4	-8.3	-0.2	30.8	23.3	12.6	-7
o.w. Oil	-	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 agrobased 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.

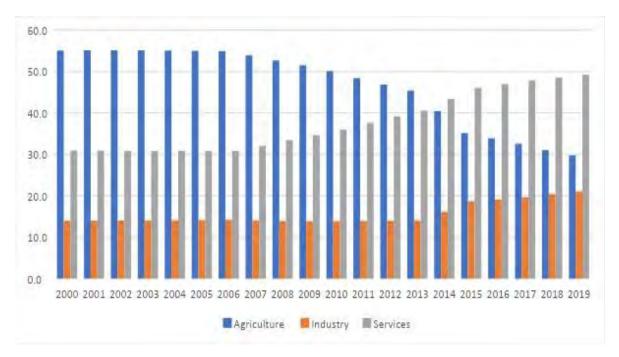
2.3. Economic transformation and the African Transformation Index (ATI)

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 (%)



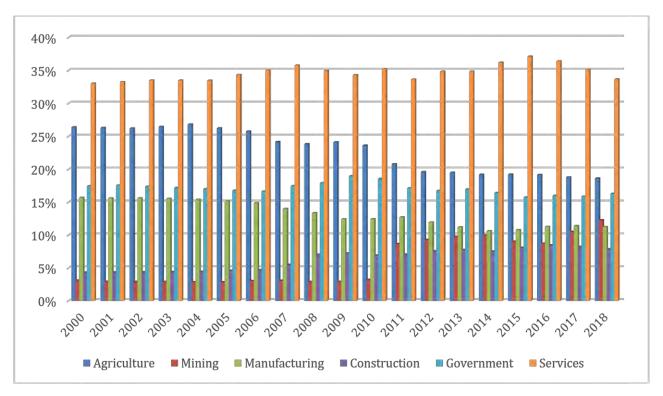
Source: World Bank World Development Indicators

Government 9% Business 8% Finance 7% Trade 6% Manufacturing 6% Transport 5% Construction 4% Utilities 3% Realestate 1% Mining 1% Agriculture 1% 0% 1% 2% 3% 4% 5% 6% 7% 8% 9% 10%

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

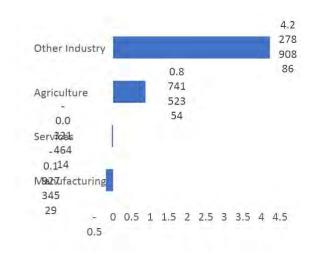


Source: GGDC Economic Transformation Database

Figure 2.5. Labor productivity, 2000-2018

100 90 80 70 60 50 40 30 20 10 0 2000200220042006200820102012201420162018 - Agriculture Manufacturing other_industry services

Figure 2.6. Labor productivity growth, 2000-2018



Source: GGDC Economic Transformation Database Note: Other industry is mining and construction

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

	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 communications	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
Professional, administrative and support service activities	6.8	1.4	-4.2	2.9	0.3	5.1	-5.9
Public administration and defense; social security	-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

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 16th out of 21 countries implying it is one of the countries with the poorest record of economic transformation. In terms of the other indicators, Ghana ranks 17th in terms of diversification, 7th in terms of export competitiveness, 12th in terms of productivity, 20th in terms of technological upgrading, and 8th 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

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 $^{^1\} http://africantransformation.org/wp-content/uploads/2014/02/country-transformation-profiles.pdf$

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' sxport 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).

5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
2007/082008/082008/092009/102010/112011/122012/132013/142014/152015/162017/18
Ghana Kenya Nigeria South Africa

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

Source: World Economic Forum

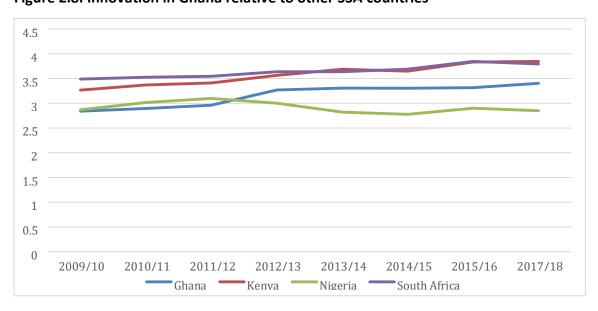


Figure 2.8. Innovation in Ghana relative to other SSA countries

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
2000-2004	1,120,692.17	11,576,137.66	1,100,541.62	12,851.19
2005-2009	1,992,008.24	33,964,491.80	1,882,103.86	38,002.79
2010-2014	3,936,816.72	71,688,554.80	2,950,140.00	114,227.12
2015-2019	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 Nigeria Africa (excluding high income)		South Africa	Kenya
2000-2004	1,052.01	1,237.42	1,236.37	1,706.39	4,727.16	1,002.55
2005-2009	1,211.95	1,423.95	1,422.87	2,101.84	5,417.64	1,091.24
2010-2014	1,582.40	1,589.44	1,588.29	2,530.78	5,681.05	1,229.80
2015-2019	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 countries². 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 donated³, and 1,178,400 doses of the Johnson & Johnson single-shot vaccine in August, September, and October 2021.

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

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

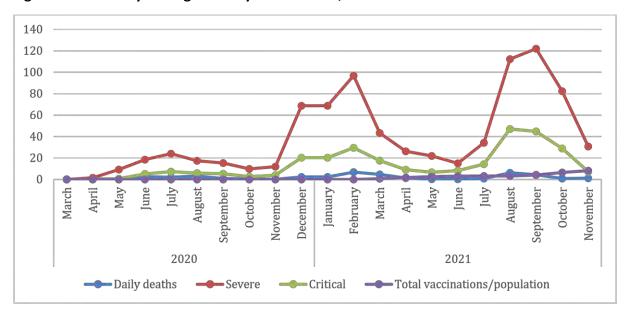


Figure 3.1. Monthly average of daily severe cases, critical cases and deaths

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

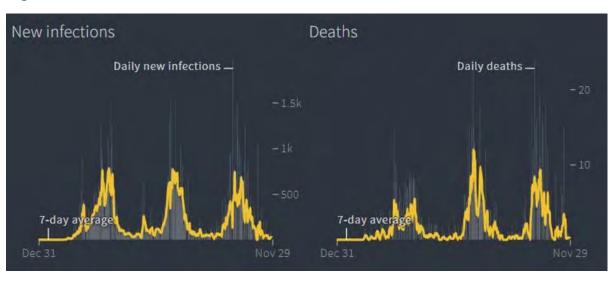


Figure 3.2. New infections and deaths

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

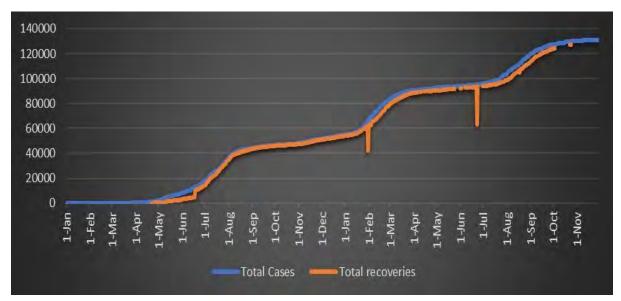


Figure 3.3. Total COVID-19 cases and total recoveries

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

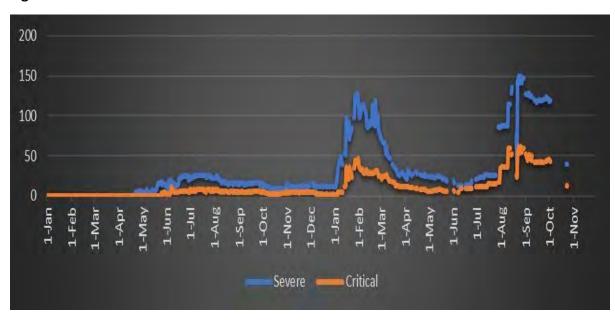


Figure 3.4. Severe and critical COVID-19 cases

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)
2020	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
2021	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, 2020⁴.

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

⁴ 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).

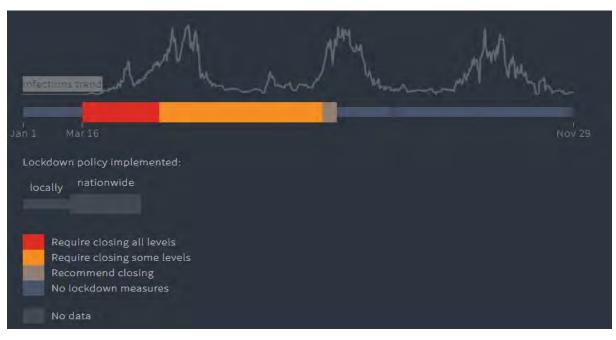


Figure 3.5. School closure and daily COVID infections

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



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/

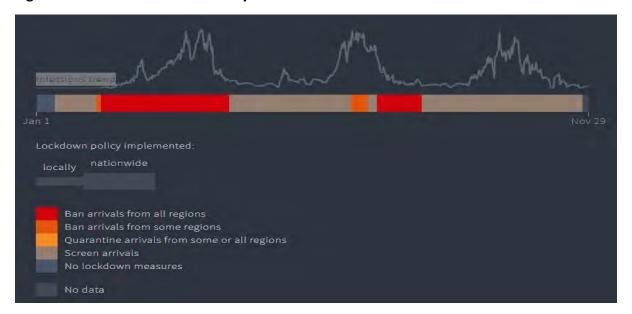


Figure 3.8. Border closure and daily COVID-19 infections

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).

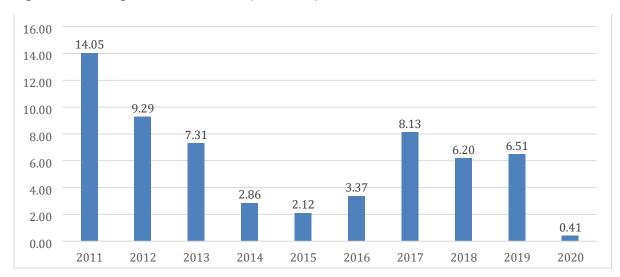


Figure 3.9. GDP growth, 2011-2020 (annual %)

Source: World Bank, World Development Indicators

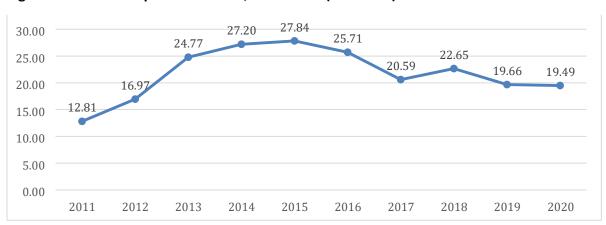


Figure 3.10. Gross capital formation, 2011-2020 (% of GDP)

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).

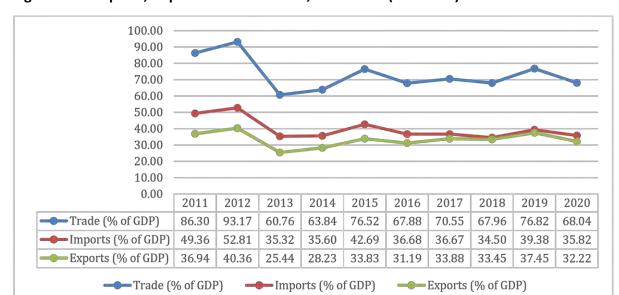


Figure 3.11. Exports, imports and total trade, 2011-2020 (% of GDP)

Source: World Bank, World Development Indicators

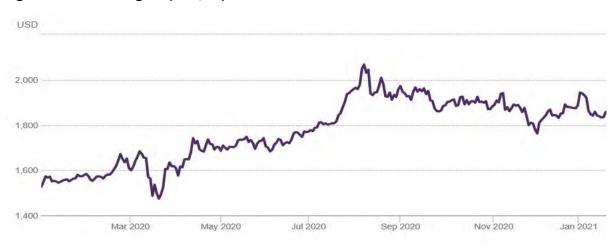


Figure 3.12 Price of gold (US\$/oz)

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.

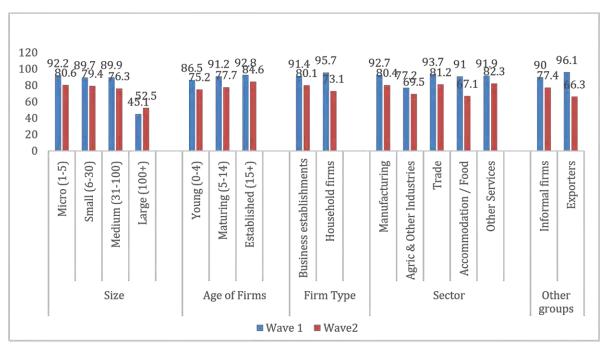


Figure 3.13. Decrease in sales in 2020 (%)

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 GHc18.9 billion (4.7 percent of GDP), the government revised the fiscal deficit (on cash basis) to GHc44.9 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)⁵, about 120,000 firms received financial support from the CAPBuSS Programme⁶, 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.

⁵ Formerly the National Board For Small-Scale Industries (NBSSI)

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

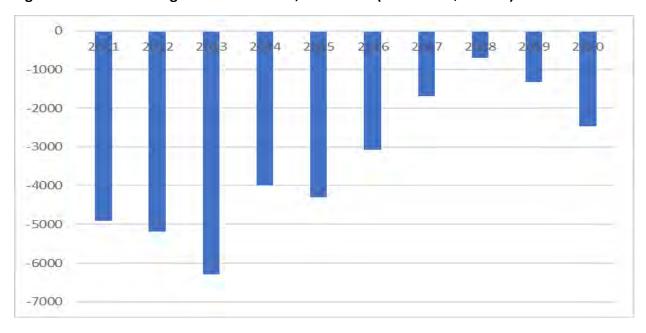
	2015	2016	2017	2018	2019
Gold	43.5	55	45.9	48.6	49.8
Cocoa	14.4	14.1	10.5	8.63	7.39
Crude petroleum	13.5	8.4	21.5	24.5	24
Total	71.4	77.5	77.9	81.73	81.19

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 Vanguard⁷ 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 excavators⁸ which could not be accounted for and the burning of excavators, which has led to litigation and some judgement debts⁹.

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.

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

⁸ "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]

⁹ "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-theunlawful-seizure-of-excavators/ [Accessed November 20, 2021]

4.1.3. Population dynamics

The growth rate of Ghana's population¹⁰ 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 areas¹¹. With a median age of about 22 years,¹² 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).

¹⁰ World Population Statistics. [Accessed November 22, 2021]

¹¹ World Population Statistics. [Accessed November 22, 2021]

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

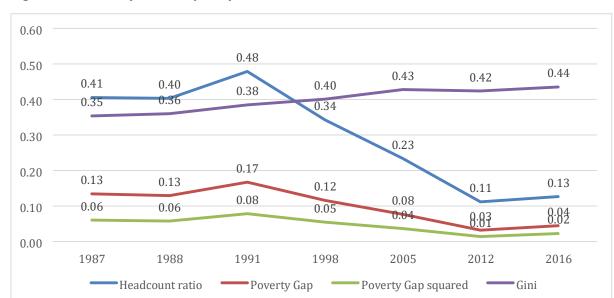


Figure 4.2. Poverty and inequality, 1987-2016

Source: POVCALNET Database

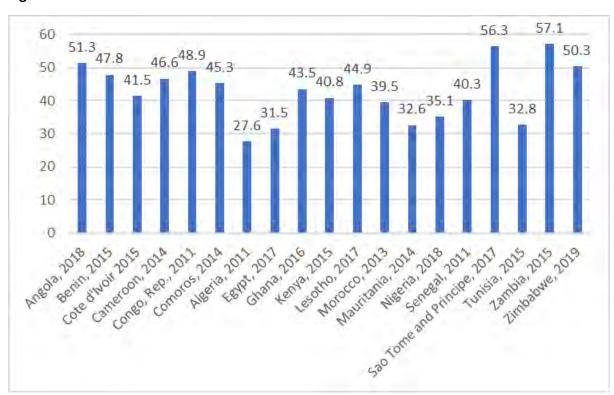


Figure 4.3. Gini Index for lower middle-income African countries

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, respectively¹³. 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.

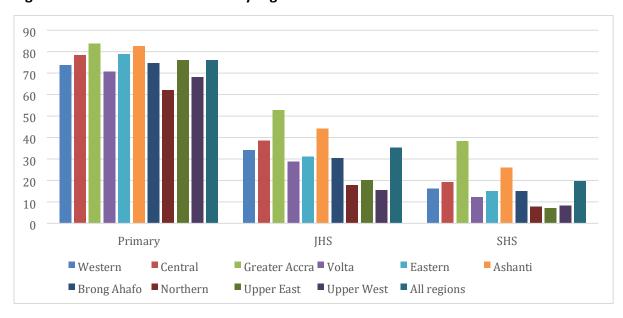


Figure 4.4 Net school attendance by region

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

¹³ Inequalities Country Report-Ghana <u>– http://africainequalities.org/wp-content/uploads/2014/05/Ghana.pdf</u> [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.

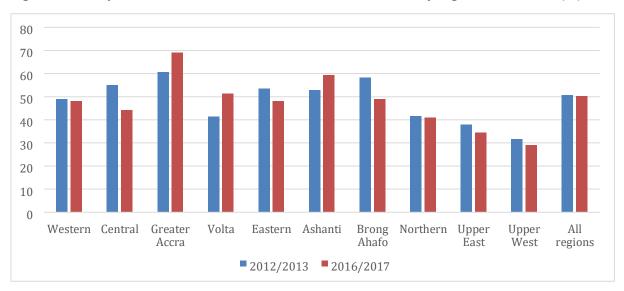


Figure 4.5. Proportion of individuals who consulted a doctor, by region, 2012-2017 (%)

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 ecommerce 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).

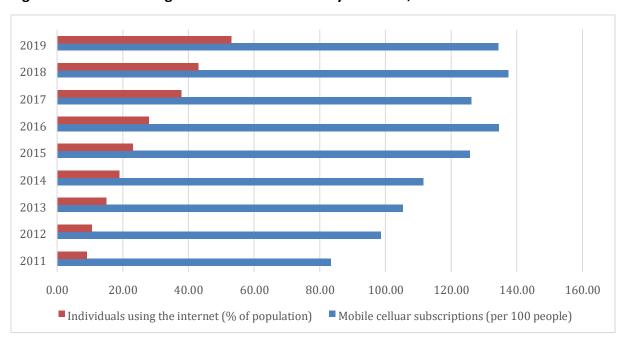


Figure 4.6. Internet usage and mobile connectivity in Ghana, 2011-2019

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
Value comparison				
Total value of mobile money transactions	GН¢	32.8	67.7	89.1
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 report¹⁴ 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.

¹⁴ 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. [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 borders¹⁵. 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 report¹⁶. 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 concerns¹⁷.

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.

¹⁵ "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-andelectronic-evidence-opens-in-accra/ [Accessed November 22, 2021]

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

¹⁷ 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 [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 Constitution¹⁸ 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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¹⁸ 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 Prosperity¹⁹ (Republic of Ghana, 1969). It was revised in 1994 due implementation challenges²⁰. Even with this new policy, Ghana has fallen short regarding many of the targets²¹. A major barrier to the effectiveness of the population policy is the influence of Ghana's pronatalist 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.

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

²⁰ 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.

²¹ 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)²² 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 an 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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²² 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)
Paved	1,928	6,004	9,218
Unpaved	40,117	9,458	5,655
Total	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 Research²³ 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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²³ 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 agroprocessing 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 agroprocessing 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
Professional, Administrative and Support	6.8	1.4	-4.2	2.9	0.3	5.1	-5.9
Service activities							
Public Administration and Defense; Social	-3.5	-2.6	8.9	4.2	4.3	3.7	7.3
Security							
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**

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DRAFT REPORT

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Acronyms

4IR 4th 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

IMFInternational Monetary FundITCInternational Trade CommissionKeNIAKenya 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)¹. 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'² rather than promising a demographic dividend³. 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 DEPTH⁴ 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.

¹ 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).

² 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 Shaabab terrorist group has found a fertile recruitment ground among Kenyan youths (Jamah, 2018).

³ 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).

⁴ 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.

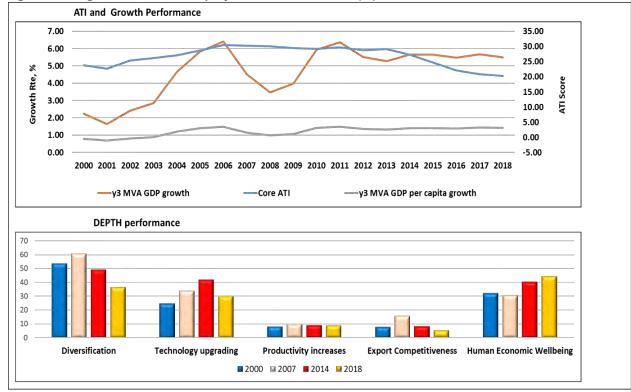


Figure 1. ATI growth and DEPTH performance, 2000-2018 (%)

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.

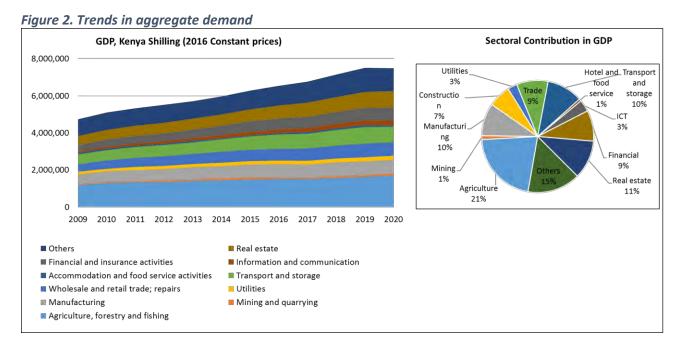
2. Kenya's economy: structure and recent trends in key economic indicators

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.



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.

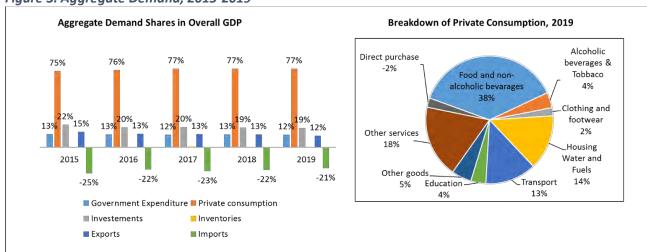


Figure 3. Aggregate Demand, 2015-2019

Source: KNBS (2021)

Box 1: Informal Sector⁵

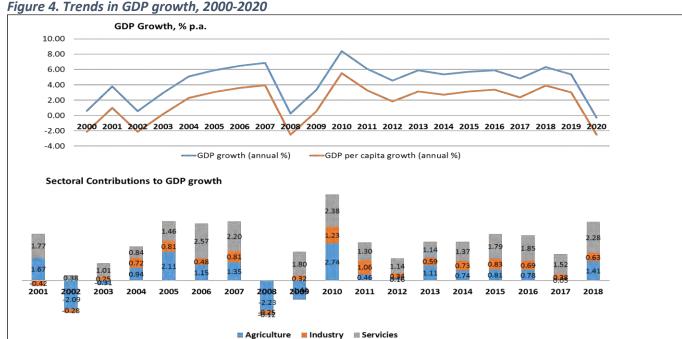
The Kenya Integrated Household Budget Survey (KIHBS) (2015/2016) estimated that Kenya had 11.8 million workers employed in the informal economy. This number increased to 15 million by 2019 or 93 percent of total employment (KNBS, 2020). A survey (FKE, 2021) of 7,409,939 enterprises found that (74 percent)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

⁵The '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).



■ Agriculture ■ Industry ■ Servicies

Source: Authors' analysis based on data from World Development Indicators (WDI), International Labour

Some observations regarding GDP growth trends include:

Organization (ILO), and Groningen Growth and Development Center (GGDC)

- 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.

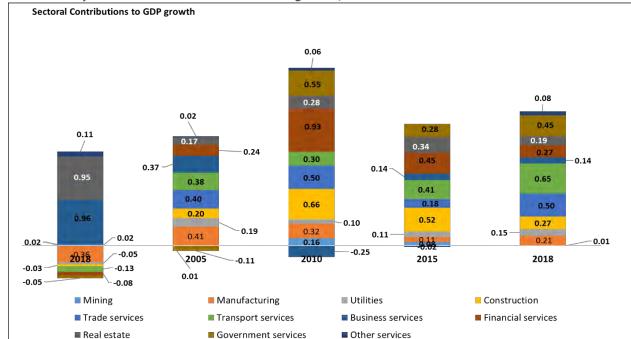


Figure 5. Industry and services contribution to GDP growth, 2000-2018

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.

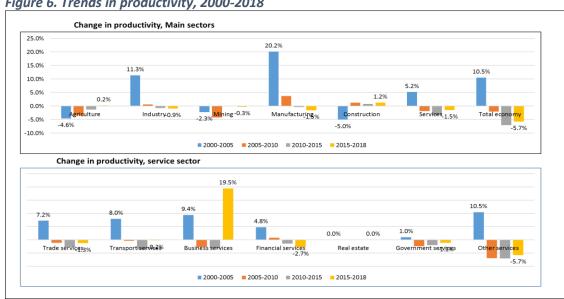
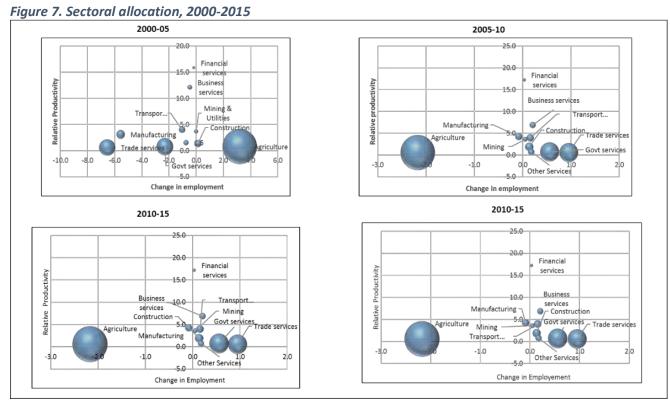


Figure 6. Trends in productivity, 2000-2018

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).



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)⁶.

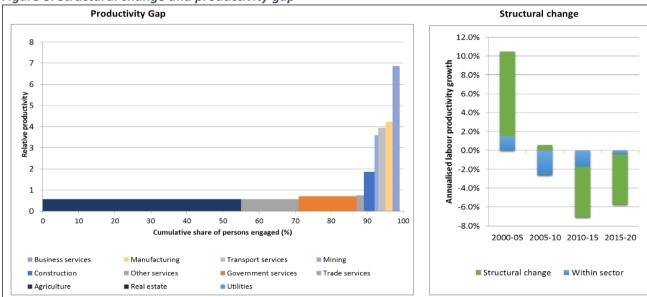


Figure 8. Structural change and productivity gap

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.

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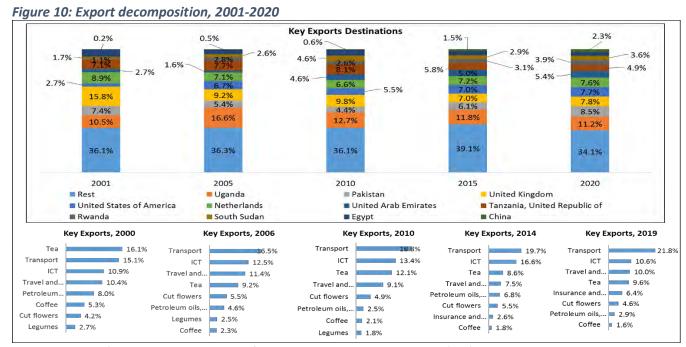
 $^{^{6}\ \} http://africantransformation.org/category/the-inde$

15000 10000 5000 0 Agriculture ■ Minerals Textiles Services

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:



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.

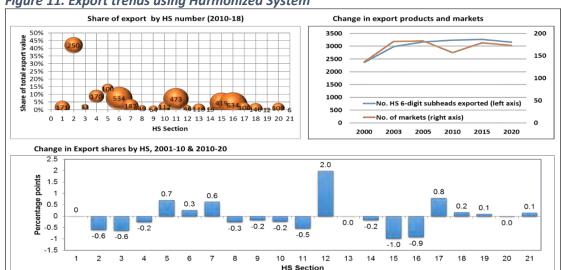


Figure 11. Export trends using Harmonized System

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)⁷ 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
- The range of products that Kenya exports has largely stagnated after an initial increase. In addition, the number of markets has remained unchanged.

⁷ 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).

Kenva's products with potential Black tea, packings >3kg Legend Export potential Realized potential Live plants, flowers, foliage Food products n.e.s. (processed or preserved) 61% Fruits Apparel Ferrous metals Cut flowers & buds, fresh Coffee, not roasted, not Chemicals Mineral products Beauty products & perfumes 62% Pulses Pharmaceutical components Nuts Vegetable oils & fats Footwear Vegetables . Paper products Meat (except poultry) ITC Export Potential Map exportpotential.intracen.org

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.

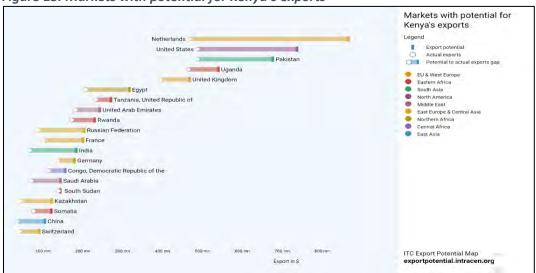


Figure 13. Markets with potential for Kenya's exports

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.

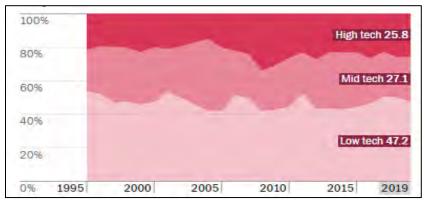


Figure 14. Technology level in manufactured exports, 1995-2019

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 UNIDO⁸, 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 Kenya⁹ and whose share is 92 percent¹⁰ (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.

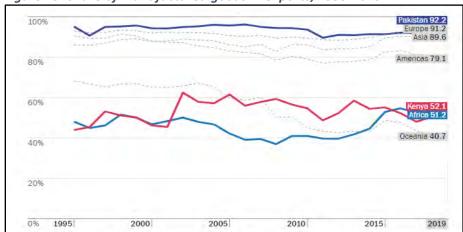


Figure 15. Share of manufactured goods in exports, 1995-2019

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)¹¹ 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

^{8 (&}lt;a href="https://iap.unido.org/data/explore?p=THA&s=CHN">https://iap.unido.org/data/explore?p=THA&s=CHN

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

¹⁰ Ironically Pakistan is a m 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.

¹¹ 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.

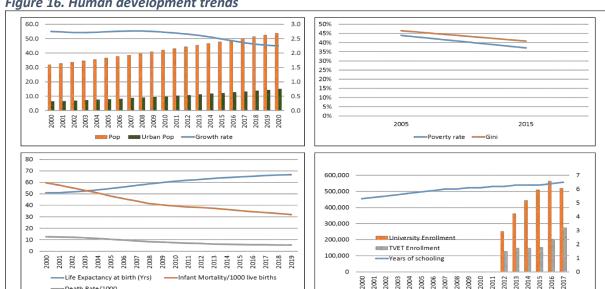


Figure 16. Human development trends

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

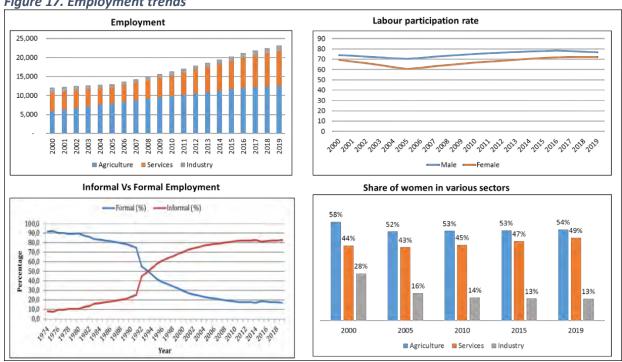
2.2. Employment trends

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:

- o Women's share of employment has risen from 44 percent in 2000 to 49 percent in 2019.
- o 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.

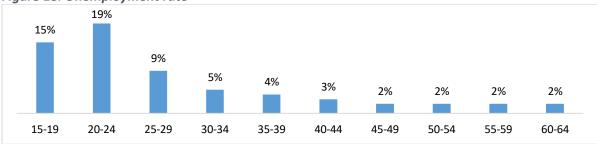




Source: Authors' analysis based on data from ILO STAT (https://ilostat.ilo.org/data/) and FKE report (2021)

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 ¹². 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

 $^{^{12}}$ 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 credit¹³ 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 2020¹⁴. 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 percent¹⁵ of GDP. The decline has been attributed to the government capping interest rates, which in turn saw banks reduce lending¹⁶. Additionally, the capping of interest rates is associated

¹³ 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).

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

¹⁵ Domestic credit to private sector (percent of GDP) | Data (worldbank.org)

¹⁶ 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).

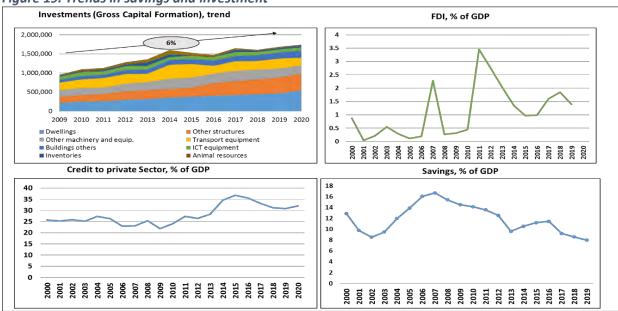


Figure 19. Trends in savings and investment

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.

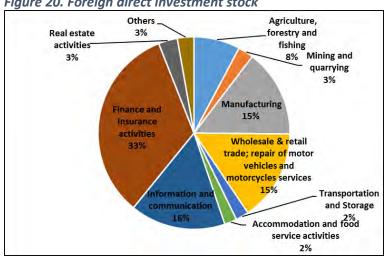


Figure 20. Foreign direct investment stock

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.

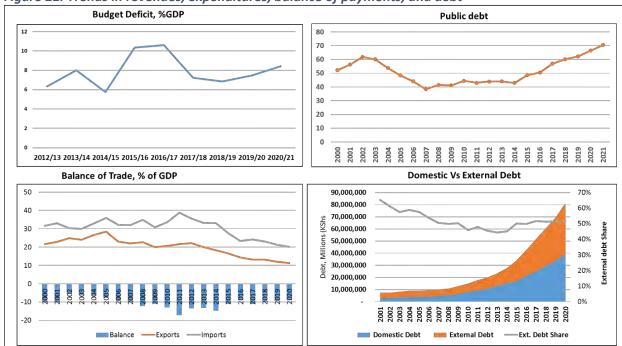


Figure 21. Trends in revenues, expenditures, balance of payments, and debt

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,¹⁷ 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.

¹⁷ 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 2019.¹⁸ 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.¹⁹
- 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).

¹⁸The country has set an ambitious plan to achieve universal access by 2022.

¹⁹ 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.

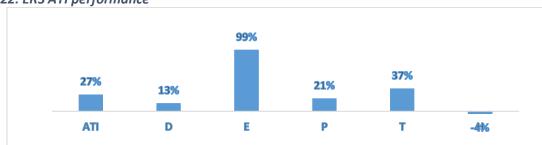
3.1. Economic Recovery Strategy for Wealth and Employment Creation (ERS) (2003-2007)

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 governance²⁰. 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

²⁰ 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).





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 people²¹. 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).

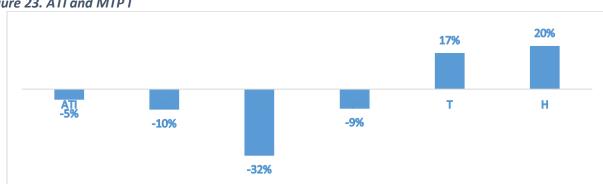


Figure 23. ATI and MTP I

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.

²¹ 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 postelection 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).

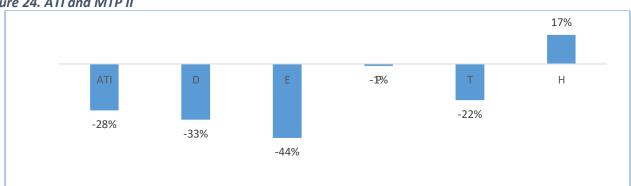


Figure 24. ATI and MTP II

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, multipurpose 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 construction²².
- 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

²² 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.
 - O 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.

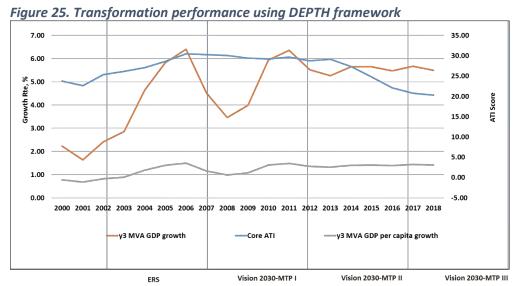
3.4. Digitalization strategy

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.



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 fairy 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.

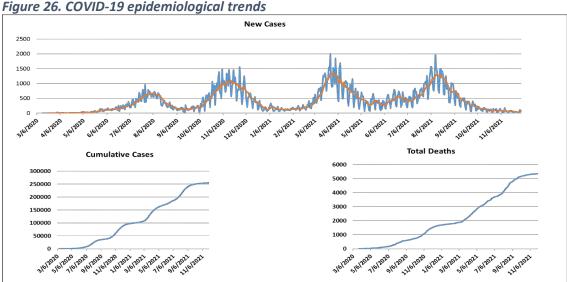
AfDB (2019) finds that structural transformation has lagged in Kenya while the World Bank (2016) argues that although the economy has become much more dynamic and innovative in the past decade, more work is needed to make such economic trends transformational. It is clear from the analysis that the current 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.



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	
Travel restriction	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	06/04/2020	07/07/2020	Cessation of movement in and out of the Nairobi	
movement			Metropolitan Area, Mombasa, and Kwale counties	
Dusk 9 pm to 4 am	06/06/2020	20/20/2021	Entire country	
curfew				
Cessation of	26/03/2021	6/06/2020	Nairobi, Kajiado, Machakos, Kiambu, and Nakuru. Curfew	
movement			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 million²³ 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 transport²⁴.

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).

²³ https://graphics.reuters.com/world-coronavirus-tracker-and-maps/countries-and-territories/kenya/

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 prepandemic 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.
 - o Transport companies reduced fleet operations due to uncertainty surrounding movement restrictions.²⁵. 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 day²⁶.
 - O 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^{27.} As a result, around 10,000 casual workers were laid off and about 50 percent of permanent workers were given compulsory annual leave²⁸.

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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²⁵The 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

https://www.theeastafrican.co.ke/news/ea/Kenya-truck-drivers-protest-Uganda-border-rules/4552908-5536468-idivikz/index.html

https://www.standardmedia.co.ke/article/2001369109/COVID-19-kenya-sends-300-bouquets-of-flowers-to-uk-in-solidarity

²⁸ 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 individuals²⁹. 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 online³⁰.

Initiatives were also launched to distribute cash, as the key challenge is loss of income rather than lack of food. For example, the <u>Shikilia</u> initiative aimed to give US\$30 per month to families in Kibera and Mathare slums for three months³¹. 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 delivery³².

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.

²⁹ https://www.nation.co.ke/kenya/business/COVID-19-safaricom-pledges-sh200m-286144

³⁰ https://www.capitalfm.co.ke/business/2020/04/centum-subsidiary-develops-zero-contact-COVID-19-food-distribution-app/

³¹ https://www.givedirectly.org/COVID-19/kenya/

³² 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 ecommerce.
- 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.³³ Examples of COVID-19 innovations and impacts include:

- **Unleashing new industries:** In Kenya, a locally made ventilator, PUMUAISHI 2.0³⁴ 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 kiosks³⁵.
- 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

³³ 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 recover³³. As of May 2020, Zoom was valued at more than the combined value of the seven biggest airlines (Ghosh, 2020)

³⁴ https://kam.co.ke/kam-automotive-sector-to-supply-ventilators-to-combat-COVID-19/

³⁵ https://www.capitalfm.co.ke/business/2020/04/centum-subsidiary-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 freely³⁶.

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-19³⁷. In Ghana, drones are used to deliver test samples from remote areas to the testing centers in the city³⁸.
- 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.

³⁶ Can be tested if found to have signs COVID -19, on screening at check points using the screening too https://eac.int/press-releases/147-health/1736-eac-partner-states-adopt-the-eac-regional-electronic-cargo-and-drivers-tracking-system

³⁷ https://www.voanews.com/COVID-19-pandemic/drones-spread-word-about-COVID-19-rural-south-africa

³⁸ 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 lowincome 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.

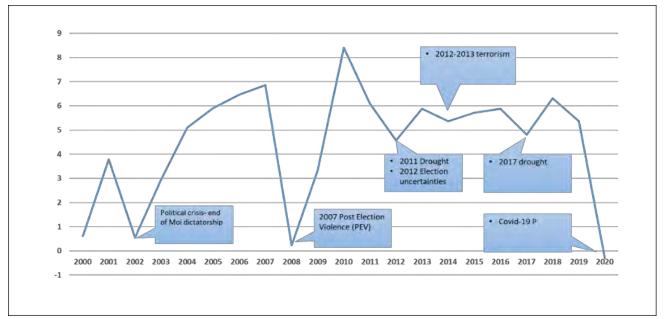


Figure 27. Kenya's recent domestic growth shocks

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 2008³⁹.

³⁹ 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" deal⁴⁰. 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.

⁴⁰ 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

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 FDI⁴¹ 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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⁴¹ 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 expenditure⁴². 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.

⁴² 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)⁴³ 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 reuse waste⁴⁴. 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 ecosystems⁴⁵; 3) complement other strategies targeting climate change⁴⁶; 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 NGOs⁴⁷, 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).

⁴³ 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).

⁴⁴ 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.

 $^{^{45}}$ It will do this through capacity building in CSA practices, research and innovation.

⁴⁶ Such as the National Climate Change Action Plan (2013-2017) and the Agriculture Sector Development Strategy (2010-2020)

⁴⁷ 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 hazard⁴⁸. 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 resources⁴⁹, 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).

⁴⁸ 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).

⁴⁹ 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 require 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.nDevelopment 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).

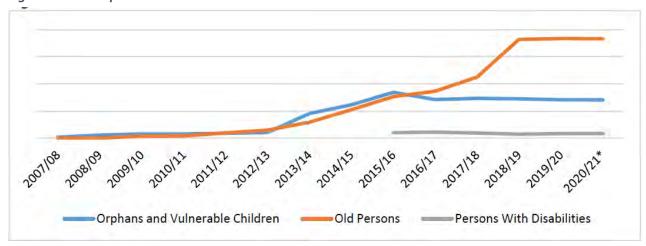


Figure 28. Social protection disbursements

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

(World Bank, 2016).

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 innovations⁵⁰. All the same, modern services account for only a marginal share of employment⁵¹

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.

⁵⁰ 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.

⁵¹ 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 (Word 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).
- O 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 imposed⁵².

⁵² 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)⁵³. 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 adaption. 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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⁵³ 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. <u>Diaspora Bonds in an African Context</u> | 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)⁵⁴. 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 Farmworks⁵⁵. 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 yields⁵⁶). 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.⁵⁷ 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.

⁵⁴ 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.

⁵⁵ FarmWorks – Feeding Africa, Building Communities

⁵⁶ 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

⁵⁷Already 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. Rasberry 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

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)⁵⁸ 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.

⁵⁸ 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 gofundme⁵⁹ 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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⁵⁹ 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 though 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 polices 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 underutilized 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

	4IR technology							
Transforma tion Strategy	AI/Machine Learning	Internet of Things (IoT)	Big Data/Data Science	3D Printing	Blockchain Technologi es	Net Impact on competitiveness		
Agricultural transformat ion	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 internation al 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/servi ce 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/contra ct manufactu ring; Communit y workshops	Numerous trust- based application s (land registries, contractin g) Crypto- currency based transactio ns	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 manufactu red 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 manufactur ing	Advanced robots will kill cheap labor advantage		Will enable fine-grained market segmentation and kill mass markets	Will kill the factory manufactu ring model		Very low This will not be a viable strategy in the 4IR world
Infrastructu re	Smart metering and smart grid technologies	Alternative infrastructu re, e.g. drones	Smart cities and other tools to help optimize infrastructure	On-site manufactu re 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 industrialisatio n		The most dynamic of 4IR technology for Africa; Potential to create many jobs	Presents a great opportunit y 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

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DRAFT REPORT

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This report was prepared by a team of country researchers under contract with ACET.

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

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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 21st 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.

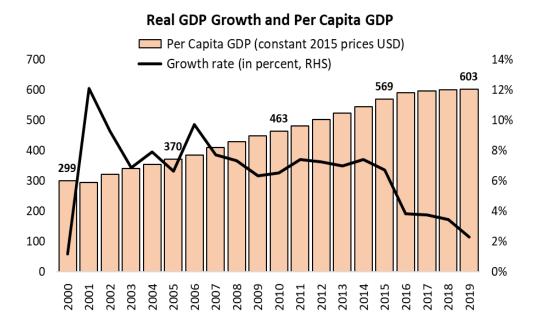


Figure 1. Growth of gross domestic product (GDP)

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 2016¹, 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 megaprojects² (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.

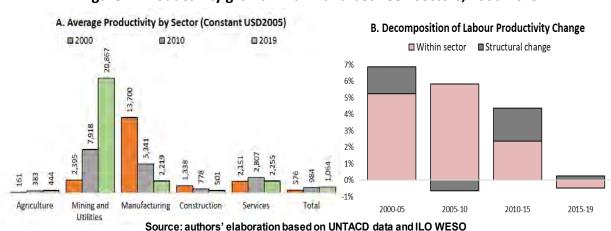


Figure 2: Productivity growth within and between sectors, 2000-2019

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).

¹ In 2016, all donors withdrew budget support to Mozambique after the discovery of undisclosed debts, leading to macroeconomic difficulties.

² Mainly Mozal, Vale (CVRD), Sasol, Kenmare, Rio Tinto, Beacon Hill.

A. Labour Productivity Change by Sector (2000-2019) **Employment by Economic Sector** ■ Within sector ■ Structural change ■ Mining and Utilities ■ Manufacturing ■ Agriculture ■ Construction ■ Services 4% 100% 15% 17% Mous 2% 18% 20% 21% 60% Trade & hotels Other Mining & utilities Construction Transport & Comumunication 5-2% 40% 2-4% 20% E-6% 2000 2010 2015 2019 -8%

Figure 3: Employment is shifting from agriculture to services

Source: authors' elaboration based on UNTACD data and ILO WESO

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.

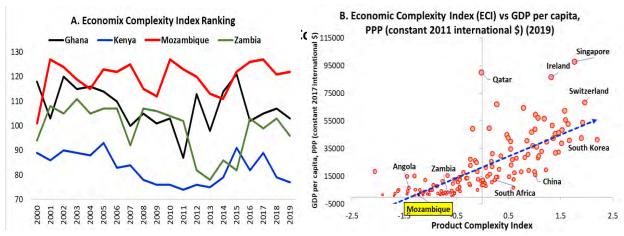
B.Sectoral Contribution to GDP A.Sectoral Contribution to GDP Growth ☐ Agriculture ■ Mining ■ Manufacturing ■ Agriculture ■ Mining ■ Manufacturing ■ Construction ■ Service **■** Others Construction ■ Service Others 100% 17% 18% 18% 19% 22% 80% 43% 60% 50% 52% 64% 102% 43% 45% 40% 46% 48% 45% 20% 25% 26% 0% 12% 10% 8% 8% 9% -53% -20% 23% 23% 21% 19% 19% -40% 2001 2005 2010 2015 2020 2000 2005 2010 2015 2020

Figure 4: Services contribution to growth, 2000-2020

Source: authors' elaboration based on Mozambique's National Institute of Statistics data

Due to low product diversity and sophistication, Mozambique's relative economic complexity index ranking falling from 101st in 2000 to 122nd 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 level³. 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 subcomponents of the transformation index including diversification, export competitiveness, productivity, technology, and human well-being. Relative to other African countries, Mozambique's ranking moved from 14th (out of 33 countries) in 2000 to 27th in 2018 on the index⁴.

³ Products with null complexity index. Mozambique's current complexity index is -1.25.

⁴ https://acetforafrica.org/programs/refining-the-african-transformation-index/

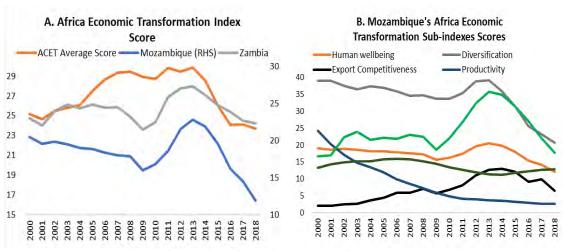


Figure 6: Mozambique's economic transformation deteriorated in all dimensions

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 2018⁵ (Figure A3 in Annex 1). This suggests that Mozambique's export growth and diversification have been sustained by expanding trading partners rather than products.

⁵ 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).

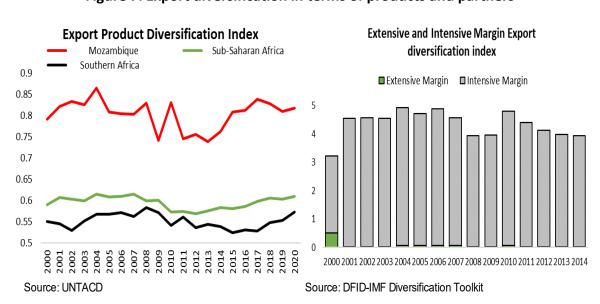
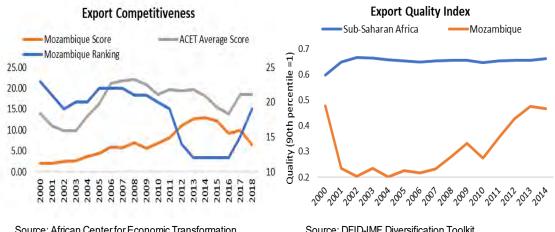


Figure 7: Export diversification in terms of products and partners

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



Source: African Center for Economic Transformation

Source: DFID-IMF Diversification Toolkit

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)⁶ 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 while the demand-side pull factors a contributed negatively (Figure 35-B in Annex 1).

⁶PCI ranks the diversity and sophistication of the know-how required to produce a product. The lower the index, the lower the product sophistication.

⁸ 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.

B. Products Export share and Product Complexity Index A. Exports by Technology Intensivity (2019)■2000 ■2020 ■ Share on Total Exports Product Complexity Index (RHS) 25% 0 -0.5 20% -1 15% -1.5 10% -2 5% -2.5 0% 11% 10% Medium High Unclassified Low Technology technology technology

Figure 9: Exports remain unsophisticated

60%

Primary

products

30%

Resource-

based

509

Source: authors' elaboration based on UNTACD data base Source: authors' elaboration based on Harvard Growth Lab data base

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 made a negative contribution to export performance (Harvard Growth Lab, 2021), implying that Mozambique specialized in lowgrowth 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

⁹ 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).

A. Exports complexity and relatedness **B. Exports Diversification Opportunities** - Photographic goods Crude Petroleum Manganese ore Most Related Products - Electrical Machinery Tin ores Product Complexity Index Uranium and thorium ore Insect resing Aluminium ore - Fruits and Nuts Tropical fruits Precious Metals Non-fillet-frozen-fish Ores & Slags -0 0 Mineral fuels & Oils perfume-plants -0.01 0.01 0.03 0.05 0.07 0.09 0.11 0.13 0.050 0.100 0.150 0.200 0.250 0.300 Trade Relatedness Trade Relatedness

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.

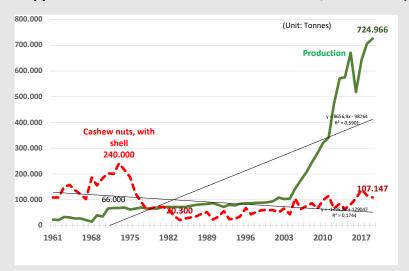
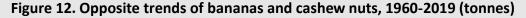
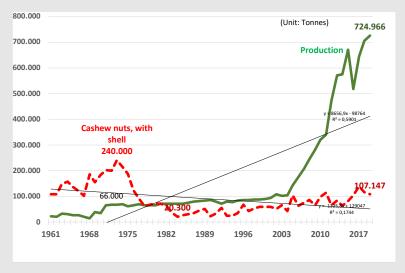


Figure 11. Opposite trends of bananas and cashew nuts, 1960-2019 (tonnes)





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 20th century. Until the mid-20th 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 coauthored 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 11th position in 2000 to the 28th 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.

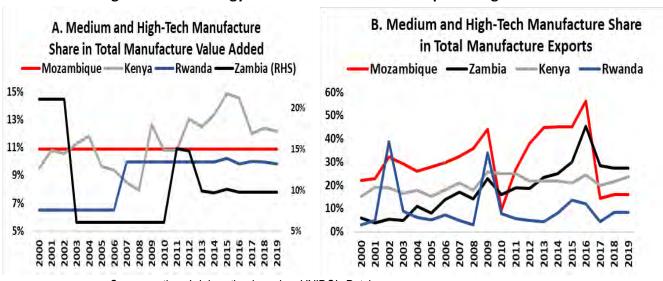
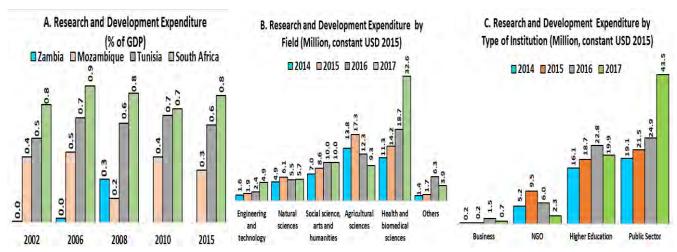


Figure 13. Technology-based manufactures and exports stagnated

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 110th in 2012 to 122nd position in 2021.

Total Trademark Applications Total Patent Applications Mozambique — Kenya — Zambia Mozambique — -Zambia -----Rwanda -2003 2004 2005 2006 2007 2008 2009 Source: authors' elaboration based on World Intellectual Property Organization (WIPO) database

Figure 15: Mozambique's innovation activities have been growing

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.

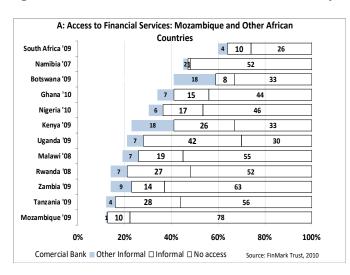
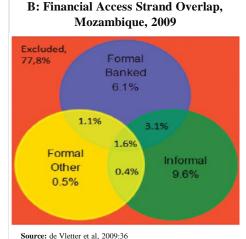


Figure 16. Financial transformation in Mozambique and other African countries in 2009



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.

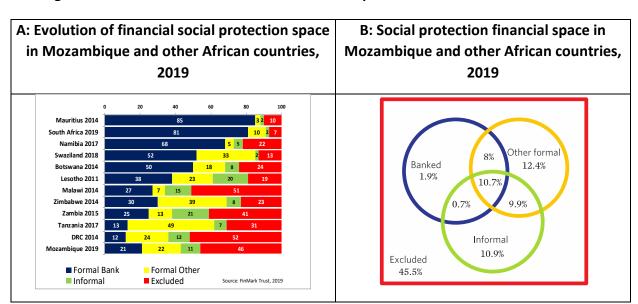


Figure 17: Financial transformation in Mozambique and other African countries in 2019

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 2050.¹⁰

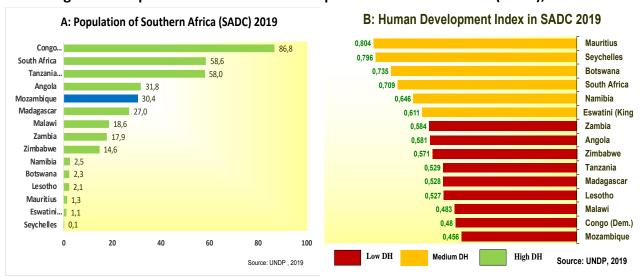


Figure 18: Population and Human Development in Southern Africa (SADC), 2019

¹⁰ 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.

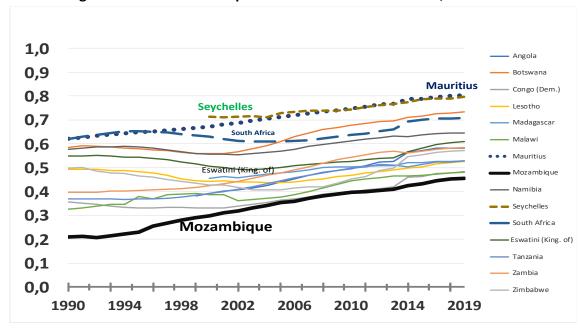


Figure 19: Human Development Index in SADC countries, 1990-2019

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).

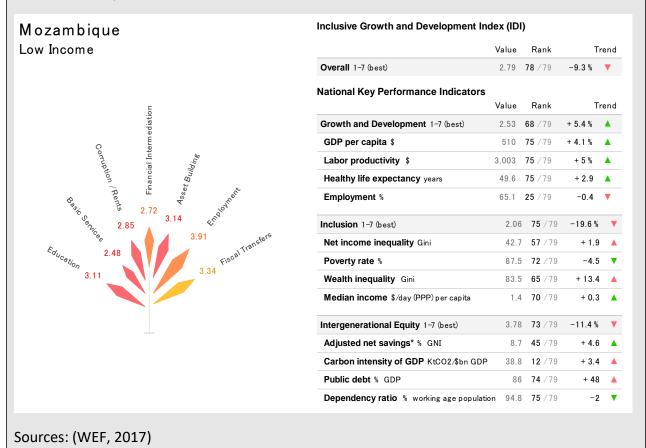
In a government study on the need for Mozambique to take advantage of the demographic dividend, the MEF recognized that it would be possible to make the most of the demographic dividend only if appropriate policies are implemented that make the most efficient and effective use of the progressive characteristics 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 Risi*ng, 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.



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.

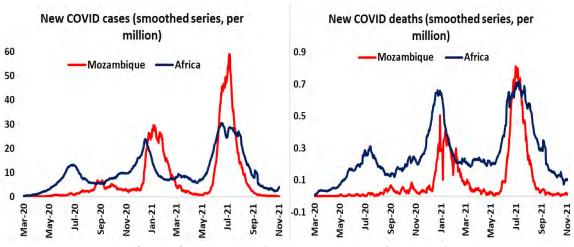
Similarly, economic fragility is understood as an imbalance between the strains and challenges (internal and external) faced by a state and society and their ability to manage them. 11 Vulnerability and fragility have multiple manifestations that span a wide range of situations, from mild or transitional 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 significatively in September 2021, remaining below 2 percent since then (Figure 20).

¹¹ 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

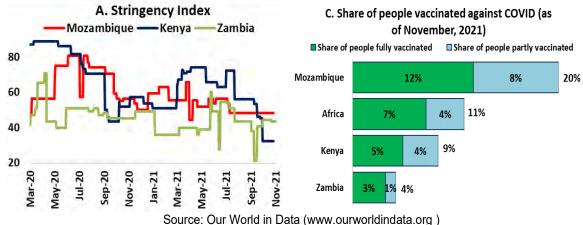


Source: Our world in data (www.ourworldindata.org/coronavirus)

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

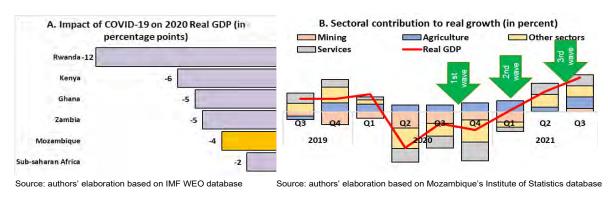
The pandemic has significantly impacted the Mozambican economy through the reduction of



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).

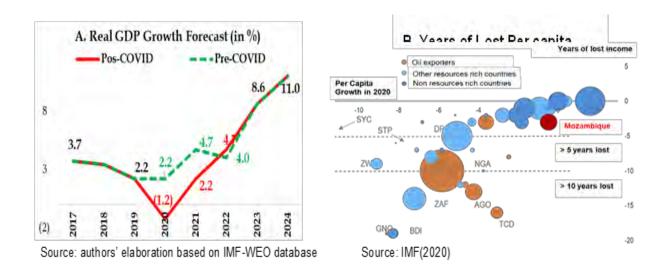
The most impacted sectors were hotels and restaurants (16 percentage points), trade (14 percentage points), transportation (10 percentage points) and mining (6 percentage points) (Betho et al., 2021). The agriculture sector was the least affected, having grown even at the height of the pandemic due to 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 relaxion of COVID-19 measures.

Figure 22: COVID-19 contributed to the decline of Mozambique's GDP by 4 percentage points



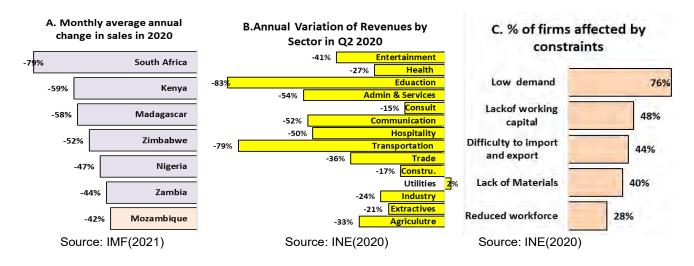
Before the COVID-19, Mozambique needed to grow by an average 17 percent per year to end extreme poverty by 2030 (UNCTAD, 2021), below the IMF's pre-COVID and post-COVID annual average forecast of 8.1 percent and 8.4 percent, respectively. COVID-19 reduced the medium-term (2021-2030) growth forecast by 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



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).

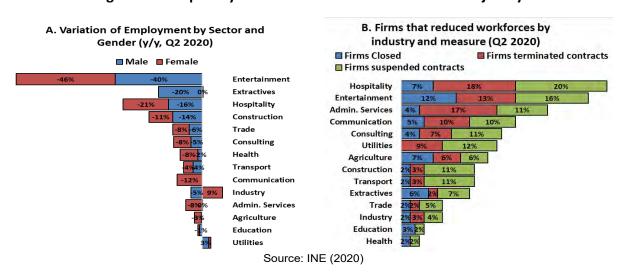
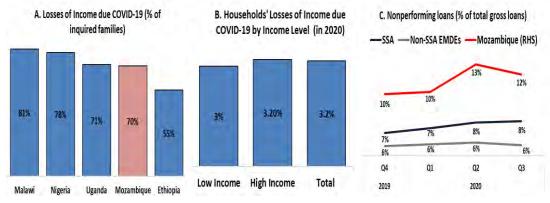


Figure 25: Hospitality and entertainment firms had the major layoffs

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 Sate 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.

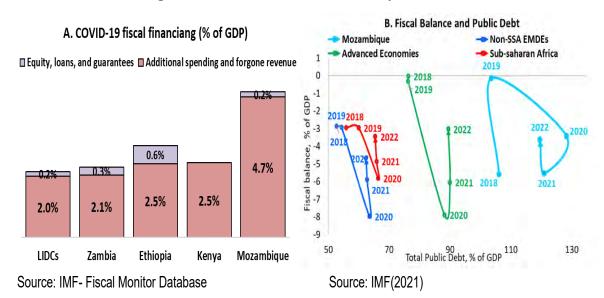


Figure 27: COVID-19 increased fiscal pressures

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).

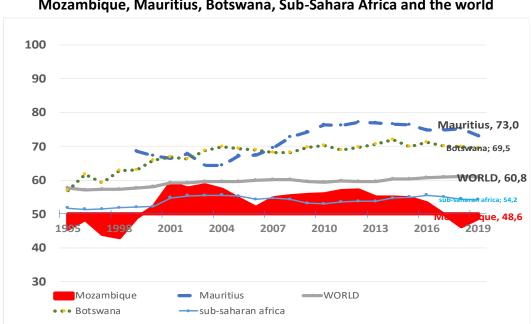


Figure 28: Economic Freedom Index:
Mozambique, Mauritius, Botswana, Sub-Sahara Africa and the world

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. 12

Figure 29: Evolution of gross production of agriculture, cereals, non-food and livestock per capita, Mozambique 1995-2019

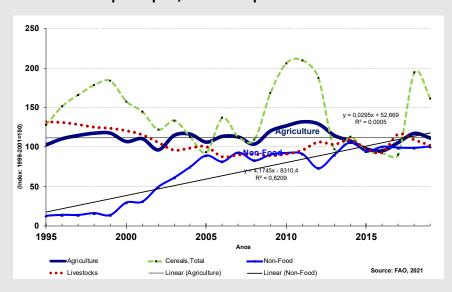
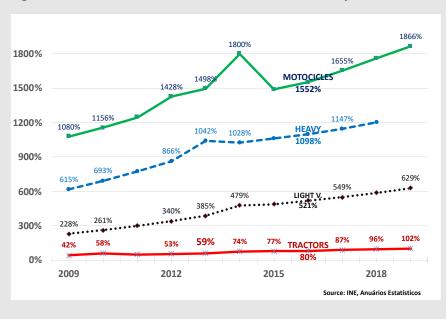


Figure 30: Evolution of the vehicle fleet, Mozambique, 2009-2019



¹² 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).

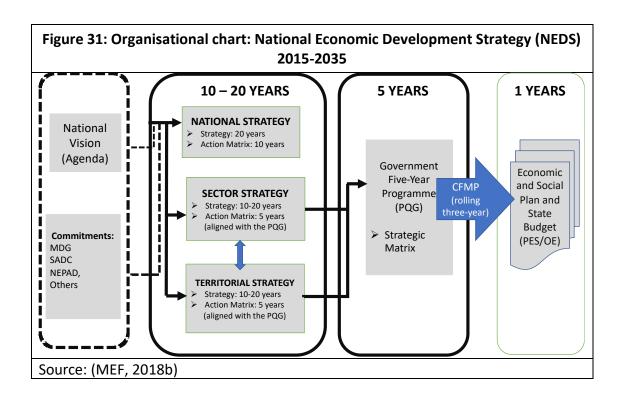
3.4. Better strategic thinking and development planning

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.

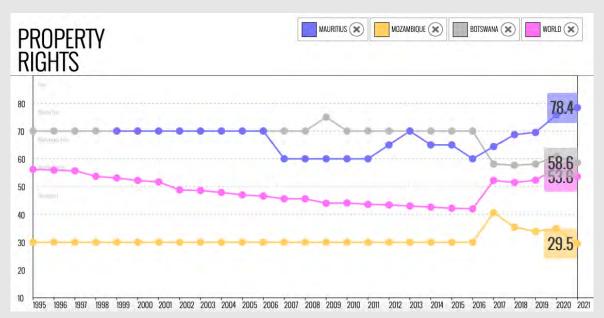


Figure 32: Property rights in Mozambique, Botswana, Sub-Saharan Africa and the world

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

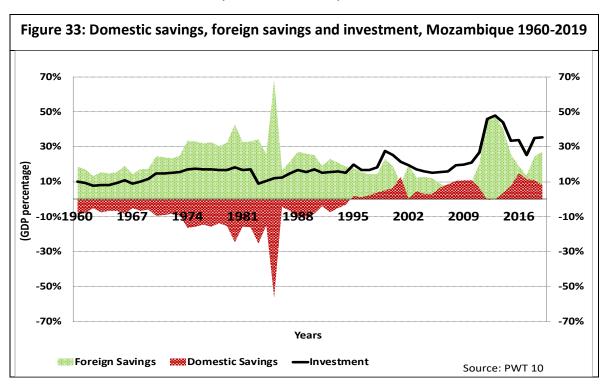
The literature provides extensive evidence on the long-term correlation between savings and economic growth and the fact that domestic savings have a positive impact on short- and long-term economic growth. However, in Mozambique, the attempt to place the issue of domestic savings among the main strategic 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 is 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 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.

Table 5: Fields of action and intervention clusters for a new post-COVID-19 policy agenda								
Policy	Finance	Business	Citizens					
Multidimensional indicators, monitoring	Mandates and legal interpretations: include	Shifting profitability: internalize the costs of	Sustainable consumption					
capacity, and legal	demographic,	demographic and	alternatives: shift from					
frameworks: ensure	environmental, financial	environmental damage.	unsustainable to					
political decision-	inclusion and social		sustainable consumption					
making addresses	objectives in the targets	Sustainable investment	and promote a culture of					
population growth,	of public institutions,	and innovation: shift	savings, not just in the					
financial inclusion,	such as the central bank	investment and	restricted sense of bank					
environmental	and private banks, as	technology from	savings but in the					
vulnerability and human	well as formal and	resource-intensive	productive sense of					
well-being with equal	informal financial actors.	activities to those that	building individual and					
weight on the economic		are more labour	family resilience to face					
aspects.	Sufficiency: limit the	intensive.	unexpected events					
	total level of		through adequate					
Fiscal policy and growth	consumption.	Non-financial	safety-nets.					
independence: increase	Metrics for the long-	disclosure, reporting						
the space for fiscal	term: integrate	and accountability:	Affordability and					
interventions for key	demographic and	include demographic	fairness: promote an					
economic	environmental	and environmental	institutional					
vulnerabilities, support	categories and extend	objectives in business	environment that					
a more balanced green	the time horizon in risk	reporting standards.	facilitates rather than					
and just transition and	assessments.		constrains individual					
place the high and very		Sustainable business	initiative and innovation,					
concentrated economic	Make sure that the	models: Support	aiming to reduce					
growth into the wider	Sovereign Fund that is	business models that	inequality and exclusion,					
context of informality	expected to be created	address vulnerability	as well as ensuring that					
and relative stagnation	has an explicit	and focus on	all people are capable of					
of most of the rural	orientation to foster	sustainability and well-	meeting their basic					
economy.	private capital formation	being and create a level	needs and of					

Limiting power and empowerment for change: reduce economic, demographic and democratic power imbalances and the fragility of local institutions.

Update the legal and institutional setting, starting from the economic regulations to the needs of a market economy more friendly to productive activities rather than speculative investment.

Address the unbalanced nexus of the formal versus informal economy by making the formal environment more inclusive.

and domestic savings of households and private enterprises.

Modernize existing fiscal rules and mechanisms.

playing field.

Promote an effective and relevant blue economy aiming to make the best use of the extensive ocean and coast available. participating socially.

Promote more inclusive social protection, through mechanisms that take into consideration the informal nature of the labor force and the very limited basis of existing formal revenue mechanisms.

Promote digitalization for its potential to boost economic transformation, stimulate productivity, reduce transaction costs and market asymmetric information, with better and wider access to public and private goods and services

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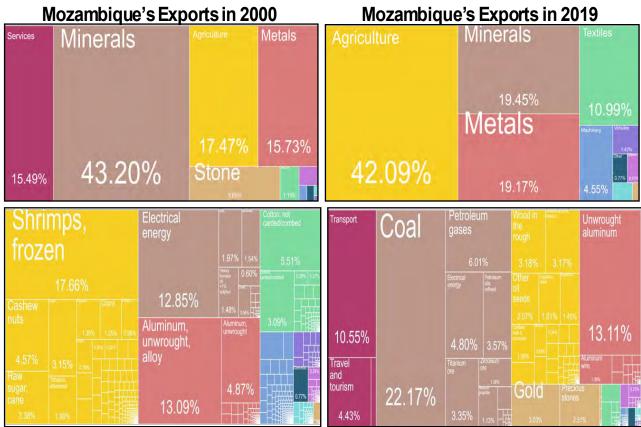
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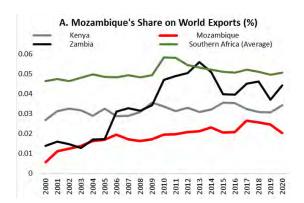
Appendix 1. Additional figures and tables

Figure 34: Mozambique exports



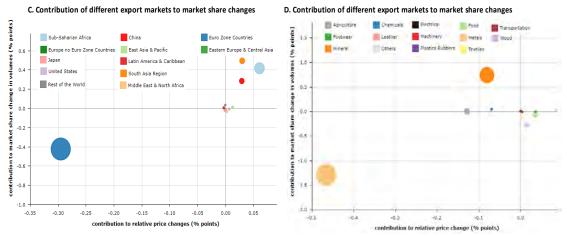
Source: Harvard Growth Lab

Figure 35: Mozambique's share of world exports has been increasingly driven by push factors



В.	B. Decomposition of Exports Shares Growth (2006Q1 - 2019Q4, in percent)									
	Export growth	Export Growth net of Composition	Export Market Share	Specialization composition effects		Market shares growth net composition effects				
		Effects	Change	Geographical Sectoral		Overall	Price	Volumes		
Southern Africa	1.84	1.99	1.19	0.45	-0.60	1.33	0.79	0.54		
Zambia	10.40	8.32	2.08	1.62	0.46	4.76	1.31	3.45		
Mozambique	5.51	7.06	-0.27	-0.01	-1.54	1.28	1.21	0.07		

Notes: Note: Indicators are expressed in log-difference form, which allows for additivity across indicators.



Notes: Indicators are expressed in log-difference form, which allows for additivity across indicators. The size of the bubbles (weight) is equal to a country's market/sector orientation.

Source: World Bank Measuring Export Competitiveness Database

Figure 36: Mozambique's trading partners have been increasing while the number of exported products stagnated

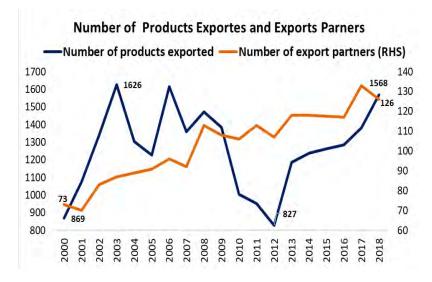
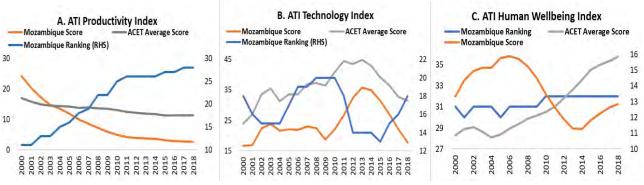


Figure 37: Mozambique's productivity, technology and human well-being scores have been deteriorating



Source: authors' elaboration based on African Center for Economic Transformation Database

Figure 38: Productivity declined in manufacturing and decelerated in services

	Agriculture	Mining & utilities	Manufacturing	Constructio	n Services	Total	В.	_	rowth Rat			d and	
2000-05 (Total)	5.75%	8.21%	2.34%	-0.57%	3.85%	6.88%		En	nployment	: (2000-2	2019)		
Within sector	4.7%	0.0%	0.0%	0.0%	0.6%	5.3%		■ Va	alue Added	□ Emr	loyment		
Structural change	1.0%	8.2%	2.3%	-0.6%	3.3%	1.6%					,		
005-10 (Total)	6.1%	1.5%	-12.6%	7.9%	3.8%	5.2%		19%					
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%				14%			
010-15 (Total)	2.1%	3.8%	-11.5%	0.9%	2.6%	4.4%			ı				
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%	8%						
015-19 (Total)	0.6%	0.6%	-5.4%	-2.7%	-1.4%	-0.2%		1	5% 4%		5%	5%	
Within sector	0.4%	0.0%	-0.2%	-0.1%	-0.3%	-0.5%			5% 4%				
Structural change	0.2%	0.6%	-5.1%	-2.6%	-1.1%	0.3%	2%			_	2%		
000-19 (Total)	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%	Agriculture	Mining and I	Utilities Manufa	cturing	Construction	Servi	ic
Structural change	0.7%	3.6%	-7.0%	1 50/	2.00/								
C. Manu		nd Service	es Valued Add	1.5% ded per w	2.0% orker	0.7%	D.	Agriculture	eValued Add		orker (Cons	stant	
20,000		nd Service			3,60 3,40 3,20 3,00 2,80	o o o o o o o o o o o o o o o o o o o	450	Agriculture	eValued Add 2015		vorker (Cons	stant	
20,000 18,000 16		nd Service	es Valued Add		3,60 3,40 3,20 3,00 2,80	3-Year Mowing Average of Services value	arage of Agricultural d per worker	Agriculture			vorker (Cons	stant	

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			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
Total	79	59	65	67	39

Source: Ministry of Science and Technology (2018)

Table 2: Comparison of trends in economic and demographic indicators,
Mozambique and Malaysia

	1960		201	.1	2019		
Indicator	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	5.1Ψ (4.8)	
Under five mortality rates	85	337	8	100.4	8.6	74.2	
Net enrolment ratio, secondary education (% of secondary schoolage population)	35	-	66	17,3	72.2	19.3	
Gross enrolment ratio, tertiary institutions (% of tertiary school-age population)	4	0,2‡	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; ‡ Gross enrolment rate in secondary education in Mozambique from 1971); YINE figure and WB in (); 2021 Word Bank Data.